Sexually Transmitted Disease Surveillance 1998

Division of STD Prevention

September 1999

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for HIV, STD, and TB Prevention
Division of STD Prevention
Atlanta, Georgia 30333

Centers for Disease Control and Prevention ..... Jeffrey P. Koplan, M.D., M.P.H.
Director

National Center for HIV, STD, and TB Prevention ..... Helene D. Gayle, M.D., M.P.H.
Director

Division of STD Prevention ..... Judith N. Wasserheit, M.D., M.P.H.
Director

Epidemiology and Surveillance Branch ..... Michael E. St. Louis, M.D.
Chief

Surveillance and Special Studies Section ..... William C. Levine, M.D., M.Sc.
Chief

Statistics and Data Management Branch ..... Russell H. Roegner, Ph.D.
Chief

Melinda L. Flock, M.S.P.H.
Deputy Chief

Copyright Information

Suggested Citation

Division of STD Prevention. *Sexually Transmitted Disease Surveillance, 1998*. Department of Health and Human Services, Atlanta: Centers for Disease Control and Prevention (CDC), September 1999.

Copies can be obtained from the Office of Communications, National Center for HIV, STD, and TB Prevention, Centers for Disease Control and Prevention, 1600 Clifton Road, Mailstop E-06, Atlanta, Georgia 30333.

The report is also available by Internet via the CDC home page at:
http://www.cdc.gov/nchstp/dstd/Stats_Trends/1998_Surv_Rpt_main_pg.htm

Foreword

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

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

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

Preface

Sexually Transmitted Disease Surveillance, 1998 presents statistics and trends of sexually transmitted diseases (STDs) in the United States through 1998. This annual publication is intended as a reference document for policy makers, program managers, health planners, researchers, and others who are concerned with the public health implications of these diseases. The figures and tables in this edition supersede those in earlier publications of these data.

The surveillance information in this report is based on the following sources of data: (1) case reports from the STD project areas; (2) prevalence data from the Regional Infertility Prevention Projects, STD project areas, the U.S. Job Corps, and Jail STD Prevalence Monitoring Projects; (3) sentinel surveillance of gonococcal antimicrobial resistance from the Gonococcal Isolate Surveillance Project; 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 most of the information in this publication. These systems are an integral part of program management at all levels of STD prevention and control in the United States.

Sexually Transmitted Disease Surveillance, 1998 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; Table A1 displays progress made toward Healthy People 2000 Priority Area 19, Objectives 19.1-19.8, on Sexually Transmitted Diseases; and Figures A1-A3 show progress made by states in converting from hardcopy aggregate reporting to electronic line-listed data submissions.

Selected figures and tables in this document include a reference point that is used to monitor progress toward some of the Healthy People 2000 (HP2000) national health status objectives for STDs[1]. The original HP2000 health status objectives were developed in 1989 and revised in 1995. The revisions are used as reference points in this edition of *Sexually Transmitted Disease Surveillance, 1998.*

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

[1]Department of Health and Human Services. *Healthy People 2000: Midcourse Review and 1995 Revisions*. U.S. Department of Health and Human Services, Public Health Service, U.S. Government Printing Office, Washington, D.C., 1995.

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, who provided state and local surveillance data to the Centers for Disease Control and Prevention.

This report was prepared by the following staff members of the Division of STD Prevention, National Center for HIV, STD, and TB Prevention, Centers for Disease Control and Prevention: Charles Akers, Susan Bradley, Jim Braxton, Sharon Clanton, Darlene Davis, Lyn Finelli, LaZetta Grier, Alesia Jester Harvey, Sharon Hixon, Kathleen Hutchins, Kristen Mertz, Debra Mosure, Raymond Ransom, LuEtta Schneider, Maya Sternberg, Emmett Swint, Susan Wang and Akbar Zaidi.

Dedication

We dedicate this volume to our colleague and friend, Russ Roegner. After 3 years as the Chief of the Statistics and Data Management Branch, Dr. Roegner is moving on to Washington, D.C. He has been an outstanding leader and dedicated member of the team producing this report. We wish him the best in the years to come.

Contents

Figures in the National Profile

Chlamydia

Gonorrhea

Syphilis

Other Sexually Transmitted Diseases

Additional Figures in the Special Focus Profiles

STDs in Women and Infants

STDs in Adolescents and Young Adults

STDs in Minorities

STDs in Persons Entering Corrections Facilities

STDs in the South

Sources and Limitations of Data

Tables in the National Profile

National Summary Tables

Chlamydia

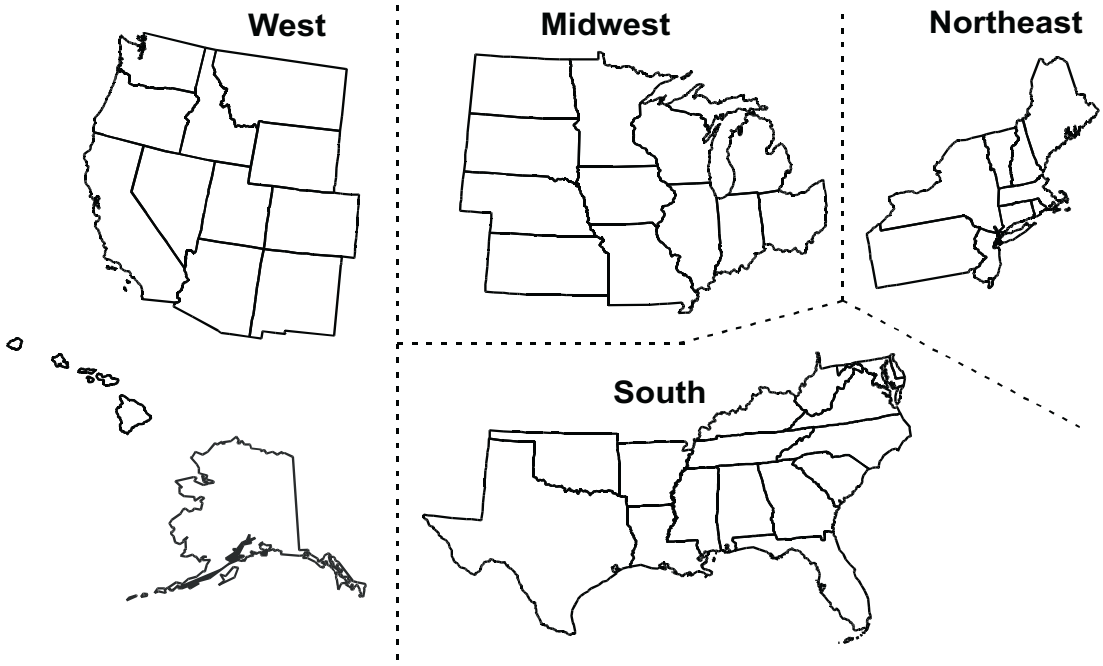
Gonorrhea

Syphilis

Chancroid

Appendix

Geographic Divisions of the United States



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

National Overview of Sexually Transmitted Diseases, 1998

The logo on the cover of Sexually Transmitted Disease Surveillance, 1998 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 women's and infants' health 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 recent report of the Institute of Medicine, *The Hidden Epidemic: Confronting Sexually Transmitted Diseases*[1], surveillance is a key component of our efforts to prevent and control these diseases.

This overview summarizes national surveillance data on the three diseases for which we have federally-funded control programs: chlamydia, gonorrhea, and syphilis. Several observations for 1998 are worthy of note.

In 1998, the reported number of cases of genital *Chlamydia trachomatis* infections was 607,602 a rate of 236.6 per 100,000 persons. In 1998, the overall reported rate for women (382.2 per 100,000) was nearly five times that for men (83.1). This difference in reported rates is attributable to screening strategies that focus on women because the severe sequelae of chlamydial infections accrue principally to women, and because these diseases are asymptomatic in the majority of infected women.

Using local, state, and federal resources, chlamydia prevention programs for screening of asymptomatic women have been established throughout the country. In 1998, state-specific chlamydia test positivity among women aged 15-24 years who were screened at family planning clinics ranged from 2.4% to 11.3%. These screening programs have consistently shown that the highest positivity of chlamydial infection in women is in adolescents. In addition, examination of chlamydial screening results for women aged 16-24 years entering the U.S. Job Corps shows that chlamydia is highly prevalent in these economically disadvantaged young women, with state-specific prevalence in 1998 ranging from 4.6% to 20.3%.

In parts of the United States where large-scale chlamydia programs have been instituted, prevalence of disease has generally declined. During 1988-1998, 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 60% (from 9.3% to 3.7%). During 1994-1998, among women under 45 years of age in Region III, positivity declined 6.4% (from 4.7% to 4.4%), and in Region VIII, positivity declined 10.3% (from 3.9% to 3.5%). Adjustment for changes in laboratory test method and sensitivity in 1998 may demonstrate larger declines in these and other HHS regions. For definition of HHS regions, see the Appendix.

Recent data on gonorrhea for 1994-1998 suggest that the annual decreases that have generally been evident since the national gonorrhea control program began in the mid-1970s may be lessening. In particular, the gonorrhea rate for 1998 (132.9 per 100,000 persons) was greater than the rate for 1997 (122.0). Although the 1997 gonorrhea rate was the lowest rate since national reporting

began, both it and the 1998 rate remain well above the revised Healthy People 2000 (HP2000) objective of 100.

With respect to gender, the gonorrhea rates for males and for females increased between 1997 and 1998. The gonorrhea rate for males increased from 124.9 to 133.7, and for females increased from 119.0 to 131.5. In contrast to earlier years, which generally exhibited decreasing age-specific rates for gonorrhea, most 5 year age categories had rates which increased between 1997 and 1998. These increases ranged from 6% to 14%. Only the rate for the oldest adults decreased slightly. Because men with gonorrhea are often symptomatic and seek medical care, trends in males are probably a good measure of trends in disease incidence. Trends in women are determined more by screening practices. Similar to chlamydia, rates of gonorrhea in women are particularly high in adolescents, with the highest rates in 15- to 19-year-olds.

With regard to antimicrobial resistance, a small proportion of *Neisseria gonorrhoeae* isolates tested through the Gonococcal Isolate Surveillance Project in 1998 (0.9%) demonstrated decreased susceptibility to ciprofloxacin, one of the currently recommended treatments for gonorrhea. However, resistance to ciprofloxacin continued to be rare (0.1%).

The 6,993 cases of primary and secondary (P&S) syphilis reported in 1998 were the fewest cases reported in the United States since 1958. The P&S syphilis rate of 2.6 per 100,000 persons (the lowest since national reporting began in 1941) is below the HP2000 objective of 4 per 100,000. Syphilis continues to be reported only in specific areas of the country. In 1998, approximately 78% of U.S. counties reported no cases of P&S syphilis. However, P&S syphilis rates exceeded 4 per 100,000 in 312 counties (10% of total counties). These 312 counties accounted for 76% of all reported P&S syphilis cases. Most notably, 91% (285 of 312) of these counties were in the South. In addition, 9 of the 12 states or outlying areas with P&S syphilis rates greater than 4 per 100,000 were located in the South. These data suggest that comprehensive syphilis prevention efforts focused in the South could markedly reduce the number of U.S. syphilis cases.

When STD statistics were examined by race or ethnicity, wide discrepancies in reported STD rates persisted between racial or ethnic groups. For example, the gonorrhea rate in blacks is approximately 30 times greater than the rate in whites. The rate of P&S syphilis in blacks is about 34 times that in whites; P&S syphilis in Hispanics is about 3 times that in whites. However, in 1998, of the 793 reported congenital syphilis cases with known race or ethnicity of the mother, blacks and Hispanics accounted for 89% of these reported cases, while accounting for only 23% of the female population, and 33% of all births. Race and ethnicity in the United States serve as risk markers that correlate with other, more fundamental determinants of health status such as socioeconomic status and access to good quality medical care. Reporting biases also undoubtedly play a role in race differentials, while not explaining them completely.

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

National Profile

The National Profile section contains figures showing trends and distribution of sexually transmitted diseases (STDs) by age, gender, race/ethnicity, and location for the United States. Where relevant, the figures illustrate progress toward specific year 2000 goals for the nation published in *Healthy People 2000: Midcourse Review and 1995 Revisions.**

*See Appendix for Healthy People Year 2000 Revisions.

Chlamydia

Infections due to *Chlamydia trachomatis* are among the most prevalent of all sexually transmitted diseases. In women these infections often result in pelvic inflammatory disease, which can cause 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 reduce the incidence of PID by as much as 60%[1]. In addition, pregnant women infected with chlamydia can infect their babies during delivery.

While case reporting of chlamydial infections is improving, it remains incomplete in many areas of the country. A combination of factors limit the documentation of the incidence and prevalence of genital chlamydial infection: variable compliance with public health laws and regulations that require health care providers and laboratories to report cases to local health authorities; large numbers of asymptomatic persons who can be identified only through screening; limited resources to support screening activities; and incomplete information management systems for collecting, maintaining, and analyzing case reporting and prevalence data. Thus, for most areas, the number of chlamydia cases reported to CDC by state health departments reflects many factors, only one of which is number of infections in the population. For defined populations of sexually active women, data on prevalence obtained through routine screening can provide a more accurate measure of the true burden of disease.

- In 1998, 49 states and the District of Columbia required reporting of chlamydia and reported cases to CDC. For the state of New York, only cases from New York City were reported (Figure 1, Table 5).
- In 1998, 607,602 chlamydial infections were reported to CDC from 49 states, the District of Columbia and New York City (Table 1). Reported cases of chlamydia far exceed reported cases of gonorrhea (355,642 gonorrhea cases in 1998, Table 1).
- From 1987 through 1998 reported rates of chlamydia increased from 50.8 cases per 100,000 persons to 236.6 (Figure 2, Table 1). This trend reflects increased screening, recognition of asymptomatic infection (mainly in women), and improved reporting, as well as the continuing high burden of disease.
- For the years 1996-1998, the chlamydia case rate of the South (203.9, 229.9, and 271.9 respectively) was highest among the four regions, reflecting a recent expansion of screening activity in the South. Before 1996, reported chlamydia rates were highest in the West and Midwest, where substantial public resources had been committed for screening programs (e.g., in family planning clinics) (Table 5, Figures 3 and 4).
- Between 1997 and 1998, rates of chlamydia reported from selected large cities (over 200,000 population) increased 10% from 333.5 cases per 100,000 persons to 366.4 (Figure 5, Table 9).
- In 1998, reported rates of chlamydia for women (382.2 per 100,000 persons) exceeded those for men (83.1) (Figure 6, Tables 6, 7, 10, and 11). This is mainly

due to detection of asymptomatic infection in women through screening. The low rates in men suggest that many of the sex partners of women with chlamydia are not diagnosed or reported. In addition, men diagnosed as having non-gonococcal urethritis are treated but frequently not tested. A large proportion of these men are infected with chlamydia, but they are not detected by surveillance systems based on laboratory reporting of positive chlamydia tests.

- Rates of chlamydia for women were highest in the 15- to 19- year-olds (2,359.4 per 100,000) and in 20- to 24-year-olds (1,952.7). For men, age-specific rates were also highest in these age groups (Figure 7, Table 3B).
- 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 initiated in three additional HHS regions (III, VII, and VIII) and, in 1995, in 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 1998, state-specific chlamydia test positivity among 15- to 24-year-old women screened varied from 2.4% to 11.3% among those attending family planning clinics (Figure 9).
- 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, the screening programs in Health and Human Services Region X (Alaska, Idaho, Oregon, Washington) family planning clinics have demonstrated a decline in chlamydia positivity of 60% since 1988 among 15- to 44-year-old women (Figure 10).
- In 1998, chlamydia test positivity increased in nine of ten HHS regions compared with 1997. However, these reported increases are most likely due to changes in laboratory test method and associated increases in test sensitivity;[2] expansion of screening programs to populations with higher prevalence of disease may also have contributed to these increases.
- 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** section.

---

[1]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.

[2]Dicker LW, Mosure DJ, Levine WC, et al. The impact of switching laboratory tests on reported trends in *Chlamydia trachomatis* infections. *Am J Epidemiol* (in press).

Figure 1. Chlamydia — Number of states that require reporting of *Chlamydia trachomatis* infections: United States, 1987–1998

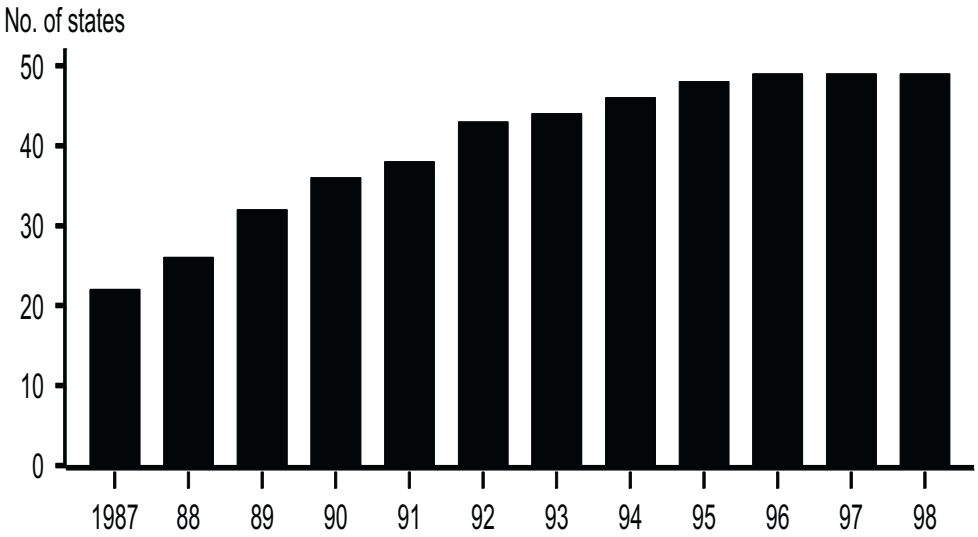
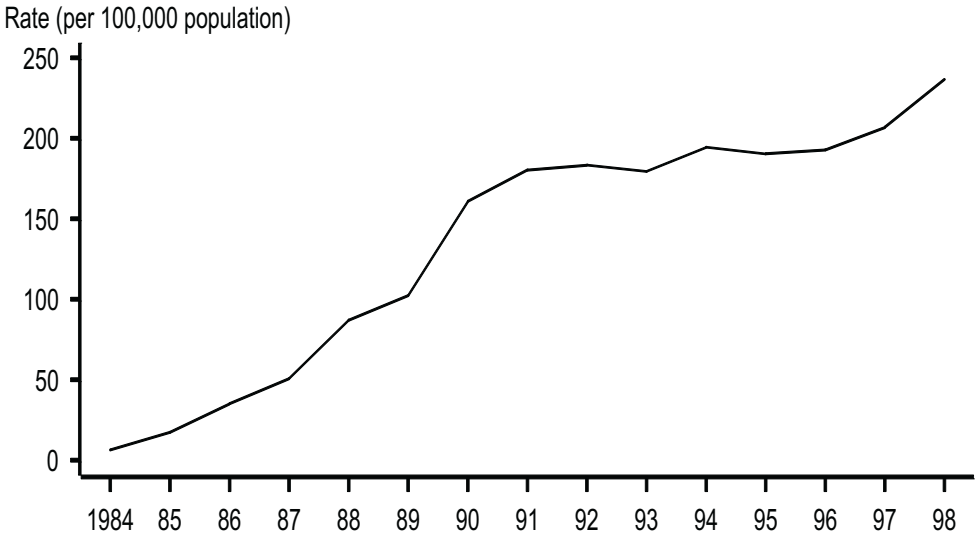
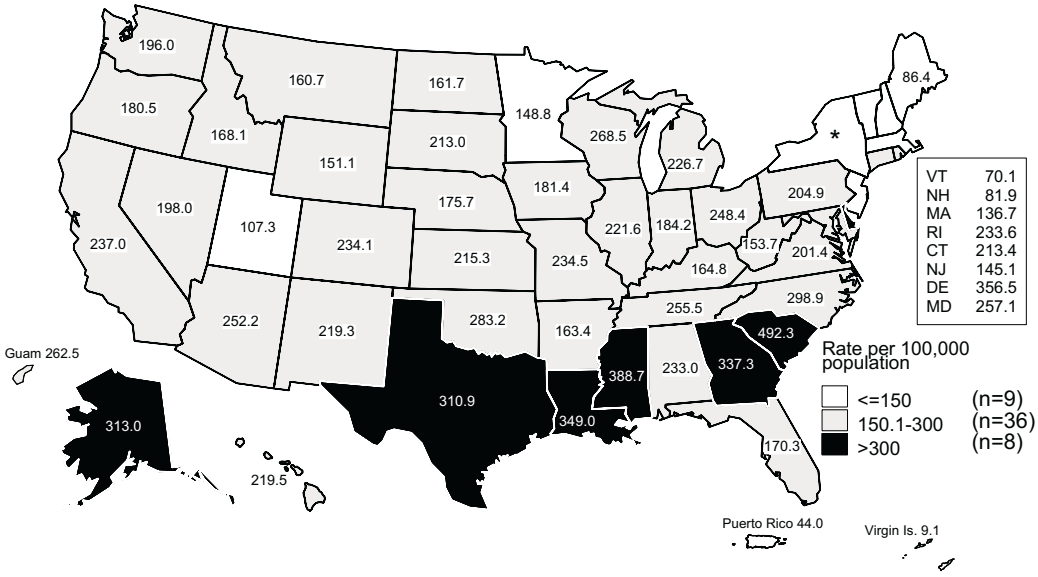


Figure 2. Chlamydia — Reported rates: United States, 1984–1998



Note: For further information on chlamydia reporting, see the Appendix.

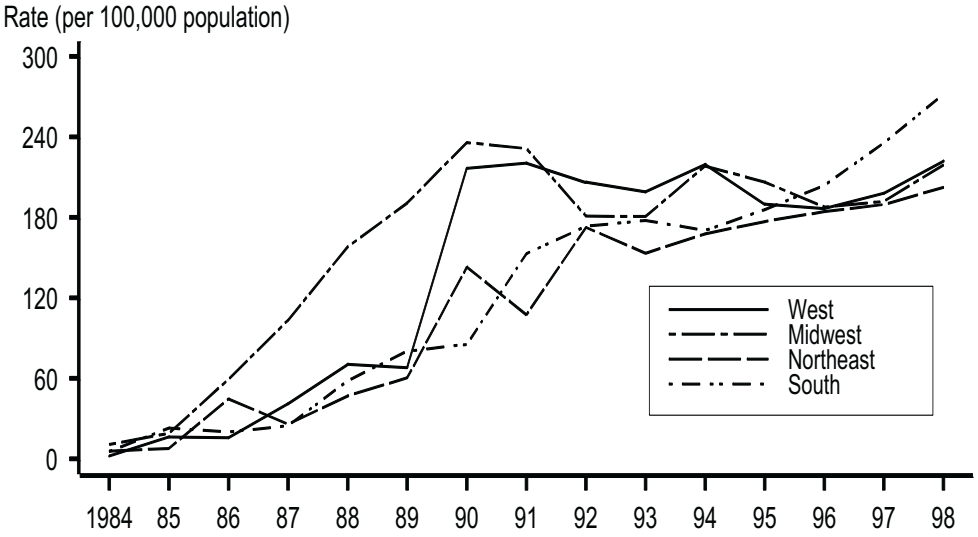
Figure 3. Chlamydia — Rates by state: United States and outlying areas, 1998



*The New York City rate was 357.1 per 100,000 population. No cases were reported outside of New York City.

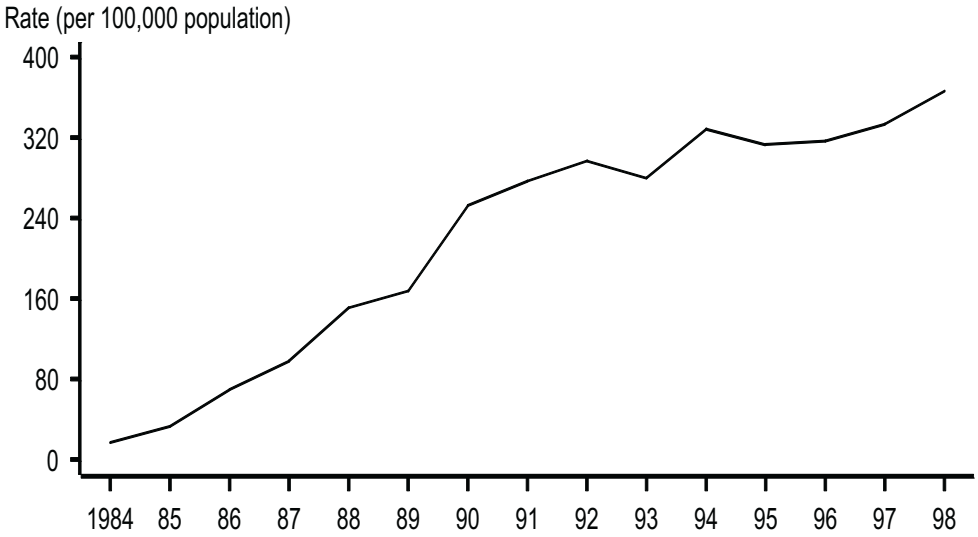
Note: The total rate of chlamydia for the United States and outlying areas (including Guam, Puerto Rico and Virgin Islands) was 233.7 per 100,000 population. For further information on chlamydia reporting, see the Appendix.

Figure 4. Chlamydia — Rates by region: United States, 1984–1998



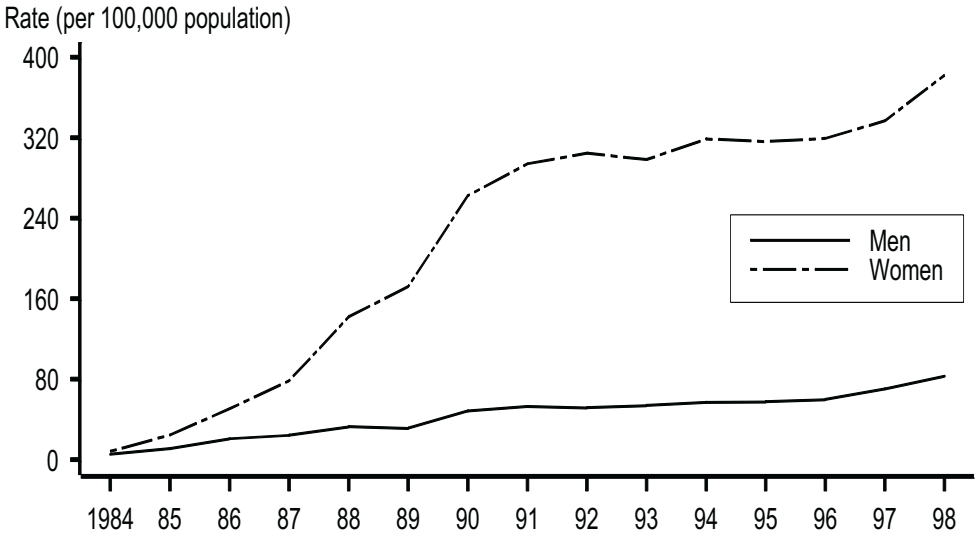
Note: For further information on chlamydia reporting, see the Appendix.

Figure 5. Chlamydia — Rates in selected U.S. cities of >200,000 population, 1984–1998



Note: For further information on chlamydia reporting, see the Appendix.

Figure 6. Chlamydia — Rates by gender: United States, 1984–1998



Note: For further information on chlamydia reporting, see the Appendix.

Figure 7. Chlamydia — Age- and gender-specific rates: United States, 1998

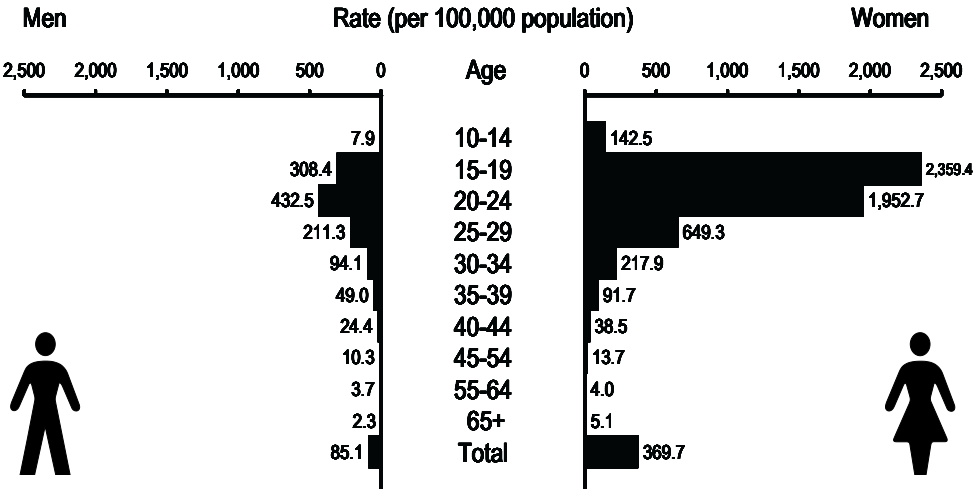
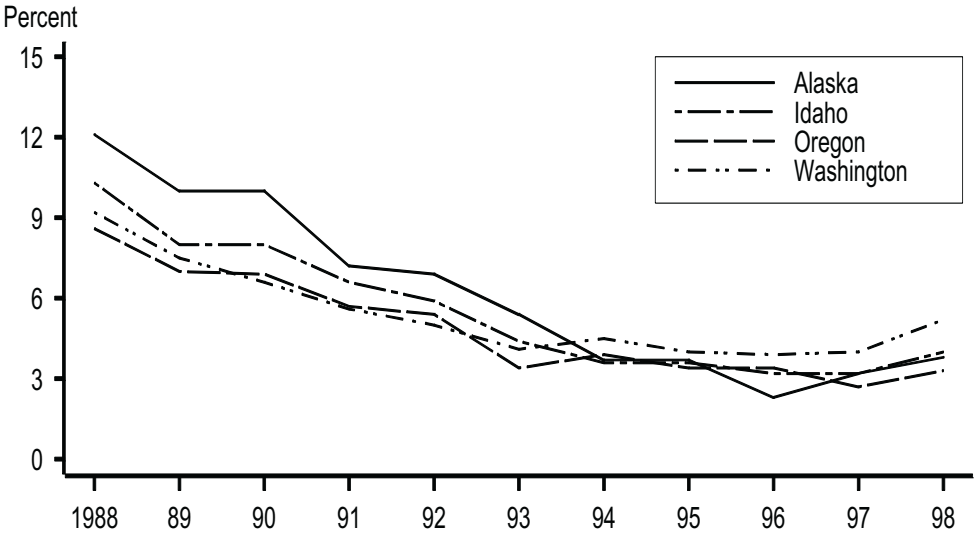


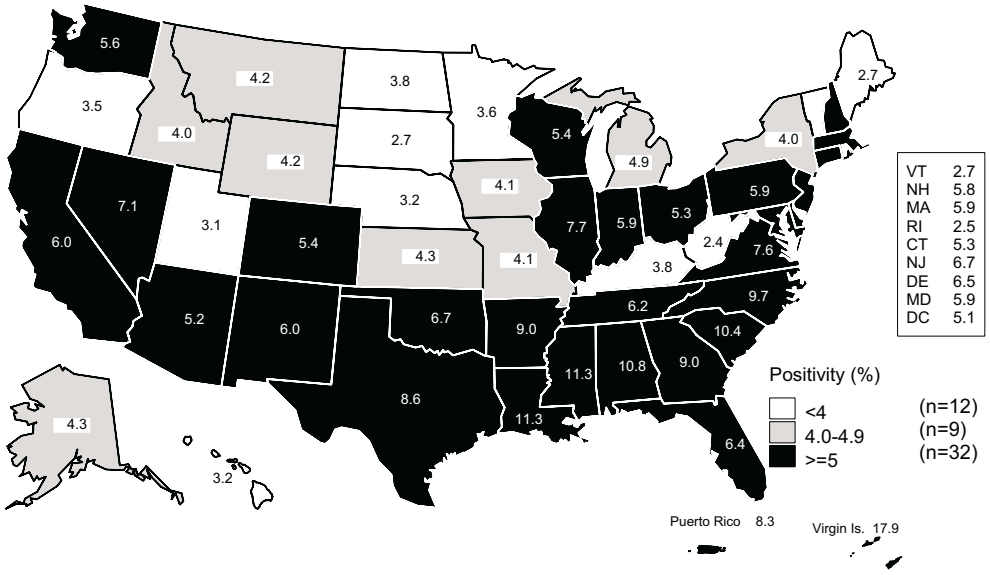
Figure 8 . Chlamydia — Positivity among women tested in family planning clinics by state: Region X, 1988–1998



Note: Women who met screening criteria were tested. Trends not adjusted for changes in laboratory test method in 1994 and 1998 and associated increases in test sensitivity.

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

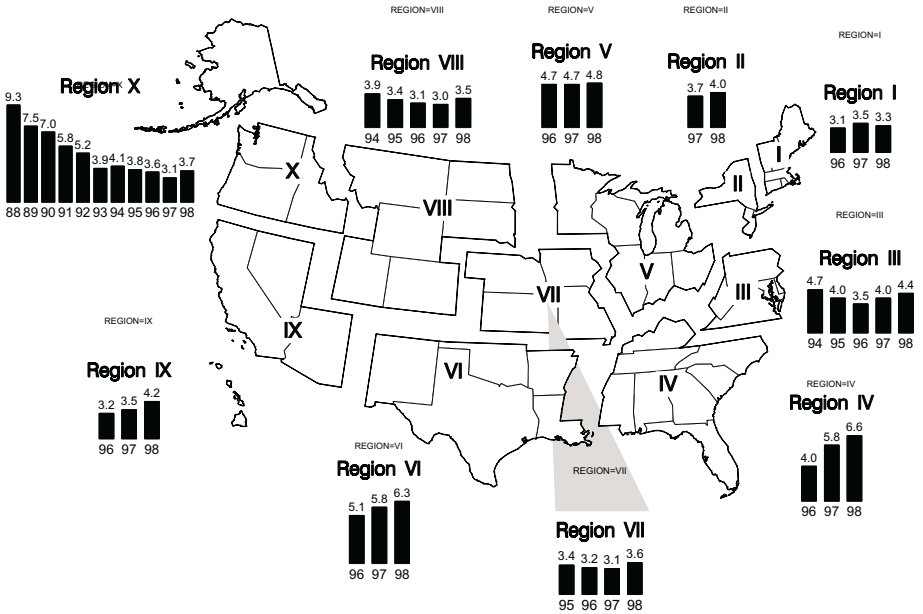
Figure 9. Chlamydia — Positivity among 15-24 year old women tested in family planning clinics by state, 1998



Note: States reported chlamydia positivity data on at least 500 women aged 15-24 years screened during 1998 except for: Rhode Island - chlamydia positivity data reported for July-December only; Puerto Rico - chlamydia positivity data reported for January-April only; and Virgin Islands - chlamydia positivity data reported for April-December only.

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

Figure 10. Chlamydia — Trends in positivity among 15-44 year old women tested in family planning clinics by HHS regions, 1988–1998



Note: Trends not adjusted for changes in laboratory test method in 1998 and associated increases in test sensitivity. See Appendix for definition of Health and Human Services (HHS) regions.

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

Gonorrhea

Infections due to *Neisseria gonorrhoeae*, like those due to *Chlamydia trachomatis*, remain a major cause of pelvic inflammatory disease, tubal infertility, ectopic pregnancy, and chronic pelvic pain in the United States. Epidemiologic studies provide strong evidence that gonococcal infections facilitate HIV transmission, and biological studies have begun to clarify the specific mechanisms through which this facilitation occurs[1]. Reporting of gonococcal infections has likely been biased towards reporting of infections in persons of minority race or ethnicity who attend public STD clinics[2].

In 1998, case reporting data indicated a reversal in the annual decreases that had been observed in preceding years.

- In 1998, 355,642 cases of gonorrhea were reported in the United States. Following the introduction of a national control program in the mid-1970s, the overall rate of gonorrhea has declined 72% since 1975. However, between 1997 and 1998 the rate increased by 8.9% from 122.0 cases per 100,000 persons to 132.9 (Table 1 and Figure 11).
- In 1998, 28 states and 3 outlying areas reported gonorrhea rates below the Healthy People 2000 (HP2000) national objective of 100 cases per 100,000 persons (Figure 12 and Table 13). However, gonorrhea rates decreased between 1997 and 1998 in only 7 of 35 states reporting more than 1,000 cases in 1998, whereas rates in the previous year decreased in 23 of 34 states with more than 1,000 cases (Table 14).
- Three of the four regions (West, Midwest, and South) exhibited increases in their gonorrhea rates between 1997 and 1998. All four of the regions had been declining. The South continued to have a higher rate than other regions (Figure 13, Table 14).
- In contrast to preceding years when consistent decreases occurred, the overall gonorrhea rate (244.4 per 100,000) for selected large cities over 200,000 population increased in 1998 for the second year in a row (Figure 14, Table 18). Fifty-five (86%) of the 64 cities had rates exceeding the HP2000 objective (Table 17).
- The gonorrhea rate in women increased from 119.0 per 100,000 in 1997 to 131.5 in 1998, and the gonorrhea rate in men also increased from 124.9 in 1997 to 133.7 in 1998. Rates for men and women were above the HP2000 objective in 22 and 24 states, respectively (Figure 15, Tables 15 and 16).
- Relative to 1997, gonorrhea rates in 1998 increased among each race/ethnic group (non-Hispanic whites increased 8%; non-Hispanic blacks 7%; Hispanics 10%; Asian Pacific Islanders 12%; and American Indian/Alaska Natives 21% (Figure 16 and Table 12B). The gonorrhea rates for non-Hispanic blacks and American Indian/Alaska Natives were above the HP2000 objective (Figure 16,

Table 12B). The former rate was about 30 times greater than the rate for non-Hispanic whites.

- Between 1997 and 1998, the gonorrhea rates for 15- to 19-year-old adolescents increased from 521.6 per 100,000 to 560.6, and for 20- to 24-year-old young adults increased from 548.4 to 609.6. Except for adults 65 and older, the rates for the other age groups also increased between 1997 and 1998 (Table 12B).
- Among women, 15- to 19-year-olds had the highest rate, while among men, 20- to 24-year-olds had the highest rate (Table 12B and Figure 17).
- In 1998, state-specific gonorrhea test positivity among 15 to 24-year old women screened in selected family planning clinics in 27 states ranged from 0.0% to 5.2% (Figure 18).
- Antimicrobial resistance remains an important consideration in the treatment of gonorrhea[3,4]. Overall, 29.4% of isolates collected in 1998 by the Gonococcal Isolate Surveillance Project (GISP) were resistant to penicillin, tetracycline, or both. The percentage of GISP isolates that were penicillinase-producing *Neisseria gonorrhoeae* (PPNG) declined from a peak of 11.0% in 1991 to 3.0% in 1998 (Figure 20). In contrast, the percentage of isolates with chromosomally mediated resistance to penicillin has increased annually and went from 0.5% in 1988 to 5.1% in 1998 (Figure 21). The prevalence of chromosomally mediated tetracycline resistance, 6.8% in 1998, has been relatively stable since 1989, except for a transient increase in 1995. However, the prevalence of isolates with chromosomally mediated resistance to penicillin and tetracycline (CMRNG) increased from 3.0% in 1989 to 7.2% in 1998 (Figure 21).
- The proportion of GISP isolates demonstrating decreased susceptibility to ciprofloxacin, one of the currently recommended treatments for gonorrhea, decreased from a high of 1.3% in 1994 to 0.5% in 1996 and 1997, but increased to 0.9% in 1998. Resistance to ciprofloxacin was first identified in GISP in 1991 but remains rare (0.1%) in 1998 (Figure 22). Reduced susceptibility and resistance to ciprofloxacin correlate with reduced susceptibility and resistance to other fluoroquinolone antibiotics.
- The proportion of GISP isolates demonstrating decreased susceptibility to cefixime remains rare (0.1%). In 1998, all GISP isolates were susceptible to ceftriaxone. To date, no cephalosporin resistance has been identified in GISP.
- The percentage of men with gonorrhea who have repeat infection within a one-year period, as measured by the GISP, decreased from 21.5% in 1992 to 17.5% in 1998 (Figure 23), approaching the HP2000 objective of 15%.
- GISP also reports the percentage of *Neisseria gonorrhoeae* isolates obtained from men who have sex with men (MSM)[4,5]. The proportion of isolates coming from MSM increased from 4.0% in 1988 to 12.0% in 1998 for GISP clinics overall. Among the nine GISP clinics reporting the majority of MSM cases, the percentage of cases that were in MSM in 1998 ranged from 13.0% to 62.5%, with a median of 24.7% (Figure 24). The increase in MSM with gonorrhea in GISP accelerated after 1993.
- Additional information about gonorrhea in racial and ethnic minority populations and adolescents can be found in the **Special Focus Profiles** section.

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

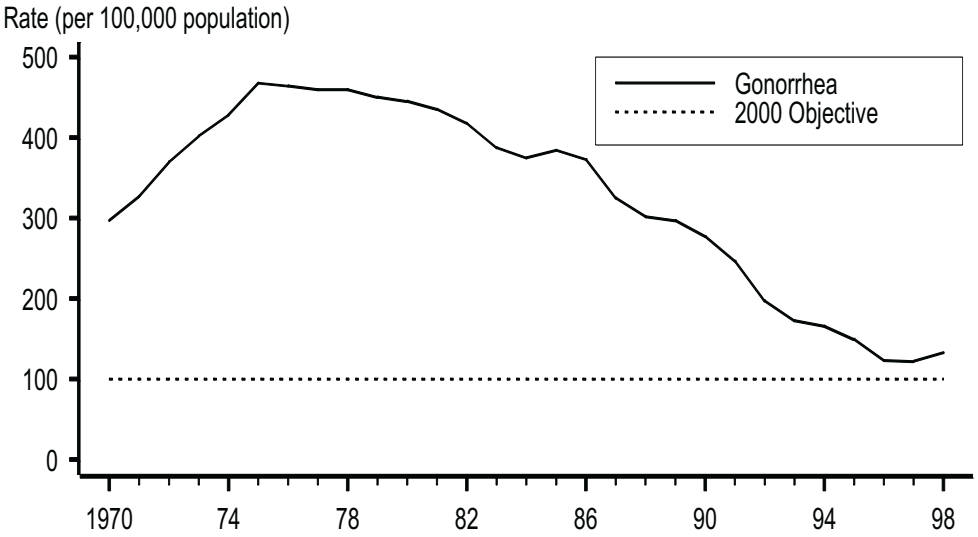
[2]Fox KK, Whittington W, Levine WC, Moran JS, Zaidi AA, Nakashima AN. Gonorrhea in the United States, 1981-1996: demographic and geographic trends, *Sex Transm Dis* 1998;25(7):386-93.

[3]Fox KK, Knapp JS, Holmes KK, Hook III EW, Judson FN, Thompson SE, Washington JA, Whitting WL. Antimicrobial resistance in *Neisseria gonorrhoeae* in the United States, 1988-1994: the emergence of decreased susceptibility to the fluoroquinolones, *J Infect Dis 1997*;175:1396-1403.

[4]CDC. Sexually transmitted disease surveillance 1997. Supplement: Gonococcal isolate surveillance project (GISP) annual report 1997, U.S. Department of Health and Human Services. Atlanta: Centers for Disease Control and Prevention, October 1998.

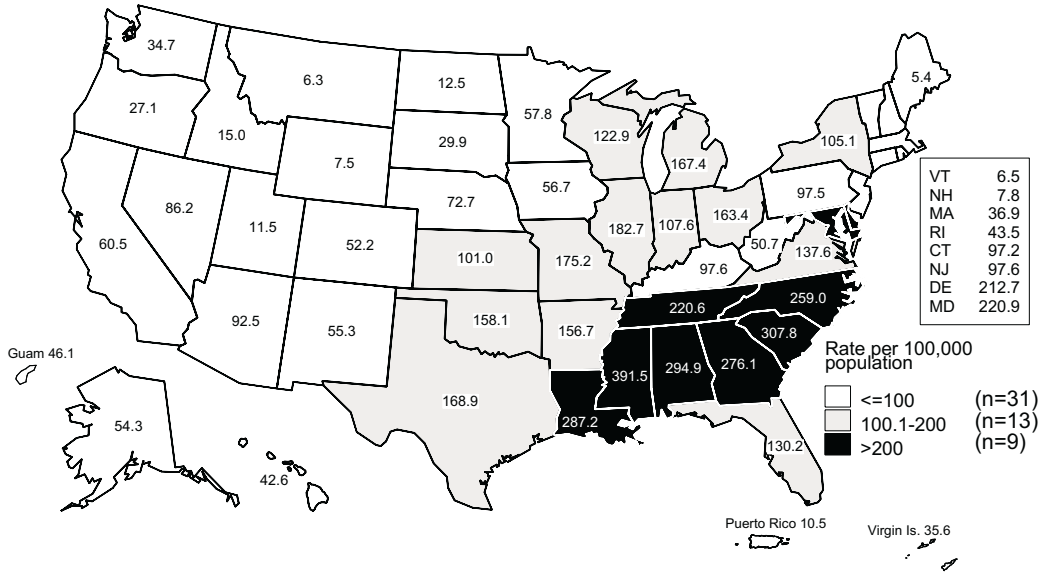
[5]CDC. Gonorrhea among men who have sex with men - selected sexually transmitted disease clinics, 1993-1996. *MMWR* 1997;46:889-92.

Figure 11. Gonorrhea — Reported rates: United States, 1970–1998 and the Healthy People year 2000 objective



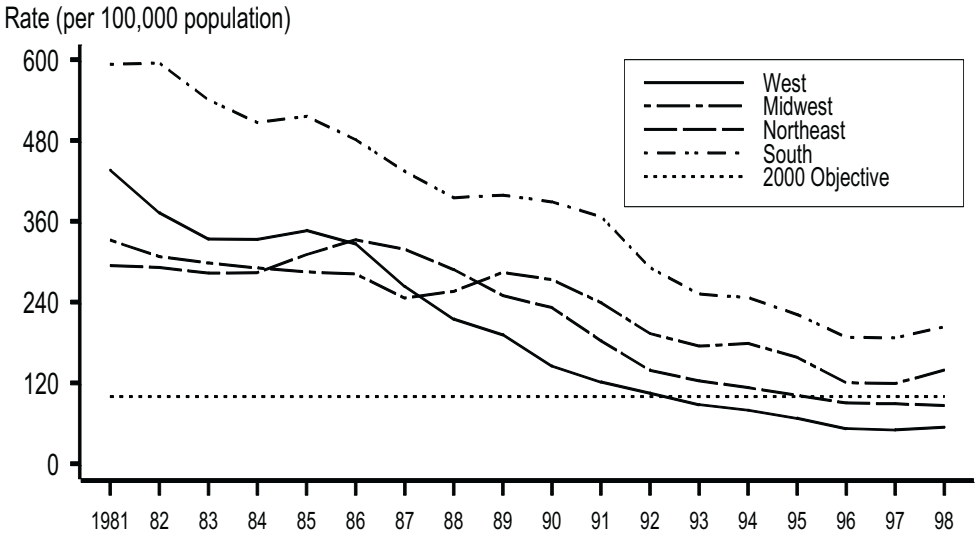
Note: Georgia did not report gonorrhea statistics in 1994 (see Appendix).

Figure 12. Gonorrhea — Rates by state: United States and outlying areas, 1998



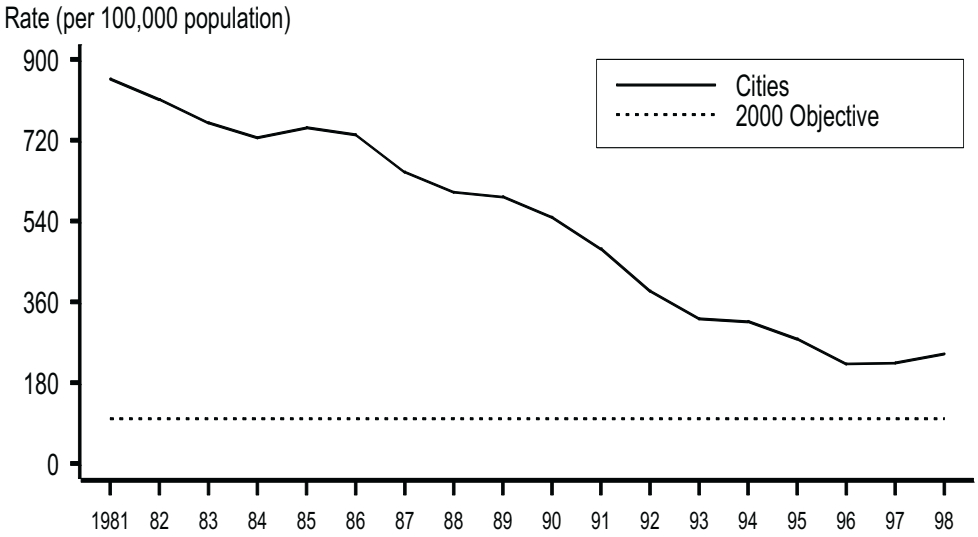
Note: The total rate of gonorrhea for the United States and outlying areas (including Guam, Puerto Rico and Virgin Islands) was 131.1 per 100,000 population. The Healthy People year 2000 objective is 100 per 100,000 population.

Figure 13. Gonorrhea — Rates by region: United States, 1981–1998 and the Healthy People year 2000 objective



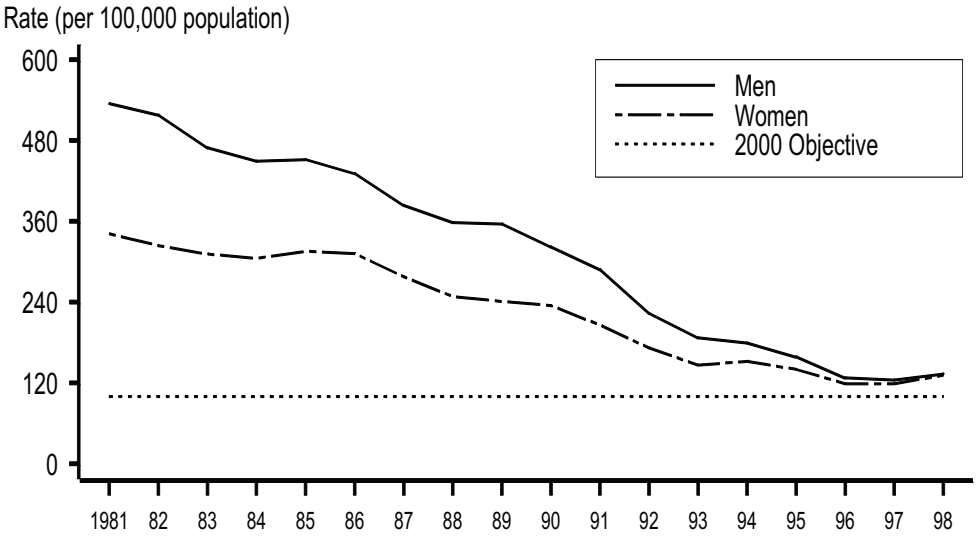
Note: Georgia did not report gonorrhea statistics in 1994 (see Appendix).

Figure 14. Gonorrhea — Rates in selected U.S. cities of >200,000 population, 1981–1998 and the Healthy People year 2000 objective



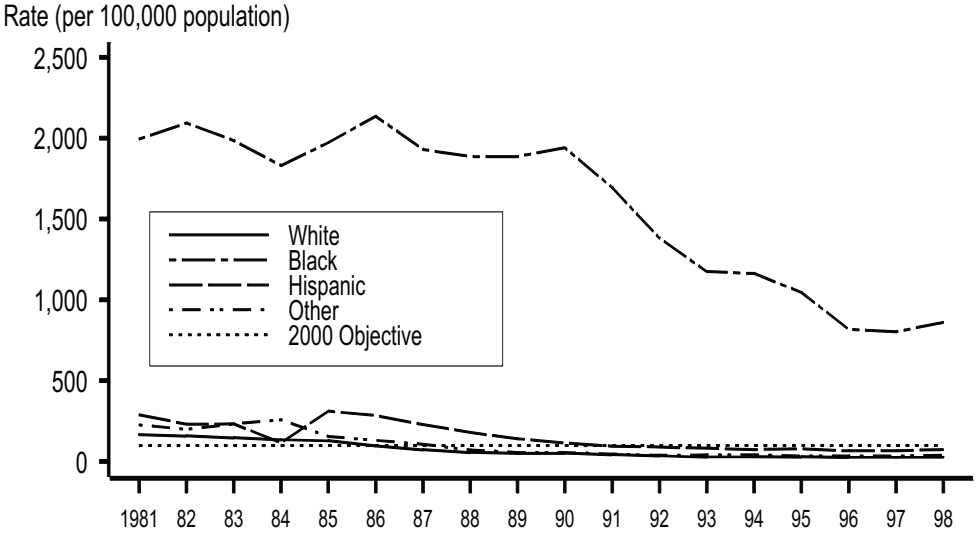
Note: Atlanta, GA did not report gonorrhea statistics in 1994 (see Appendix).

Figure 15. Gonorrhea — Rates by gender: United States, 1981–1998 and the Healthy People year 2000 objective



Note: Georgia did not report gonorrhea statistics in 1994 (see Appendix).

Figure 16. Gonorrhea — Rates by race and ethnicity: United States, 1981–1998 and the Healthy People year 2000 objective



Note: "Other" includes Asian/Pacific Islander and American Indian/Alaska Native populations. Black, White, and Other are non-Hispanic. Georgia did not report gonorrhea statistics in 1994 (see Appendix).

Figure 17. Gonorrhea — Age- and gender-specific rates: United States, 1998

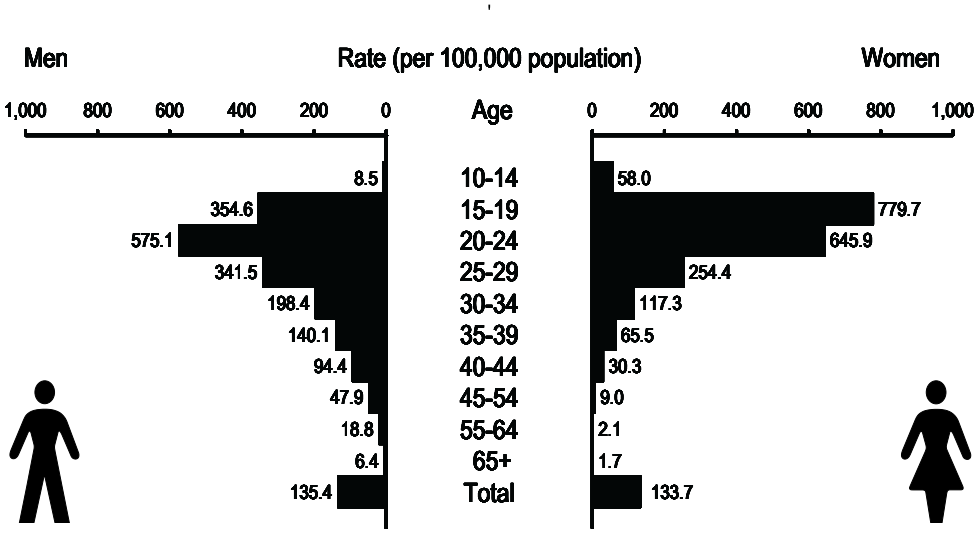
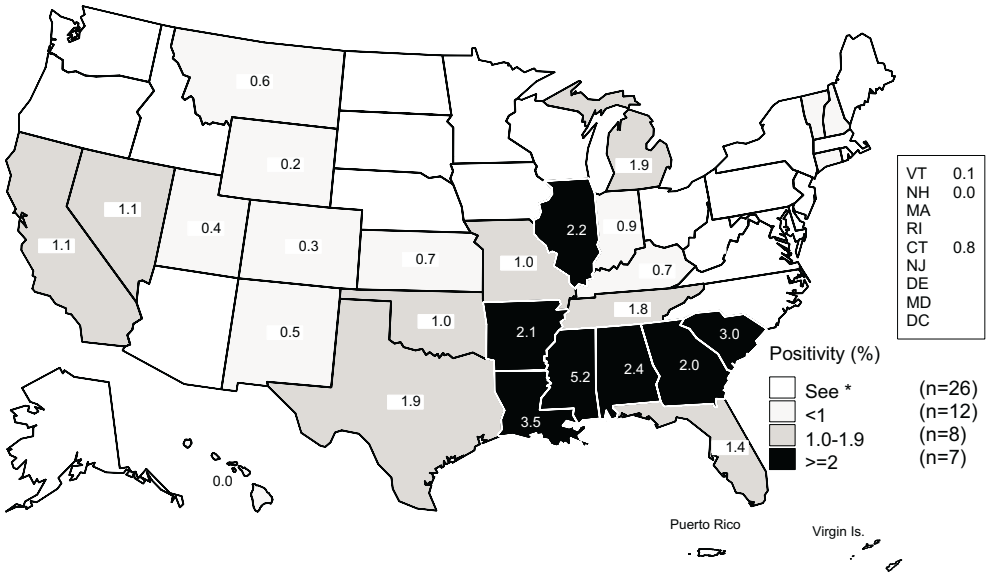


Figure 18. Gonorrhea — Positivity among 15-24 year old women tested in family planning clinics by state, 1998



*States reported gonorrhea positivity data on less than 500 women aged 15-24 years during 1998.

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

Figure 19. Gonococcal Isolate Surveillance Project (GISP) — Location of participating clinics and regional laboratories: United States, 1998

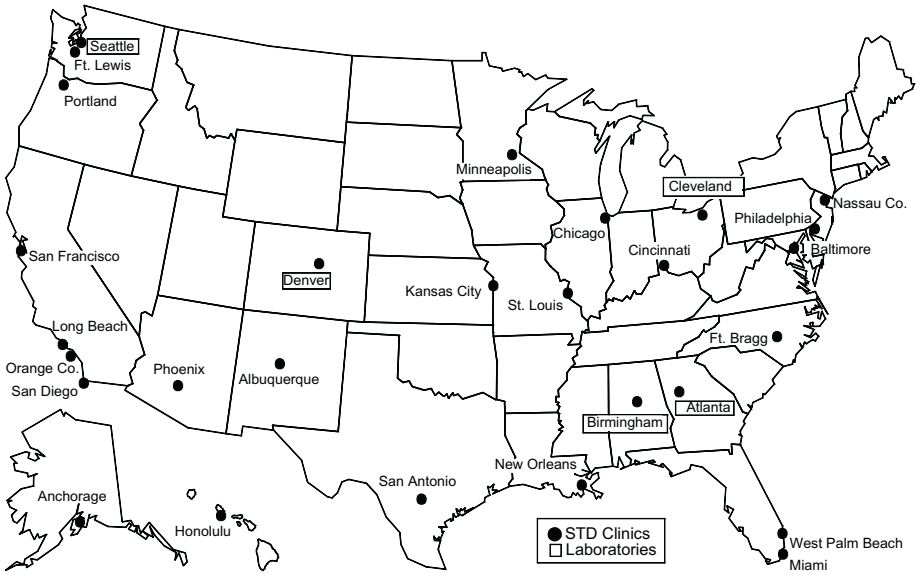
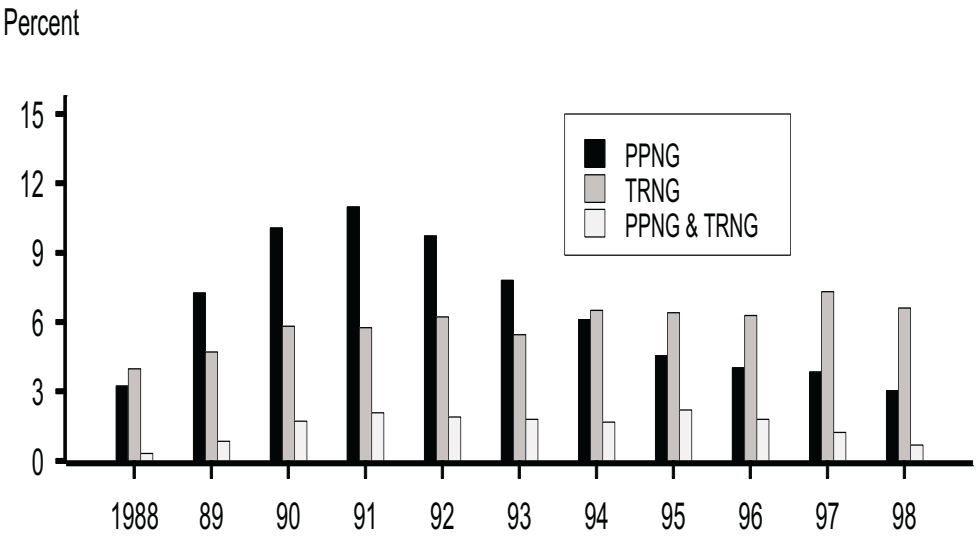
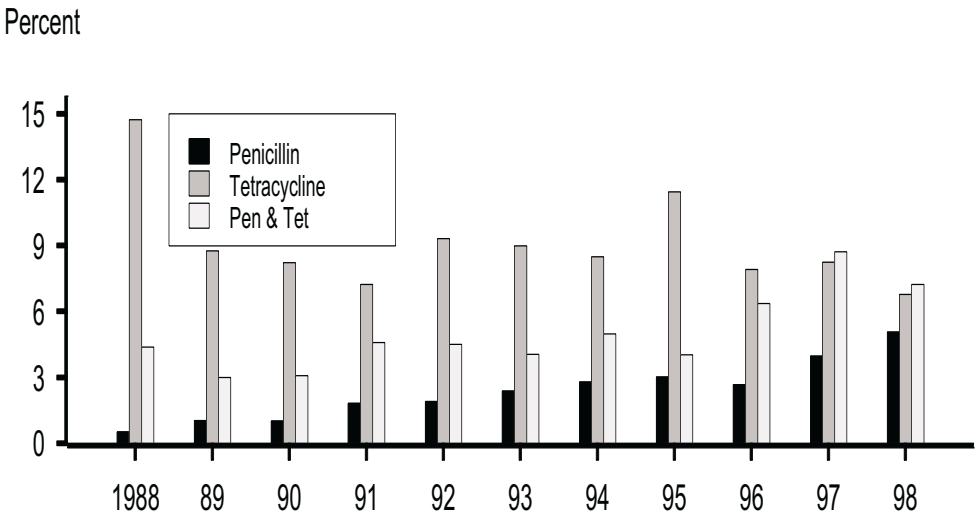


Figure 20. Gonococcal Isolate Surveillance Project (GISP) — Trends in plasmid-mediated resistance to penicillin and tetracycline, 1988–1998



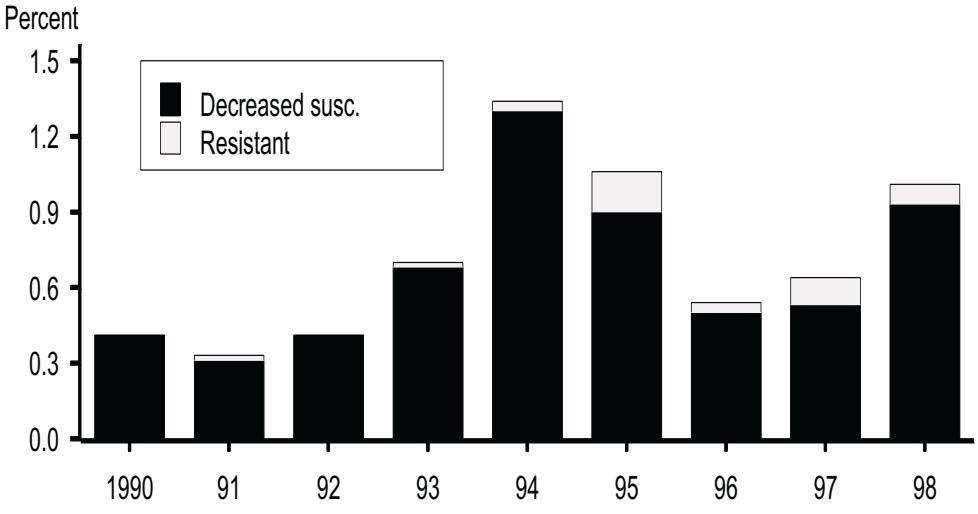
Note: "PPNG" (penicillinase-producing *Neisseria gonorrhoeae*) and "TRNG" (tetracycline-resistant *N. gonorrhoeae*) refer to plasmid-mediated resistance to penicillin and tetracycline, respectively.

Figure 21. Gonococcal Isolate Surveillance Project (GISP) — Trends in chromosomally mediated resistance to penicillin and tetracycline, 1988–1998



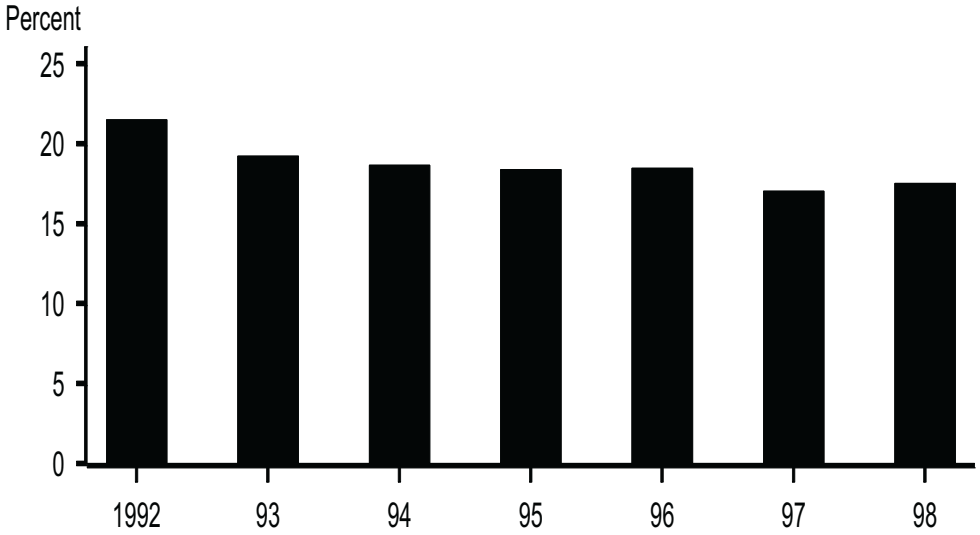
Note: Chromosomally mediated resistance to penicillin denotes a minimum inhibitory concentration (MIC) of greater than or equal to 2 μg penicillin/mL and beta-lactamase negative; chromosomally mediated resistance to tetracycline corresponds to a MIC of greater than or equal to 2 μg tetracycline/mL without plasmid-mediated tetracycline resistance.

Figure 22. Gonococcal Isolate Surveillance Project (GISP) — Prevalence of *Neisseria gonorrhoeae* with decreased susceptibility or resistance to ciprofloxacin, 1990–1998



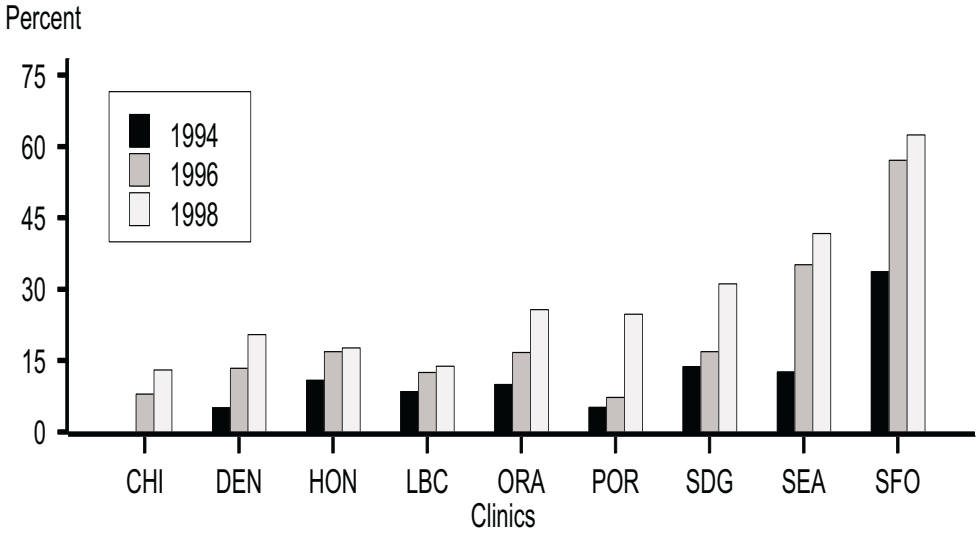
Note: Resistant isolates have MICs greater than or equal to 1 μg ciprofloxacin/mL. Isolates with decreased susceptibility have MICs of 0.125 - 0.5 μg ciprofloxacin/mL. There were twenty three (23) resistant isolates: one in 1991, one in 1993, two in 1994, eight in 1995, two in 1996, five in 1997 and four in 1998. Susceptibility to ciprofloxacin was first measured in GISP in 1990.

Figure 23. Gonococcal Isolate Surveillance Project (GISP) — Proportion of men with gonorrhea who had a previous gonorrhea infection within the past year, 1992–1998



Note: GISP cases with no information on previous episodes of gonorrhea were excluded. Data on previous episodes of gonorrhea were first collected in 1992.

Figure 24. Gonococcal Isolate Surveillance Project (GISP) — Percent of *Neisseria gonorrhoeae* isolates obtained from men who have sex with men for STD clinics in nine cities, 1994, 1996 and 1998



Note: In 1998, these nine clinics reported 87.3% (439/503) of GISP gonorrhea cases in men who have sex with men. Chicago first participated in 1996. Clinics include: CHI=Chicago, IL; DEN=Denver, CO; HON=Honolulu, HI; LBC=Long Beach, CA; ORA=Orange County, CA; POR=Portland, OR; SDG=San Diego, CA; SEA=Seattle, WA; and SFO=San Francisco, CA.

Syphilis

From 1990 to 1998, the U.S. primary and secondary (P&S) syphilis rate declined 87 percent to its lowest level since reporting began in 1941. While the U.S. syphilis rate is low and the disease is geographically concentrated, a concerted effort could lead to its elimination in the United States. Collaboration with diverse organizations, public health professionals, the private medical community, and other partners working in STD and HIV will be essential in this effort[1].

Despite the overall decline, syphilis remains an important problem in the South and in a small number of urban areas outside the South, particularly among African-Americans. Syphilis, a genital ulcerative disease, facilitates the transmission of HIV and may be particularly 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 during pregnancy results in perinatal death in up to 40% of cases, and if acquired during the previous four years before pregnancy, may lead to infection of the fetus in over 70% of cases. For syphilis, as for other STDs, differential reporting of cases from public and private sectors may magnify the differences in reported rates by race and ethnicity.

- In 1998, 6,993 cases of P&S syphilis were reported to CDC. This is the lowest number of cases reported since 1958. Between 1997 and 1998 the incidence of P&S syphilis in the U.S. declined from 3.2 to 2.6 cases per 100,000 persons (Figure 26, Table 1), and has been below the Healthy People 2000 (HP2000) national objective of 4.0 per 100,000 persons for the last two years.
- Since 1990 the rate of early latent syphilis has exceeded the rate of P&S syphilis. There were approximately 0.8 reported cases of early latent syphilis for every reported case of P&S syphilis in the five years preceding 1990 and 1.8 reported cases of early latent syphilis for every reported case of P&S syphilis in 1998 (Table 1).
- Since the peak of late and late latent syphilis in 1993, the rate of late and late latent syphilis has exceeded the rate of P&S syphilis and grows proportionately greater every year. There were approximately 0.6 reported cases of late and late latent syphilis for every reported case of P&S syphilis in the five years preceding 1993 and 2.5 reported cases of late and late latent syphilis for every reported case of P&S syphilis in 1998 (Table 1).
- In 1998, P&S syphilis rates in 40 states and 1 outlying area were below the HP2000 national objective of 4 cases per 100,000 (Figure 27, Table 24). Fourteen states and 1 outlying area reported 5 or fewer cases of P&S syphilis in 1998.
- In 1998, 2,430 (78%) of 3,115 counties in the U.S. reported no cases of P&S syphilis compared with 2,324 (75%) of counties in 1997. Of 685 counties reporting at least one case of P&S syphilis in 1998, 373 (54%) counties reported rates of 4 cases or fewer per 100,000 persons. Therefore, rates of P&S syphilis were above the HP2000 objective for 312 counties in 1998 (Figure 28). These

counties (10% of the total number of counties in the U.S.) accounted for approximately 76% of the reported P&S syphilis cases.

- In 1998, the largest numbers of reported cases of P&S syphilis were found in 25 counties, and the three independent cities of Baltimore, St. Louis, and the District of Columbia (Table 32). These 28 areas account for half of the total number of reported P&S syphilis cases.
- In 1998, the rates of P&S syphilis continued to decline in the Northeast, Midwest, and the South. However, the rate of 5.1 cases per 100,000 persons in the South remained above the HP2000 objective (Figure 29, Table 25). The P&S syphilis rates of the other 3 regions were below the HP2000 objective.
- Rates for P&S syphilis were calculated within the U.S. and each geographic region for each of 4 defined urban-to-rural categories (see Figure 30 and the Appendix for definitions of the categories). In general, P&S syphilis rates for urban-to-rural categories of the South dominated the corresponding rates of the other three regions. Of the 6,969 cases of P&S syphilis reported at the county level for 1998, about 69% occurred in the South. In 1998, the highest rate (5.6 per 100,000 population) was found for urban counties of the South. The South accounted for 64% of all P&S cases that occurred in urban counties, and 93% of all P&S cases that occurred within each of the other three categories of counties (peri-urban, peri-rural, and rural). Within the South, rural counties had the lowest rate (2.5 per 100,000). However, this rate was substantially higher than the rates found for rural counties in each of the other regions, and was about 2 to 3 times greater than the rates for urban counties in the West and Northeast. In the West, Midwest, and Northeast, the highest rates were typically found in urban counties.
- The overall rate of P&S syphilis in selected large cities over 200,000 population declined from 6.0 cases per 100,000 persons in 1997 to 5.1 in 1998 (Figure 31, Table 29). However, rates exceeded the HP2000 objective in 24 (38%) of 64 large cities in the United States and outlying areas for which data were available (Table 28).
- During the period 1994 to 1998, the rates of P&S syphilis within racial and ethnic groups have generally declined (Figure 33, Table 23B). However, the 1998 rate for non-Hispanic blacks of 17.1 cases per 100,000 persons was 34 times greater than the rate for non-Hispanic whites.
- Between 1997 and 1998, the overall rate of congenital syphilis decreased from 27.5 to 20.6 cases per 100,000 live births (Figure 36, Table 37)[2]. However, compared with 1997, increases were observed in 1998 for 6 (Arizona, Missouri, New Jersey, North Carolina, Oklahoma, and South Carolina) of 21 states reporting more than 5 cases and for Puerto Rico (Table 39).
- In 1998, 3 states (Arkansas, Maryland, and New Jersey) and Puerto Rico had congenital syphilis rates that exceeded the HP2000 objective of 40 cases per 100,000 live births (Table 38).
- The HP2000 congenital syphilis objective of 40 cases per 100,000 live births was exceeded in 24 (38%) of the 64 selected cities with a population over 200,000 (Table 40). For 5 of these cities (Baltimore, Houston, Miami, Newark, and Oklahoma City), the rate per 100,000 births was 3 to almost 13 times greater than the HP2000 objective.

- Additional information on syphilis and congenital syphilis can be found in the **Special Focus Profiles** section.

---

[1]CDC. Primary and secondary syphilis—United States, 1997. *MMWR* 1998;24:493-7.

[2]CDC. Congenital syphilis—United States, 1998. *MMWR* 1998;48:757-61.

Figure 25. Syphilis — Reported cases by stage of illness: United States, 1941–1998

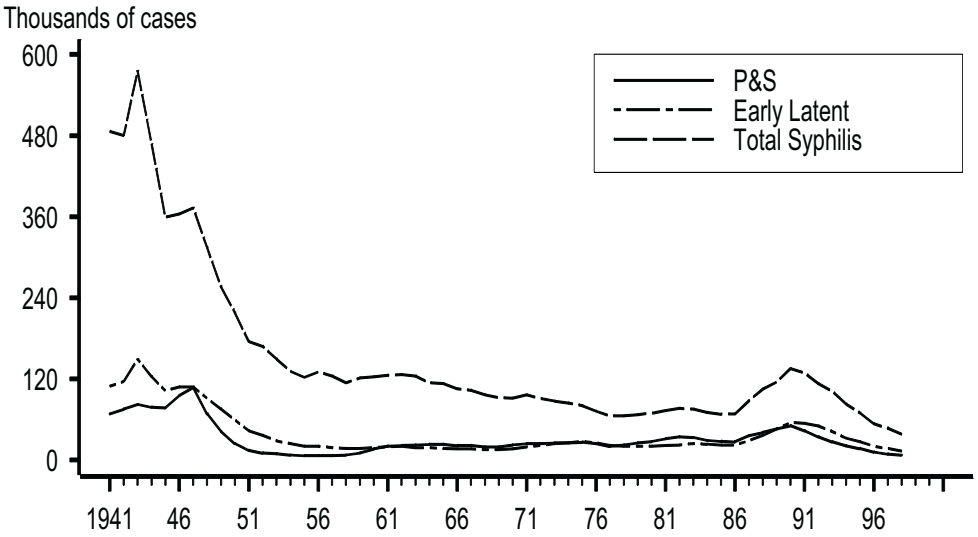


Figure 26. Primary and secondary syphilis — Reported rates: United States, 1970–1998 and the Healthy People year 2000 objective

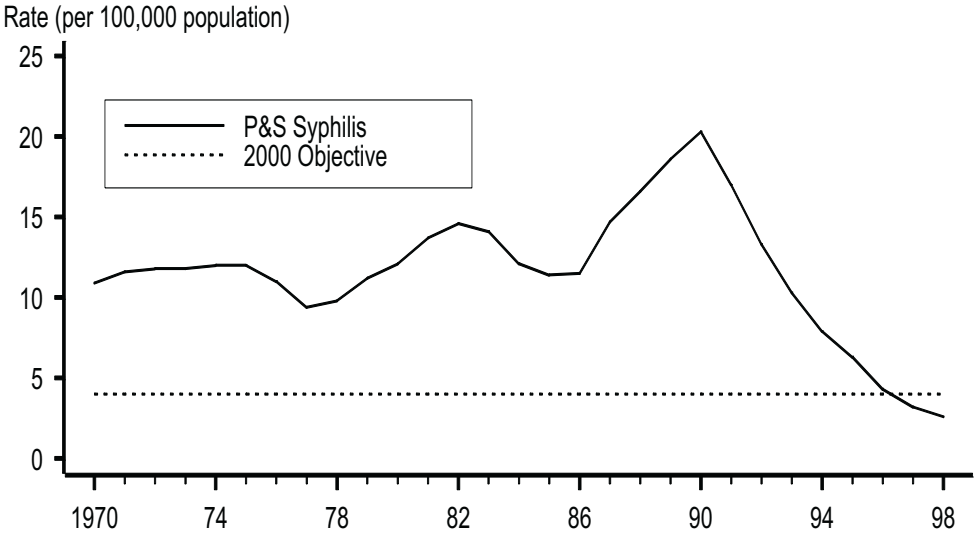
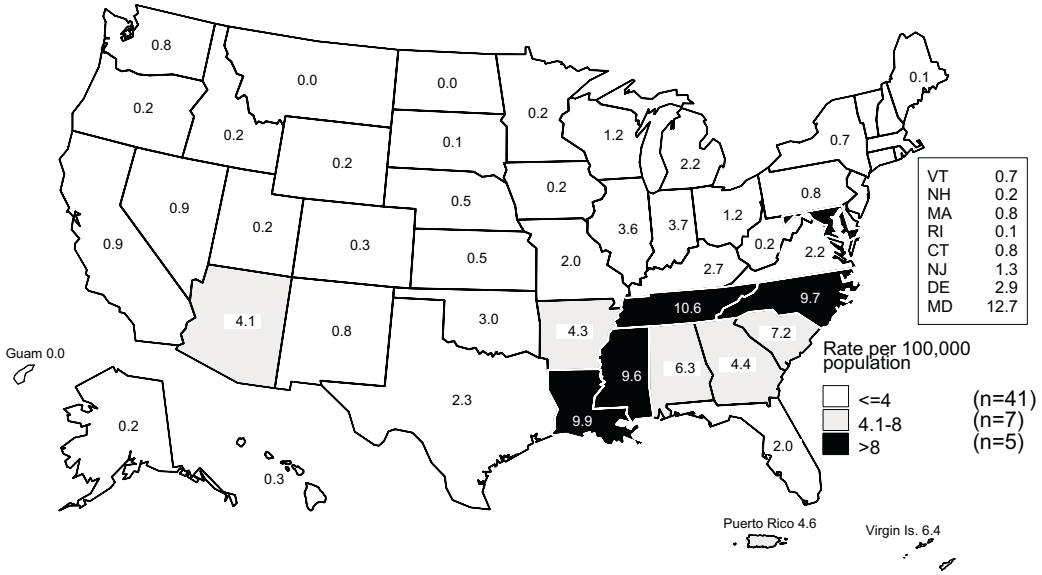


Figure 27. Primary and secondary syphilis — Rates by state: United States and outlying areas, 1998



Note: The total rate of primary and secondary syphilis for the United States and outlying areas (including Guam, Puerto Rico and Virgin Islands) was 2.6 per 100,000 population. The Healthy People year 2000 objective is 4.0 per 100,000 population.

Figure 28. Primary and secondary syphilis — Counties with rates above and counties with rates below the Healthy People year 2000 objective: United States, 1998

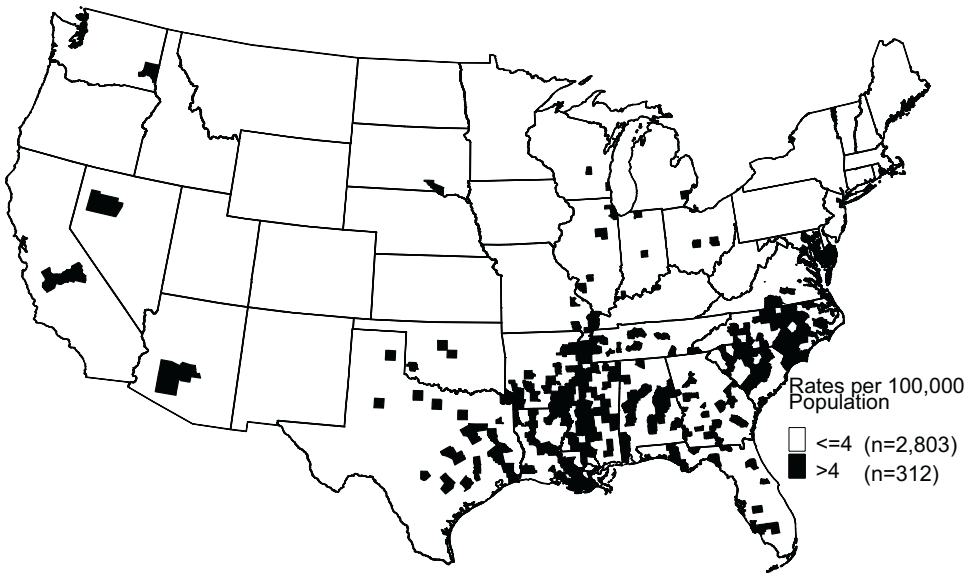


Figure 29. Primary and secondary syphilis — Rates by region: United States, 1981–1998 and the Healthy People year 2000 objective

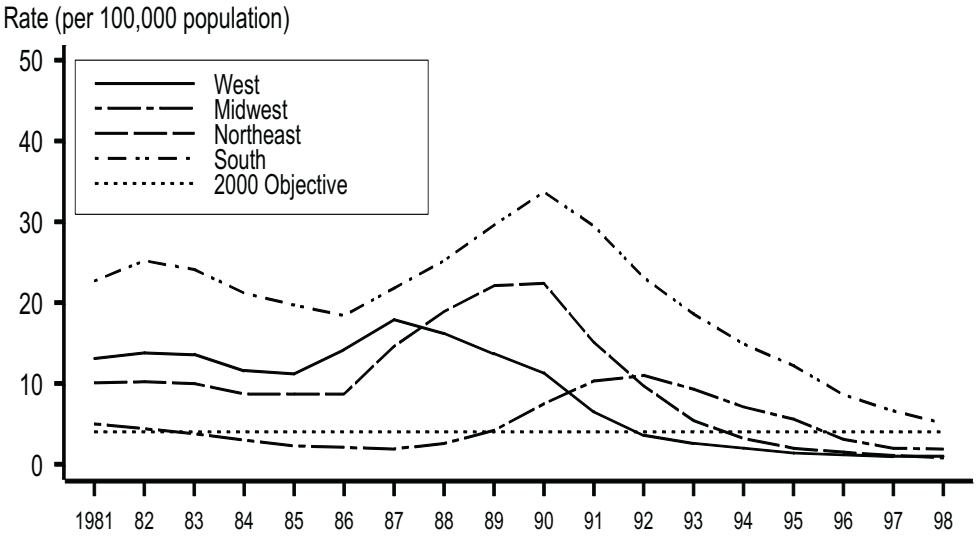
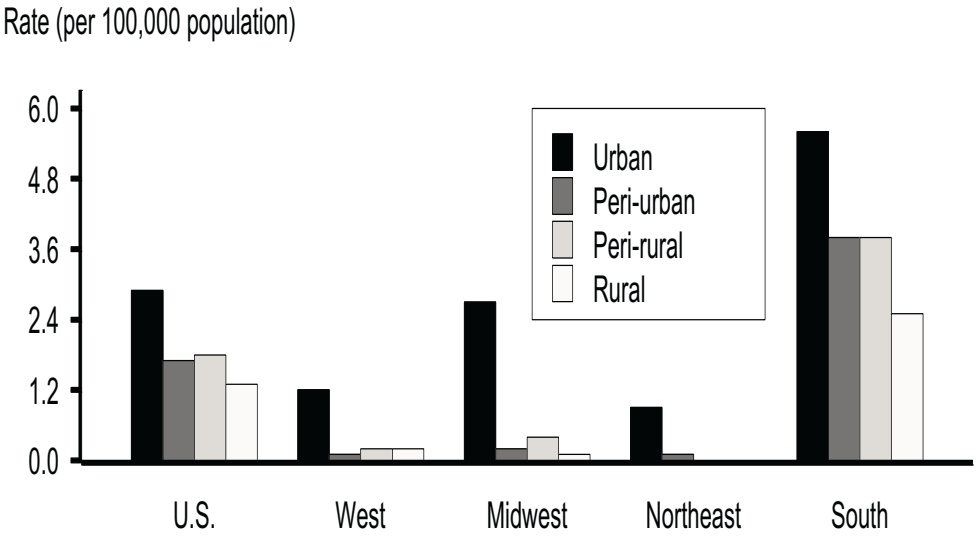


Figure 30. Primary and secondary syphilis — Rates by urban-rural category and geographic region, 1998



Note: See Appendix for definitions and source of urban-to-rural categories.

Figure 31. Primary and secondary syphilis — Rates in selected U.S. cities of >200,000 population, 1981–1998 and the Healthy People year 2000 objective

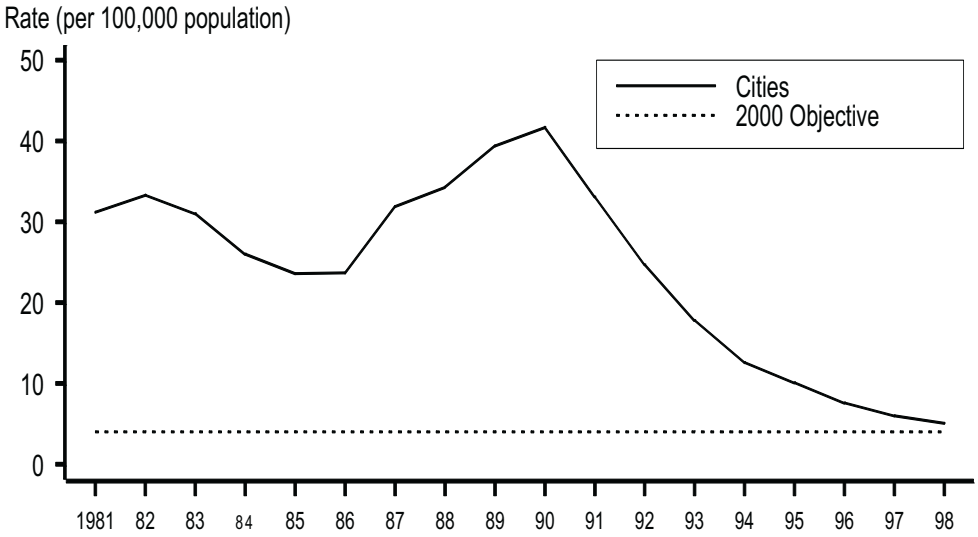


Figure 32. Primary and secondary syphilis — Rates by gender: United States, 1981–1998 and the Healthy People year 2000 objective

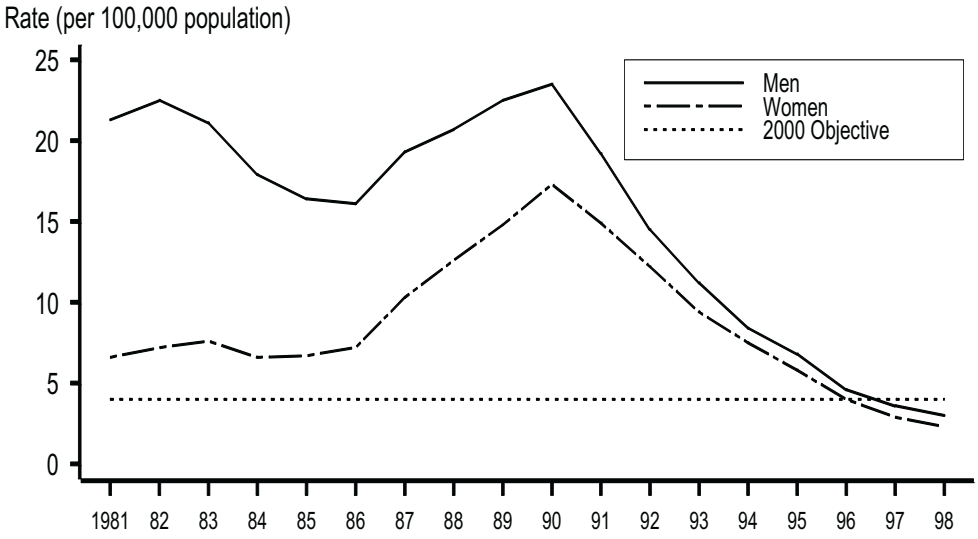
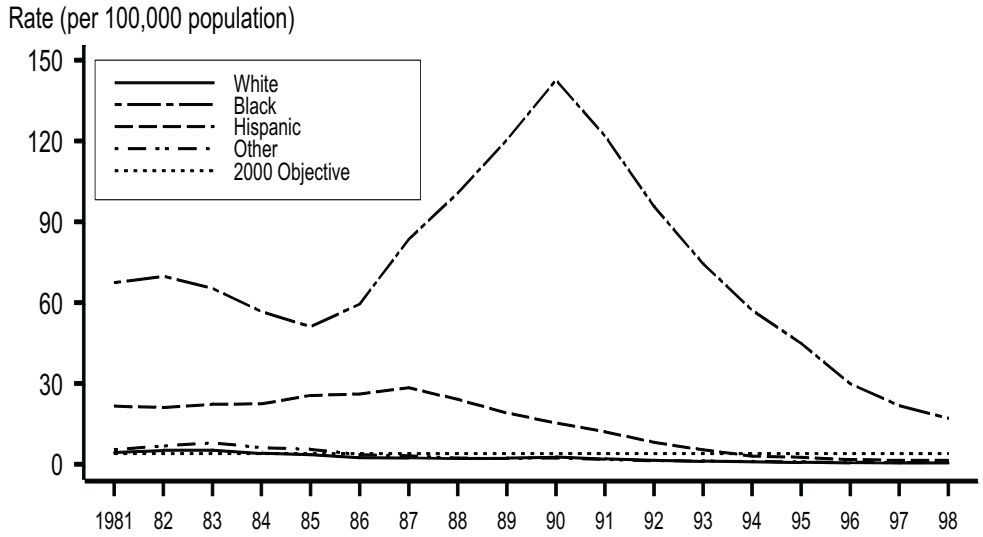


Figure 33. Primary and secondary syphilis — Rates by race and ethnicity: United States, 1981–1998 and the Healthy People year 2000 objective



Note: "Other" includes Asian/Pacific Islander and American Indian/Alaska Native populations. Black, White, and Other are non-Hispanic.

Figure 34. Primary and secondary syphilis — Age- and gender-specific rates: United States, 1998

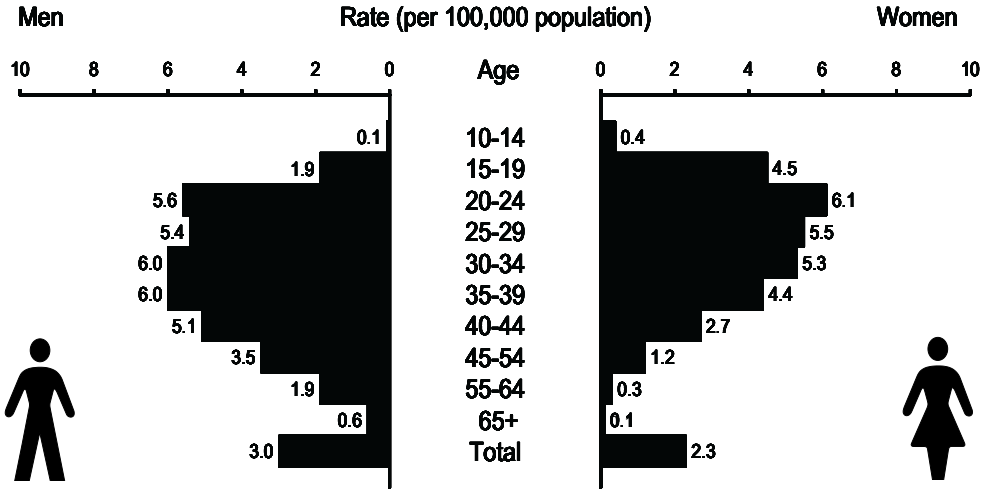
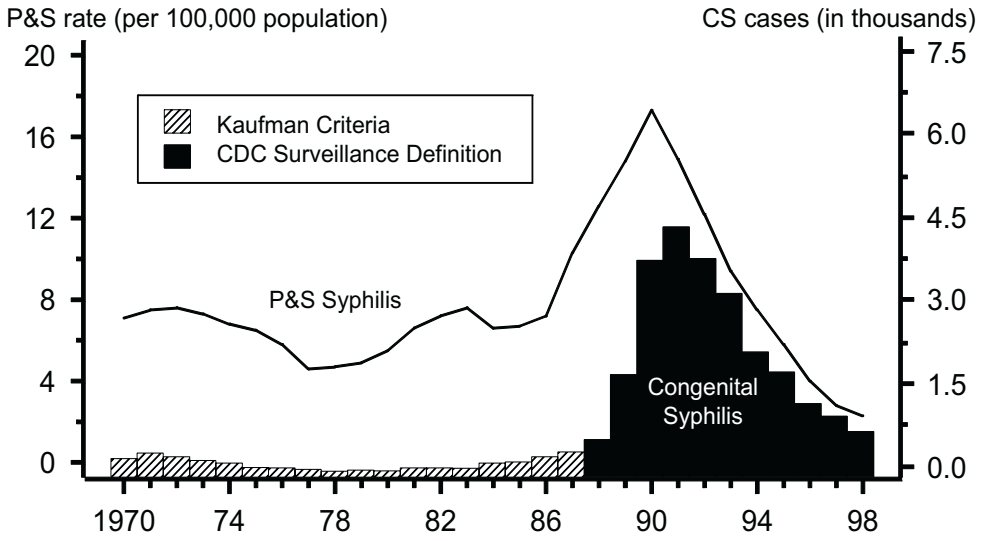
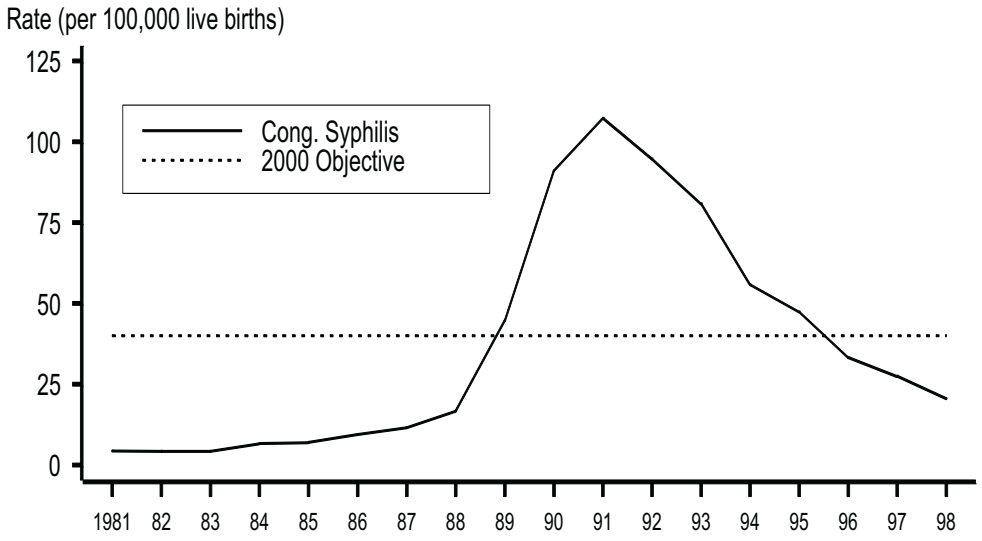


Figure 35. Congenital syphilis — Reported cases for infants <1 year of age and rates of primary and secondary syphilis among women: United States, 1970–1998



Note: The surveillance case definition for congenital syphilis changed in 1988 (see Appendix).

Figure 36. Congenital syphilis — Rates for infants <1 year of age: United States, 1981–1998



Note: 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 (Table 1, Figure 37). In 1998, a total of 189 cases of chancroid were reported from 20 states (Table 42). Six states (Arkansas, California, New York, North Carolina, South Carolina, and Texas) accounted for nearly 85% of the 189 reported cases. Chancroid is difficult to culture and may be substantially underdiagnosed[1,2].

Comprehensive surveillance data for non-gonococcal urethritis, genital herpes simplex virus (HSV), human papillomavirus, and trichomoniasis are not available. Ongoing trend data are limited to estimates of trends in physicians' office practices provided by the National Disease and Therapeutic Index (Figures 38 and 40-42).

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%. The HSV-2 seroprevalence in NHANES III was 30% higher than the age-adjusted HSV-2 seroprevalence from NHANES II (1976-1980). Increases in HSV-2 seroprevalence between NHANES II and NHANES III were concentrated in the younger age groups. There were statistically significant increases overall in the three youngest age groups, including persons aged 12 to 39 years (Figure 39)[3].

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

---

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

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

[3]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.

Figure 37. Chancroid — Reported cases: United States, 1981–1998

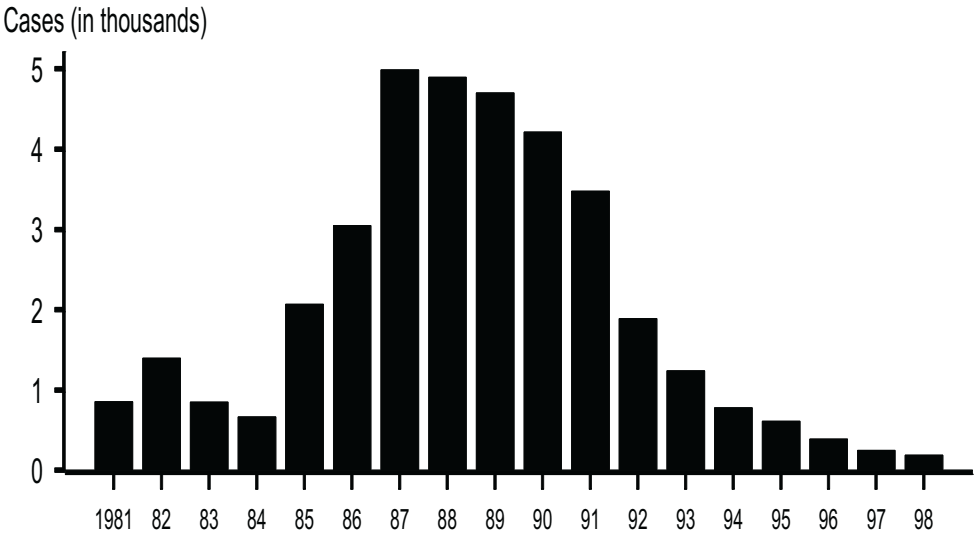
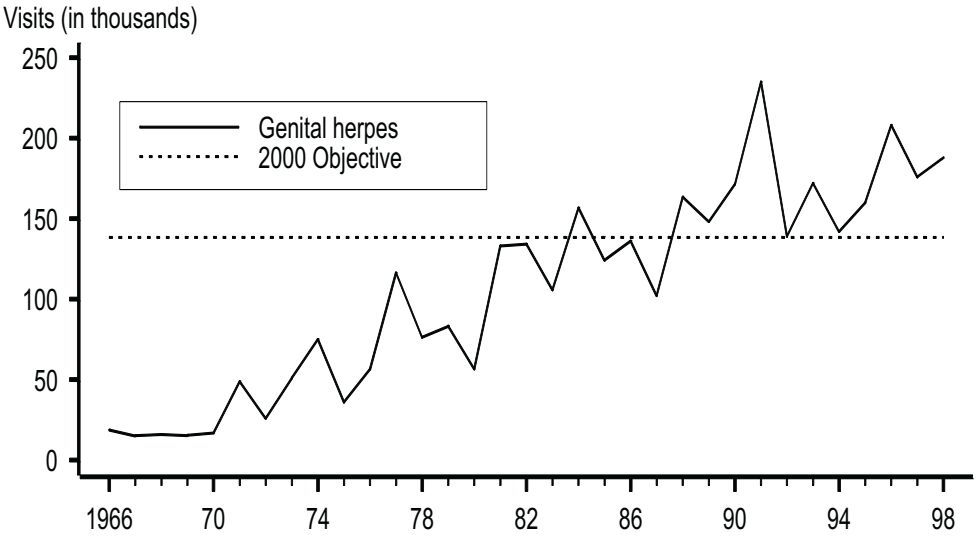


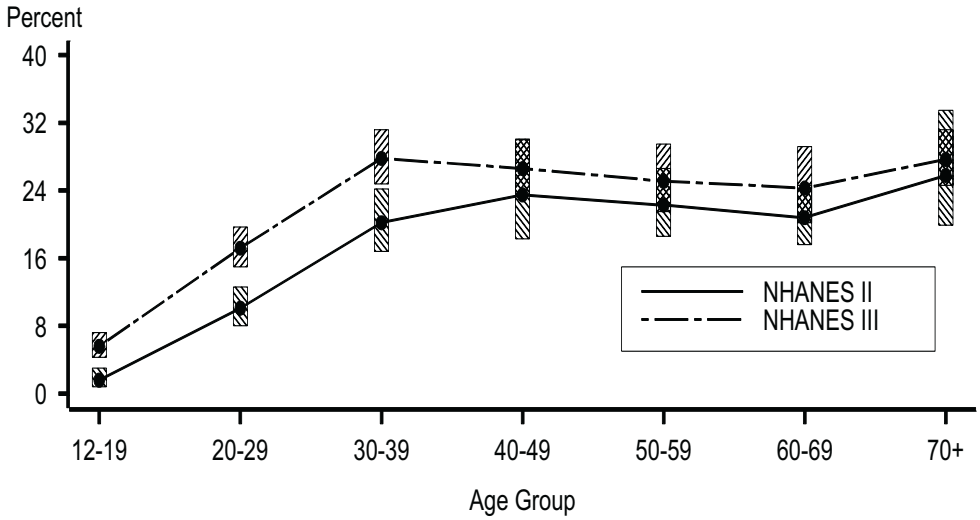
Figure 38. Genital herpes simplex virus infections — Initial visits to physicians' offices: United States, 1966–1998 and the Healthy People year 2000 objective



Note: See Appendix.

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

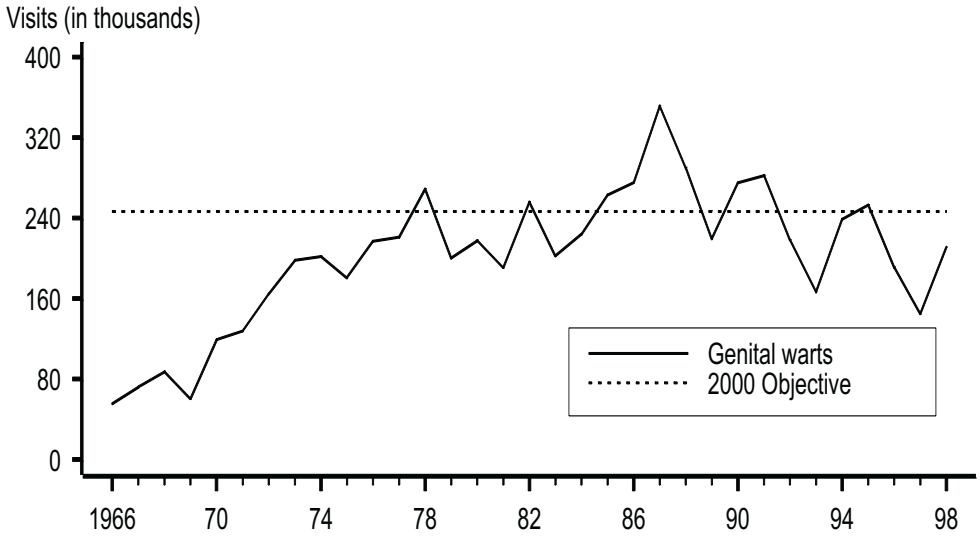
Figure 39. Genital herpes simplex virus type 2 — Percent seroprevalence according to age in NHANES* II (1976–1980) and NHANES III (1988–1994)



Note: Bars indicate 95% confidence intervals.

*National Health and Nutrition Examination Survey

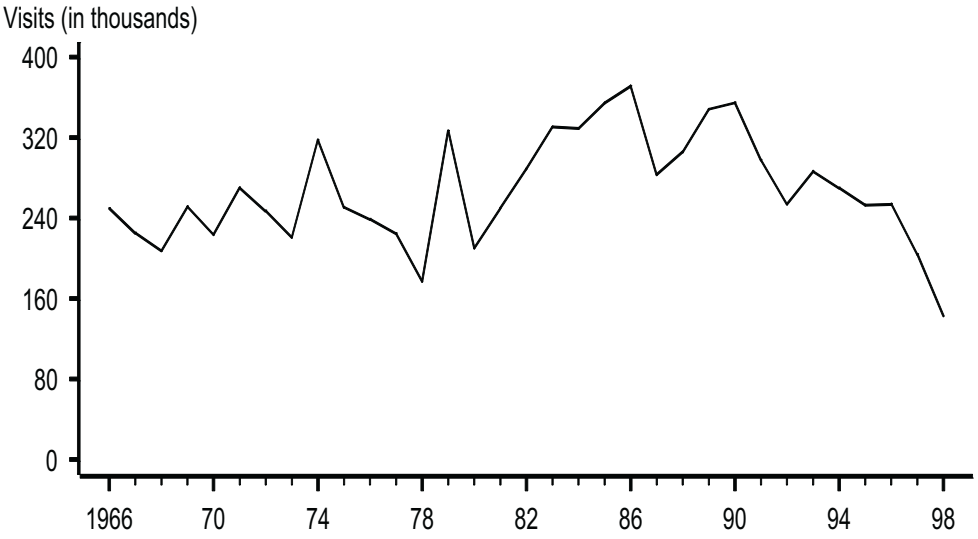
Figure 40. Human papillomavirus (genital warts) — Initial visits to physicians' offices: United States, 1966–1998 and the Healthy People year 2000 objective



Note: See Appendix.

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

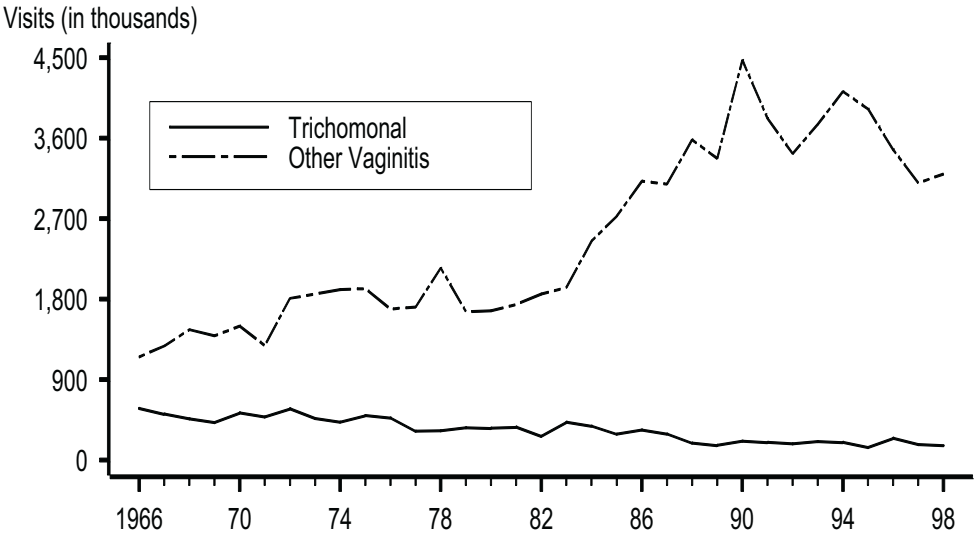
Figure 41. Nonspecific urethritis — Initial visits to physicians' offices by men: United States, 1966–1998



Note: See Appendix.

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

Figure 42. Trichomonal and other vaginal infections — Initial visits to physicians' offices: United States, 1966–1998



Note: See Appendix.

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

Special Focus Profiles

The **Special Focus Profiles** section highlights 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; 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**. In addition, there are figures (Figures A-EE) that highlight specific points made in the following 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 adverse reproductive consequences, e.g., ectopic pregnancy and tubal factor infertility. If not adequately treated, 20% to 40% of women infected with chlamydia[1] and 10% to 40% of women infected with gonorrhea[2] develop PID. Among women with PID, scarring sequelae will cause involuntary infertility in 20%, ectopic pregnancy in 9%, and chronic pelvic pain in 18%[3]. Approximately 70% of chlamydial infections and 50% of gonococcal infections in women are asymptomatic[4-6]. These infections are detected primarily through screening programs. The vague symptoms associated with chlamydial and gonococcal PID cause 85% of women to delay seeking medical care, thereby increasing the risk of infertility and ectopic pregnancy[7]. Data from a randomized controlled trial of chlamydia screening in a managed care setting suggest that such screening programs can reduce the incidence of PID by as much as 60%[8].

Gonorrhea and chlamydia 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 antenatal detection and treatment.

Infections with human papillomavirus (HPV) in women are a major concern because specific HPV subtypes (e.g., types 16, 18, 31, 33, and 35) have been associated epidemiologically with cervical dysplasia and cervical cancer. HPV types 6 and 11 in child bearing women can cause laryngeal papillomatosis in infants.

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[9].

Observations

- Between 1997 and 1998, the reported rate of chlamydial infections in women increased from 336.9 per 100,000 population to 382.2 (Figure 6, Table 6). This increase most likely reflects a variety of different factors (e.g., increased screening activities, the increased use of more recently developed diagnostic test procedures, changes to information systems to incorporate laboratory reporting, etc.) rather than an increase in number of cases in women; even as reported cases have increased, prevalence among women screened in the U.S. has generally declined (see section on Chlamydia). Despite considerable under-reporting, it is

important to note that chlamydia rates exceed gonorrhea rates in women in many states (Figures A and B, Tables 6 and 15).

- For gonorrhea, the Healthy People year 2000 objective is 100 cases per 100,000 persons. Gonorrhea rates for women alone exceeded this HP2000 objective in 24 states (Figure B, Table 15), an increase of 4 additional states over the preceding year. The highest rates of gonorrhea for women were concentrated in the South.
- 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 15, Tables 15 and 16). Gonorrhea rates for women increased from 119.0 cases per 100,000 population in 1997 to 131.5 in 1998; rates for men also increased from 124.9 to 133.7 between 1997 and 1998. 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. However, trends in women are determined more by screening practices, similar to chlamydia.
- The Healthy People year 2000 objective for primary and secondary syphilis is 4.0 per 100,000 persons. Primary and secondary syphilis rates for women exceeded the HP2000 objective in 8 southern states and 1 outlying area (Figure C, Table 26). Five southern states (Louisiana, Maryland, Mississippi, North Carolina, and Tennessee) had rates for women that were at least twice the HP2000 objective for primary and secondary syphilis (Table 26). For congenital syphilis, the Healthy People year 2000 objective is 40 per 100,000 live births. Three states (Arkansas, Maryland, and New Jersey) and Puerto Rico had rates that exceeded the HP2000 objective (Figure D, Table 38).
- The rate of congenital syphilis closely follows the trend of P&S syphilis in women (Figure 35). 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 approximately 80% to 20.6 in 1998 (Figure 36, Table 37). The rate of P&S syphilis in women peaked at 17.3 per 100,000 persons in 1990 and declined 87% to 2.3 in 1998 (Figure 35, Table 26).
- In 1998, state-specific chlamydia test positivity among 15 to 24 year old women screened in selected prenatal clinics in 21 states ranged from 3.7%-14.5% (Figure E).
- In 1998, state-specific gonorrhea test positivity among 15 to 24 year old women screened in selected prenatal clinics in 8 states ranged from 0.9%-4.7% (Figure F).
- Although the 1998 rate of congenital syphilis was below the Healthy People 2000 objective of 40 cases 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[10].
- Accurate estimates of pelvic inflammatory disease (PID) and tubal factor infertility from gonococcal and chlamydial infections are difficult to obtain. Definitive diagnosis of these conditions can be complex, requiring for example, laparoscopy or laparotomy, while tubal patency studies may be needed to accurately document these conditions. Most cases of PID are treated on the basis of interpretations of clinical findings, which vary between individual practitioners. In

addition, the settings in which care is provided can vary considerably over time. For example, women with PID who would have been hospitalized in the 1980s may be treated in out-patient facilities during the 1990s. Trends in hospitalized PID have declined steadily throughout the 1980s and early 1990s but were similar for 1994-1997 (Figure H). However, these trends may be more reflective of changes in the etiologic spectrum (with increasing proportions of more indolent chlamydial infection) and clinical management of PID (from in-patient to out-patient) rather than true trends in disease[11].

- Recent evidence suggests that health care practices associated with ectopic pregnancy also 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 (Figure G). Beginning in 1990, hospitalizations for ectopic pregnancy began to decline. Data from outpatient care surveys suggest that nearly half of all ectopic pregnancies are treated on an outpatient basis[12]. The total number of ectopic pregnancies in the U.S. in 1992 was estimated to be 108,800 (or 19.7 cases per 1,000 pregnancies), the highest level in more than two decades[12].
- Initial visits to physicians' offices for PID declined from 1993 to 1995, increased in 1996, and again decreased in 1997 and 1998 (Figure I). Among women 15 to 44 years of age, the estimated number of PID cases diagnosed in emergency departments was about 233,000 in 1997 (National Hospital Ambulatory Medical Care Survey, NCHS). This estimate has a relative standard error of 18%.

---

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

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

[3]Westrom L, Joesoef R, Reynolds G, et al. Pelvic inflammatory disease and fertility: a cohort study of 1,844 women with laparoscopically verified disease and 657 control women with normal laparoscopy. *Sex Transm Dis* 1992;19:185-92.

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

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

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

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

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

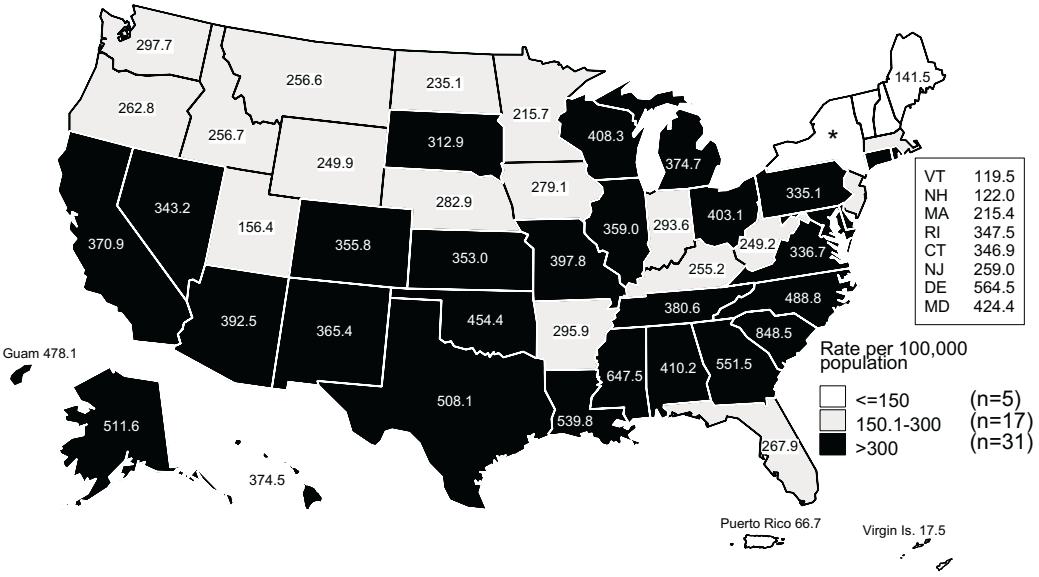
[9]CDC. Guidelines for prevention and control of congenital syphilis. *MMWR* 1988;37(No.S-1).

[10]Division of STD/HIV Prevention. Healthy People 2000: National Health Promotion and Disease Objectives. Progress Review: Sexually Transmitted Diseases, October 26, 1994.

[11]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.

[12]CDC. Ectopic pregnancy—United States, 1990-1992. *MMWR* 1995;44:46-8.

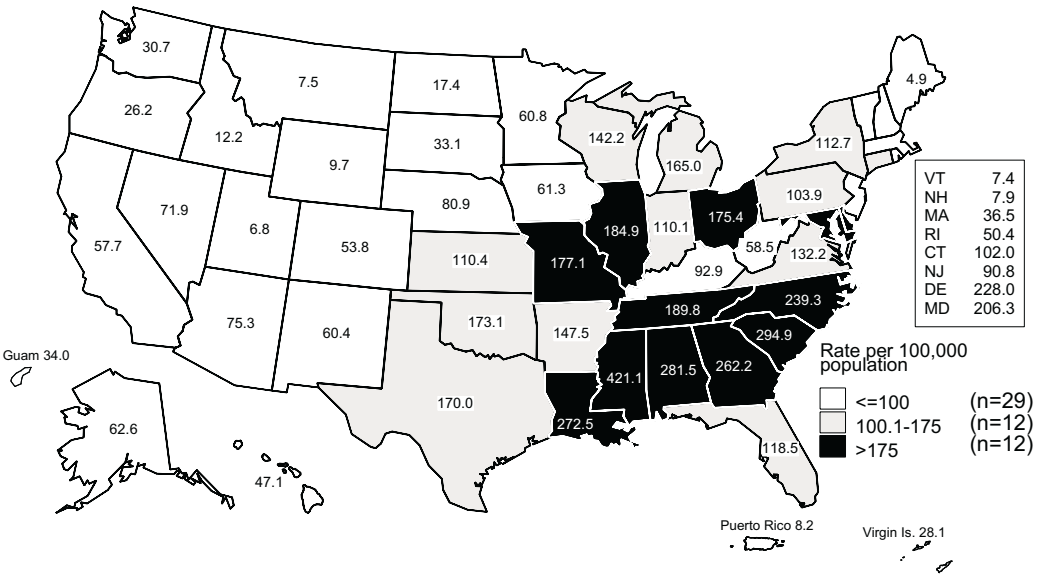
Figure A. Chlamydia — Rates for women by state: United States and outlying areas, 1998



*The New York City rate was 604.6 per 100,000 population. No cases were reported outside of New York City.

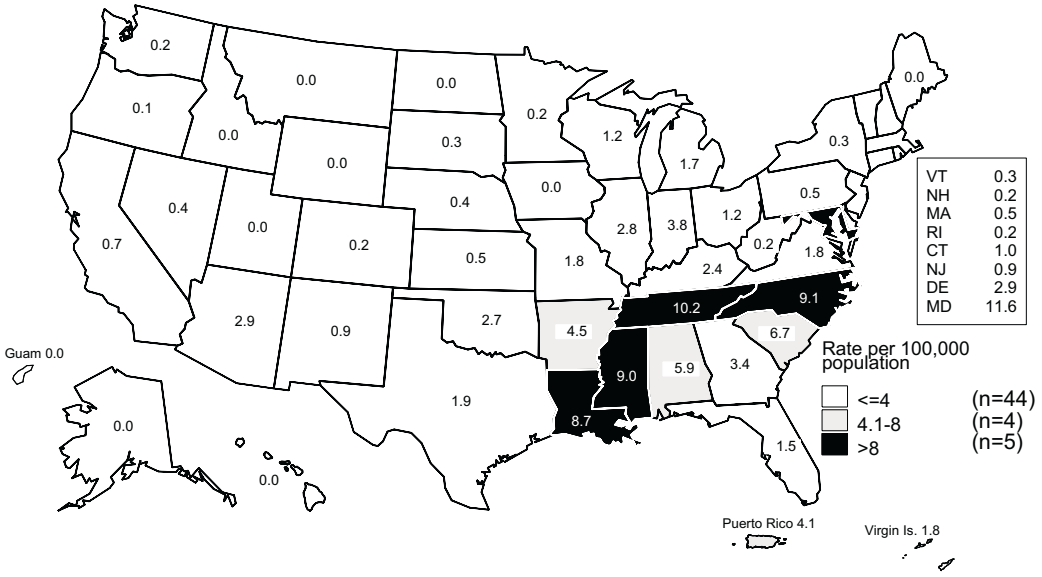
Note: The total rate of chlamydia for women in the United States and outlying areas (including Guam, Puerto Rico and Virgin Islands) was 377.4 per 100,000 population. For further information on chlamydia reporting see the Appendix.

Figure B. Gonorrhea — Rates for women by state: United States and outlying areas, 1998



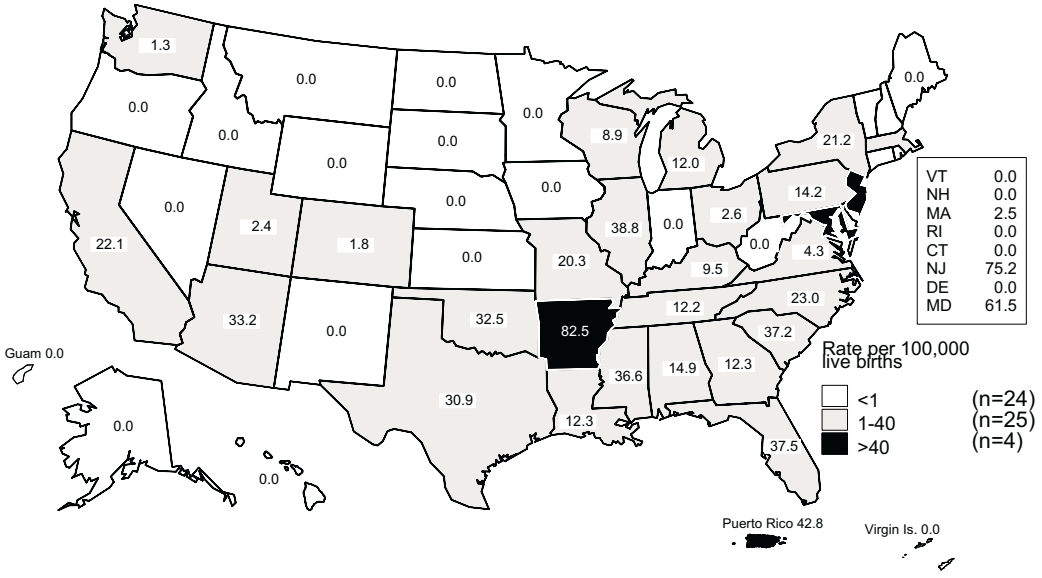
Note: The total rate of gonorrhea for women in the United States and outlying areas (including Guam, Puerto Rico and Virgin Islands) was 129.6 per 100,000 population. The Healthy People year 2000 objective is 175 per 100,000 population for women aged 15-44.

Figure C. Primary and secondary syphilis — Rates for women by state: United States and outlying areas, 1998



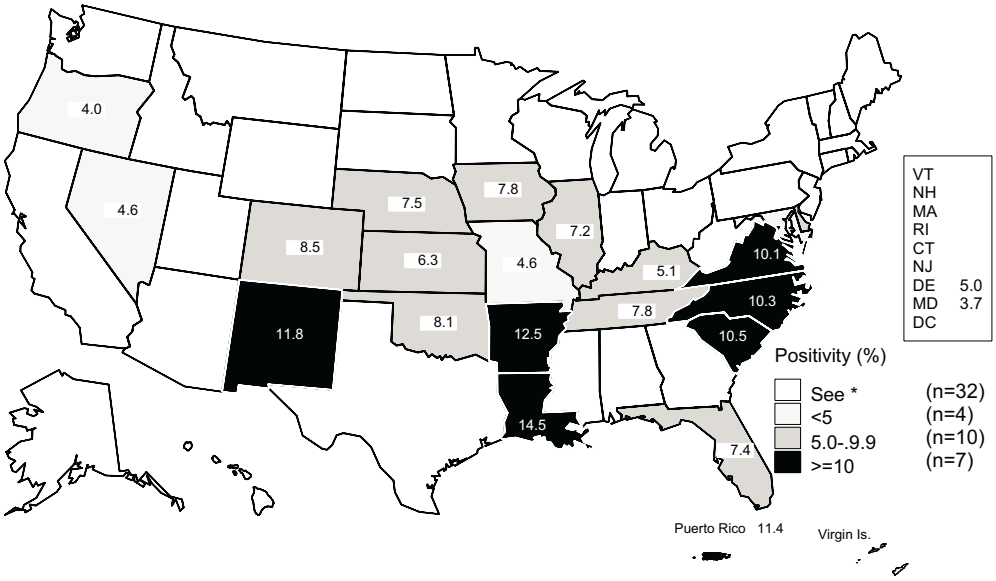
Note: The total rate of primary and secondary syphilis for women in the United States and outlying areas (including Guam, Puerto Rico and Virgin Islands) was 2.3 per 100,000 population. The Healthy People year 2000 objective is 4.0 per 100,000 population.

Figure D. Congenital syphilis — Rates for infants <1 year of age by state: United States and outlying areas, 1998



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 20.9 per 100,000 live births. The Healthy People year 2000 objective is 40.0 per 100,000 live births.

Figure E. Chlamydia — Positivity among 15-24 year old women tested in prenatal clinics by state, 1998

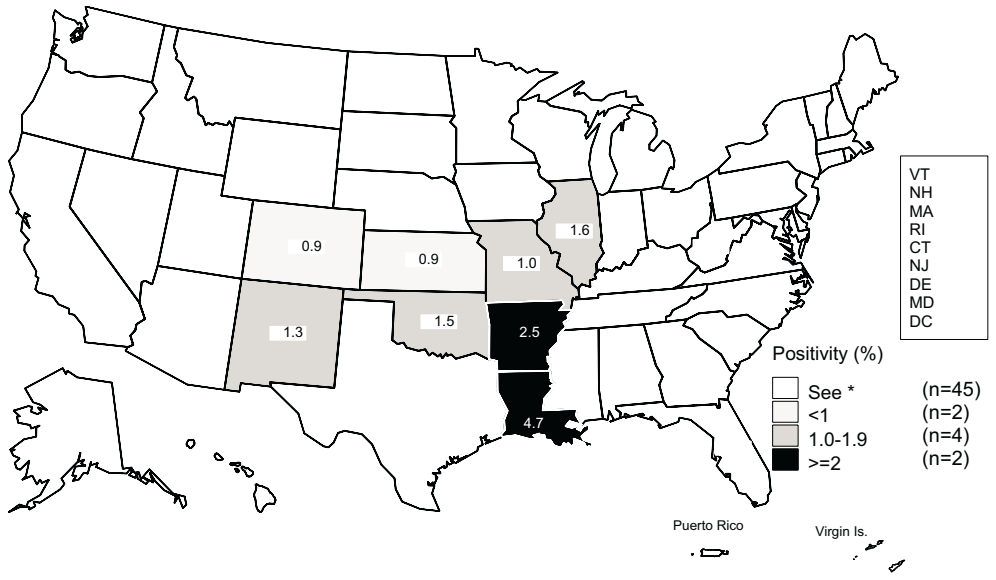


*States not reporting chlamydia positivity data in prenatal clinics.

Note: States reported chlamydia positivity data on at least 500 women aged 15-24 years during 1998 except for Colorado, Nevada, New Mexico, and Oregon. Puerto Rico reported chlamydia positivity data for January - April only.

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

Figure F. Gonorrhea — Positivity among 15-24 year old women tested in prenatal clinics by state, 1998

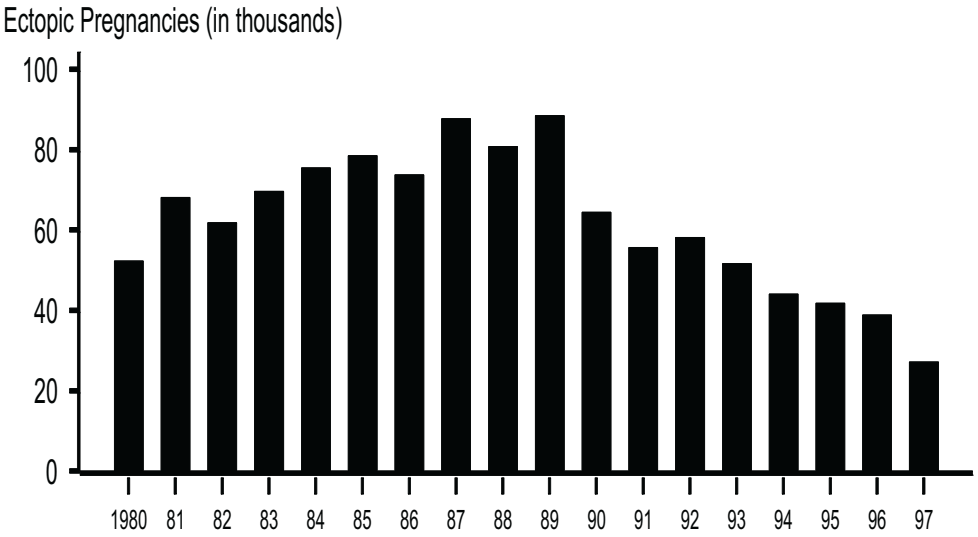


*States not reporting gonorrhea positivity data in prenatal clinics.

Note: States reported gonorrhea positivity data on at least 500 women aged 15-24 years during 1998 except for Colorado and New Mexico.

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

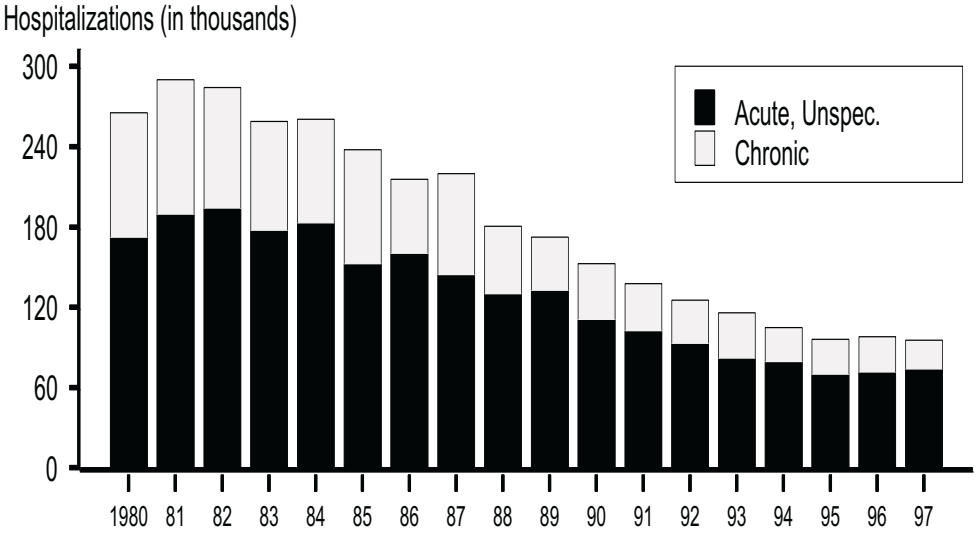
Figure G. Ectopic pregnancy — Hospitalizations of women 15-44 years of age: United States, 1980-1997



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)

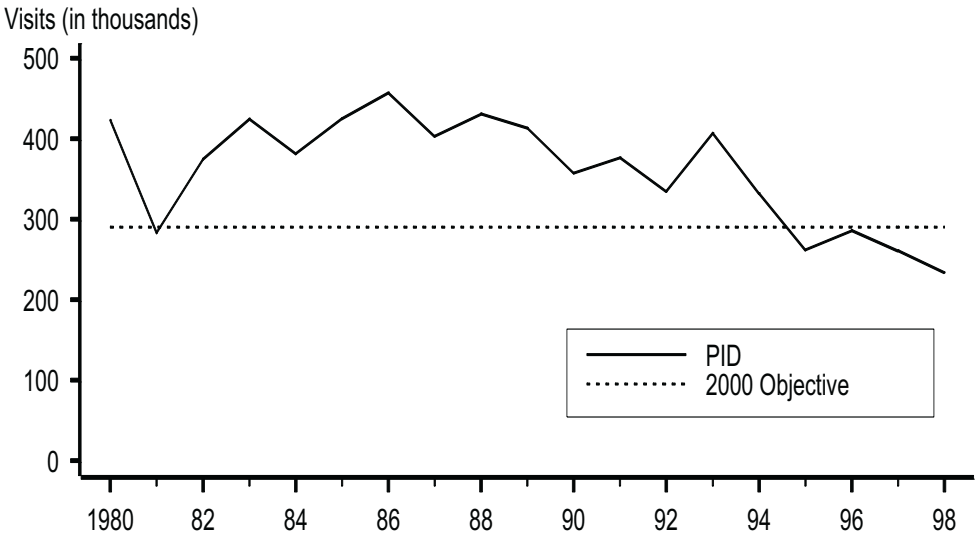
Figure H. Pelvic inflammatory disease — Hospitalizations of women 15-44 years of age: United States, 1980–1997



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 I. Pelvic inflammatory disease — Initial visits to physicians' offices by women 15-44 years of age: United States, 1980–1998 and Healthy People year 2000 objective



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; they may be more likely to engage in unprotected intercourse; and they may select partners at higher risk. In addition, for some STDs, e.g., *Chlamydia trachomatis*, adolescent women may have a physiologically increased susceptibility to infection due to increased cervical ectopy and lack of immunity. During the past two decades, the age of initiation of sexual activity has steadily decreased and age at first marriage has increased, resulting in increases in premarital sexual experience among adolescent women and in an enlarging pool of young women at risk[1,2,3]. 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[4]. The Chlamydia Regional Projects that perform large-scale screening 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 Project, which has screened women since 1988[5] (Figure J).
- Among women, 15- to 19-year-olds had the highest rate of gonorrhea in 1998 (Figure M, Table 12B), and 20- to 24-year-olds had the highest rate of primary and secondary syphilis (Figure O, Table 23B). Among men, 20- to 24-year-olds had the highest rate of gonorrhea and third highest rate of primary and secondary syphilis (Figures N and P, Tables 12B and 23B).
- Rates of gonorrhea among male adolescents generally decreased during 1994-98 (Table 12B). In the 10- to 14-year-old group, the rate for males remained stable at 8.5 per 100,000 for 1997 and 1998. In the 15- to 19-year-old group, the rate declined from 585.2 in 1994 to 354.6 in 1998, a 39% decrease. However, the rate for this male adolescent age group increased from 348.1 in 1997 to 354.6 in 1998. Among young adult men in the 20- to 24-year-old group, the rate of gonorrhea also increased between 1997 and 1998 (537.1 and 575.1, respectively); however, relative to the 1994 rate of 739.1, the 1998 rate reflected a decline of 22%.
- Rates of gonorrhea among female adolescents also generally decreased during the 5 year period 1994-98 (Table 12B). In the 10- to 14-year-old group, the rate

for females decreased from 82.3 per 100,000 in 1994 to 58.0 in 1998, a decrease of 30%. In the 15- to 19-year-old group, the rate declined from 890.2 in 1994 to 779.7 in 1998, a 12% decrease. However, the rates for female adolescents increased between 1997 and 1998 in both age groups. Among young adult women in the 20- to 24-year-old group, the rate of gonorrhea increased from 560.4 in 1997 to 645.9 in 1998; relative to the 1994 rate of 650.4, the 1998 rate decreased slightly.

- In 1998, the highest age-specific gonorrhea rates among women and the second highest rates among men were in the 15- to 19-year-old group (Figure 17).
- Since 1990, approximately 20,000 female Job Corps entrants have been screened each year for chlamydia. The Job Corps, administered by the U.S. Department of Labor at more than 100 sites throughout the country, is a job training program for disadvantaged youth aged 16-24 years. Among women entering the Job Corps in 1998, based on their place of residence just before program entry, state-specific chlamydia prevalence ranged from 4.6% to 20.3% (Figure K). Chlamydial infection is widespread geographically and highly prevalent among these economically disadvantaged young women.
- Data from Job Corps centers submitting gonorrhea specimens for female students aged 16- 24 years to the national contract laboratory indicate a high prevalence of gonococcal infection in this population. At least 100 students from each of 12 states were tested; state-specific gonorrhea prevalence ranged from 1.4% to 8.4% in 1998 (Figure L).

---

[1]CDC. Premarital sexual experience among adolescent women—United States, 1970-1988. *MMWR* 1991;39:929-32.

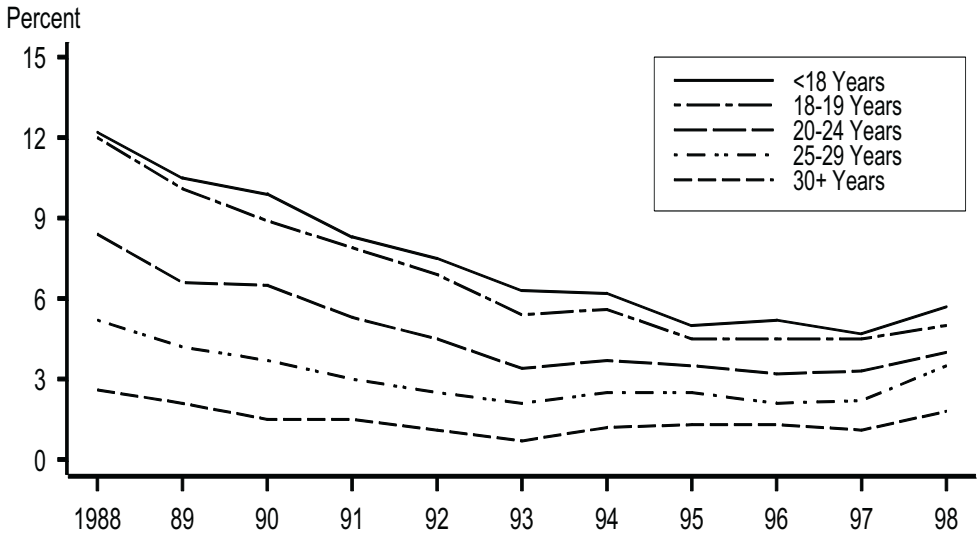
[2]CDC. Pregnancy, Sexually Transmitted Diseases and Related Risk Behaviors Among U.S. Adolescents. Atlanta: Centers for Disease Control and Prevention, 1994. Adolescent Health: State of the Nation monograph series, No. 2. CDC Publication No. 099-4630.

[3]Forrest JD. Timing of reproductive life stages. *Obstet Gynecol* 1993;82(1)

[4]CDC. Recommendations for the prevention and management of *Chlamydia trachomatis* infections, 1993. *MMWR* 1993;42(No. RR-12).

[5]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.

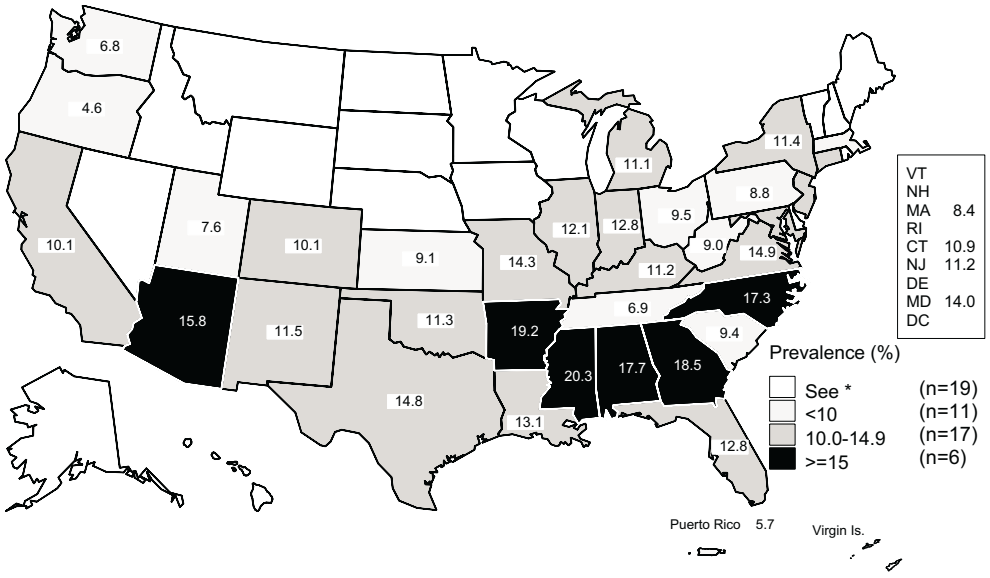
Figure J. Chlamydia — Positivity among women tested in family planning clinics by age group: Region X, 1988–1998



Note: Women who met screening criteria were tested. Trends not adjusted for changes in laboratory test method in 1994 and 1998 and associated increases in test sensitivity.

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

Figure K. Chlamydia — Prevalence among 16-24 year-old women entering the U.S. Job Corps by state of residence, 1998

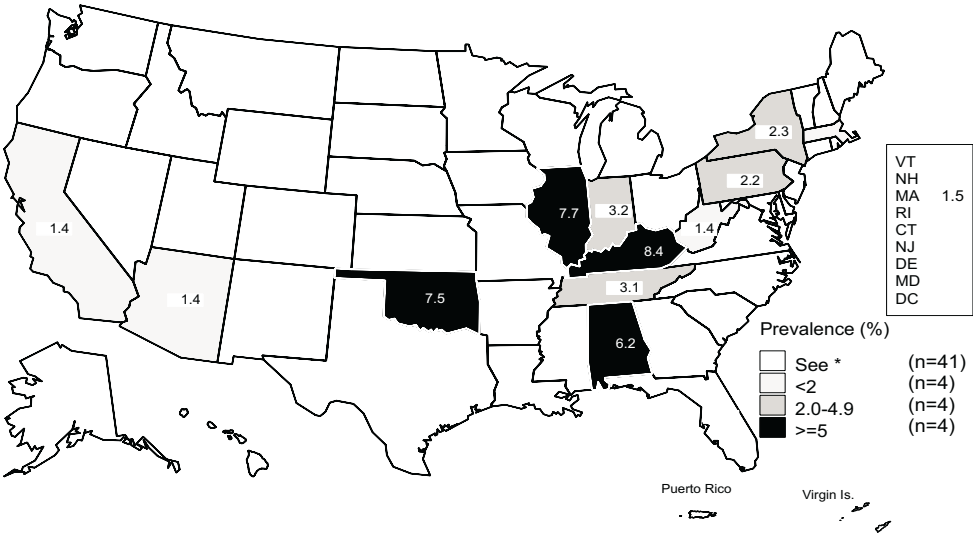


*Fewer than 100 women residing in these states and entering the U.S. Job Corps were screened for chlamydia in 1998.

Note: The overall chlamydia prevalence among female students entering the U.S. Job Corps in 1998 was 11.7%. The increase in prevalence since 1997, when the overall prevalence was 10.4%, may have been due to the change in test type from EIA to DNA probe in August 1997.

SOURCE: U.S. Department of Labor

Figure L. Gonorrhea — Prevalence among 16-24 year-old women entering the U.S. Job Corps by state of residence, 1998

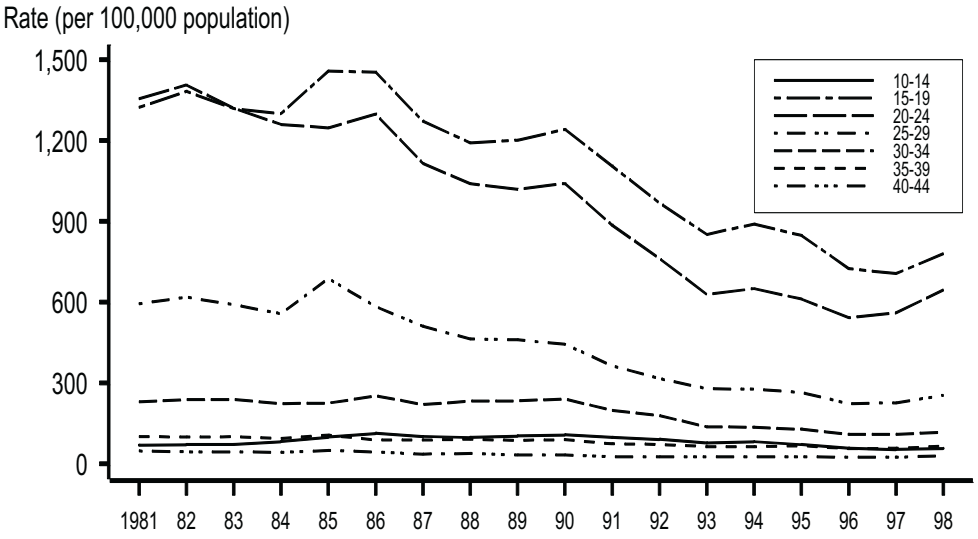


*Fewer than 100 women residing in these states and entering the U.S. Job Corps were screened for gonorrhea by the national contract laboratory in 1998.

Note: Many Job Corps 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.

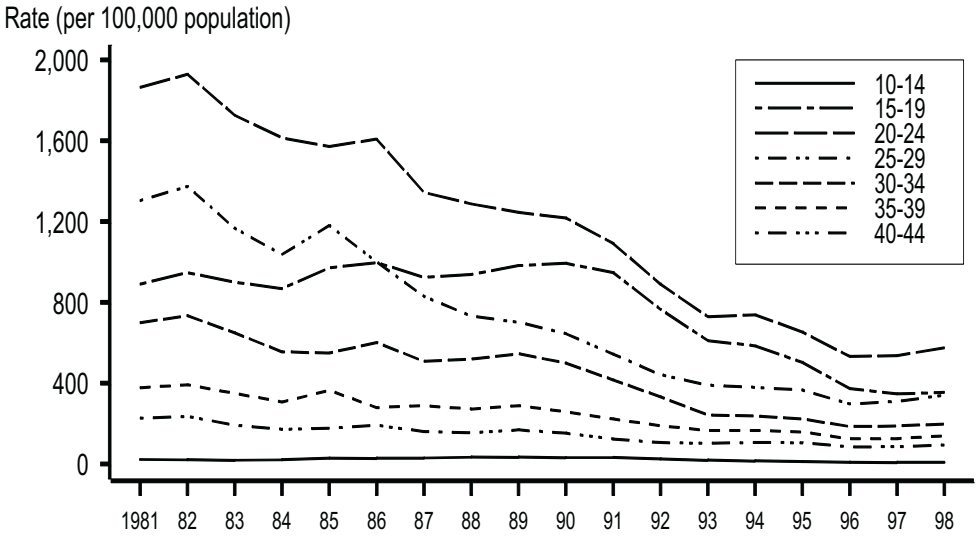
SOURCE: U.S. Department of Labor

Figure M. Gonorrhea — Age-specific rates among women 10-44 years of age: United States, 1981–1998



Note: See Appendix.

Figure N. Gonorrhea — Age-specific rates among men 10-44 years of age: United States, 1981–1998



Note: See Appendix.

Figure O. Primary and secondary syphilis — Age-specific rates among women 10-44 years of age: United States, 1981–1998

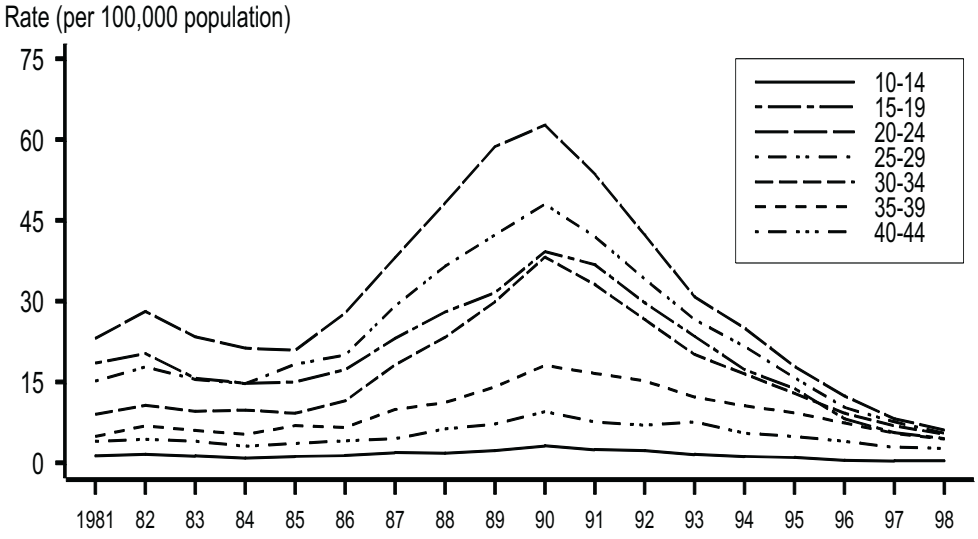
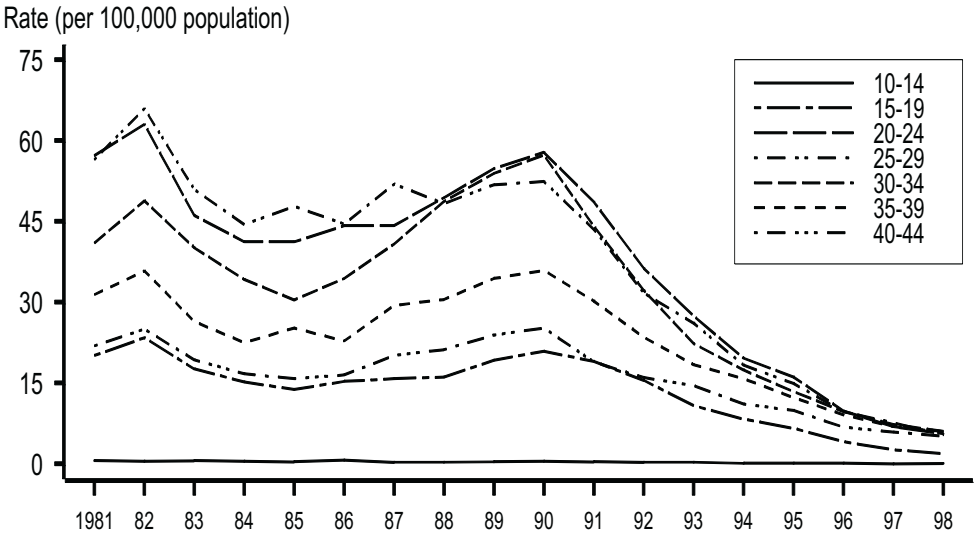


Figure P. Primary and secondary syphilis — Age-specific rates among men 10-44 years of age: United States, 1981–1998



STDs in Minorities

Public Health Impact

Surveillance data show high rates of STDs for some minority racial or ethnic groups when compared with rates for 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 (e.g., 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

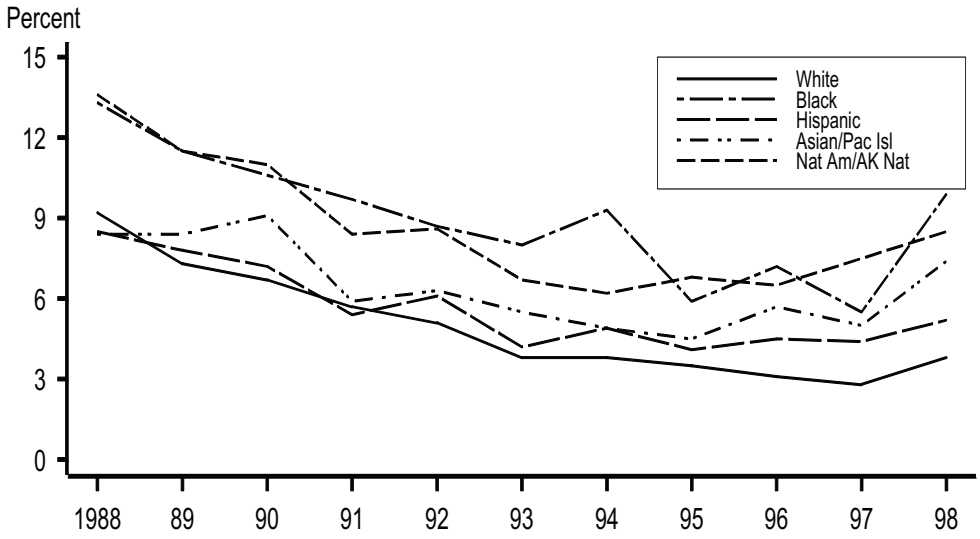
- Although chlamydia is a widely distributed STD among all racial and ethnic groups, trends in positivity in women screened in Health and Human Services Region X (Alaska, Idaho, Oregon, and Washington) show consistently higher rates among minorities (Figure Q).
- In 1998, African-Americans accounted for about 77% of total reported cases of gonorrhea (Table 12A). The overall gonorrhea rates in 1998 were 861.6 cases per 100,000 population for African-Americans and 74.3 for Hispanics compared with 28.3 for non-Hispanic whites (Figure 16, Table 12B). Compared with 1997, 1998 rates of gonorrhea increased for all race/ethnic groups reported.
- Gonorrhea rates are high for African-American adolescents and young adults. In 1998, black females aged 15 to 19 years had a gonorrhea rate of 3,851.7 cases per 100,000 population. Black men in this age group had a gonorrhea rate of 2,075.9. These rates were on average about 23 times higher than those of 15- to 19-year-old white adolescents (Table 12B). Among 20- to 24-year-olds in 1998, the gonorrhea rate among blacks was almost 27 times greater than that of whites (3,408.9 vs. 126.5, respectively) (Table 12B).
- Despite declines in gonorrhea rates for most age and race/ethnic groups during the 1980s, African-American adolescents did not show declining trends in rates until 1991 (black women) and 1992 (black men). However between 1997 and 1998, gonorrhea rates increased nearly 10% for black females aged 15 to 19 years, and decreased slightly for black males in this age group (Table 12B, Figures R and S).
- The most recent epidemic of syphilis was largely an epidemic in heterosexual, minority populations[1]. Since 1990, rates of primary and secondary (P&S) syphilis

have declined among all racial and ethnic groups except American Indian/Alaska Natives. However, rates for African-Americans and Hispanics continue to be higher than for non-Hispanic whites. In 1998, African-Americans accounted for about 79% of all reported cases of P&S syphilis (Table 23A). Although the rate for African-Americans declined from 21.8 cases per 100,000 population in 1997 to 17.1 in 1998, the latter rate was 34-fold greater than the non-Hispanic white rate of 0.5 per 100,000 population. Between 1997 and 1998, primary and secondary syphilis rates for black females aged 15 to 19 years declined by 21.4%, and for black males in this age group, by 24.2% (Figures T and U, Table 23B). Similarly, the P&S rates declined about 25% between 1997 and 1998 among young black adults aged 20 to 24 years. The 1998 rate of P&S syphilis in Hispanics was 1.5 (Figure 33, Table 23B).

- In 1998, the rate of congenital syphilis in African-Americans was 87.0 per 100,000 live births and 27.9 in Hispanics compared with 2.9 in whites (Figure V). Compared with 1997, this represented a 29% decrease for blacks and a 17% decrease for Hispanics.

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

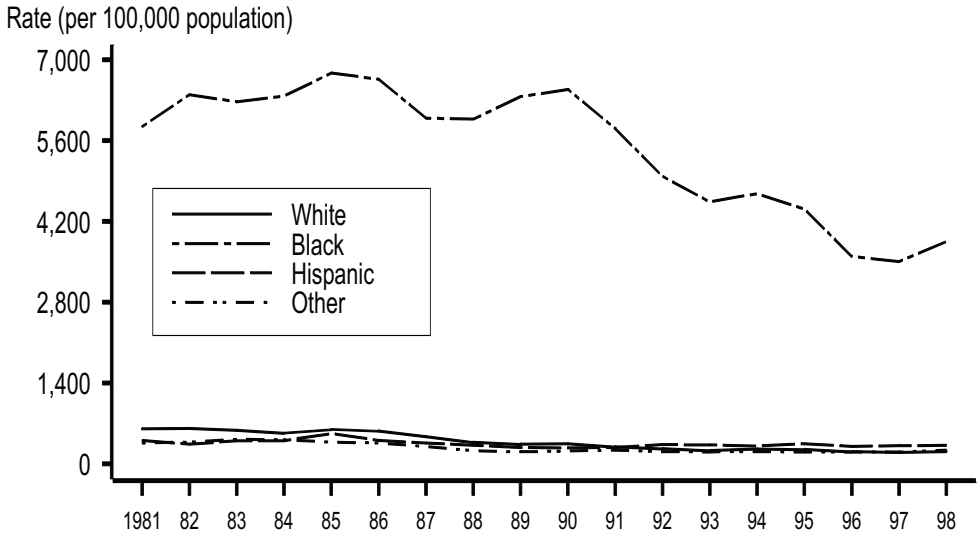
Figure Q. Chlamydia — Positivity among women tested in family planning clinics by race and ethnicity: Region X, 1988–1998



Note: Women who met screening criteria were tested. Trends not adjusted for changes in laboratory test method in 1994 and 1998 and associated increases in test sensitivity.

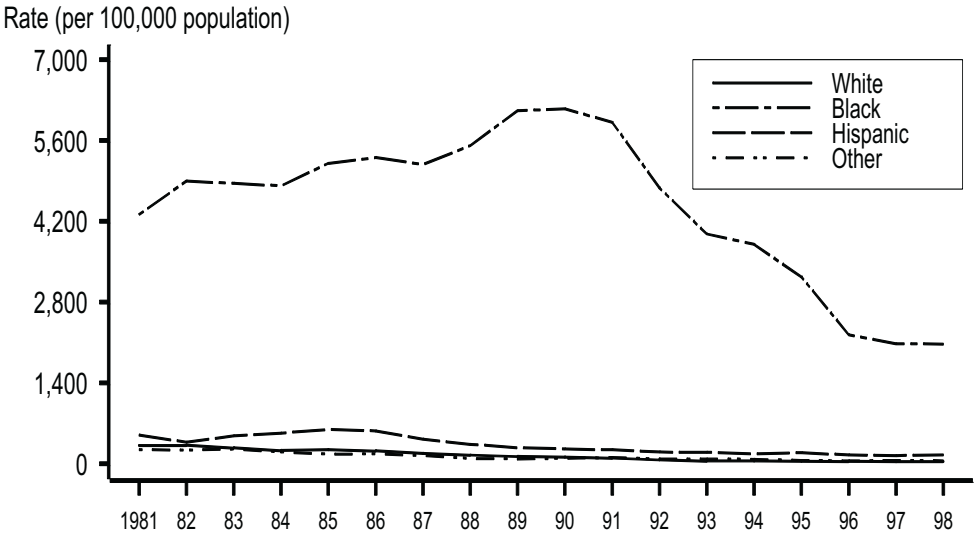
SOURCE: Regional Infertility Prevention Program: Region X Chlamydia Project (Alaska, Idaho, Oregon and Washington)

Figure R. Gonorrhea — Reported rates for 15-19 year old females by race and ethnicity: United States, 1981–1998



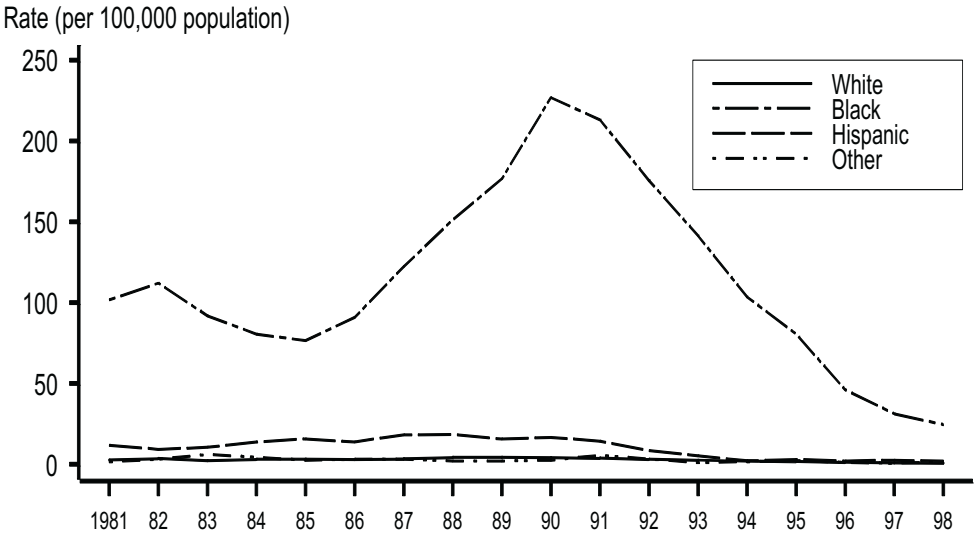
Note: See Appendix. Black, White, and Other are non-Hispanic.

Figure S. Gonorrhea — Reported rates for 15-19 year old males by race and ethnicity: United States, 1981–1998



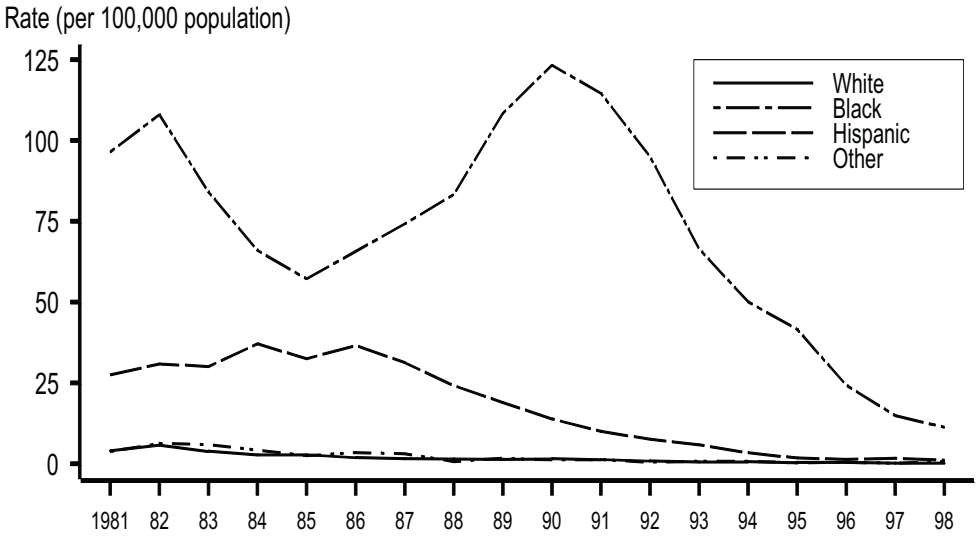
Note: See Appendix. Black, White, and Other are non-Hispanic.

Figure T. Primary and secondary syphilis — Reported rates for 15-19 year old females by race and ethnicity: United States, 1981–1998



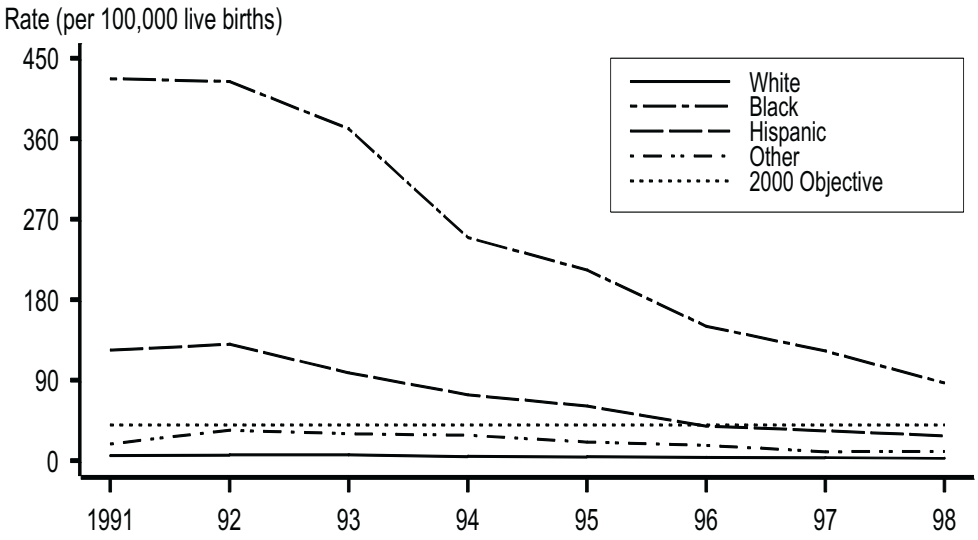
Note: See Appendix. Black, White, and Other are non-Hispanic.

Figure U. Primary and secondary syphilis — Reported rates for 15-19 year old males by race and ethnicity: United States, 1981–1998



Note: See Appendix. Black, White, and Other are non-Hispanic.

Figure V. Congenital syphilis — Rates for infants <1 year of age by race and ethnicity: United States, 1991–1998



Note: See Appendix. Less than 5% of cases had missing race/ethnicity information and were excluded. Black, White, and Other are non-Hispanic.

STDs in Persons Entering Corrections Facilities

Public Health Impact

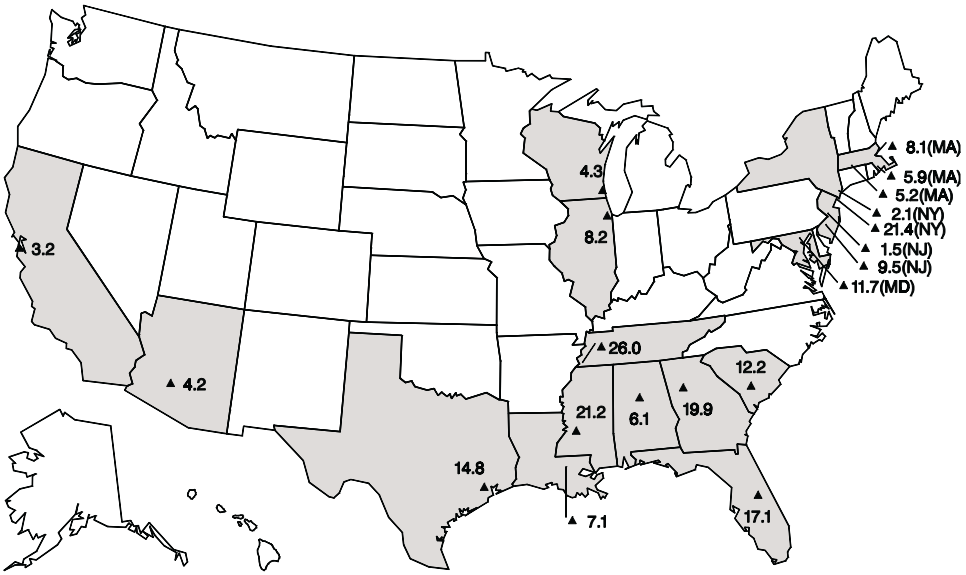
Multiple studies and surveillance projects have demonstrated a high prevalence of STDs in persons entering jails and juvenile detention facilities. Screening for chlamydia, gonorrhea, and syphilis at intake offers an opportunity to identify infections, prevent complications, and reduce transmission in the community. In cities where routine syphilis screening in jails occurs, a substantial percentage of all reported cases are identified in jails[1]. Compiling data and analyzing trends in STD prevalence in this population provides a method for monitoring trends in STD prevalence in the community.

Observations

- In 1998, 12 states reported chlamydia, gonorrhea, or syphilis data to CDC as part of the Jail STD Prevalence Monitoring Project, 4 states reported syphilis data as part of the Innovations in Syphilis Prevention Project, 10 additional states reported data (at least 100 test results) from corrections facilities as part of the Regional Infertility Prevention Project, and 4 additional states reported data in response to CDC's request for data.
- The maps shown below represent approximately 186,000 syphilis tests and 33,000 chlamydia tests for men, and 47,000 syphilis tests, 25,000 chlamydia tests, and 28,000 gonorrhea tests for women.
- The percentage of reactive syphilis tests was higher for women than for men in 17 (94%) of 18 facilities reporting syphilis test results for both sexes (Figures W, X). In women tested for syphilis, seroreactivity was greater than 5% in 15 (75%) of 20 facilities reporting syphilis test results for women (Figure W). The percentage of reactive syphilis tests representing new cases of syphilis varied from site to site (data not shown).
- The positivity for chlamydia and gonorrhea in women was higher in juvenile facilities than in adult facilities. In adolescent women entering juvenile detention facilities, the positivity for chlamydia was greater than 8% in all 14 facilities reporting data (Figure Y) and the positivity for gonorrhea was at least 3% in 6 (86%) of 7 facilities (Figure AA).
- The positivity for chlamydial infection in men, although generally lower than that in women, was greater than 5% in 14 (64%) of 22 juvenile facilities (Figure Z).

[1]CDC. Syphilis screening among women arrestees at the Cook County Jail — Chicago, 1996. *MMWR* 1998;47:432-3.

Figure W. Syphilis serologic tests — Percent seroreactivity in women entering city or county jails†, 1998

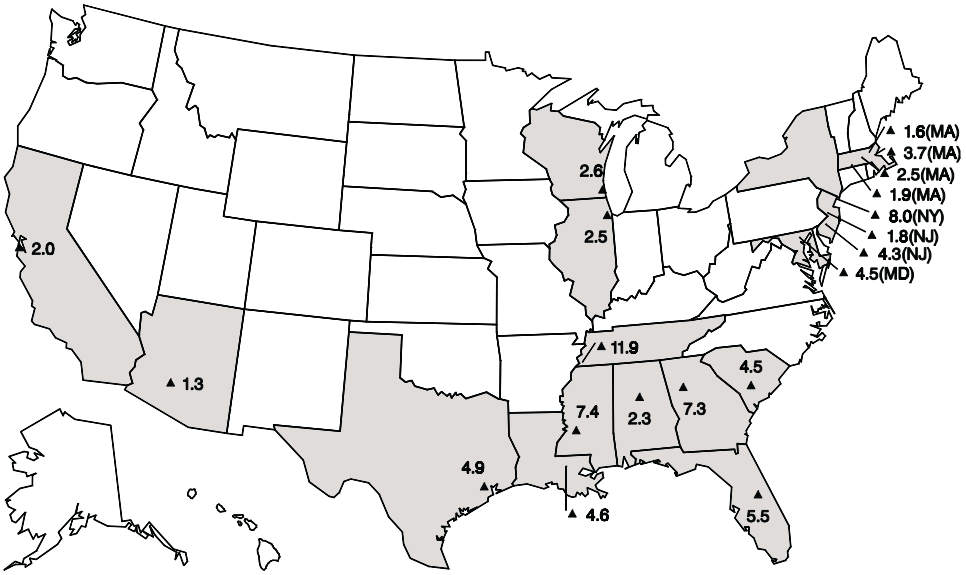


†From facilities reporting >100 test results.

NOTE: Data from Tennessee is from June 1998 only.

SOURCE: Local and State STD Control Programs; Regional Infertility Prevention Programs; Centers for Disease Control and Prevention

Figure X. Syphilis serologic tests — Percent seroreactivity in men entering city or county jails†, 1998

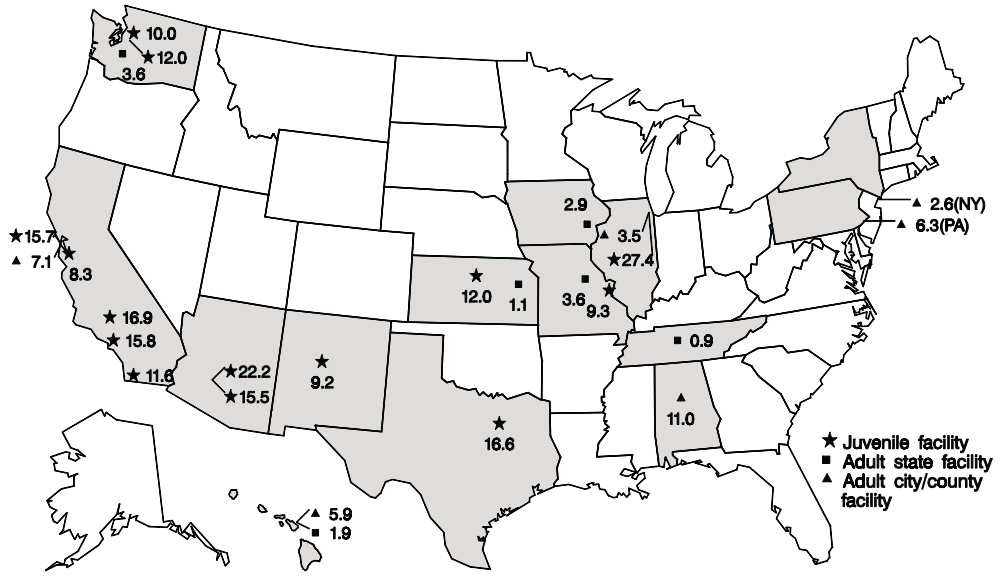


†From facilities reporting >100 test results.

NOTE: Data from Tennessee is from June 1998 only.

SOURCE: Local and State STD Control Programs; Regional Infertility Prevention Programs; Centers for Disease Control and Prevention

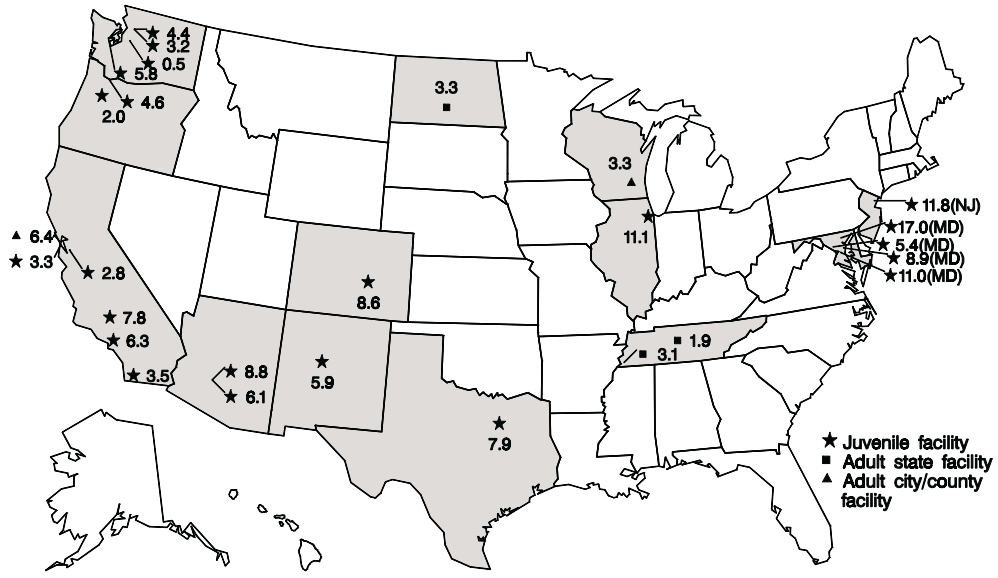
Figure Y. Chlamydia — Positivity in women entering juvenile and adult corrections facilities†, 1998



†From facilities reporting >100 test results.

SOURCE: Local and State STD Control Programs; Regional Infertility Prevention Programs; Centers for Disease Control and Prevention

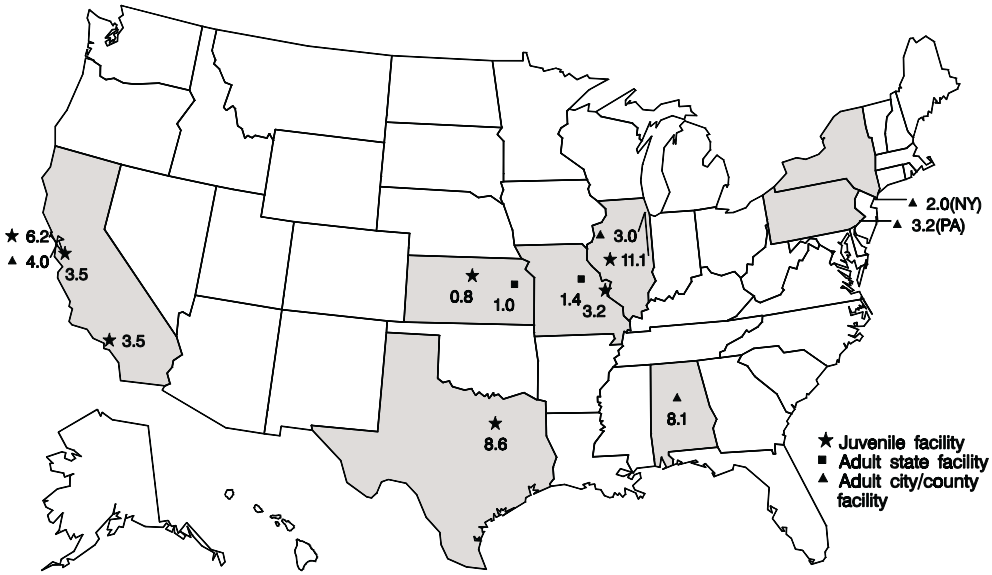
Figure Z. Chlamydia — Positivity in men entering juvenile and adult corrections facilities†, 1998



†From facilities reporting >100 test results.

SOURCE: Local and State STD Control Programs; Regional Infertility Prevention Programs; Centers for Disease Control and Prevention

Figure AA. Gonorrhea — Positivity in women entering juvenile and adult corrections facilities[†], 1998



[†]From facilities reporting >100 test results.

SOURCE: Local and State STD Control Programs; Regional Infertility Prevention Programs; Centers for Disease Control and Prevention

STDs in the South

Public Health Impact

The southern region of the U.S. (Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia) has higher rates of primary and secondary (P&S) syphilis and gonorrhea than other regions of the country. The reasons for regional differences in rates are not well understood, but may include differences in racial and ethnic distribution of the population, poverty, and availability and quality of health care services. These racial and ethnic differentials in STD rates are particularly disturbing in light of the fact that STDs facilitate HIV transmission at least two to five fold. High HIV prevalence among childbearing women living in the South may be due, in part, to the high rates of these other STDs. Data from a randomized controlled trial of STD treatment to prevent HIV infection suggest that as much as a 40% reduction in HIV incidence might be achieved in areas with high STD rates[1].

Observations

- The South has consistently had higher rates of both gonorrhea and P&S syphilis compared with other regions throughout the 1980s and 1990s (Figures 12, 13, 27 and 29, Tables 14 and 25). During 1996-1998, the South also had the highest rate of chlamydia (Table 5) compared to the other regions.
- In 1998, 8 of the 10 states with the highest chlamydia rates were in the South (Table 4). Similarly, 9 of the 10 states with the highest rates of gonorrhea were located in the South (Figure 12, Table 13). Nine southern states, 1 western state, and 2 outlying areas had rates of P&S syphilis above the HP2000 objective of 4 per 100,000 (Figure 27, Table 24). Seven of the 9 southern states had rates of P&S syphilis that were 1.6 to 3.2 times greater than the HP2000 national objective (Figure 27, Table 24).
- In 1998, 285 (91%) of 312 counties with P&S syphilis rates above the HP2000 objective were located in the South (Figure 28 and Figure BB).
- Of the 285 counties in the South that had a 1998 P&S syphilis rate above 4.0 per 100,000 population, 159 (56%) had an increase in the rate from 1997 to 1998 (Figures BB and CC).
- County-specific rates of chlamydia and gonorrhea in 1998 were produced for those southern states submitting county level data (Figures DD and EE). 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, Oklahoma, Texas, and*

Virginia where hardcopy reports have been discontinued based on the submission of consistent, quality, and timely submissions of NETSS data.

---

[1] Grosskurth H, Mosha F, Todd J, *et* al. Impact of improved treatment of sexually transmitted diseases on HIV infection in rural Tanzania: randomized controlled trial. *Lancet* 1995;346:530-6.

Figure BB. South — Primary and secondary syphilis case rates by county, 1998

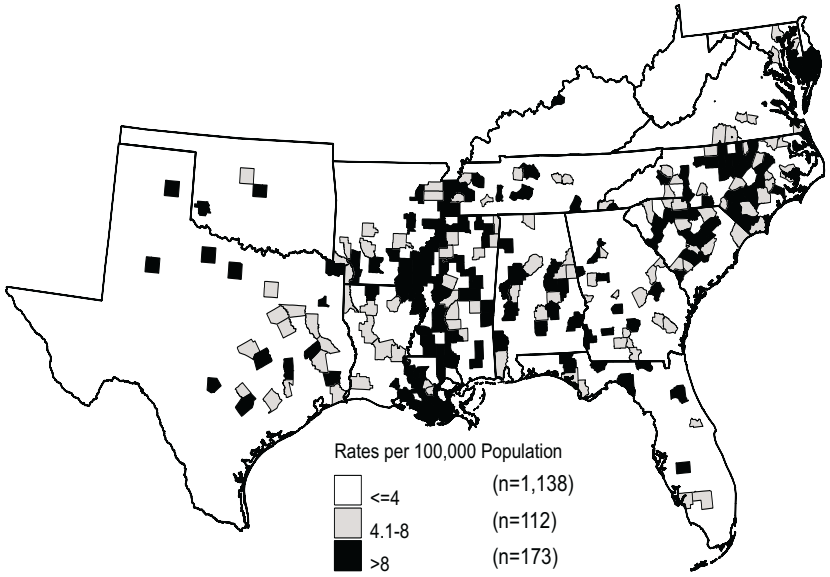
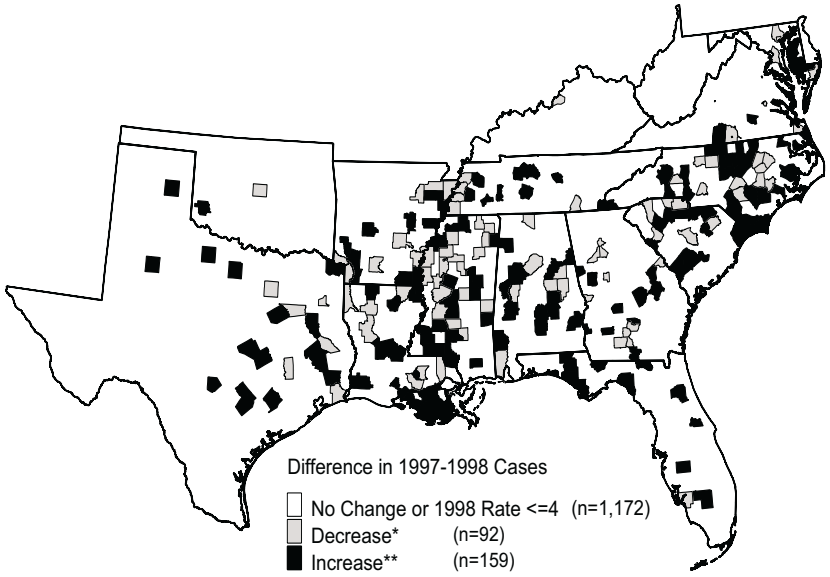
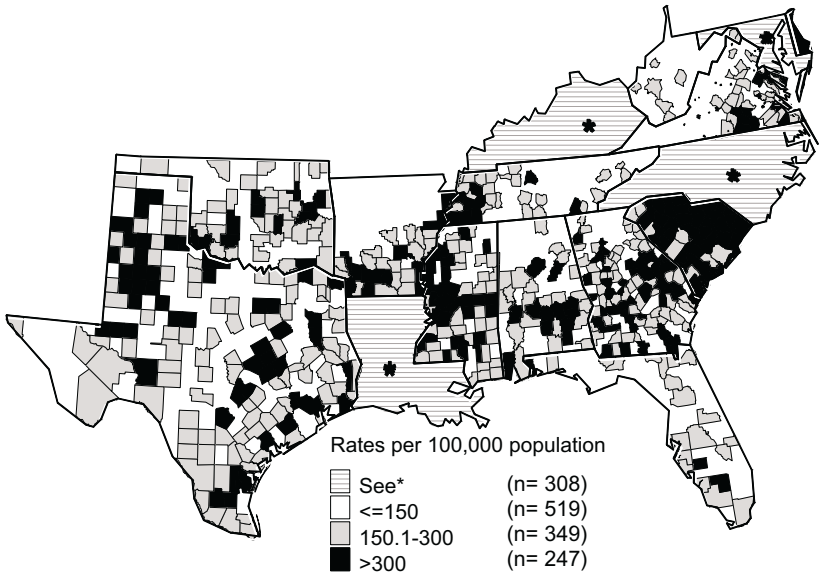


Figure CC. South — Increases and decreases in cases of primary and secondary syphilis in 1998 compared with 1997 cases, by county



*Decrease in cases in 1998 vs. 1997; 1998 rate >4.0/100,000 population.
**Increase in cases in 1998 vs. 1997; 1998 rate >4.0/100,000 population.

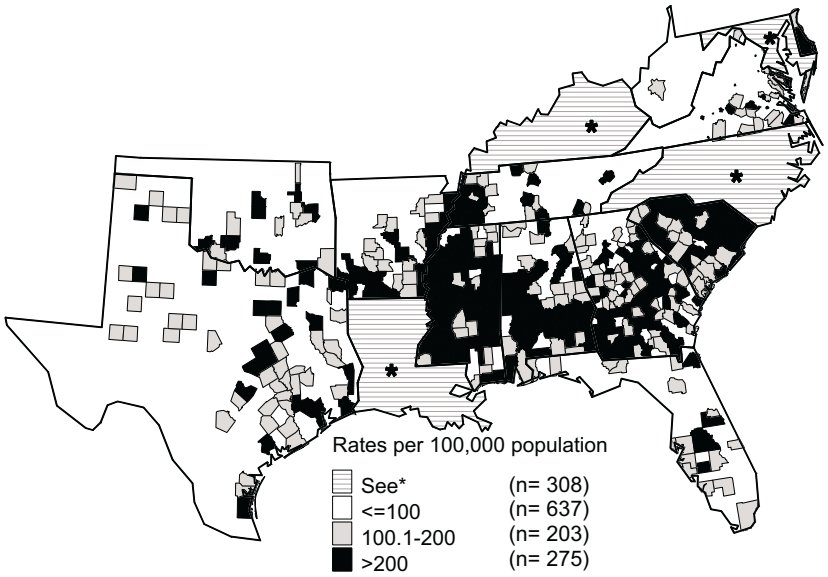
Figure DD. South — Chlamydia case rates by county, 1998



*States not submitting county level data.

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

Figure EE. South — Gonorrhea case rates by county, 1998



*States not submitting county level data.

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, 1941–1998*

	Syphilis																			
	All Stages		Primary and Secondary		Early Latent		Late and Late Latent		Congenital		Chlamydia		Gonorrhea		Chancroid		Granuloma Inguinale		Lympho-granuloma Venereum	
Year[1]	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate[2]	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	69,873	29.8	28,607	12.2	23,132	9.9	17,829	7.6	305	0.1	7,594	6.5	878,556	374.8	665	0.3	30	0.0	170	0.1
1985	67,563	28.5	27,131	11.5	21,689	9.2	18,414	7.8	329	0.1	25,848	17.4	911,419	384.3	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, 1941–1998* (continued)

	Syphilis																			
	All Stages		Primary and Secondary		Early Latent		Late and Late Latent		Congenital		Chlamydia		Gonorrhea		Chancroid		Granuloma Inguinale		Lympho-granuloma Venereum	
Year[1]	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate[2]	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
1986	67,771	28.3	27,667	11.6	21,656	9.0	18,046	7.5	410	0.2	58,001	35.2	892,229	372.8	3,045	1.3	48	0.0	307	0.1
1987	87,278	35.9	35,585	14.6	28,233	11.6	22,988	9.4	480	0.2	91,913	50.8	787,532	323.6	4,986	2.0	22	0.0	302	0.1
1988	104,546	42.5	40,474	16.5	35,968	14.6	27,363	11.1	741	0.3	157,807	87.1	738,160	300.3	4,891	2.0	11	0.0	194	0.1
1989	115,067	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	135,043	54.3	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	128,637	51.0	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	112,855	44.3	33,962	13.3	49,903	19.6	25,099	9.8	3,890	1.5	409,634	183.4	502,785	197.1	1,885	0.7	6	0.0	289	0.1
1993	101,335	39.3	26,497	10.3	41,902	16.3	29,675	11.5	3,261	1.3	405,275	179.5	444,578	172.5	1,237	0.5	19	0.0	286	0.1
1994	82,334	31.6	20,645	7.9	32,020	12.3	27,452	10.5	2,217	0.8	451,758	194.5	419,577	165.7	779	0.3	3	0.0	237	0.1
1995	69,345	26.4	16,543	6.3	26,657	10.1	24,295	9.2	1,850	0.7	478,577	190.4	392,651	149.4	607	0.2	0	0.0	188	0.1
1996	53,226	20.1	11,388	4.3	20,187	7.6	20,356	7.7	1,295	0.5	490,615	192.9	326,805	123.2	386	0.1	10	0.0	72	0.0
1997	46,642	17.4	8,556	3.2	16,631	6.2	20,385	7.6	1,070	0.4	531,529	206.9	326,564	122.0	246	0.1	8	0.0	114	0.0
1998	37,977	14.2	6,993	2.6	12,613	4.7	17,570	6.6	801	0.3	607,602	236.6	355,642	132.9	189	0.1	3	0.0	86	0.0

*NR = No report

[1]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.

[2]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 37, 38 and 39**. As of 1995, cases of congenital syphilis <1 year of age are obtained using case reporting form CDC 73.126.

Note: Adjustments to the number of cases reported from state health departments were made through June 15, 1999 for hardcopy forms and through July 19, 1999 for electronic data submissions (see Appendix). The number of cases and the rates shown here supersede those published in previous reports. Georgia did not report gonorrhea statistics for 1994 (see Appendix). 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 gender and reporting source: United States, 1998*

	Non-STD Clinic			STD Clinic			Total†		
Disease	*Male*	*Female*	*Total*	*Male*	*Female*	*Total*	*Male*	*Female*	*Total*
Total *Chlamydia Trachomatis*	54,774	383,520	439,700	48,900	113,620	162,989	104,435	501,128	607,602
Chlamydial PID‡	NA	2,616	2,616	NA	475	479	NA	3,099	3,103
Ophthalmia Neonatorum	105	187	292	6	5	11	116	202	318
Total Gonorrhea	72,455	119,504	192,501	101,671	58,757	160,626	175,233	179,651	355,642
Gonococcal PID	NA	2,566	2,567	NA	1,445	1,450	NA	4,013	4,019
Ophthalmia Neonatorum	17	16	33	3	2	5	20	19	39
Total Syphilis§	NA	NA	NA	NA	NA	NA	19,739	18,179	37,977
Primary	570	198	769	1,301	340	1,640	1,878	541	2,420
Secondary	828	1,128	1,957	1,187	1,413	2,600	2,024	2,548	4,573
Early Latent	2,853	3,128	5,985	3,439	3,143	6,583	6,311	6,298	12,613
Late and Late Latent+	4,817	4,699	9,529	4,319	3,684	8,008	9,157	8,406	17,570
Neurosyphilis	201	62	264	14	3	17	215	65	281
Congenital <1 year¥	NR	NR	NR	NR	NR	NR	369	386	801
Chancroid	17	29	46	95	47	142	112	76	189
Granuloma Inguinale	0	2	2	1	0	1	1	2	3
Lymphogranuloma Venereum	18	9	27	44	15	59	62	24	86
Genital Herpes°	649	2,744	3,393	2,369	2,150	4,524	3,019	4,894	7,918
Other and Nonspecified PID	NA	1,216	1,219	NA	1,141	1,141	NA	2,549	2,552
Nonspecific Urethritis in Men	2,152	NA	2,152	22,660	NA	22,707	26,818	NA	26,865

*NA = Not applicable. NR = No report.

†Totals include unknown gender and reporting source.

‡PID = Pelvic inflammatory disease.

§Neurosyphilis cases are not included with Total Syphilis cases.

+Cases of unknown duration for syphilis are included in late and late latent syphilis.

¥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.

°Genital herpes data are only available for a limited number of states.

Table 3A. Chlamydia — Reported cases by age, gender, and race/ethnicity: United States, 1996–1998

	Age	Total			White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Asian/Pacific Islander			American Indian/ Alaska Native		
	Group	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1996	10-14	9,351	459	8,892	2,672	89	2,583	4,862	253	4,609	1,482	86	1,396	122	15	107	213	16	197
	15-19	151,344	16,897	134,447	52,737	4,167	48,570	68,501	9,133	59,368	24,823	2,963	21,860	1,935	213	1,722	3,348	421	2,927
	20-24	119,705	21,016	98,689	41,561	6,199	35,362	49,276	10,077	39,199	23,742	3,943	19,799	2,258	340	1,918	2,868	457	2,411
	25-29	47,092	10,432	36,660	14,943	3,135	11,808	18,606	4,745	13,861	11,171	2,108	9,063	1,118	197	921	1,254	247	1,007
	30-34	19,730	5,181	14,549	6,020	1,590	4,430	7,630	2,335	5,295	4,873	988	3,885	565	123	442	642	145	497
	35-39	9,350	2,623	6,727	3,105	871	2,234	3,615	1,185	2,430	2,006	454	1,552	293	62	231	331	51	280
	40-44	4,079	1,272	2,807	1,368	409	959	1,583	568	1,015	836	222	614	138	44	94	154	29	125
	45-54	2,596	936	1,660	985	359	626	957	419	538	472	122	350	93	24	69	89	12	77
	55-64	517	237	280	210	88	122	181	104	77	88	33	55	13	5	8	25	7	18
	65+	479	117	362	206	63	143	145	30	115	106	16	90	11	5	6	11	3	8
	TOTAL	366,836	59,787	307,049	124,735	17,169	107,566	156,305	29,090	127,215	70,170	11,093	59,077	6,615	1,033	5,582	9,011	1,402	7,609
1997	10-14	8,871	429	8,442	2,594	70	2,524	4,382	221	4,161	1,540	122	1,418	119	8	111	236	8	228
	15-19	154,992	18,940	136,052	52,717	4,379	48,338	69,632	10,180	59,452	27,320	3,787	23,533	2,235	277	1,958	3,088	317	2,771
	20-24	127,676	25,121	102,555	41,935	6,782	35,153	54,042	12,501	41,541	26,598	5,039	21,559	2,416	424	1,992	2,685	375	2,310
	25-29	50,374	12,566	37,808	15,188	3,381	11,807	20,357	6,122	14,235	12,433	2,646	9,787	1,202	244	958	1,194	173	1,021
	30-34	20,698	6,260	14,438	5,910	1,658	4,252	8,157	3,068	5,089	5,441	1,287	4,154	599	152	447	591	95	496
	35-39	9,597	3,246	6,351	2,948	896	2,052	3,782	1,581	2,201	2,248	640	1,608	328	62	266	291	67	224
	40-44	4,126	1,522	2,604	1,343	454	889	1,586	750	836	917	267	650	163	36	127	117	15	102
	45-54	2,602	1,114	1,488	889	382	507	947	503	444	572	180	392	118	38	80	76	11	65
	55-64	544	267	277	182	84	98	206	116	90	119	54	65	15	3	12	22	10	12
	65+	1,096	260	836	370	73	297	456	122	334	218	56	162	17	5	12	35	4	31
	TOTAL	382,249	70,250	311,999	124,587	18,302	106,285	164,231	35,386	128,845	77,814	14,222	63,592	7,250	1,260	5,990	8,367	1,080	7,287
1998	10-14	11,190	615	10,575	2,984	89	2,895	6,135	377	5,758	1,647	125	1,522	141	11	130	283	13	270
	15-19	198,558	24,287	174,271	63,883	5,257	58,626	96,960	13,848	83,112	30,820	4,355	26,465	3,014	363	2,651	3,881	464	3,417
	20-24	163,993	31,182	132,811	50,826	8,191	42,635	76,442	15,923	60,519	30,445	6,034	24,411	3,132	534	2,598	3,148	500	2,648
	25-29	64,304	15,960	48,344	17,784	4,075	13,709	29,209	8,109	21,100	14,316	3,225	11,091	1,676	354	1,322	1,319	197	1,122
	30-34	25,614	7,721	17,893	6,746	2,100	4,646	11,336	3,846	7,490	6,086	1,524	4,562	770	163	607	676	88	588
	35-39	12,592	4,384	8,208	3,483	1,145	2,338	5,644	2,295	3,349	2,646	729	1,917	465	136	329	354	79	275
	40-44	5,322	2,049	3,273	1,585	608	977	2,367	1,102	1,265	995	257	738	214	50	164	161	32	129
	45-54	3,185	1,342	1,843	1,030	450	580	1,378	702	676	541	136	405	118	42	76	118	12	106
	55-64	661	306	355	173	82	91	322	176	146	115	34	81	28	8	20	23	6	17
	65+	1,066	254	812	308	88	220	553	124	429	164	34	130	29	8	21	12	0	12
	TOTAL	488,421	88,669	399,752	149,309	22,251	127,058	231,257	46,756	184,501	88,209	16,581	71,628	9,623	1,677	7,946	10,023	1,404	8,619

NOTE: In most instances, 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 race/ethnicity for most cases and were excluded: 1996 (Colorado, Delaware, Georgia, Maryland, Michigan, New Jersey, New York, Ohio, and South Carolina): 1997 (Colorado, Delaware, District of Columbia, Georgia, Maryland, Michigan, Mississippi, New Jersey, New York, Ohio and South Carolina): 1998 (Colorado, District of Columbia, Michigan, New Jersey, New York, Ohio and South Carolina). 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. Cases and rates for the 0 to 9 year age group are not shown because some of these may not be due to sexual transmission; however, they are included in the totals.

Table 3B. Chlamydia — Reported rates per 100,000 population by age, gender, and race/ethnicity: United States, 1996–1998

Age	Total			White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Asian/Pacific Islander			American Indian/ Alaska Native			
Group	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	
10-14	65.6	6.3	128.0	27.8	1.8	55.3	264.6	27.1	509.6	71.8	8.1	138.8	21.7	5.2	38.9	117.3	17.4	219.5	
15-19	1,080.0	233.6	1,982.6	560.8	86.1	1,064.5	3,720.0	975.9	6,555.8	1,188.0	266.6	2,235.1	373.8	81.1	674.8	2,077.1	518.7	3,657.9	
20-24	908.3	309.8	1,542.9	475.9	139.0	827.3	3,026.1	1,245.8	4,783.2	1,125.6	340.3	2,083.1	396.8	118.9	677.8	2,062.2	651.3	3,499.2	
25-29	333.3	146.5	523.0	155.0	65.1	244.8	1,168.1	621.3	1,671.8	526.2	180.4	949.3	174.4	64.3	275.3	917.8	354.6	1,503.5	
30-34	125.3	65.7	185.1	54.2	28.6	79.7	448.4	290.9	589.0	225.1	85.0	387.5	89.1	40.6	133.3	469.7	214.1	720.5	1996
35-39	56.1	31.4	80.8	25.3	14.2	36.6	207.1	143.9	263.5	105.3	45.2	172.3	47.1	20.9	71.1	243.3	76.8	401.9	
40-44	26.5	16.6	36.2	11.7	7.0	16.5	103.0	78.8	124.4	54.7	28.2	82.9	23.8	16.3	30.3	125.9	49.4	196.7	
45-54	10.9	8.0	13.7	5.2	3.9	6.6	46.3	44.4	47.9	23.9	12.4	35.3	11.1	6.2	15.4	50.1	14.1	83.4	
55-64	3.3	3.1	3.4	1.6	1.4	1.9	13.6	18.0	10.3	7.6	6.0	9.0	2.7	2.2	3.0	23.4	14.0	31.7	
65+	1.9	1.1	2.4	1.0	0.7	1.1	8.2	4.3	10.7	8.1	2.9	12.0	2.0	2.2	1.9	9.2	5.9	11.6	
TOTAL	185.7	61.7	305.2	86.5	24.3	145.9	751.0	293.6	1,166.7	298.8	91.4	520.4	92.1	29.9	149.9	515.9	163.3	856.4	
10-14	63.0	5.9	123.0	27.4	1.4	54.8	251.6	25.0	485.5	72.8	11.3	137.6	21.0	2.8	40.0	129.4	8.7	253.5	
15-19	1,098.8	260.1	1,993.6	556.6	89.8	1,051.7	3,955.5	1,135.4	6,882.5	1,260.0	328.4	2,318.1	413.5	101.2	733.9	1,864.3	381.7	3,355.3	
20-24	987.1	376.8	1,636.1	490.7	155.2	842.1	3,531.9	1,640.3	5,409.0	1,228.0	425.0	2,199.5	435.4	152.5	719.5	1,946.3	540.1	3,371.4	
25-29	364.8	180.4	552.4	162.0	72.2	251.7	1,358.4	849.1	1,830.7	580.9	224.9	1,015.8	182.4	77.7	277.7	865.0	245.0	1,514.5	
30-34	137.4	83.0	192.0	56.2	31.6	80.7	518.1	412.3	613.0	246.7	108.4	408.1	93.5	50.0	132.7	443.9	143.6	740.4	1997
35-39	58.3	39.3	77.2	24.4	14.8	34.1	228.7	202.1	252.6	113.2	61.0	171.7	51.9	20.5	80.6	213.5	100.4	322.2	
40-44	26.4	19.6	33.2	11.4	7.7	15.1	105.4	105.8	105.0	56.6	31.9	83.2	27.1	12.8	39.7	94.0	25.1	157.8	
45-54	10.6	9.3	12.0	4.6	4.0	5.2	46.4	53.9	40.0	27.2	17.1	37.2	13.3	9.3	16.8	41.6	12.5	68.4	
55-64	3.4	3.5	3.3	1.4	1.4	1.5	16.2	20.9	12.5	9.9	9.5	10.3	2.9	1.3	4.3	20.2	19.6	20.7	
65+	4.4	2.5	5.7	1.7	0.8	2.4	27.7	18.8	33.4	16.1	9.7	20.8	3.0	2.1	3.6	28.5	7.7	43.8	
TOTAL	194.8	72.9	312.4	87.1	26.1	145.5	832.1	375.8	1,248.3	320.0	113.2	541.1	98.2	35.5	156.2	476.0	125.0	815.1	
10-14	73.5	7.9	142.5	29.4	1.7	58.6	287.1	34.7	547.4	76.6	11.3	145.4	23.8	3.6	44.8	152.4	13.8	294.7	
15-19	1,301.2	308.4	2,359.4	629.4	100.6	1,190.8	4,468.6	1,256.2	7,786.3	1,397.5	371.2	2,564.2	532.7	126.6	949.8	2,295.8	547.1	4,056.7	
20-24	1,170.5	432.5	1,952.7	552.7	174.1	949.2	4,054.0	1,706.0	6,355.3	1,380.5	499.4	2,448.2	537.6	182.8	894.4	2,230.6	702.9	3,783.2	
25-29	428.8	211.3	649.3	175.7	80.5	270.9	1,568.7	911.5	2,170.2	655.7	268.5	1,129.4	242.4	107.5	365.1	932.1	272.0	1,624.1	
30-34	156.0	94.1	217.9	59.3	37.0	81.5	573.4	415.1	713.0	270.2	125.6	439.0	114.1	50.9	171.2	494.9	129.6	855.9	1998
35-39	70.4	49.0	91.7	26.8	17.6	36.1	273.9	237.3	306.3	130.5	68.0	200.7	69.9	42.8	94.7	253.5	115.4	386.3	
40-44	31.5	24.4	38.5	12.6	9.6	15.5	126.8	126.0	127.5	60.3	30.1	92.8	33.9	17.0	48.9	126.1	52.1	194.7	
45-54	12.0	10.3	13.7	5.0	4.4	5.6	54.4	60.8	49.1	25.3	12.7	37.8	12.7	9.8	15.2	62.7	13.2	108.6	
55-64	3.9	3.7	4.0	1.3	1.2	1.3	20.8	26.1	16.7	9.4	5.9	12.6	5.2	3.3	6.9	20.6	11.5	28.6	
65+	4.0	2.3	5.1	1.3	0.9	1.6	27.8	15.9	35.5	11.9	5.8	16.5	4.9	3.2	6.1	9.6	0.0	16.6	
TOTAL	230.1	85.1	369.7	97.2	29.6	161.9	949.8	403.9	1,444.6	356.4	129.6	599.1	124.4	45.1	197.8	557.5	158.8	943.2	

NOTE: For the following years the states listed did not report race/ethnicity for most cases and were excluded: 1996 (Colorado, Delaware, Georgia, Maryland, Michigan, New Jersey, New York, Ohio, and South Carolina): 1997 (Colorado, Delaware, District of Columbia, Georgia, Maryland, Michigan, Mississippi, New Jersey, New York, Ohio and South Carolina): 1998 (Colorado, District of Columbia, Michigan, New Jersey, New York, Ohio and South Carolina). Cases and population denominators have been excluded for these states/areas. Rates for the 0 to 9 year age group are not shown because some of these may not be due to sexual transmission; however, they are included in the totals.

Table 4. Chlamydia — Reported cases and rates by state/area, ranked according to rates: United States and outlying areas, 1998

Rank	*State/Area*	*Cases*	*Rate per 100,000 Population*
1	South Carolina	18,510	492.3
2	Mississippi	10,614	388.7
3	New York[1]	26,218	357.1
4	Delaware	2,608	356.5
5	Louisiana	15,188	349.0
6	Georgia	25,250	337.3
7	Alaska	1,907	313.0
8	Texas	60,436	310.9
9	North Carolina	22,197	298.9
10	Oklahoma	9,393	283.2
11	Wisconsin	13,878	268.5
12	Guam	410	262.5
13	Maryland	13,097	257.1
14	Tennessee	13,717	255.5
15	Arizona	11,489	252.2
16	Ohio	27,786	248.4
17	California	76,490	237.0
	U.S. TOTAL[2]	**607,602**	**236.6**
18	Missouri	12,670	234.5
19	Colorado	9,113	234.1
20	Rhode Island	2,307	233.6
21	Alabama	10,065	233.0
22	Michigan	22,156	226.7
23	Illinois	26,363	221.6
24	Hawaii	2,604	219.5
25	New Mexico	3,793	219.3
26	Kansas	5,587	215.3
27	Connecticut	6,977	213.4
28	South Dakota	1,572	213.0
29	Pennsylvania	24,629	204.9
30	Virginia	13,561	201.4
31	Nevada	3,320	198.0
32	Washington	10,998	196.0
33	Indiana	10,801	184.2
34	Iowa	5,174	181.4
35	Oregon	5,855	180.5
36	Nebraska	2,911	175.7
37	Florida	24,949	170.3
38	Idaho	2,035	168.1
39	Kentucky	6,441	164.8
40	Arkansas	4,123	163.4
41	North Dakota	1,036	161.7
42	Montana	1,412	160.7
43	West Virginia	2,791	153.7
44	Wyoming	725	151.1
45	Minnesota	6,970	148.8
46	New Jersey	11,686	145.1
47	Massachusetts	8,363	136.7
48	Utah	2,209	107.3
49	Maine	1,073	86.4
50	New Hampshire	960	81.9
51	Vermont	413	70.1
52	Puerto Rico	1,685	44.0
53	Virgin Islands	10	9.1

[1]New York's cases and rate are based on New York City. No cases were reported outside of New York City.
[2]Includes cases reported by Washington, D.C., but excludes outlying areas (Guam, Puerto Rico and Virgin Islands).

Table 5. Chlamydia — Reported cases and rates by state/area and region: United States and outlying areas, 1994–1998*

	Cases					Rates per 100,000 Population				
State/Area	*1994*	*1995*	*1996*	*1997*	*1998*	*1994*	*1995*	*1996*	*1997*	*1998*
Alabama	508	3,188	8,306	8,704	10,065	12.0	75.0	193.7	201.5	233.0
Alaska	NR	NR	1,360	1,616	1,907	.	.	224.8	265.2	313.0
Arizona	9,211	10,061	10,692	10,783	11,489	226.0	238.5	241.1	236.7	252.2
Arkansas	788	680	2,111	2,503	4,123	32.1	27.4	84.2	99.2	163.4
California	72,766	61,802	61,593	68,737	76,490	231.5	195.6	193.3	213.0	237.0
Colorado	9,031	6,650	7,282	7,749	9,113	247.0	177.5	190.8	199.1	234.1
Connecticut	7,146	6,440	6,269	6,377	6,977	218.2	196.7	191.9	195.0	213.4
Delaware	2,478	2,701	2,271	2,613	2,608	349.4	376.6	313.9	357.2	356.5
Florida	NR	22,294	24,763	26,788	24,949	.	157.4	171.7	182.8	170.3
Georgia	168	11,193	13,555	15,911	25,250	2.4	155.4	184.8	212.5	337.3
Hawaii	2,484	2,135	1,816	1,829	2,604	210.8	179.9	153.5	154.1	219.5
Idaho	1,752	1,739	1,524	1,709	2,035	154.6	149.5	128.3	141.2	168.1
Illinois	24,605	24,645	24,430	23,024	26,363	209.4	208.3	206.2	193.5	221.6
Indiana	10,346	9,102	10,334	9,600	10,801	179.9	156.8	177.3	163.7	184.2
Iowa	5,413	5,089	4,165	4,907	5,174	191.3	179.1	146.2	172.0	181.4
Kansas	6,391	5,314	4,449	4,627	5,587	250.2	207.1	172.5	178.3	215.3
Kentucky	5,630	6,904	6,805	6,332	6,441	147.1	178.9	175.3	162.0	164.8
Louisiana	10,650	9,111	11,020	11,545	15,188	246.8	209.8	253.9	265.3	349.0
Maine	1,195	1,144	967	1,066	1,073	96.3	92.2	78.1	85.8	86.4
Maryland	6,709	10,378	11,901	13,763	13,097	134.1	205.8	235.2	270.2	257.1
Massachusetts	8,066	7,402	6,837	7,984	8,363	133.5	121.9	112.4	130.5	136.7
Michigan	17,686	21,666	19,865	21,399	22,156	186.2	226.9	204.1	218.9	226.7
Minnesota	7,317	6,032	5,607	6,631	6,970	160.2	130.9	120.6	141.5	148.8
Mississippi	NR	912	4,848	10,020	10,614	.	33.8	178.8	367.0	388.7
Missouri	12,249	12,110	11,959	12,257	12,670	232.1	227.5	223.0	226.9	234.5
Montana	1,403	1,198	1,124	1,146	1,412	163.9	137.7	128.2	130.4	160.7
Nebraska	3,336	2,873	2,478	2,766	2,911	205.5	175.5	150.3	166.9	175.7
Nevada	3,149	3,049	2,847	2,887	3,320	216.1	199.3	177.8	172.2	198.0
New Hampshire	967	898	732	816	960	85.1	78.2	63.1	69.6	81.9
New Jersey	1,831	4,056	12,273	10,339	11,686	23.2	51.0	153.4	128.4	145.1
New Mexico	5,037	4,285	4,007	4,021	3,793	304.6	254.2	234.2	232.5	219.3
New York[1]	26,472	26,686	26,455	28,468	26,218	361.0	365.0	360.7	387.7	357.1
North Carolina	17,796	15,780	15,078	17,108	22,197	251.8	219.3	206.3	230.4	298.9
North Dakota	1,079	1,324	1,016	902	1,036	169.0	206.4	158.1	140.7	161.7
Ohio	32,475	29,124	20,653	22,827	27,786	292.5	261.2	185.0	204.1	248.4
Oklahoma	3,729	5,065	7,379	7,419	9,393	114.5	154.5	223.9	223.7	283.2
Oregon	5,495	5,465	5,457	5,270	5,855	178.0	174.0	170.7	162.5	180.5
Pennsylvania	19,746	22,961	19,275	19,838	24,629	163.8	190.2	160.1	165.0	204.9
Rhode Island	2,095	1,902	1,833	2,069	2,307	210.2	192.2	185.5	209.5	233.6
South Carolina	8,153	8,591	9,391	12,511	18,510	222.5	233.9	252.7	332.7	492.3
South Dakota	1,427	1,313	1,538	1,439	1,572	197.2	180.1	208.5	195.0	213.0
Tennessee	6,787	13,154	13,125	12,502	13,717	131.1	250.3	247.3	232.9	255.5
Texas	46,046	44,627	43,003	50,675	60,436	250.5	238.3	225.3	260.7	310.9
Utah	1,801	1,676	1,598	1,774	2,209	94.4	85.9	79.2	86.2	107.3
Vermont	522	462	398	434	413	90.0	79.0	67.9	73.7	70.1
Virginia	12,976	12,285	11,756	11,955	13,561	198.1	185.6	176.4	177.5	201.4
Washington	10,577	9,462	9,236	9,523	10,998	198.0	174.2	167.3	169.7	196.0
West Virginia	2,602	2,326	2,325	3,108	2,791	142.8	127.2	127.7	171.2	153.7
Wisconsin	11,769	8,955	10,290	9,554	13,878	231.6	174.8	200.0	184.8	268.5
Wyoming	816	703	621	635	725	171.4	146.4	129.4	132.4	151.1
U.S. TOTAL[2]	451,758	478,577	490,615	531,529	607,602	194.5	190.4	192.9	206.9	236.6
Northeast	68,040	71,951	75,039	77,391	82,626	167.8	177.0	184.4	189.7	202.5
Midwest	134,093	127,547	116,784	119,933	136,904	218.4	206.4	187.8	192.0	219.2
South	126,103	170,854	189,635	216,526	256,122	170.3	185.9	203.9	229.9	271.9
West	123,522	108,225	109,157	117,679	131,950	219.6	189.9	186.6	198.1	222.1
Guam	275	461	304	368	410	188.5	308.9	199.1	235.6	262.5
Puerto Rico	2,443	2,305	2,481	2,123	1,685	66.8	62.4	66.7	55.5	44.0
Virgin Islands	50	17	11	14	10	46.2	15.5	10.0	12.8	9.1
OUTLYING AREAS	2,768	2,783	2,796	2,505	2,105	70.8	70.4	70.2	61.2	51.4
TOTAL	454,526	481,360	493,411	534,034	609,707	192.4	188.6	191.0	204.7	233.7

*NR = No report (see Appendix).

[1]New York's cases and rate are based on New York City. No cases were reported outside of New York City.

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

Table 6. Chlamydia — Women – Reported cases and rates by state/area: United States and outlying areas, 1994–1998*

	Cases					Rates per 100,000 Population				
State/Area	*1994*	*1995*	*1996*	*1997*	*1998*	*1994*	*1995*	*1996*	*1997*	*1998*
Alabama	425	2,888	7,623	7,957	9,197	19.4	130.5	342.4	354.9	410.2
Alaska	NR	NR	1,071	1,291	1,479	.	.	373.4	446.6	511.6
Arizona	7,680	8,315	8,635	8,597	9,015	372.6	389.8	385.9	374.3	392.5
Arkansas	654	596	1,933	2,346	3,850	51.5	46.4	149.4	180.3	295.9
California	55,828	50,314	49,158	53,536	59,739	355.4	318.6	309.1	332.4	370.9
Colorado	NG	NG	5,692	5,958	6,979	.	.	295.9	303.8	355.8
Connecticut	6,288	5,624	5,321	5,282	5,828	372.5	333.2	316.8	314.4	346.9
Delaware	2,171	2,295	1,877	2,070	2,117	595.9	623.4	506.0	551.9	564.5
Florida	NR	18,251	20,160	21,953	20,171	.	249.9	271.8	291.5	267.9
Georgia	148	10,263	11,744	13,927	21,156	4.1	277.4	312.3	363.1	551.5
Hawaii	2,127	1,878	1,568	1,548	2,209	365.6	320.2	267.5	262.4	374.5
Idaho	1,411	1,370	1,177	1,336	1,553	248.4	235.1	198.1	220.8	256.7
Illinois	21,660	20,443	21,111	17,302	21,845	358.9	336.6	348.2	284.4	359.0
Indiana	8,637	7,564	8,592	7,819	8,823	291.9	253.5	287.5	260.2	293.6
Iowa	4,405	4,210	3,443	3,900	4,077	302.9	288.4	235.9	267.0	279.1
Kansas	5,225	4,453	3,744	3,840	4,649	402.4	341.6	285.8	291.5	353.0
Kentucky	5,009	5,995	5,604	5,128	5,126	254.0	301.4	280.8	255.3	255.2
Louisiana	8,540	7,569	9,490	9,414	12,169	381.4	335.8	422.0	417.6	539.8
Maine	1,048	1,024	829	898	899	164.7	160.7	130.8	141.4	141.5
Maryland	6,036	9,150	10,249	11,969	11,093	234.6	352.9	394.6	457.9	424.4
Massachusetts	6,867	6,237	5,783	6,522	6,812	219.1	198.1	183.7	206.2	215.4
Michigan	14,938	18,750	16,851	18,289	18,769	306.1	382.3	337.7	365.1	374.7
Minnesota	5,689	4,681	4,328	4,953	5,119	245.1	199.9	183.7	208.7	215.7
Mississippi	NR	849	4,100	8,590	9,185	.	60.5	291.0	605.6	647.5
Missouri	11,199	10,866	10,578	10,749	11,063	410.4	395.0	382.7	386.5	397.8
Montana	1,143	995	899	941	1,131	265.5	227.5	204.4	213.5	256.6
Nebraska	2,661	2,346	2,020	2,288	2,390	320.4	280.2	240.2	270.9	282.9
Nevada	2,668	2,649	2,463	2,484	2,820	372.9	352.6	313.9	302.3	343.2
New Hampshire	817	725	578	639	726	141.0	124.0	98.1	107.4	122.0
New Jersey	1,733	3,902	11,463	9,641	10,735	42.5	95.2	278.2	232.6	259.0
New Mexico	4,536	3,721	3,417	3,503	3,204	540.6	435.2	394.1	399.5	365.4
New York[1]	24,317	24,600	24,375	25,706	23,449	626.0	635.4	628.7	662.8	604.6
North Carolina	14,907	13,589	13,072	14,553	18,646	409.6	366.8	347.9	381.5	488.8
North Dakota	827	1,025	714	684	755	258.2	318.6	221.9	212.9	235.1
Ohio	27,881	24,883	18,050	19,727	23,248	485.5	431.6	313.4	342.0	403.1
Oklahoma	3,305	4,467	6,269	6,269	7,696	198.0	266.2	372.4	370.1	454.4
Oregon	4,023	4,145	4,095	3,848	4,307	257.0	260.4	253.3	234.8	262.8
Pennsylvania	17,418	20,290	17,227	17,257	20,878	278.0	323.5	275.9	277.0	335.1
Rhode Island	1,753	1,598	1,600	1,738	1,779	338.5	310.8	312.0	339.4	347.5
South Carolina	7,097	6,932	7,918	11,120	16,489	374.7	364.8	412.2	572.2	848.5
South Dakota	1,114	1,039	1,184	1,021	1,171	303.3	280.8	316.6	272.9	312.9
Tennessee	6,109	10,517	10,004	9,605	10,552	227.9	386.5	365.0	346.4	380.6
Texas	39,314	38,517	37,240	42,750	49,940	421.9	405.9	385.6	435.0	508.1
Utah	1,403	1,316	1,229	1,357	1,616	146.3	134.2	121.4	131.3	156.4
Vermont	457	408	336	379	357	154.8	137.2	112.9	126.9	119.5
Virginia	12,086	11,253	10,630	10,452	11,567	361.5	333.0	312.7	304.2	336.7
Washington	8,458	7,508	7,194	7,331	8,377	314.3	274.6	259.7	260.5	297.7
West Virginia	2,271	1,961	1,894	2,590	2,340	240.2	206.9	201.1	275.8	249.2
Wisconsin	9,086	6,860	8,170	7,459	10,716	350.9	262.9	312.5	284.2	408.3
Wyoming	681	560	521	536	595	287.6	234.7	218.6	225.1	249.9
U.S. TOTAL[2]	372,990	400,840	414,987	441,710	501,128	318.8	316.3	319.4	336.9	382.2
Guam	227	393	260	325	351	331.1	560.3	362.3	442.6	478.1
Puerto Rico	1,974	1,905	1,989	1,722	1,327	104.5	99.8	103.4	86.5	66.7
Virgin Islands	39	9	11	13	10	69.3	15.8	19.3	22.8	17.5
OUTLYING AREAS	2,240	2,307	2,260	2,060	1,688	111.2	113.3	110.1	97.1	79.6
TOTAL	375,230	403,147	417,247	443,770	502,816	315.3	313.1	316.2	333.1	377.4

*NR = No report (see Appendix). NG= Not reported by gender.

[1]New York's cases and rate are based on New York City. No cases were reported outside of New York City.

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

NOTE: Cases and rates underestimated in some areas because of under-reporting or non-reporting by gender.

Table 7. Chlamydia — Men – Reported cases and rates by state/area: United States and outlying areas, 1994–1998*

	Cases					Rates per 100,000 Population				
State/Area	*1994*	*1995*	*1996*	*1997*	*1998*	*1994*	*1995*	*1996*	*1997*	*1998*
Alabama	68	285	662	708	844	3.4	14.0	32.1	34.1	40.6
Alaska	NR	NR	289	325	428	.	.	90.8	101.5	133.7
Arizona	1,531	1,746	2,057	2,186	2,474	76.0	83.7	93.6	96.8	109.6
Arkansas	134	79	178	143	267	11.3	6.6	14.7	11.7	21.9
California	11,274	11,248	12,157	14,875	16,504	71.7	71.2	76.2	92.0	102.1
Colorado	NG	NG	1,585	1,784	2,115	.	.	83.7	92.4	109.5
Connecticut	858	816	948	1,095	1,149	54.1	51.4	59.7	68.9	72.3
Delaware	307	406	394	543	491	89.0	116.3	111.8	152.3	137.7
Florida	NR	4,043	4,603	4,835	4,363	.	58.9	65.7	67.9	61.3
Georgia	20	930	1,811	1,962	3,932	0.6	26.6	50.7	53.7	107.7
Hawaii	357	257	248	281	395	59.8	42.8	41.6	47.1	66.2
Idaho	341	369	347	373	482	60.4	63.6	58.5	61.6	79.6
Illinois	2,923	4,202	3,319	5,722	4,518	51.1	73.0	57.4	98.5	77.7
Indiana	1,709	1,537	1,742	1,773	1,968	61.2	54.5	61.3	62.0	68.8
Iowa	1,008	879	722	1,007	1,096	73.3	63.6	52.0	72.4	78.8
Kansas	1,166	860	705	787	938	92.9	68.2	55.5	61.6	73.4
Kentucky	621	909	1,201	1,182	1,093	33.5	48.6	63.7	62.2	57.5
Louisiana	2,110	1,542	1,530	2,131	3,019	101.6	73.8	73.1	101.6	143.9
Maine	147	120	138	168	174	24.3	19.9	22.8	27.7	28.7
Maryland	673	1,228	1,652	1,794	1,973	27.7	50.1	67.1	72.3	79.5
Massachusetts	1,199	1,165	1,054	1,462	1,551	41.2	39.8	35.9	49.5	52.5
Michigan	2,748	2,916	3,014	3,110	3,387	59.5	62.8	63.6	65.3	71.1
Minnesota	1,628	1,351	1,279	1,678	1,851	72.5	59.6	55.8	72.6	80.0
Mississippi	NR	63	703	1,180	1,355	.	4.9	54.0	89.9	103.3
Missouri	1,050	1,244	1,381	1,508	1,607	41.2	48.4	53.1	57.5	61.3
Montana	260	203	180	198	281	61.1	46.9	41.2	45.2	64.2
Nebraska	647	526	452	473	520	81.6	65.8	56.0	58.2	64.0
Nevada	480	400	384	403	498	64.7	51.4	47.0	47.1	58.2
New Hampshire	149	173	154	177	234	26.7	30.7	27.0	30.6	40.5
New Jersey	98	154	801	689	944	2.6	4.0	20.6	17.6	24.2
New Mexico	501	564	590	518	589	61.5	67.9	69.9	60.7	69.1
New York[1]	2,155	2,086	2,080	2,762	2,669	62.5	60.6	60.2	79.7	77.0
North Carolina	2,889	2,191	2,006	2,555	3,551	84.2	62.8	56.5	70.8	98.3
North Dakota	252	299	302	218	281	79.2	93.5	94.1	68.2	87.9
Ohio	4,594	4,048	2,405	2,884	4,211	85.7	75.2	44.5	53.2	77.7
Oklahoma	418	598	1,110	1,150	1,697	26.3	37.4	68.9	70.8	104.5
Oregon	1,472	1,320	1,362	1,422	1,548	96.8	85.2	86.2	88.6	96.5
Pennsylvania	2,328	2,671	2,048	2,581	3,751	40.2	46.1	35.3	44.6	64.8
Rhode Island	342	304	233	331	528	71.4	63.9	49.0	69.6	111.1
South Carolina	836	813	881	1,215	1,837	47.2	45.9	49.1	66.9	101.1
South Dakota	313	274	354	417	400	87.8	76.3	97.4	114.6	110.0
Tennessee	678	2,637	3,121	2,897	3,165	27.2	104.0	121.6	111.6	121.9
Texas	6,732	6,110	5,763	7,925	10,301	74.3	66.2	61.1	82.5	107.2
Utah	398	360	368	417	593	41.9	37.1	36.6	40.7	57.8
Vermont	65	54	62	55	56	22.8	18.8	21.5	19.0	19.3
Virginia	834	989	1,109	1,379	1,988	26.0	30.5	33.9	41.8	60.3
Washington	2,119	1,954	2,042	2,192	2,621	79.9	72.5	74.3	78.4	93.7
West Virginia	323	359	429	515	448	36.8	40.8	48.8	58.7	51.1
Wisconsin	2,683	2,095	2,120	2,095	3,160	107.7	83.3	83.7	82.3	124.2
Wyoming	135	143	100	99	130	56.4	59.2	41.4	41.0	53.8
U.S. TOTAL[2]	63,716	69,736	74,409	88,590	104,435	57.1	57.7	59.8	70.5	83.1
Guam	48	68	44	43	59	62.1	86.0	54.4	51.9	71.3
Puerto Rico	469	400	492	401	358	26.6	22.4	27.4	21.8	19.5
Virgin Islands	11	8	NR	1	NR	21.2	15.2	.	1.9	.
OUTLYING AREAS	528	476	536	445	417	27.9	24.9	28.6	22.6	21.7
TOTAL	64,244	70,212	74,945	89,035	104,852	56.6	57.2	59.3	69.7	82.1

*NR = No report (see Appendix). NG= Not reported by gender.

[1]New York's cases and rate are based on New York City. No cases were reported outside of New York City.

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

Note: Cases and rates underestimated in some areas because of under-reporting or non-reporting by gender.

Table 8. Chlamydia — Reported cases and rates in selected cities of >200,000 population, ranked according to rates: United States and outlying areas, 1998*

Rank	*City*	*Cases*	*Rate per 100,000 Population*
1	Milwaukee, WI	7,851	863.8
2	Baltimore, MD	5,663	861.6
3	St Louis, MO	2,921	854.4
4	Richmond, VA	1,619	841.5
5	Philadelphia, PA	11,763	810.5
6	Atlanta, GA	5,276	730.2
7	New Orleans, LA	3,331	710.1
8	Kansas City, MO	3,105	694.5
9	Detroit, MI	7,351	675.0
10	Minneapolis, MN	2,555	666.5
11	Newark, NJ	1,725	606.2
12	Washington, DC	3,182	601.6
13	Cincinnati, OH	4,840	568.3
14	Denver, CO	2,834	568.0
15	Indianapolis, IN	4,584	563.4
16	Memphis, TN	4,791	553.3
17	Boston, MA	2,588	464.3
18	Tulsa, OK	1,782	461.8
19	Oklahoma City, OK	2,008	455.7
20	St Paul, MN	1,233	446.6
21	San Antonio, TX	5,909	443.4
22	Dallas, TX	8,893	439.6
23	Austin, TX	3,030	436.8
24	Portland, OR	2,128	431.8
25	Norfolk, VA	954	415.9
26	Corpus Christi, TX	1,220	384.3
27	Columbus, OH	3,854	378.9
28	Chicago, IL	11,009	377.8
29	Birmingham, AL	2,476	375.9
30	Nashville, TN	1,981	371.2
31	Houston, TX	11,561	366.1
32	San Francisco, CA	2,616	357.2
33	New York City, NY	26,218	357.1
34	Sacramento, CA	4,005	355.7
35	Albuquerque, NM	1,715	326.0
36	Omaha, NE	1,410	319.7
37	Jersey City, NJ	678	311.3
38	Fort Worth, TX	4,089	308.1
39	Oakland, CA	3,651	291.3
40	Los Angeles, CA	24,131	281.9
41	Phoenix, AZ	7,549	280.0
42	Charlotte, NC	1,695	276.4
43	Cleveland, OH	3,650	263.2
44	Jacksonville, FL	1,913	261.1
45	San Diego, CA	7,044	258.7
46	Honolulu, HI	2,205	253.5
47	Tampa, FL	2,240	246.3
48	El Paso, TX	1,697	241.9
49	Pittsburgh, PA	2,980	232.7
50	Seattle, WA	3,486	213.5
51	Des Moines, IA	743	209.7
52	San Jose, CA	3,349	208.1
53	Tucson, AZ	1,610	206.4
54	Wichita, KS	861	196.3
55	St Petersburg, FL	1,692	194.1
56	Louisville, KY	1,253	186.8
57	Toledo, OH	780	172.8
58	Miami, FL	3,486	170.5
59	Dayton, OH	929	165.5
60	Akron, OH	859	161.6
61	San Juan, PR	615	70.5
62	Buffalo, NY	NR	.
63	Rochester, NY	NR	.
64	Yonkers, NY	NR	.

*NR = No report (see Appendix).

Table 9. Chlamydia — Reported cases and rates in selected cities of >200,000 population: United States and outlying areas, 1994–1998*

City	Cases					Rates per 100,000 Population				
	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Akron, OH	2,132	1,457	711	852	859	403.8	274.8	134.2	160.3	161.6
Albuquerque, NM	2,080	1,651	1,624	1,635	1,715	403.4	316.1	309.3	310.8	326.0
Atlanta, GA	NR	4,411	4,091	4,208	5,276	.	629.5	572.5	582.4	730.2
Austin, TX	2,572	2,977	2,699	2,977	3,030	397.9	447.8	395.9	429.2	436.8
Baltimore, MD	3,638	5,638	4,812	6,066	5,663	517.5	815.8	716.4	922.9	861.6
Birmingham, AL	273	992	2,349	2,372	2,476	41.6	150.8	355.4	360.1	375.9
Boston, MA	2,452	2,179	1,985	2,450	2,588	446.6	392.0	355.8	439.5	464.3
Buffalo, NY	NR	NR	NR	NR	NR	.	.	.	.	.
Charlotte, NC	NR	1,063	803	1,049	1,695	.	183.4	134.7	171.0	276.4
Chicago, IL	11,984	11,687	12,356	9,375	11,009	406.1	396.4	423.3	321.7	377.8
Cincinnati, OH	2,885	2,846	1,699	2,617	4,840	332.5	329.4	198.5	307.3	568.3
Cleveland, OH	7,036	5,770	3,465	3,056	3,650	501.4	412.7	248.0	220.4	263.2
Columbus, OH	5,380	3,500	2,267	3,133	3,854	535.2	346.2	223.9	308.0	378.9
Corpus Christi, TX	567	1,167	1,070	986	1,220	182.4	373.2	340.0	310.6	384.3
Dallas, TX	3,909	5,115	5,309	7,990	8,893	201.3	261.1	266.2	394.9	439.6
Dayton, OH	1,372	869	509	813	929	239.8	152.3	90.0	144.8	165.5
Denver, CO	NR	NR	2,563	2,726	2,834	.	.	516.3	546.3	568.0
Des Moines, IA	692	699	727	567	743	200.1	200.0	205.9	160.1	209.7
Detroit, MI	4,496	9,026	7,460	6,622	7,351	425.3	857.7	681.7	608.0	675.0
El Paso, TX	2,238	1,245	2,457	1,439	1,697	336.6	183.5	358.7	205.1	241.9
Fort Worth, TX	2,437	2,540	1,864	2,402	4,089	193.8	198.7	143.4	181.0	308.1
Honolulu, HI	2,147	1,738	1,473	1,488	2,205	245.6	198.1	169.4	171.1	253.5
Houston, TX	9,377	8,075	8,488	10,756	11,561	307.9	262.4	272.5	340.6	366.1
Indianapolis, IN	5,049	4,662	4,814	3,693	4,584	617.2	570.2	590.8	453.9	563.4
Jacksonville, FL	NR	1,611	2,431	2,402	1,913	.	229.6	335.3	327.9	261.1
Jersey City, NJ	83	182	647	553	678	38.0	83.7	298.2	253.9	311.3
Kansas City, MO	1,839	1,997	3,165	3,086	3,105	419.9	455.3	710.7	690.2	694.5
Los Angeles, CA	20,459	18,659	20,196	23,346	24,131	238.9	218.1	237.5	272.7	281.9
Louisville, KY	1,130	1,618	1,761	1,598	1,253	168.1	240.4	262.6	238.3	186.8
Memphis, TN	2,489	3,728	4,474	4,244	4,791	290.2	431.0	517.3	490.1	553.3
Miami, FL	NR	2,004	2,606	3,579	3,486	.	98.7	127.9	175.0	170.5
Milwaukee, WI	5,452	4,332	5,568	5,121	7,851	581.2	465.2	606.4	563.4	863.8
Minneapolis, MN	2,394	1,922	1,922	2,473	2,555	626.1	501.2	501.2	645.1	666.5
Nashville, TN	1,190	1,926	1,965	1,820	1,981	225.7	362.8	368.8	341.0	371.2
New Orleans, LA	2,733	3,107	4,140	2,869	3,331	564.5	644.7	873.1	611.6	710.1
New York City, NY	26,472	26,686	26,455	28,468	26,218	361.0	365.0	360.7	387.7	357.1
Newark, NJ	292	1,077	1,944	1,669	1,725	100.7	374.6	680.5	586.5	606.2
Norfolk, VA	944	832	801	899	954	391.0	350.2	344.3	391.9	415.9
Oakland, CA	3,434	3,461	3,375	3,419	3,651	284.7	286.1	272.7	272.8	291.3
Oklahoma City, OK	1,528	1,232	2,154	1,013	2,008	350.5	281.8	490.9	229.9	455.7
Omaha, NE	1,808	1,335	819	1,349	1,410	420.2	307.5	187.0	305.9	319.7
Philadelphia, PA	9,957	8,079	8,118	10,480	11,763	653.2	539.0	551.0	722.1	810.5
Phoenix, AZ	5,218	5,896	6,342	6,580	7,549	222.4	242.4	242.7	244.0	280.0
Pittsburgh, PA	3,294	2,865	2,494	2,879	2,980	249.4	218.7	193.0	224.8	232.7
Portland, OR	2,072	1,945	1,937	1,844	2,128	429.3	401.4	395.2	374.2	431.8
Richmond, VA	994	2,150	2,036	2,175	1,619	493.3	1,084.3	1,066.2	1,130.5	841.5
Rochester, NY	NR	NR	NR	NR	NR	.	.	.	.	.
Sacramento, CA	3,800	3,760	3,584	3,499	4,005	346.0	340.7	321.5	310.8	355.7
San Antonio, TX	4,519	4,348	4,338	4,838	5,909	353.0	335.3	330.1	363.1	443.4
San Diego, CA	6,413	5,250	5,642	6,397	7,044	243.6	198.6	210.7	235.0	258.7
San Francisco, CA	2,120	2,008	1,819	2,243	2,616	288.6	274.9	249.2	306.3	357.2
San Jose, CA	4,047	2,838	2,971	2,751	3,349	259.9	181.3	187.1	171.0	208.1
Seattle, WA	3,578	3,286	3,229	3,174	3,486	225.4	206.0	200.1	194.4	213.5
St Louis, MO	3,013	2,796	2,386	2,653	2,921	818.3	779.5	683.1	776.0	854.4
St Paul, MN	1,119	1,027	1,054	1,112	1,233	406.1	373.7	382.8	402.8	446.6
St Petersburg, FL	NR	1,579	1,522	1,789	1,692	.	181.3	175.3	205.2	194.1
Tampa, FL	NR	2,063	2,083	2,836	2,240	.	233.2	232.8	311.8	246.3
Toledo, OH	2,181	968	484	528	780	476.6	212.7	107.1	117.0	172.8
Tucson, AZ	1,847	1,915	2,201	1,888	1,610	252.5	254.5	286.7	242.0	206.4
Tulsa, OK	831	1,028	1,663	793	1,782	220.0	271.9	435.9	205.5	461.8
Washington, DC	1,083	1,665	1,998	3,069	3,182	191.0	300.4	370.5	580.2	601.6
Wichita, KS	1,642	1,324	1,086	1,159	861	391.5	315.7	250.9	264.2	196.3
Yonkers, NY	NR	NR	NR	NR	NR	.	.	.	.	.
U.S. CITY TOTAL[1]	202,691	211,806	217,005	229,867	252,551	328.5	313.2	316.7	333.5	366.4
San Juan, PR	821	742	916	739	615	94.1	85.1	105.0	84.7	70.5
TOTAL	203,512	212,548	217,921	230,606	253,166	325.3	310.3	314.0	330.4	362.7

*NR = No report (see Appendix).

[1]Rates exclude population of cities that did not report.

Table 10. Chlamydia — Women – Reported cases and rates in selected cities of >200,000 population: United States and outlying areas, 1994-1998*

	Cases					Rates per 100,000 Population				
City	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Akron, OH	1,804	1,265	616	666	697	656.4	458.5	223.7	241.2	252.5
Albuquerque, NM	1,876	1,403	1,332	1,386	1,437	711.5	525.3	496.3	515.1	534.0
Atlanta, GA	NR	4,084	3,190	3,596	4,217	.	1,115.0	855.2	954.0	1,118.8
Austin, TX	2,257	2,600	2,257	2,468	2,463	698.5	782.5	660.5	710.2	708.7
Baltimore, MD	3,327	5,197	4,442	5,607	5,066	886.9	1,408.7	1,237.5	1,595.4	1,441.4
Birmingham, AL	231	867	2,258	2,269	2,352	66.0	247.5	642.3	647.6	671.3
Boston, MA	1,966	1,696	1,584	1,842	1,920	689.9	588.0	548.6	638.8	665.9
Buffalo, NY	NR	NR	NR	NR	NR	.	.	.	.	.
Charlotte, NC	NR	926	702	576	1,395	.	308.1	227.5	181.5	439.6
Chicago, IL	10,927	9,720	11,428	6,362	9,480	713.5	635.2	756.6	422.1	629.0
Cincinnati, OH	2,370	2,176	1,538	2,349	4,122	518.8	478.5	341.9	524.9	921.2
Cleveland, OH	6,163	5,050	3,059	2,672	3,173	828.8	681.7	413.8	364.3	432.6
Columbus, OH	4,239	2,862	1,830	2,666	3,027	814.5	546.8	349.4	506.7	575.3
Corpus Christi, TX	430	978	888	802	1,031	270.6	611.9	553.7	495.9	637.6
Dallas, TX	3,445	3,950	4,123	6,159	6,699	349.6	397.5	407.3	600.1	652.7
Dayton, OH	1,244	787	471	756	729	417.6	265.0	160.2	259.1	249.8
Denver, CO	NR	NR	1,907	2,076	2,146	.	.	747.3	809.8	837.1
Des Moines, IA	566	571	583	430	581	313.4	313.1	317.3	233.4	315.4
Detroit, MI	4,138	8,009	6,409	5,863	6,491	744.1	1,446.8	1,114.4	1,024.4	1,134.1
El Paso, TX	2,011	1,112	2,241	1,263	1,421	586.5	317.7	635.8	349.9	393.7
Fort Worth, TX	1,905	2,069	1,586	1,968	3,278	300.1	320.6	240.8	292.7	487.6
Honolulu, HI	1,830	1,502	1,244	1,236	1,850	424.0	346.3	288.5	285.5	427.3
Houston, TX	7,665	7,388	7,811	9,326	9,912	501.0	478.1	499.1	588.1	625.0
Indianapolis, IN	3,902	3,629	3,718	2,680	3,472	909.4	846.6	871.3	629.4	815.4
Jacksonville, FL	NR	1,275	1,840	1,753	1,368	.	354.4	492.0	464.1	362.1
Jersey City, NJ	83	176	628	536	657	73.7	156.9	562.3	477.8	585.6
Kansas City, MO	1,705	1,848	2,890	2,779	2,785	743.3	804.8	1,242.3	1,190.7	1,193.3
Los Angeles, CA	17,112	15,119	15,813	17,911	18,922	397.6	351.5	371.2	417.6	441.2
Louisville, KY	1,022	1,343	1,345	1,248	985	287.9	378.0	381.0	353.7	279.2
Memphis, TN	2,256	3,090	3,427	3,325	3,786	502.4	682.4	757.7	734.0	835.8
Miami, FL	NR	1,519	2,106	2,884	2,799	.	143.2	199.1	271.8	263.8
Milwaukee, WI	4,300	3,275	4,574	4,051	6,298	872.7	669.7	950.4	850.5	1,322.3
Minneapolis, MN	1,791	1,442	1,437	1,710	1,762	909.3	730.4	728.9	868.1	894.5
Nashville, TN	1,022	1,431	1,428	1,308	1,426	369.3	513.6	511.6	467.7	509.9
New Orleans, LA	1,840	2,438	3,593	2,266	2,574	708.8	943.0	1,413.7	901.0	1,023.5
New York City, NY	24,317	24,600	24,375	25,706	23,449	626.0	635.4	628.7	662.8	604.6
Newark, NJ	284	1,022	1,887	1,615	1,632	185.7	674.5	1,256.2	1,079.4	1,090.7
Norfolk, VA	895	768	705	801	826	783.7	681.0	624.1	719.3	741.8
Oakland, CA	2,884	2,939	2,793	2,715	2,942	469.7	477.0	446.0	427.1	462.8
Oklahoma City, OK	1,350	1,069	1,887	892	1,585	596.8	471.6	830.9	391.1	695.0
Omaha, NE	1,435	1,079	682	1,107	1,139	644.3	480.4	301.5	486.2	500.3
Philadelphia, PA	9,095	7,446	7,483	9,300	10,182	1,114.9	927.9	948.3	1,196.5	1,309.9
Phoenix, AZ	4,247	4,813	4,937	5,064	5,653	357.1	390.5	373.7	371.8	415.0
Pittsburgh, PA	2,674	2,353	2,064	2,416	2,415	381.6	338.6	301.0	355.5	355.4
Portland, OR	1,460	1,444	1,410	1,248	1,453	590.0	581.5	562.5	495.4	576.8
Richmond, VA	913	1,955	1,835	1,931	1,452	831.3	1,807.4	1,760.2	1,837.7	1,381.9
Rochester, NY	NR	NR	NR	NR	NR	.	.	.	.	.
Sacramento, CA	3,018	2,897	2,855	2,750	3,069	538.9	514.8	500.5	477.0	532.3
San Antonio, TX	3,895	3,785	3,775	4,093	4,854	590.4	566.3	557.7	596.5	707.4
San Diego, CA	5,093	4,034	4,143	4,733	5,394	392.9	309.5	312.3	350.8	399.8
San Francisco, CA	1,637	1,535	1,324	1,426	1,541	443.6	417.7	358.6	384.3	415.3
San Jose, CA	3,117	2,189	2,414	2,135	2,594	405.2	282.9	307.2	268.0	325.7
Seattle, WA	2,755	2,474	2,352	2,279	2,430	342.3	306.0	288.7	276.6	294.9
St Louis, MO	2,810	2,609	2,194	2,442	2,630	1,402.0	1,336.4	1,155.5	1,314.7	1,416.0
St Paul, MN	824	784	782	830	897	573.7	547.5	546.0	578.3	625.0
St Petersburg, FL	NR	1,346	1,213	1,486	1,391	.	290.1	262.5	320.7	300.2
Tampa, FL	NR	1,646	1,707	2,371	1,851	.	362.8	372.5	509.5	397.8
Toledo, OH	1,926	805	420	480	630	805.7	338.8	178.3	204.1	267.9
Tucson, AZ	1,533	1,545	1,796	1,510	1,299	410.2	401.9	459.5	380.5	327.3
Tulsa, OK	774	946	1,375	622	1,467	395.9	483.7	698.1	312.3	736.5
Washington, DC	940	1,449	1,764	2,658	2,722	310.8	490.0	615.2	946.7	969.5
Wichita, KS	1,253	1,036	878	915	665	586.4	485.0	398.4	409.6	297.7
Yonkers, NY	NR	NR	NR	NR	NR	.	.	.	.	.
U.S. CITY TOTAL[1]	172,556	179,365	183,348	188,314	206,483	543.4	514.8	520.0	531.2	582.5
San Juan, PR	606	560	681	580	445	126.3	116.7	142.0	120.9	92.8
TOTAL	173,162	179,925	184,029	188,894	206,928	537.2	509.4	515.0	525.7	575.9

*NR = No report (see Appendix).

[1]Rates exclude population of cities that did not report.

Table 11. Chlamydia — Men – Reported cases and rates in selected cities of >200,000 population: United States and outlying areas, 1994–1998*

	Cases					Rates per 100,000 Population				
City	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Akron, OH	328	191	92	179	161	129.6	75.1	36.1	70.0	63.0
Albuquerque, NM	204	248	292	249	278	81.0	97.2	113.7	96.9	108.2
Atlanta, GA	NR	327	899	597	1,038	.	97.8	263.2	172.7	300.3
Austin, TX	315	377	442	509	564	97.4	113.4	130.0	147.1	163.0
Baltimore, MD	311	441	370	459	566	94.9	136.9	118.3	150.1	185.1
Birmingham, AL	33	116	85	101	123	10.8	37.7	27.5	32.8	39.9
Boston, MA	486	483	401	608	668	184.0	180.6	149.0	226.0	248.3
Buffalo, NY	NR	NR	NR	NR	NR	.	.	.	.	.
Charlotte, NC	NR	137	101	174	300	.	49.1	35.1	58.8	101.4
Chicago, IL	1,057	1,967	928	3,013	1,529	74.5	138.7	65.9	214.2	108.7
Cincinnati, OH	515	656	155	247	688	125.3	160.3	38.2	61.1	170.2
Cleveland, OH	873	697	392	365	463	132.4	106.0	59.6	55.9	70.9
Columbus, OH	1,141	617	429	459	812	235.4	126.5	87.8	93.5	165.3
Corpus Christi, TX	137	189	182	184	188	90.1	123.6	117.9	118.1	120.7
Dallas, TX	464	1,165	1,186	1,831	2,156	48.5	120.6	120.8	183.7	216.3
Dayton, OH	128	79	36	54	198	46.7	28.9	13.3	20.0	73.5
Denver, CO	NR	NR	655	645	676	.	.	271.5	265.9	278.6
Des Moines, IA	126	128	144	137	162	76.2	76.6	85.0	80.6	95.3
Detroit, MI	358	1,017	1,051	759	860	71.4	203.9	202.4	146.9	166.4
El Paso, TX	227	133	216	176	273	70.5	40.5	64.9	51.7	80.1
Fort Worth, TX	532	471	278	434	763	85.5	74.4	43.3	66.3	116.5
Honolulu, HI	317	236	229	252	355	71.6	53.2	52.3	57.7	81.3
Houston, TX	1,712	687	677	1,430	1,648	113.0	44.9	43.7	91.0	104.8
Indianapolis, IN	1,147	1,033	1,096	1,013	1,112	294.9	265.6	282.4	261.2	286.7
Jacksonville, FL	NR	336	591	649	544	.	98.3	168.3	182.9	153.3
Jersey City, NJ	NR	6	19	16	21	.	5.7	18.0	15.1	19.9
Kansas City, MO	134	149	275	307	320	64.2	71.3	129.3	143.7	149.7
Los Angeles, CA	3,347	3,540	4,383	5,373	5,209	78.6	83.2	103.3	125.8	122.0
Louisville, KY	108	275	416	349	260	34.0	86.6	130.9	109.8	81.8
Memphis, TN	233	638	1,047	919	1,005	57.0	154.8	253.7	222.5	243.3
Miami, FL	NR	485	500	695	685	.	50.0	51.0	70.7	69.7
Milwaukee, WI	1,154	1,057	994	1,070	1,553	259.1	239.0	227.5	247.3	359.0
Minneapolis, MN	603	480	485	763	793	325.2	258.0	260.3	409.4	425.5
Nashville, TN	168	495	537	512	555	67.1	196.3	211.7	201.6	218.5
New Orleans, LA	893	669	547	603	757	397.7	299.5	248.6	277.1	347.9
New York City, NY	2,155	2,086	2,080	2,762	2,669	62.5	60.6	60.2	79.7	77.0
Newark, NJ	8	55	56	52	93	5.8	40.4	41.3	38.5	68.9
Norfolk, VA	42	59	96	84	128	33.0	47.3	80.2	71.2	108.4
Oakland, CA	516	522	582	704	698	87.2	88.0	95.2	114.0	113.1
Oklahoma City, OK	176	163	267	121	423	83.9	77.4	126.1	56.9	199.0
Omaha, NE	349	256	137	237	270	168.1	122.2	64.7	111.1	126.6
Philadelphia, PA	862	633	635	1,180	1,581	121.7	90.9	92.8	175.1	234.5
Phoenix, AZ	971	1,083	1,405	1,516	1,896	83.9	90.3	108.7	113.6	142.1
Pittsburgh, PA	620	512	430	463	565	100.0	83.3	70.9	77.0	94.0
Portland, OR	612	501	527	596	675	260.2	212.1	220.1	247.4	280.2
Richmond, VA	79	194	201	234	167	86.2	215.3	231.8	268.0	191.3
Rochester, NY	NR	NR	NR	NR	NR	.	.	.	.	.
Sacramento, CA	756	824	714	725	907	140.5	152.4	131.2	132.0	165.1
San Antonio, TX	624	563	563	745	1,048	100.6	89.6	88.4	115.3	162.1
San Diego, CA	1,206	1,141	1,304	1,477	1,583	90.3	85.1	96.5	107.5	115.2
San Francisco, CA	483	473	495	817	1,075	132.1	130.3	137.2	226.2	297.6
San Jose, CA	818	629	538	607	717	103.8	79.5	67.0	74.7	88.2
Seattle, WA	823	812	877	895	1,056	105.2	103.2	109.8	110.6	130.6
St Louis, MO	203	187	192	211	291	121.0	114.4	120.5	135.1	186.4
St Paul, MN	295	243	272	282	336	223.7	184.6	205.9	212.7	253.5
St Petersburg, FL	NR	233	309	303	294	.	57.3	76.1	74.2	72.0
Tampa, FL	NR	417	376	465	353	.	96.8	86.1	104.7	79.5
Toledo, OH	255	160	63	44	144	116.7	73.6	29.1	20.4	66.6
Tucson, AZ	314	370	405	378	311	87.8	100.5	107.5	98.6	81.1
Tulsa, OK	55	82	288	171	315	30.2	44.9	156.1	91.6	168.8
Washington, DC	143	216	234	411	460	54.0	83.5	92.7	165.6	185.3
Wichita, KS	389	288	208	244	196	189.1	140.0	97.9	113.3	91.0
Yonkers, NY	NR	NR	NR	NR	NR	.	.	.	.	.
U.S. CITY TOTAL[1]	29,805	32,227	33,384	40,855	45,534	99.9	98.3	100.4	122.1	136.0
San Juan, PR	215	182	235	159	170	54.8	46.4	59.9	40.5	43.3
TOTAL	30,020	32,409	33,619	41,014	45,704	99.3	97.7	99.9	121.1	135.0

*NR = No report (see Appendix).

[1]Rates exclude population of cities that did not report.

Table 12A. Gonorrhea — Reported cases by age, gender, and race/ethnicity: United States, 1994–1998

	Age	Total			White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Asian/Pacific Islander			American Indian/ Alaska Native		
	Group	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1994	10-14	8,239	1,391	6,848	1,244	92	1,152	6,492	1,220	5,272	408	71	337	39	6	33	56	2	54
	15-19	117,189	47,960	69,229	16,669	2,822	13,847	94,699	43,079	51,620	4,784	1,775	3,009	466	115	351	571	169	402
	20-24	115,090	62,217	52,873	13,958	4,471	9,487	94,675	54,464	40,211	5,268	2,800	2,468	497	168	329	692	314	378
	25-29	56,554	32,803	23,751	7,613	3,393	4,220	45,374	27,392	17,982	2,970	1,749	1,221	264	128	136	333	141	192
	30-34	37,331	23,779	13,552	5,561	2,911	2,650	29,575	19,503	10,072	1,801	1,151	650	156	98	58	238	116	122
	35-39	22,840	16,489	6,351	3,299	1,988	1,311	18,332	13,681	4,651	972	666	306	120	77	43	117	77	40
	40-44	11,761	9,411	2,350	1,745	1,228	517	9,436	7,793	1,643	472	325	147	55	36	19	53	29	24
	45-54	8,056	6,930	1,126	1,427	1,092	335	6,203	5,532	671	340	245	95	43	28	15	43	33	10
	55-64	2,206	1,993	213	370	319	51	1,716	1,577	139	100	81	19	9	7	2	11	9	2
	65+	1,552	1,079	473	260	159	101	1,116	826	290	143	74	69	25	12	13	8	8	0
	TOTAL	382,899	204,920	177,979	52,332	18,550	33,782	309,404	175,832	133,572	17,331	8,957	8,374	1,682	676	1,006	2,150	905	1,245
1995	10-14	6,965	1,072	5,893	1,033	71	962	5,445	928	4,517	415	62	353	35	2	33	37	9	28
	15-19	104,753	40,311	64,442	15,661	2,500	13,161	82,894	35,649	47,245	5,290	1,953	3,337	430	94	336	478	115	363
	20-24	100,107	52,577	47,530	13,213	4,071	9,142	80,385	45,171	35,214	5,600	2,978	2,622	430	183	247	479	174	305
	25-29	51,167	29,789	21,378	7,440	3,212	4,228	40,158	24,532	15,626	3,027	1,771	1,256	281	161	120	261	113	148
	30-34	33,761	21,411	12,350	5,638	3,008	2,630	25,865	17,015	8,850	1,887	1,204	683	160	96	64	211	88	123
	35-39	22,045	15,479	6,566	3,616	2,204	1,412	17,135	12,429	4,706	1,082	727	355	70	45	25	142	74	68
	40-44	11,528	9,164	2,364	1,707	1,197	510	9,205	7,551	1,654	510	351	159	46	28	18	60	37	23
	45-54	7,778	6,726	1,052	1,465	1,156	309	5,884	5,244	640	356	279	77	36	23	13	37	24	13
	55-64	1,990	1,810	180	358	311	47	1,511	1,396	115	108	90	18	9	9	0	4	4	0
	65+	920	754	166	160	129	31	712	597	115	31	17	14	11	7	4	6	4	2
	TOTAL	343,127	179,985	163,142	50,565	17,956	32,609	270,898	151,263	119,635	18,430	9,472	8,958	1,514	650	864	1,720	644	1,076
1996	10-14	5,725	807	4,918	884	62	822	4,433	696	3,737	346	40	306	20	4	16	42	5	37
	15-19	92,253	32,683	59,570	14,517	2,655	11,862	71,870	28,047	43,823	4,932	1,790	3,142	364	62	302	570	129	441
	20-24	85,731	43,556	42,175	11,801	3,677	8,124	68,108	37,077	31,031	4,866	2,452	2,414	407	169	238	549	181	368
	25-29	44,639	25,609	19,030	6,764	3,029	3,735	34,569	20,789	13,780	2,728	1,527	1,201	258	132	126	320	132	188
	30-34	28,257	17,777	10,480	4,930	2,704	2,226	21,402	13,900	7,502	1,553	988	565	158	92	66	214	93	121
	35-39	18,464	12,702	5,762	3,174	1,927	1,247	14,125	10,073	4,052	921	566	355	94	55	39	150	81	69
	40-44	10,289	7,953	2,336	1,689	1,172	517	8,003	6,397	1,606	468	305	163	52	31	21	77	48	29
	45-54	7,069	5,999	1,070	1,441	1,122	319	5,238	4,601	637	313	232	81	37	23	14	40	21	19
	55-64	1,717	1,552	165	333	282	51	1,295	1,200	95	74	63	11	11	5	6	4	2	2
	65+	930	701	229	187	133	54	675	532	143	60	32	28	6	4	2	2	0	2
	TOTAL	296,393	149,814	146,579	45,991	16,852	29,139	230,616	123,656	106,960	16,394	8,031	8,363	1,416	579	837	1,976	696	1,280
1997	10-14	5,283	746	4,537	842	61	781	4,038	627	3,411	335	51	284	22	3	19	46	4	42
	15-19	90,096	30,995	59,101	13,710	2,389	11,321	70,242	26,642	43,600	5,127	1,735	3,392	408	95	313	609	134	475
	20-24	86,853	43,644	43,209	12,068	3,760	8,308	68,778	36,978	31,800	5,038	2,522	2,516	459	215	244	510	169	341
	25-29	45,645	26,478	19,167	7,012	3,047	3,965	35,121	21,434	13,687	2,950	1,752	1,198	278	130	148	284	115	169
	30-34	27,570	17,441	10,129	4,871	2,664	2,207	20,561	13,446	7,115	1,735	1,111	624	198	127	71	205	93	112
	35-39	18,666	12,810	5,856	3,547	2,118	1,429	13,868	9,892	3,976	1,056	703	353	88	51	37	107	46	61
	40-44	10,556	8,225	2,331	1,830	1,282	548	8,088	6,517	1,571	509	356	153	63	39	24	66	31	35
	45-54	7,433	6,331	1,102	1,433	1,136	297	5,586	4,910	676	326	231	95	51	36	15	37	18	19
	55-64	1,820	1,617	203	370	286	84	1,349	1,247	102	83	70	13	9	7	2	9	7	2
	65+	1,251	866	385	228	150	78	939	658	281	79	55	24	3	1	2	2	2	0
	TOTAL	296,222	149,547	146,675	46,068	16,933	29,135	229,358	122,665	106,693	17,331	8,624	8,707	1,583	706	877	1,882	619	1,263
1998	10-14	6,009	801	5,208	837	57	780	4,757	684	4,073	341	53	288	24	3	21	50	4	46
	15-19	103,428	33,717	69,711	15,768	2,657	13,111	80,641	28,779	51,862	5,817	2,056	3,761	467	82	385	735	143	592
	20-24	103,327	49,985	53,342	14,223	4,351	9,872	81,446	41,980	39,466	6,432	3,245	3,187	585	202	383	641	207	434
	25-29	54,496	31,331	23,165	7,946	3,520	4,426	42,162	25,380	16,782	3,641	2,136	1,505	370	172	198	377	123	254
	30-34	31,563	19,793	11,770	5,565	3,092	2,473	23,477	15,129	8,348	2,113	1,380	733	210	106	104	198	86	112
	35-39	22,395	15,241	7,154	4,098	2,555	1,543	16,683	11,660	5,023	1,298	864	434	154	92	62	162	70	92
	40-44	12,806	9,654	3,152	2,218	1,478	740	9,767	7,619	2,148	651	451	200	87	57	30	83	49	34
	45-54	9,097	7,606	1,491	1,646	1,267	379	6,886	5,947	939	460	328	132	48	25	23	57	39	18
	55-64	2,120	1,886	234	403	349	54	1,582	1,436	146	112	87	25	10	6	4	13	8	5
	65+	1,197	860	337	243	170	73	844	624	220	82	62	20	11	3	8	17	1	16
	TOTAL	347,572	171,271	176,301	53,129	19,552	33,577	269,091	139,539	129,552	21,033	10,689	10,344	1,975	752	1,223	2,344	739	1,605

NOTE: In most instances, 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 race/ethnicity for most cases and were excluded: 1994 (Georgia, and New York); 1995 (Georgia, New Jersey, and New York); 1996 (New Jersey, and New York); 1997 (Idaho, New Jersey, and New York); 1998 (Idaho and New Jersey). 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. Cases aged 0 to 9 years are not shown because some of these may not be due to sexual transmission; however, they are included in the totals.

Table 12B. Gonorrhea — Reported rates per 100,000 population by age, gender, and race/ethnicity: United States, 1994–1998

Age	Total			White, Non-Hispanic			Black, Non-Hispanic			Hispanic			American Indian/ Alaska Native			Asian/Pacific Islander			
Group	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	
10-14	48.3	15.9	82.3	10.6	1.5	20.2	276.4	102.5	455.2	19.0	6.5	32.1	29.5	2.1	57.6	6.3	1.9	10.7	
15-19	733.7	585.2	890.2	151.0	49.7	258.5	4,235.8	3,801.3	4,682.5	240.3	173.5	310.9	355.0	207.6	506.1	84.9	41.3	129.8	
20-24	695.5	739.1	650.4	121.5	76.7	167.8	4,357.0	5,092.9	3,643.9	249.4	248.2	250.8	448.9	398.8	501.2	79.5	53.6	105.5	
25-29	328.5	379.4	277.1	62.9	56.0	69.9	2,168.9	2,751.0	1,640.2	133.1	145.4	118.8	231.8	194.3	270.0	40.7	40.7	40.7	
30-34	187.2	238.9	135.7	38.1	39.8	36.4	1,299.3	1,833.0	830.9	81.6	99.0	62.3	155.6	154.2	156.8	21.9	28.6	15.7	1994
35-39	115.2	167.0	63.8	22.1	26.6	17.6	824.0	1,314.6	392.8	52.7	69.9	34.3	81.2	110.1	54.0	17.6	23.8	12.0	
40-44	66.1	106.9	26.1	12.7	17.9	7.5	501.3	892.0	162.9	32.4	44.2	20.4	41.7	47.4	36.3	9.0	12.8	5.8	
45-54	30.0	52.6	8.2	6.6	10.3	3.1	249.0	488.0	49.4	18.0	26.5	9.9	23.8	38.0	10.7	5.2	7.3	3.4	
55-64	11.6	22.1	2.1	2.4	4.3	0.6	100.0	210.2	14.4	8.4	14.5	3.0	9.9	17.2	3.4	1.8	3.1	0.7	
65+	5.2	8.8	2.7	1.0	1.5	0.7	49.5	93.8	21.1	11.2	13.8	9.3	6.7	15.8	0.0	4.9	5.5	4.4	
TOTAL	162.9	178.3	148.1	29.8	21.6	37.6	1,163.0	1,393.3	955.2	74.0	75.1	72.8	116.7	99.9	133.0	22.3	18.6	25.8	
10-14	41.3	12.4	71.7	8.9	1.2	17.1	237.0	79.7	398.9	19.3	5.7	33.6	19.0	9.2	29.1	5.6	0.6	10.7	
15-19	671.0	503.2	847.8	145.1	45.0	251.6	3,815.3	3,234.6	4,413.1	270.3	195.3	348.6	296.2	141.1	454.4	81.0	35.0	128.0	
20-24	633.1	653.8	611.6	121.0	73.4	170.2	3,841.8	4,376.7	3,321.1	275.3	276.2	274.3	309.5	220.3	402.4	70.2	59.9	80.5	
25-29	316.1	366.6	265.2	65.9	56.9	75.0	2,044.9	2,623.9	1,518.7	139.6	151.2	126.0	186.7	159.4	214.8	44.4	52.6	36.7	
30-34	175.7	223.1	128.4	40.3	42.9	37.7	1,184.0	1,665.3	761.1	86.0	103.9	66.0	138.9	117.4	159.8	23.0	28.6	17.7	1995
35-39	112.9	159.0	67.0	24.7	30.0	19.3	778.5	1,205.2	402.3	58.4	75.8	39.7	97.8	104.6	91.4	10.5	14.2	7.1	
40-44	66.0	105.9	26.8	12.7	17.9	7.6	491.4	866.9	165.1	34.9	47.4	22.0	46.6	59.9	34.3	7.7	10.1	5.5	
45-54	28.7	50.6	7.6	6.7	10.8	2.8	236.7	462.8	47.3	18.7	29.9	8.0	20.0	26.9	13.5	4.3	6.0	2.9	
55-64	10.9	20.8	1.9	2.4	4.3	0.6	91.7	194.0	12.4	9.3	16.5	2.9	3.6	7.6	0.0	1.8	4.0	0.0	
65+	3.1	6.3	1.0	0.6	1.2	0.2	32.4	69.3	8.6	2.4	3.2	1.9	4.9	7.8	2.8	2.1	3.2	1.3	
TOTAL	149.5	160.4	139.1	29.6	21.5	37.3	1,045.9	1,230.2	879.4	79.2	80.0	78.3	92.9	70.7	114.3	20.3	18.1	22.3	
10-14	33.2	9.1	58.6	7.5	1.0	14.4	179.8	55.6	307.8	15.8	3.6	28.8	21.7	5.1	38.6	3.3	1.3	5.3	
15-19	543.6	373.6	724.5	125.8	44.7	211.8	2,904.8	2,235.0	3,594.2	222.7	152.1	302.9	329.0	147.7	513.3	64.1	21.5	107.8	
20-24	537.3	532.4	542.6	109.8	67.1	154.3	3,096.2	3,418.2	2,783.0	218.2	200.4	239.9	364.9	238.1	494.4	64.8	53.5	76.2	
25-29	260.6	297.6	223.3	57.0	51.1	62.9	1,594.2	2,015.2	1,212.1	121.7	124.0	118.9	215.6	174.0	258.9	36.6	39.1	34.3	
30-34	147.6	186.0	109.3	36.1	39.6	32.5	916.4	1,273.3	603.2	67.9	80.5	53.2	143.9	126.0	161.6	22.6	27.5	18.1	1996
35-39	91.0	125.4	56.7	21.1	25.5	16.6	591.8	902.3	319.0	45.6	53.1	37.2	101.3	111.8	91.2	13.8	16.9	10.9	
40-44	54.8	85.3	24.7	11.8	16.4	7.2	380.1	652.5	142.7	28.8	36.4	20.7	57.5	74.6	41.7	8.2	10.5	6.2	
45-54	24.3	42.1	7.2	6.3	9.8	2.7	183.8	354.7	41.0	14.9	22.1	7.7	20.5	22.4	18.8	4.0	5.4	2.8	
55-64	9.0	17.0	1.6	2.2	3.8	0.6	72.2	153.9	9.4	6.0	10.9	1.7	3.4	3.7	3.3	2.1	2.1	2.1	
65+	3.1	5.6	1.3	0.7	1.2	0.4	28.5	57.4	9.9	4.4	5.5	3.5	1.6	0.0	2.7	1.0	1.6	0.6	
TOTAL	124.0	127.9	120.2	26.1	19.6	32.4	816.8	923.4	720.7	66.0	62.6	69.6	104.8	75.1	133.7	18.0	15.3	20.5	
10-14	30.7	8.5	54.1	7.2	1.0	13.8	162.2	49.6	278.3	15.0	4.4	26.1	23.7	4.1	43.8	3.5	0.9	6.2	
15-19	521.6	348.1	706.2	117.4	39.7	199.7	2,780.0	2,077.3	3,504.3	223.5	142.3	315.6	342.9	150.3	537.2	68.6	31.5	106.5	
20-24	548.4	537.1	560.4	114.0	69.6	160.5	3,124.8	3,404.5	2,852.4	220.2	201.6	242.7	342.6	225.5	461.4	74.5	69.7	79.4	
25-29	268.8	310.5	226.8	60.2	52.3	68.0	1,606.8	2,059.4	1,195.3	130.4	141.0	117.5	189.8	150.0	231.5	38.1	37.4	38.8	
30-34	148.7	188.5	109.0	37.3	40.9	33.7	897.0	1,255.2	582.7	74.4	88.6	57.9	141.7	129.1	154.2	27.9	37.6	19.0	1997
35-39	92.1	126.5	57.7	23.8	28.3	19.2	577.4	880.4	311.1	50.1	63.2	35.5	72.3	63.4	81.0	12.6	15.3	10.2	
40-44	55.0	86.2	24.1	12.6	17.7	7.6	368.9	636.7	134.4	29.6	40.0	18.4	48.6	47.3	49.7	9.5	12.6	6.8	
45-54	24.7	42.9	7.2	6.0	9.7	2.5	186.3	359.7	41.4	14.6	20.7	8.5	18.5	18.6	18.3	5.2	8.0	2.9	
55-64	9.3	17.4	2.0	2.4	3.8	1.0	73.4	156.1	9.8	6.5	11.6	1.9	7.6	12.6	3.2	1.6	2.7	0.7	
65+	4.1	6.9	2.2	0.9	1.4	0.5	39.2	70.1	19.3	5.5	9.0	2.9	1.5	3.6	0.0	0.5	0.4	0.6	
TOTAL	123.3	127.0	119.8	26.2	19.7	32.4	802.4	904.5	710.2	67.4	64.9	70.0	99.4	66.4	131.3	19.5	18.1	20.8	
10-14	32.6	8.5	58.0	6.8	0.9	12.9	175.9	49.8	305.8	14.0	4.3	24.3	25.1	4.0	46.9	3.5	0.9	6.3	
15-19	560.6	354.6	779.7	127.3	41.7	218.2	2,950.8	2,075.9	3,851.7	233.2	155.5	320.8	404.4	156.7	654.4	71.4	24.8	119.4	
20-24	609.6	575.1	645.9	126.5	75.8	179.5	3,408.9	3,562.8	3,259.2	258.8	239.9	281.5	419.5	268.7	573.0	85.7	59.1	112.4	
25-29	298.1	341.5	254.4	63.9	56.7	71.1	1,759.8	2,223.9	1,337.7	146.9	157.7	133.8	243.6	155.0	336.7	45.5	44.4	46.5	
30-34	157.7	198.4	117.3	39.8	44.3	35.3	932.5	1,286.9	622.1	82.4	100.7	61.5	132.5	115.5	149.4	26.3	27.9	24.9	1998
35-39	102.7	140.1	65.5	25.7	32.0	19.4	636.2	951.8	359.5	55.9	70.9	39.4	106.1	93.3	118.5	19.7	24.4	15.2	
40-44	62.1	94.4	30.3	14.4	19.1	9.6	409.6	687.2	168.4	34.3	46.3	21.6	59.2	72.5	46.8	11.8	16.4	7.7	
45-54	28.1	47.9	9.0	6.5	10.1	3.0	208.2	397.6	51.8	18.4	26.4	10.4	27.6	39.2	16.8	4.4	4.9	3.9	
55-64	10.1	18.8	2.1	2.4	4.3	0.6	77.3	162.1	12.6	7.7	12.8	3.3	10.6	13.9	7.7	1.6	2.1	1.2	
65+	3.6	6.4	1.7	0.9	1.5	0.4	32.1	60.8	13.7	5.1	9.2	2.2	12.5	1.7	20.3	1.7	1.1	2.1	
TOTAL	134.5	135.4	133.7	28.3	21.3	35.0	861.6	943.9	787.6	74.3	73.5	75.2	120.4	77.1	162.2	21.9	17.3	26.2	

NOTE: For the following years, the states listed did not report race/ethnicity for most cases and were excluded: 1994 (Georgia, and New York); 1995 (Georgia, New Jersey, and New York); 1996 (New Jersey, and New York); 1997 (Idaho, New Jersey, and New York); 1998 (Idaho and New Jersey). Cases and population denominators have been excluded for these states/areas. Rates for the 0 to 9 year age group are not shown because some of these may not be due to sexual transmission; however, these cases are included in the calculation of total rates.

Table 13. Gonorrhea — Reported cases and rates by state/area, ranked according to rates: United States and outlying areas, 1998

Rank	*State/Area*	*Cases*	*Rate per 100,000 Population*
1	Mississippi	10,689	391.5
2	South Carolina	11,575	307.8
3	Alabama	12,737	294.9
4	Louisiana	12,499	287.2
5	Georgia	20,666	276.1
6	North Carolina	19,230	259.0
7	Maryland	11,254	220.9
8	Tennessee	11,840	220.6
9	Delaware	1,556	212.7
10	Illinois	21,735	182.7
11	Missouri	9,463	175.2
12	Texas	32,833	168.9
13	Michigan	16,359	167.4
14	Ohio	18,275	163.4
15	Oklahoma	5,243	158.1
16	Arkansas	3,953	156.7
17	Virginia	9,265	137.6
	U.S. TOTAL[1]	**355,642**	**132.9**
18	Florida	19,080	130.2
19	Wisconsin	6,351	122.9
20	Indiana	6,307	107.6
21	New York	19,062	105.1
22	Kansas	2,622	101.0
	YEAR 2000 OBJECTIVE		**100.0**
23	Kentucky	3,813	97.6
24	New Jersey	7,858	97.6
25	Pennsylvania	11,719	97.5
26	Connecticut	3,177	97.2
27	Arizona	4,213	92.5
28	Nevada	1,445	86.2
29	Nebraska	1,204	72.7
30	California	19,518	60.5
31	Minnesota	2,708	57.8
32	Iowa	1,616	56.7
33	New Mexico	957	55.3
34	Alaska	331	54.3
35	Colorado	2,033	52.2
36	West Virginia	920	50.7
37	Guam	72	46.1
38	Rhode Island	430	43.5
39	Hawaii	506	42.6
40	Massachusetts	2,258	36.9
41	Virgin Islands	39	35.6
42	Washington	1,948	34.7
43	South Dakota	221	29.9
44	Oregon	880	27.1
45	Idaho	182	15.0
46	North Dakota	80	12.5
47	Utah	236	11.5
48	Puerto Rico	400	10.5
49	New Hampshire	91	7.8
50	Wyoming	36	7.5
51	Vermont	38	6.5
52	Montana	55	6.3
53	Maine	67	5.4

[1]Includes cases reported by Washington, D.C., but excludes outlying areas (Guam, Puerto Rico and Virgin Islands).

Table 14. Gonorrhea — Reported cases and rates by state/area and region: United States and outlying areas, 1994–1998*

State/Area	Cases					Rates per 100,000 Population				
	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Alabama	15,881	14,683	13,169	12,031	12,737	376.4	345.2	307.2	278.5	294.9
Alaska	918	660	466	391	331	151.7	109.3	77.0	64.2	54.3
Arizona	3,603	3,844	3,709	3,802	4,213	88.4	91.1	83.6	83.5	92.5
Arkansas	6,892	5,630	5,056	4,382	3,953	281.0	226.7	201.7	173.7	156.7
California	29,102	24,606	18,674	17,979	19,518	92.6	77.9	58.6	55.7	60.5
Colorado	3,632	2,803	2,021	2,315	2,033	99.4	74.8	53.0	59.5	52.2
Connecticut	4,767	4,055	3,388	3,154	3,177	145.5	123.8	103.7	96.5	97.2
Delaware	2,038	2,201	1,456	1,273	1,556	287.3	306.9	201.3	174.0	212.7
Florida	24,367	20,874	19,181	19,079	19,080	174.7	147.4	133.0	130.2	130.2
Georgia	NR	21,025	19,806	18,471	20,666	.	292.0	270.0	246.7	276.1
Hawaii	700	563	497	510	506	59.4	47.4	42.0	43.0	42.6
Idaho	98	149	98	158	182	8.6	12.8	8.3	13.1	15.0
Illinois	26,571	21,747	17,964	18,423	21,735	226.1	183.8	151.7	154.9	182.7
Indiana	9,757	8,880	6,638	6,155	6,307	169.6	153.0	113.9	105.0	107.6
Iowa	1,645	1,723	1,145	1,311	1,616	58.1	60.6	40.2	46.0	56.7
Kansas	3,673	2,797	2,044	2,075	2,622	143.8	109.0	79.3	80.0	101.0
Kentucky	5,127	4,751	4,229	4,027	3,813	134.0	123.1	108.9	103.0	97.6
Louisiana	11,992	9,292	9,315	10,782	12,499	277.9	214.0	214.6	247.8	287.2
Maine	93	94	55	66	67	7.5	7.6	4.4	5.3	5.4
Maryland	15,137	12,984	11,592	11,568	11,254	302.6	257.5	229.1	227.1	220.9
Massachusetts	3,159	2,658	2,189	2,225	2,258	52.3	43.8	36.0	36.4	36.9
Michigan	18,215	18,220	15,130	15,736	16,359	191.8	190.8	155.5	161.0	167.4
Minnesota	3,346	2,852	2,697	2,417	2,708	73.3	61.9	58.0	51.6	57.8
Mississippi	11,455	9,511	6,988	9,367	10,689	429.1	352.6	257.8	343.1	391.5
Missouri	12,557	11,326	8,421	7,658	9,463	237.9	212.8	157.0	141.8	175.2
Montana	85	65	38	66	55	9.9	7.5	4.3	7.5	6.3
Nebraska	1,335	1,133	1,164	1,210	1,204	82.2	69.2	70.6	73.0	72.7
Nevada	1,736	1,237	1,025	829	1,445	119.1	80.8	64.0	49.4	86.2
New Hampshire	103	118	153	96	91	9.1	10.3	13.2	8.2	7.8
New Jersey	5,269	5,783	8,721	7,566	7,858	66.7	72.8	109.0	94.0	97.6
New Mexico	1,130	1,054	890	857	957	68.3	62.5	52.0	49.5	55.3
New York	30,997	25,992	20,604	22,393	19,062	170.6	143.3	113.6	123.5	105.1
North Carolina	28,936	23,961	18,229	16,888	19,230	409.3	333.0	249.4	227.4	259.0
North Dakota	35	38	37	68	80	5.5	5.9	5.8	10.6	12.5
Ohio	24,746	23,176	14,946	14,961	18,275	222.9	207.8	133.9	133.7	163.4
Oklahoma	4,888	5,077	4,897	4,760	5,243	150.0	154.9	148.6	143.5	158.1
Oregon	978	854	887	773	880	31.7	27.2	27.8	23.8	27.1
Pennsylvania	13,184	13,038	10,803	9,967	11,719	109.4	108.0	89.7	82.9	97.5
Rhode Island	478	545	486	422	430	48.0	55.1	49.2	42.7	43.5
South Carolina	13,067	12,120	11,661	11,487	11,575	356.6	330.0	313.8	305.5	307.8
South Dakota	243	237	176	172	221	33.6	32.5	23.9	23.3	29.9
Tennessee	15,745	13,892	11,709	11,023	11,840	304.2	264.3	220.6	205.3	220.6
Texas	29,757	30,801	23,124	26,612	32,833	161.9	164.5	121.1	136.9	168.9
Utah	303	306	277	278	236	15.9	15.7	13.7	13.5	11.5
Vermont	40	69	47	53	38	6.9	11.8	8.0	9.0	6.5
Virginia	13,414	10,340	9,293	8,888	9,265	204.8	156.2	139.4	132.0	137.6
Washington	2,893	2,765	2,020	1,956	1,948	54.1	50.9	36.6	34.9	34.7
West Virginia	805	860	736	957	920	44.2	47.0	40.4	52.7	50.7
Wisconsin	7,776	5,524	4,481	4,316	6,351	153.0	107.8	87.1	83.5	122.9
Wyoming	82	51	41	54	36	17.2	10.6	8.5	11.3	7.5
U.S. TOTAL[1]	419,577	392,651	326,805	326,564	355,642	165.7	149.4	123.2	122.0	132.9
Northeast	58,090	52,352	46,446	45,942	44,700	113.0	101.7	90.2	89.1	86.6
Midwest	109,899	97,653	74,843	74,502	86,941	179.0	158.0	120.4	119.3	139.2
South	206,328	203,689	174,873	176,152	191,661	246.7	221.7	188.0	187.0	203.5
West	45,260	38,957	30,643	29,968	32,340	79.6	67.6	52.4	50.5	54.4
Guam	110	90	56	47	72	75.4	60.3	36.7	30.1	46.1
Puerto Rico	500	618	648	526	400	13.7	16.7	17.4	13.7	10.5
Virgin Islands	60	31	12	40	39	55.5	28.3	10.9	36.5	35.6
OUTLYING AREAS	670	739	716	613	511	17.1	18.7	18.0	15.0	12.5
TOTAL	420,247	393,390	327,521	327,177	356,153	163.4	147.5	121.7	120.4	131.1

*NR = No report (see Appendix).
[1]Includes cases reported by Washington, D.C.

Table 15. Gonorrhea — Women – Reported cases and rates by state/area: United States and outlying areas, 1994–1998*

	Cases					Rates per 100,000 Population				
State/Area	*1994*	*1995*	*1996*	*1997*	*1998*	*1994*	*1995*	*1996*	*1997*	*1998*
Alabama	6,816	6,938	6,730	5,984	6,313	310.5	313.6	302.3	266.9	281.5
Alaska	431	318	242	230	181	150.6	111.4	84.4	79.6	62.6
Arizona	1,601	1,700	1,690	1,625	1,730	77.7	79.7	75.5	70.8	75.3
Arkansas	3,316	2,592	2,506	2,071	1,919	261.2	201.7	193.7	159.2	147.5
California	13,429	11,349	8,847	8,462	9,300	85.5	71.9	55.6	52.5	57.7
Colorado	1,765	1,401	1,028	1,224	1,055	95.7	74.1	53.4	62.4	53.8
Connecticut	2,439	2,075	1,815	1,642	1,714	144.5	122.9	108.1	97.7	102.0
Delaware	1,074	1,171	799	705	855	294.8	318.1	215.4	188.0	228.0
Florida	11,144	9,439	9,409	9,513	8,923	154.9	129.2	126.9	126.3	118.5
Georgia	NR	9,995	9,806	9,532	10,056	.	270.2	260.7	248.5	262.2
Hawaii	369	290	244	264	278	63.4	49.4	41.6	44.8	47.1
Idaho	53	68	53	83	74	9.3	11.7	8.9	13.7	12.2
Illinois	13,199	11,027	9,112	6,765	11,250	218.7	181.6	150.3	111.2	184.9
Indiana	4,485	4,143	3,305	3,141	3,308	151.6	138.9	110.6	104.5	110.1
Iowa	864	950	666	762	895	59.4	65.1	45.6	52.2	61.3
Kansas	1,968	1,528	1,084	1,133	1,454	151.6	117.2	82.8	86.0	110.4
Kentucky	2,229	2,259	2,013	1,882	1,866	113.0	113.6	100.9	93.7	92.9
Louisiana	4,838	4,003	3,923	5,202	6,143	216.1	177.6	174.4	230.7	272.5
Maine	58	56	27	31	31	9.1	8.8	4.3	4.9	4.9
Maryland	7,644	6,323	5,692	5,767	5,391	297.1	243.9	219.2	220.6	206.3
Massachusetts	1,562	1,231	1,146	1,151	1,155	49.8	39.1	36.4	36.4	36.5
Michigan	8,319	8,117	7,780	7,969	8,265	170.5	165.5	155.9	159.1	165.0
Minnesota	1,683	1,488	1,383	1,307	1,443	72.5	63.6	58.7	55.1	60.8
Mississippi	6,003	5,218	3,681	5,188	5,973	431.7	371.5	261.3	365.7	421.1
Missouri	5,876	5,315	4,193	4,113	4,924	215.3	193.2	151.7	147.9	177.1
Montana	44	27	19	31	33	10.2	6.2	4.3	7.0	7.5
Nebraska	700	600	604	670	683	84.3	71.7	71.8	79.3	80.9
Nevada	630	448	362	317	591	88.1	59.6	46.1	38.6	71.9
New Hampshire	50	70	95	57	47	8.6	12.0	16.1	9.6	7.9
New Jersey	2,263	2,706	3,743	3,564	3,763	55.5	66.0	90.8	86.0	90.8
New Mexico	646	583	459	509	530	77.0	68.2	52.9	58.0	60.4
New York	16,470	13,999	10,952	12,833	10,586	174.5	148.7	116.5	136.6	112.7
North Carolina	13,039	11,101	8,482	7,844	9,129	358.3	299.7	225.8	205.6	239.3
North Dakota	13	15	18	42	56	4.1	4.7	5.6	13.1	17.4
Ohio	12,774	11,978	8,161	8,349	10,117	222.4	207.8	141.7	144.8	175.4
Oklahoma	2,512	2,764	2,610	2,418	2,932	150.5	164.7	155.1	142.8	173.1
Oregon	438	387	418	348	430	28.0	24.3	25.9	21.2	26.2
Pennsylvania	6,452	6,805	5,730	5,396	6,472	103.0	108.5	91.8	86.6	103.9
Rhode Island	241	274	245	263	258	46.5	53.3	47.8	51.4	50.4
South Carolina	4,486	4,597	4,807	5,128	5,730	236.9	241.9	250.2	263.9	294.9
South Dakota	116	117	94	87	124	31.6	31.6	25.1	23.3	33.1
Tennessee	6,780	6,197	5,106	4,940	5,263	252.9	227.7	186.3	178.2	189.8
Texas	13,670	15,008	11,933	13,797	16,704	146.7	158.2	123.6	140.4	170.0
Utah	127	121	95	84	70	13.2	12.3	9.4	8.1	6.8
Vermont	24	43	23	32	22	8.1	14.5	7.7	10.7	7.4
Virginia	6,025	4,886	4,495	4,290	4,543	180.2	144.6	132.2	124.9	132.2
Washington	1,370	1,301	929	965	863	50.9	47.6	33.5	34.3	30.7
West Virginia	429	459	363	512	549	45.4	48.4	38.5	54.5	58.5
Wisconsin	3,892	2,713	2,343	2,344	3,733	150.3	104.0	89.6	89.3	142.2
Wyoming	44	30	25	30	23	18.6	12.6	10.5	12.6	9.7
U.S. TOTAL[1]	197,218	188,460	161,126	162,515	179,651	152.1	140.2	119.0	119.0	131.5
Guam	58	49	30	12	25	84.6	69.9	41.8	16.3	34.0
Puerto Rico	138	205	219	212	163	7.3	10.7	11.4	10.7	8.2
Virgin Islands	27	14	4	19	16	48.0	24.5	7.0	33.3	28.1
OUTLYING AREAS	223	268	253	243	204	11.1	13.2	12.3	11.5	9.6
TOTAL	197,441	188,728	161,379	162,758	179,855	150.0	138.3	117.4	117.3	129.6

*NR = No report (see Appendix).

[1]Includes cases reported by Washington, D.C.

NOTE: Cases and rates underestimated in some areas because of under-reporting or non-reporting by gender.

Table 16. Gonorrhea — Men – Reported cases and rates by state/area: United States and outlying areas, 1994–1998*

State/Area	Cases					Rates per 100,000 Population				
	1994	*1995*	*1996*	*1997*	*1998*	*1994*	*1995*	*1996*	*1997*	*1998*
Alabama	8,943	7,698	6,409	6,022	6,411	442.0	377.2	311.0	290.0	308.7
Alaska	487	342	224	161	150	152.6	107.5	70.4	50.3	46.8
Arizona	2,002	2,144	2,019	2,177	2,483	99.4	102.8	91.9	96.4	109.9
Arkansas	3,576	3,031	2,536	2,295	2,029	302.3	252.9	209.1	187.9	166.1
California	15,501	13,121	9,729	9,452	10,165	98.6	83.1	61.0	58.5	62.9
Colorado	1,867	1,402	992	1,091	978	103.1	75.5	52.4	56.5	50.6
Connecticut	2,328	1,980	1,573	1,512	1,463	146.7	124.8	99.1	95.1	92.0
Delaware	964	1,030	657	568	701	279.4	295.1	186.4	159.3	196.6
Florida	13,223	11,435	9,772	9,566	10,054	195.7	166.6	139.5	134.3	141.1
Georgia	NR	11,030	10,000	8,916	10,525	.	315.0	279.8	244.2	288.3
Hawaii	331	273	253	246	228	55.5	45.5	42.4	41.2	38.2
Idaho	45	81	45	75	108	8.0	14.0	7.6	12.4	17.8
Illinois	13,371	10,720	8,852	11,658	10,485	233.9	186.2	153.1	200.6	180.4
Indiana	5,272	4,737	3,331	3,006	2,991	188.7	168.0	117.3	105.1	104.6
Iowa	781	773	479	549	721	56.8	55.9	34.5	39.4	51.8
Kansas	1,705	1,269	960	942	1,168	135.8	100.6	75.6	73.7	91.4
Kentucky	2,898	2,492	2,216	2,137	1,887	156.3	133.2	117.5	112.5	99.3
Louisiana	7,154	5,289	5,392	5,580	6,356	344.6	253.3	257.8	266.1	303.1
Maine	35	38	28	35	36	5.8	6.3	4.6	5.8	5.9
Maryland	7,493	6,661	5,897	5,801	5,846	308.5	271.9	239.4	233.9	235.7
Massachusetts	1,597	1,427	1,043	1,074	1,103	54.9	48.8	35.5	36.4	37.3
Michigan	9,896	10,103	7,350	7,767	8,094	214.3	217.5	155.0	163.0	169.9
Minnesota	1,663	1,364	1,314	1,110	1,265	74.0	60.1	57.3	48.0	54.7
Mississippi	5,452	4,284	3,266	4,049	4,653	426.3	331.4	250.9	308.6	354.7
Missouri	6,681	6,011	4,228	3,545	4,539	262.1	233.6	162.6	135.2	173.2
Montana	41	38	19	35	22	9.6	8.8	4.3	8.0	5.0
Nebraska	619	532	551	537	520	78.1	66.5	68.2	66.1	64.0
Nevada	1,106	789	663	512	854	149.1	101.3	81.2	59.9	99.9
New Hampshire	53	48	58	39	44	9.5	8.5	10.2	6.7	7.6
New Jersey	3,006	3,077	4,972	3,999	4,094	78.6	80.0	128.1	102.3	104.8
New Mexico	484	471	431	348	427	59.4	56.7	51.1	40.8	50.1
New York	14,527	11,993	9,652	9,560	8,476	166.3	137.5	110.5	109.3	96.9
North Carolina	15,897	12,860	9,747	9,044	10,101	463.6	368.5	274.4	250.5	279.7
North Dakota	22	23	19	26	24	6.9	7.2	5.9	8.1	7.5
Ohio	11,972	10,940	6,672	6,506	8,023	223.4	203.1	123.5	120.1	148.1
Oklahoma	2,366	2,313	2,287	2,342	2,311	148.9	144.6	141.9	144.3	142.4
Oregon	540	467	469	425	450	35.5	30.2	29.7	26.5	28.0
Pennsylvania	6,732	6,233	5,073	4,571	5,247	116.3	107.5	87.5	79.0	90.6
Rhode Island	237	271	241	159	172	49.5	57.0	50.7	33.4	36.2
South Carolina	8,382	7,388	6,828	6,340	5,769	473.5	416.7	380.2	349.0	317.5
South Dakota	127	120	82	85	97	35.6	33.4	22.6	23.4	26.7
Tennessee	8,965	7,695	6,603	6,083	6,577	359.4	303.6	257.3	234.4	253.4
Texas	16,087	15,793	11,191	12,815	15,995	177.6	171.0	118.6	133.3	166.4
Utah	176	185	182	194	166	18.5	19.1	18.1	18.9	16.2
Vermont	16	26	24	21	16	5.6	9.0	8.3	7.2	5.5
Virginia	7,349	5,414	4,783	4,590	4,720	229.1	167.1	146.4	139.2	143.1
Washington	1,523	1,464	1,091	991	1,085	57.4	54.3	39.7	35.4	38.8
West Virginia	376	401	373	445	369	42.9	45.5	42.5	50.8	42.1
Wisconsin	3,884	2,811	2,138	1,972	2,618	155.9	111.8	84.5	77.5	102.9
Wyoming	38	21	16	24	13	15.9	8.7	6.6	9.9	5.4
U.S. TOTAL[1]	221,799	203,557	165,321	163,634	175,233	179.4	158.7	127.4	124.9	133.7
Guam	52	41	26	35	47	67.3	51.8	32.1	42.3	56.8
Puerto Rico	362	413	429	314	237	20.5	23.2	23.9	17.1	12.9
Virgin Islands	33	17	8	21	23	63.5	32.3	15.2	39.9	43.7
OUTLYING AREAS	447	471	463	370	307	23.6	24.6	24.0	18.8	15.6
TOTAL	222,246	204,028	165,784	164,004	175,540	177.0	156.7	125.9	123.3	132.0

*NR = No report (see Appendix).

[1]Includes cases reported by Washington, D.C.

NOTE: Cases and rates underestimated in some areas because of under-reporting or non-reporting by gender.

Table 17. Gonorrhea — Reported cases and rates in selected cities of >200,000 population, ranked according to rates: United States and outlying areas, 1998

Rank	*City*	*Cases*	*Rate per 100,000 Population*
1	St Louis, MO	3,652	1,068.2
2	Baltimore, MD	6,989	1,063.4
3	Washington, DC	4,508	852.2
4	Rochester, NY	1,992	826.0
5	Richmond, VA	1,527	793.7
6	Detroit, MI	8,459	776.7
7	Atlanta, GA	5,599	774.9
8	Newark, NJ	1,781	625.9
9	Norfolk, VA	1,415	616.9
10	Memphis, TN	5,235	604.5
11	New Orleans, LA	2,691	573.7
12	Kansas City, MO	2,538	567.7
13	Milwaukee, WI	5,080	558.9
14	Philadelphia, PA	7,271	501.0
15	Birmingham, AL	3,172	481.6
16	Chicago, IL	13,959	479.0
17	Cincinnati, OH	3,583	420.7
18	Minneapolis, MN	1,562	407.5
19	Indianapolis, IN	3,071	377.4
20	Dallas, TX	7,421	366.8
21	Oklahoma City, OK	1,571	356.5
22	Buffalo, NY	1,108	346.1
23	Tulsa, OK	1,308	339.0
24	Jacksonville, FL	2,463	336.2
25	Nashville, TN	1,777	333.0
26	Charlotte, NC	1,911	311.6
27	Columbus, OH	3,082	303.0
28	Austin, TX	1,803	259.9
29	San Francisco, CA	1,858	253.7
30	Fort Worth, TX	3,310	249.4
31	Houston, TX	7,226	228.8
32	Jersey City, NJ	491	225.4
33	Cleveland, OH	3,030	218.5
34	Louisville, KY	1,462	218.0
35	Omaha, NE	871	197.5
36	Denver, CO	973	195.0
37	Dayton, OH	1,092	194.5
38	St Paul, MN	519	188.0
39	Tampa, FL	1,696	186.5
40	Boston, MA	982	176.2
41	St Petersburg, FL	1,468	168.4
42	New York City, NY	12,097	164.8
43	Akron, OH	823	154.8
44	Toledo, OH	655	145.1
45	Corpus Christi, TX	449	141.4
46	San Antonio, TX	1,862	139.7
47	Oakland, CA	1,742	139.0
48	Sacramento, CA	1,546	137.3
49	Phoenix, AZ	3,543	131.4
50	Miami, FL	2,573	125.8
51	Albuquerque, NM	570	108.3
52	Portland, OR	527	106.9
53	Wichita, KS	466	106.2
54	Pittsburgh, PA	1,351	105.5
55	Des Moines, IA	371	104.7
	YEAR 2000 OBJECTIVE		**100.0**
56	Los Angeles, CA	5,914	69.1
57	Seattle, WA	975	59.7
58	San Diego, CA	1,595	58.6
59	Honolulu, HI	481	55.3
60	Yonkers, NY	105	54.5
61	Tucson, AZ	403	51.7
62	El Paso, TX	252	35.9
63	San Jose, CA	453	28.2
64	San Juan, PR	227	26.0

Table 18. Gonorrhea — Reported cases and rates in selected cities of >200,000 population: United States and outlying areas, 1994–1998*

City	Cases					Rates per 100,000 Population				
	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Akron, OH	1,285	1,043	646	669	823	243.4	196.7	121.9	125.8	154.8
Albuquerque, NM	759	625	560	544	570	147.2	119.7	106.6	103.4	108.3
Atlanta, GA	NR	7,330	5,211	5,468	5,599	.	1,046.1	729.2	756.8	774.9
Austin, TX	1,349	1,600	1,363	1,531	1,803	208.7	240.7	199.9	220.7	259.9
Baltimore, MD	9,099	6,928	6,495	6,693	6,989	1,294.3	1,002.4	966.9	1,018.3	1,063.4
Birmingham, AL	5,309	4,321	3,239	3,104	3,172	808.5	656.9	490.0	471.3	481.6
Boston, MA	1,199	917	821	939	982	218.4	165.0	147.2	168.5	176.2
Buffalo, NY	1,768	1,691	1,284	1,172	1,108	539.0	518.5	397.7	366.0	346.1
Charlotte, NC	4,137	2,146	1,823	1,703	1,911	733.9	370.3	305.8	277.7	311.6
Chicago, IL	16,868	12,586	11,383	11,498	13,959	571.6	426.9	389.9	394.6	479.0
Cincinnati, OH	2,822	2,590	1,442	2,552	3,583	325.2	299.8	168.5	299.7	420.7
Cleveland, OH	6,580	5,746	3,362	2,743	3,030	468.9	411.0	240.6	197.8	218.5
Columbus, OH	4,009	2,887	1,480	2,218	3,082	398.8	285.6	146.2	218.0	303.0
Corpus Christi, TX	344	373	367	351	449	110.7	119.3	116.6	110.6	141.4
Dallas, TX	6,170	8,027	5,795	6,645	7,421	317.7	409.7	290.6	328.4	366.8
Dayton, OH	1,925	1,603	954	1,070	1,092	336.5	281.0	168.7	190.6	194.5
Denver, CO	1,735	1,375	992	1,140	973	351.5	278.1	199.8	228.5	195.0
Des Moines, IA	431	362	310	330	371	124.6	103.6	87.8	93.2	104.7
Detroit, MI	8,637	8,553	7,048	7,518	8,459	817.0	812.7	644.1	690.3	776.7
El Paso, TX	171	159	157	155	252	25.7	23.4	22.9	22.1	35.9
Fort Worth, TX	2,752	2,442	1,331	1,759	3,310	218.9	191.0	102.4	132.5	249.4
Honolulu, HI	675	543	457	484	481	77.2	61.9	52.6	55.6	55.3
Houston, TX	7,429	6,984	5,999	6,606	7,226	244.0	227.0	192.6	209.2	228.8
Indianapolis, IN	5,430	4,709	3,178	2,912	3,071	663.8	575.9	390.0	357.9	377.4
Jacksonville, FL	3,555	2,476	2,352	2,089	2,463	505.3	352.9	324.4	285.1	336.2
Jersey City, NJ	298	223	371	373	491	136.6	102.6	171.0	171.2	225.4
Kansas City, MO	2,997	3,186	2,401	1,872	2,538	684.3	726.4	539.2	418.7	567.7
Los Angeles, CA	9,143	7,935	5,716	5,810	5,914	106.8	92.8	67.2	67.9	69.1
Louisville, KY	2,637	2,441	2,059	1,817	1,462	392.2	362.7	307.0	270.9	218.0
Memphis, TN	6,973	6,108	5,242	4,876	5,235	813.1	706.1	606.0	563.1	604.5
Miami, FL	2,857	2,338	2,317	2,168	2,573	141.1	115.1	113.7	106.0	125.8
Milwaukee, WI	6,284	4,160	3,528	3,303	5,080	669.9	446.7	384.2	363.4	558.9
Minneapolis, MN	1,933	1,689	1,548	1,430	1,562	505.5	440.5	403.7	373.0	407.5
Nashville, TN	3,110	2,622	2,033	2,050	1,777	589.9	494.0	381.6	384.1	333.0
New Orleans, LA	4,056	3,353	3,013	2,743	2,691	837.8	695.8	635.4	584.8	573.7
New York City, NY	19,491	16,499	12,998	15,592	12,097	265.8	225.6	177.2	212.3	164.8
Newark, NJ	1,464	2,222	2,710	1,967	1,781	504.7	772.8	948.7	691.2	625.9
Norfolk, VA	2,519	1,679	1,451	1,466	1,415	1,043.4	706.7	623.7	639.1	616.9
Oakland, CA	2,427	2,195	1,714	1,559	1,742	201.2	181.5	138.5	124.4	139.0
Oklahoma City, OK	1,763	2,028	1,986	982	1,571	404.4	464.0	452.6	222.9	356.5
Omaha, NE	1,060	880	612	813	871	246.3	202.7	139.7	184.4	197.5
Philadelphia, PA	8,026	6,565	6,415	6,504	7,271	526.6	438.0	435.4	448.1	501.0
Phoenix, AZ	2,797	3,149	2,906	3,007	3,543	119.2	129.5	111.2	111.5	131.4
Pittsburgh, PA	2,602	1,598	1,058	1,026	1,351	197.0	122.0	81.9	80.1	105.5
Portland, OR	706	543	564	478	527	146.3	112.1	115.1	97.0	106.9
Richmond, VA	2,621	2,371	1,737	1,465	1,527	1,300.9	1,195.8	909.6	761.5	793.7
Rochester, NY	2,876	2,210	2,126	1,867	1,992	1,177.5	909.5	879.2	774.1	826.0
Sacramento, CA	1,805	1,828	1,393	1,380	1,546	164.4	165.7	125.0	122.6	137.3
San Antonio, TX	1,738	1,914	1,349	1,751	1,862	135.8	147.6	102.7	131.4	139.7
San Diego, CA	2,656	2,176	1,815	1,509	1,595	100.9	82.3	67.8	55.4	58.6
San Francisco, CA	1,885	1,853	1,626	1,510	1,858	256.6	253.6	222.8	206.2	253.7
San Jose, CA	773	492	481	471	453	49.6	31.4	30.3	29.3	28.2
Seattle, WA	1,213	1,295	925	918	975	76.4	81.2	57.3	56.2	59.7
St Louis, MO	5,228	4,425	2,890	2,806	3,652	1,419.8	1,233.6	827.4	820.8	1,068.2
St Paul, MN	656	560	597	383	519	238.1	203.8	216.8	138.7	188.0
St Petersburg, FL	1,787	1,545	1,165	1,201	1,468	206.1	177.4	134.2	137.8	168.4
Tampa, FL	2,181	1,833	1,574	2,246	1,696	249.5	207.2	175.9	247.0	186.5
Toledo, OH	2,262	944	419	346	655	494.3	207.5	92.7	76.7	145.1
Tucson, AZ	439	359	518	575	403	60.0	47.7	67.5	73.7	51.7
Tulsa, OK	1,444	1,452	1,284	618	1,308	382.3	384.0	336.6	160.2	339.0
Washington, DC	6,827	5,687	4,432	4,557	4,508	1,203.9	1,026.1	821.8	861.5	852.2
Wichita, KS	1,078	713	585	614	466	257.1	170.0	135.2	140.0	106.2
Yonkers, NY	131	121	98	79	105	68.5	63.2	51.1	41.0	54.5
U.S. CITY TOTAL	215,181	191,207	153,705	156,025	170,259	316.5	277.6	221.9	223.9	244.4
San Juan, PR	256	349	343	233	227	29.4	40.0	39.3	26.7	26.0
TOTAL	215,437	191,556	154,048	156,258	170,486	312.9	274.6	219.6	221.5	241.7

*NR = No report (see Appendix).

Table 19. Gonorrhea — Women – Reported cases and rates in selected cities of >200,000 population: United States and outlying areas, 1994-1998*

	Cases					Rates per 100,000 Population				
City	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Akron, OH	761	600	366	356	435	276.9	217.5	132.9	128.9	157.6
Albuquerque, NM	418	324	261	306	308	158.5	121.3	97.2	113.7	114.5
Atlanta, GA	NR	3,426	2,437	2,544	2,462	.	935.4	653.3	674.9	653.2
Austin, TX	705	815	714	860	894	218.2	245.3	209.0	247.5	257.3
Baltimore, MD	4,592	3,065	3,054	3,279	3,258	1,224.2	830.8	850.8	933.0	927.0
Birmingham, AL	2,423	2,145	1,668	1,567	1,555	692.7	612.3	474.4	447.3	443.8
Boston, MA	585	432	405	445	477	205.3	149.8	140.3	154.3	165.4
Buffalo, NY	1,029	984	772	720	682	600.3	577.7	458.5	431.4	408.6
Charlotte, NC	1,578	823	737	644	830	539.6	273.9	238.8	203.0	261.6
Chicago, IL	8,430	6,507	5,710	3,087	7,022	550.4	425.2	378.1	204.8	465.9
Cincinnati, OH	1,253	1,268	1,007	1,515	2,044	274.3	278.8	223.9	338.6	456.8
Cleveland, OH	3,323	2,856	1,881	1,573	1,672	446.9	385.5	254.4	214.4	227.9
Columbus, OH	2,085	1,498	797	1,214	1,584	400.6	286.2	152.2	230.7	301.1
Corpus Christi, TX	139	192	192	163	181	87.5	120.1	119.7	100.8	111.9
Dallas, TX	2,631	3,758	3,121	3,319	3,591	267.0	378.2	308.3	323.4	349.9
Dayton, OH	1,083	876	458	502	490	363.6	295.0	155.8	172.0	167.9
Denver, CO	827	646	474	577	463	326.1	254.3	185.8	225.1	180.6
Des Moines, IA	210	181	169	160	189	116.3	99.2	92.0	86.9	102.6
Detroit, MI	3,290	3,080	3,312	3,583	4,147	591.6	556.4	575.9	626.0	724.6
El Paso, TX	93	72	75	76	123	27.1	20.6	21.3	21.1	34.1
Fort Worth, TX	1,371	1,239	748	1,014	1,743	216.0	192.0	113.6	150.8	259.3
Honolulu, HI	353	284	223	252	262	81.8	65.5	51.7	58.2	60.5
Houston, TX	2,813	2,976	2,636	3,082	3,285	183.9	192.6	168.4	194.3	207.1
Indianapolis, IN	2,565	2,186	1,550	1,401	1,532	597.8	509.9	363.3	329.0	359.8
Jacksonville, FL	1,399	1,025	1,129	1,009	898	388.0	284.9	301.9	267.1	237.7
Jersey City, NJ	108	100	175	204	231	95.9	89.2	156.7	181.8	205.9
Kansas City, MO	1,465	1,556	1,212	1,072	1,382	638.7	677.6	521.0	459.3	592.1
Los Angeles, CA	3,987	3,361	2,612	2,645	2,747	92.6	78.1	61.3	61.7	64.0
Louisville, KY	1,057	1,039	889	745	624	297.7	292.4	251.8	211.1	176.8
Memphis, TN	2,904	2,711	2,303	2,175	2,259	646.7	598.7	509.2	480.2	498.7
Miami, FL	937	767	1,048	987	1,053	88.7	72.3	99.1	93.0	99.2
Milwaukee, WI	3,266	1,954	1,832	1,707	2,982	662.8	399.6	380.7	358.4	626.1
Minneapolis, MN	877	808	740	737	806	445.3	409.2	375.4	374.1	409.2
Nashville, TN	1,222	1,035	779	845	718	441.5	371.5	279.1	302.1	256.7
New Orleans, LA	1,262	1,088	1,216	1,226	1,158	486.1	420.8	478.4	487.5	460.5
New York City, NY	10,383	8,792	6,788	9,101	6,791	267.3	227.1	175.1	234.6	175.1
Newark, NJ	458	994	998	848	794	299.5	656.0	664.4	566.7	530.7
Norfolk, VA	1,004	722	614	636	593	879.2	640.2	543.6	571.1	532.5
Oakland, CA	1,298	1,316	1,004	901	987	211.4	213.6	160.3	141.7	155.3
Oklahoma City, OK	946	1,115	1,010	503	839	418.2	491.9	444.7	220.6	367.9
Omaha, NE	553	462	314	456	494	248.3	205.7	138.8	200.3	217.0
Philadelphia, PA	3,809	3,330	3,387	3,507	3,938	466.9	415.0	429.2	451.2	506.6
Phoenix, AZ	1,171	1,325	1,243	1,209	1,415	98.5	107.5	94.1	88.8	103.9
Pittsburgh, PA	1,335	875	574	543	788	190.5	125.9	83.7	79.9	116.0
Portland, OR	311	243	272	203	246	125.7	97.9	108.5	80.6	97.7
Richmond, VA	1,015	1,067	817	650	752	924.2	986.4	783.7	618.6	715.7
Rochester, NY	1,565	1,219	1,107	959	1,031	1,234.9	967.4	884.1	768.4	826.1
Sacramento, CA	964	1,013	736	765	869	172.1	180.0	129.0	132.7	150.7
San Antonio, TX	866	998	708	955	1,012	131.3	149.3	104.6	139.2	147.5
San Diego, CA	999	834	883	660	688	77.1	64.0	66.6	48.9	51.0
San Francisco, CA	697	598	390	298	402	188.9	162.7	105.6	80.3	108.3
San Jose, CA	379	285	254	205	224	49.3	36.8	32.3	25.7	28.1
Seattle, WA	541	533	349	403	324	67.2	65.9	42.8	48.9	39.3
St Louis, MO	2,206	1,897	1,302	1,409	1,685	1,100.6	971.7	685.7	758.6	907.2
St Paul, MN	354	298	314	203	278	246.4	208.1	219.2	141.4	193.7
St Petersburg, FL	875	706	619	648	738	189.4	152.2	133.9	139.8	159.2
Tampa, FL	986	830	752	1,214	886	219.9	182.9	164.1	260.9	190.4
Toledo, OH	1,071	466	221	162	350	448.0	196.1	93.8	68.9	148.8
Tucson, AZ	229	194	283	285	175	61.3	50.5	72.4	71.8	44.1
Tulsa, OK	668	715	670	299	728	341.7	365.6	340.2	150.1	365.5
Washington, DC	2,818	2,237	1,841	1,919	1,904	931.6	756.4	642.0	683.5	678.1
Wichita, KS	555	394	301	321	243	259.7	184.4	136.6	143.7	108.8
Yonkers, NY	69	62	54	35	55	68.9	61.8	53.8	34.8	54.6
U.S. CITY TOTAL	99,166	89,197	74,507	74,888	83,316	283.1	251.3	209.0	208.9	232.5
San Juan, PR	52	102	102	83	85	10.8	21.3	21.3	17.3	17.7
TOTAL	99,218	89,299	74,609	74,971	83,401	279.5	248.3	206.5	206.4	229.6

*NR = No report (see Appendix).

Table 20. Gonorrhea — Men – Reported cases and rates in selected cities of >200,000 population: United States and outlying areas, 1994–1998*

City	Cases					Rates per 100,000 Population				
	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Akron, OH	524	440	277	310	380	207.1	173.1	108.8	121.3	148.7
Albuquerque, NM	341	301	299	238	262	135.4	117.9	116.5	92.6	102.0
Atlanta, GA	NR	3,904	2,774	2,917	3,118	.	1,167.4	812.1	844.0	902.2
Austin, TX	644	785	649	671	905	199.2	236.1	190.8	193.9	261.5
Baltimore, MD	4,507	3,863	3,441	3,414	3,714	1,374.6	1,198.9	1,100.2	1,116.4	1,214.5
Birmingham, AL	2,801	2,146	1,569	1,531	1,614	912.9	697.9	507.1	496.6	523.5
Boston, MA	614	485	416	494	505	232.5	181.3	154.6	183.6	187.7
Buffalo, NY	739	707	512	452	426	471.9	453.7	331.5	294.9	277.9
Charlotte, NC	2,559	1,323	1,086	1,059	1,081	943.4	474.3	377.8	357.8	365.2
Chicago, IL	8,438	6,079	5,673	8,411	6,937	594.4	428.6	402.7	597.8	493.1
Cincinnati, OH	1,569	1,308	432	1,023	1,518	381.9	319.7	106.4	253.1	375.6
Cleveland, OH	3,257	2,855	1,462	1,153	1,347	493.8	434.3	222.2	176.5	206.2
Columbus, OH	1,924	1,371	675	997	1,488	396.9	281.2	138.1	203.0	303.0
Corpus Christi, TX	205	181	175	188	268	134.9	118.4	113.4	120.7	172.1
Dallas, TX	3,539	4,269	2,674	3,326	3,814	369.9	442.1	272.3	333.7	382.6
Dayton, OH	842	726	493	566	601	307.0	265.4	181.6	210.0	223.0
Denver, CO	908	729	517	563	510	378.3	303.3	214.3	232.1	210.2
Des Moines, IA	221	181	141	170	182	133.7	108.3	83.3	100.0	107.0
Detroit, MI	5,347	5,473	3,736	3,935	4,312	1,067.1	1,097.2	719.6	761.5	834.5
El Paso, TX	78	87	82	79	129	24.2	26.5	24.7	23.2	37.9
Fort Worth, TX	1,381	1,203	583	745	1,537	221.9	190.0	90.9	113.7	234.6
Honolulu, HI	322	259	234	232	219	72.7	58.4	53.4	53.1	50.1
Houston, TX	4,616	4,008	3,363	3,524	3,937	304.7	261.7	217.0	224.1	250.4
Indianapolis, IN	2,865	2,523	1,627	1,511	1,539	736.6	648.7	419.2	389.6	396.8
Jacksonville, FL	2,156	1,451	1,223	1,081	1,564	628.6	424.4	348.3	304.6	440.7
Jersey City, NJ	190	123	195	169	260	179.9	116.9	185.2	160.0	246.1
Kansas City, MO	1,532	1,630	1,189	800	1,156	734.4	780.1	559.1	374.3	540.9
Los Angeles, CA	5,156	4,574	3,104	3,165	3,167	121.0	107.6	73.2	74.1	74.1
Louisville, KY	1,580	1,402	1,170	1,071	831	498.0	441.4	368.2	337.0	261.5
Memphis, TN	4,069	3,397	2,939	2,701	2,976	995.8	824.0	712.2	654.0	720.6
Miami, FL	1,920	1,571	1,269	1,181	1,518	198.3	161.8	129.6	120.1	154.4
Milwaukee, WI	3,018	2,206	1,696	1,596	2,098	677.6	498.8	388.1	368.9	484.9
Minneapolis, MN	1,056	871	808	693	756	569.5	468.2	433.7	371.9	405.7
Nashville, TN	1,888	1,587	1,254	1,205	1,059	753.9	629.3	494.4	474.4	416.9
New Orleans, LA	2,794	2,265	1,797	1,517	1,533	1,244.3	1,014.0	816.8	697.2	704.5
New York City, NY	9,108	7,707	6,210	6,491	5,306	264.1	224.0	179.6	187.4	153.2
Newark, NJ	1,006	1,228	1,712	1,119	987	733.4	903.0	1,264.0	829.2	731.4
Norfolk, VA	1,501	945	834	828	822	1,179.8	757.2	696.9	701.5	696.4
Oakland, CA	1,107	879	710	658	749	187.0	148.1	116.1	106.6	121.3
Oklahoma City, OK	814	913	976	479	732	388.0	433.8	461.1	225.3	344.3
Omaha, NE	492	417	296	355	376	237.0	199.0	139.8	166.4	176.2
Philadelphia, PA	4,217	3,235	3,028	2,997	3,333	595.2	464.5	442.6	444.6	494.4
Phoenix, AZ	1,626	1,824	1,663	1,798	2,128	140.5	152.0	128.7	134.8	159.5
Pittsburgh, PA	1,267	723	484	483	563	204.4	117.6	79.8	80.4	93.7
Portland, OR	395	300	292	275	281	168.0	127.0	121.9	114.2	116.6
Richmond, VA	1,600	1,301	919	815	775	1,745.7	1,443.7	1,059.8	933.3	887.5
Rochester, NY	1,311	991	1,019	908	961	1,115.5	847.1	874.0	780.3	825.8
Sacramento, CA	833	805	655	606	673	154.8	148.9	120.3	110.3	122.5
San Antonio, TX	872	916	641	796	846	140.6	145.8	100.6	123.1	130.9
San Diego, CA	1,537	1,237	859	805	883	115.1	92.3	63.6	58.6	64.3
San Francisco, CA	1,188	1,255	1,236	1,212	1,456	324.9	345.7	342.7	335.5	403.1
San Jose, CA	375	204	220	264	227	47.6	25.8	27.4	32.5	27.9
Seattle, WA	672	762	576	515	651	85.9	96.9	72.1	63.7	80.5
St Louis, MO	3,022	2,528	1,588	1,397	1,967	1,801.1	1,546.3	996.2	894.8	1,259.9
St Paul, MN	302	262	283	180	241	229.0	199.0	214.2	135.8	181.8
St Petersburg, FL	912	839	546	553	728	225.1	206.2	134.4	135.4	178.3
Tampa, FL	1,195	1,003	822	1,032	800	280.6	232.8	188.2	232.4	180.1
Toledo, OH	1,191	478	196	184	305	544.8	219.9	90.6	85.1	141.1
Tucson, AZ	210	165	235	290	228	58.7	44.8	62.4	75.7	59.5
Tulsa, OK	776	737	614	319	580	425.8	403.8	332.8	170.9	310.7
Washington, DC	4,009	3,449	2,591	2,637	2,604	1,515.1	1,334.1	1,026.0	1,062.5	1,049.2
Wichita, KS	523	319	284	293	223	254.3	155.1	133.7	136.1	103.6
Yonkers, NY	62	59	44	44	50	68.2	64.7	48.1	47.8	54.4
U.S. CITY TOTAL	115,723	101,764	79,067	81,021	86,736	351.1	304.7	235.1	239.5	256.3
San Juan, PR	204	247	241	150	142	52.0	62.9	61.4	38.2	36.2
TOTAL	115,927	102,011	79,308	81,171	86,878	347.6	301.9	233.1	237.2	253.8

*NR = No report (see Appendix).

Table 21. All stages of syphilis — Reported cases and rates by state/area: United States and outlying areas, 1994–1998*

	Cases					Rates per 100,000 Population				
State/Area	*1994*	*1995*	*1996*	*1997*	*1998*	*1994*	*1995*	*1996*	*1997*	*1998*
Alabama	1,933	1,640	1,890	1,483	1,133	45.8	38.6	44.1	34.3	26.2
Alaska	22	20	15	12	13	3.6	3.3	2.5	2.0	2.1
Arizona	419	417	468	600	697	10.3	9.9	10.6	13.2	15.3
Arkansas	1,328	1,270	843	571	506	54.1	51.1	33.6	22.6	20.1
California	7,959	5,771	4,419	3,825	2,618	25.3	18.3	13.9	11.9	8.1
Colorado	296	303	162	151	118	8.1	8.1	4.2	3.9	3.0
Connecticut	337	270	334	325	177	10.3	8.2	10.2	9.9	5.4
Delaware	138	129	124	113	114	19.5	18.0	17.1	15.4	15.6
Florida	5,048	3,465	2,912	2,745	2,539	36.2	24.5	20.2	18.7	17.3
Georgia	3,185	3,666	2,953	2,835	1,836	45.1	50.9	40.3	37.9	24.5
Hawaii	41	25	30	45	15	3.5	2.1	2.5	3.8	1.3
Idaho	10	12	24	24	15	0.9	1.0	2.0	2.0	1.2
Illinois	3,877	3,712	2,071	1,954	2,028	33.0	31.4	17.5	16.4	17.0
Indiana	844	870	675	522	509	14.7	15.0	11.6	8.9	8.7
Iowa	235	170	86	72	48	8.3	6.0	3.0	2.5	1.7
Kansas	187	150	136	168	113	7.3	5.8	5.3	6.5	4.4
Kentucky	534	501	398	403	339	14.0	13.0	10.3	10.3	8.7
Louisiana	5,422	3,692	2,409	1,808	1,651	125.7	85.0	55.5	41.5	37.9
Maine	9	4	4	13	4	0.7	0.3	0.3	1.0	0.3
Maryland	1,538	1,679	2,234	2,455	2,156	30.7	33.3	44.1	48.2	42.3
Massachusetts	622	506	633	730	568	10.3	8.3	10.4	11.9	9.3
Michigan	1,234	1,203	851	788	686	13.0	12.6	8.7	8.1	7.0
Minnesota	201	187	116	124	74	4.4	4.1	2.5	2.6	1.6
Mississippi	4,547	4,532	2,365	1,441	1,161	170.3	168.0	87.2	52.8	42.5
Missouri	1,985	1,265	618	502	375	37.6	23.8	11.5	9.3	6.9
Montana	9	13	4	5	0	1.1	1.5	0.5	0.6	0.0
Nebraska	46	35	27	32	33	2.8	2.1	1.6	1.9	2.0
Nevada	171	193	142	119	136	11.7	12.6	8.9	7.1	8.1
New Hampshire	18	32	29	23	14	1.6	2.8	2.5	2.0	1.2
New Jersey	2,188	1,469	1,467	1,151	826	27.7	18.5	18.3	14.3	10.3
New Mexico	178	138	78	103	76	10.8	8.2	4.6	6.0	4.4
New York	9,376	8,880	6,529	5,645	5,145	51.6	49.0	36.0	31.1	28.4
North Carolina	4,023	3,066	2,670	2,202	2,133	56.9	42.6	36.5	29.7	28.7
North Dakota	1	0	0	0	0	0.2	0.0	0.0	0.0	0.0
Ohio	2,740	1,938	1,324	761	474	24.7	17.4	11.9	6.8	4.2
Oklahoma	497	589	467	405	363	15.3	18.0	14.2	12.2	10.9
Oregon	100	67	70	48	32	3.2	2.1	2.2	1.5	1.0
Pennsylvania	2,738	1,948	1,440	1,182	910	22.7	16.1	12.0	9.8	7.6
Rhode Island	141	90	72	84	55	14.1	9.1	7.3	8.5	5.6
South Carolina	1,945	1,669	1,286	1,138	871	53.1	45.4	34.6	30.3	23.2
South Dakota	8	7	2	7	2	1.1	1.0	0.3	0.9	0.3
Tennessee	2,978	2,604	2,321	2,368	1,750	57.5	49.5	43.7	44.1	32.6
Texas	9,028	7,923	5,895	5,382	3,955	49.1	42.3	30.9	27.7	20.3
Utah	51	50	49	56	55	2.7	2.6	2.4	2.7	2.7
Vermont	1	0	1	1	6	0.2	0.0	0.2	0.2	1.0
Virginia	1,919	1,590	1,265	1,108	707	29.3	24.0	19.0	16.5	10.5
Washington	281	211	129	131	141	5.3	3.9	2.3	2.3	2.5
West Virginia	179	65	59	20	11	9.8	3.6	3.2	1.1	0.6
Wisconsin	797	585	496	317	208	15.7	11.4	9.6	6.1	4.0
Wyoming	3	2	8	1	2	0.6	0.4	1.7	0.2	0.4
U.S. TOTAL[1]	82,334	69,345	53,226	46,642	37,977	31.6	26.4	20.1	17.4	14.2
Guam	7	6	3	1	3	4.8	4.0	2.0	0.6	1.9
Puerto Rico	2,018	1,619	1,469	1,577	1,460	55.2	43.9	39.5	41.2	38.1
Virgin Islands	30	19	17	10	35	27.7	17.3	15.5	9.1	31.9
OUTLYING AREAS	2,055	1,644	1,489	1,588	1,498	52.6	41.6	37.4	38.8	36.6
TOTAL	84,389	70,989	54,715	48,230	39,475	31.9	26.6	20.3	17.7	14.5

[1]Includes cases reported by Washington, D.C.

Table 22. All stages of syphilis — Reported cases and rates in selected cities of >200,000 population: United States and outlying areas, 1994–1998

City	Cases					Rates per 100,000 Population				
	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Akron, OH	13	8	8	4	7	2.5	1.5	1.5	0.8	1.3
Albuquerque, NM	87	41	33	56	45	16.9	7.8	6.3	10.6	8.6
Atlanta, GA	917	1,074	835	872	591	132.8	153.3	116.9	120.7	81.8
Austin, TX	260	183	88	98	56	40.2	27.5	12.9	14.1	8.1
Baltimore, MD	673	1,089	1,552	1,781	1,472	95.7	157.6	231.0	271.0	224.0
Birmingham, AL	664	640	703	474	244	101.1	97.3	106.4	72.0	37.0
Boston, MA	219	193	257	305	240	39.9	34.7	46.1	54.7	43.1
Buffalo, NY	52	32	22	23	12	15.9	9.8	6.8	7.2	3.7
Charlotte, NC	506	347	312	153	210	89.8	59.9	52.3	24.9	34.2
Chicago, IL	2,335	2,244	1,254	1,314	1,457	79.1	76.1	43.0	45.1	50.0
Cincinnati, OH	839	399	166	93	32	96.7	46.2	19.4	10.9	3.8
Cleveland, OH	1,160	750	377	250	151	82.7	53.6	27.0	18.0	10.9
Columbus, OH	71	31	89	117	115	7.1	3.1	8.8	11.5	11.3
Corpus Christi, TX	83	62	29	22	27	26.7	19.8	9.2	6.9	8.5
Dallas, TX	1,130	1,022	790	717	735	58.2	52.2	39.6	35.4	36.3
Dayton, OH	236	399	367	126	39	41.2	69.9	64.9	22.4	6.9
Denver, CO	177	179	67	70	35	35.9	36.2	13.5	14.0	7.0
Des Moines, IA	110	92	34	26	20	31.8	26.3	9.6	7.3	5.6
Detroit, MI	775	707	522	544	474	73.3	67.2	47.7	50.0	43.5
El Paso, TX	183	142	118	112	81	27.5	20.9	17.2	16.0	11.5
Fort Worth, TX	592	489	379	299	175	47.1	38.2	29.2	22.5	13.2
Honolulu, HI	41	22	26	40	15	4.7	2.5	3.0	4.6	1.7
Houston, TX	2,909	2,691	2,047	1,937	1,397	95.5	87.5	65.7	61.3	44.2
Indianapolis, IN	176	168	186	125	239	21.5	20.5	22.8	15.4	29.4
Jacksonville, FL	289	192	228	206	154	41.1	27.4	31.4	28.1	21.0
Jersey City, NJ	171	136	97	84	34	78.4	62.6	44.7	38.6	15.6
Kansas City, MO	168	68	38	13	13	38.4	15.5	8.5	2.9	2.9
Los Angeles, CA	3,931	2,955	2,164	1,613	994	45.9	34.5	25.5	18.8	11.6
Louisville, KY	325	272	227	232	213	48.3	40.4	33.8	34.6	31.8
Memphis, TN	1,738	1,596	1,370	1,435	1,034	202.7	184.5	158.4	165.7	119.4
Miami, FL	1,453	1,006	876	874	773	71.8	49.5	43.0	42.7	37.8
Milwaukee, WI	688	464	397	275	168	73.3	49.8	43.2	30.3	18.5
Minneapolis, MN	122	86	52	53	33	31.9	22.4	13.6	13.8	8.6
Nashville, TN	234	202	293	412	416	44.4	38.1	55.0	77.2	77.9
New Orleans, LA	845	649	520	463	348	174.5	134.7	109.7	98.7	74.2
New York City, NY	8,001	7,881	5,801	4,961	4,650	109.1	107.8	79.1	67.6	63.3
Newark, NJ	518	392	371	239	187	178.6	136.3	129.9	84.0	65.7
Norfolk, VA	247	278	222	157	106	102.3	117.0	95.4	68.4	46.2
Oakland, CA	313	185	139	128	128	26.0	15.3	11.2	10.2	10.2
Oklahoma City, OK	299	291	227	109	178	68.6	66.6	51.7	24.7	40.4
Omaha, NE	28	21	1	15	24	6.5	4.8	0.2	3.4	5.4
Philadelphia, PA	2,394	1,696	1,293	1,093	804	157.1	113.1	87.8	75.3	55.4
Phoenix, AZ	237	270	342	473	572	10.1	11.1	13.1	17.5	21.2
Pittsburgh, PA	39	27	16	21	12	3.0	2.1	1.2	1.6	0.9
Portland, OR	63	42	45	23	17	13.1	8.7	9.2	4.7	3.4
Richmond, VA	128	122	171	135	80	63.5	61.5	89.5	70.2	41.6
Rochester, NY	200	104	68	32	39	81.9	42.8	28.1	13.3	16.2
Sacramento, CA	126	86	58	55	31	11.5	7.8	5.2	4.9	2.8
San Antonio, TX	491	394	378	309	237	38.4	30.4	28.8	23.2	17.8
San Diego, CA	493	371	227	259	187	18.7	14.0	8.5	9.5	6.9
San Francisco, CA	89	84	151	171	129	12.1	11.5	20.7	23.4	17.6
San Jose, CA	131	78	70	93	62	8.4	5.0	4.4	5.8	3.9
Seattle, WA	126	93	59	58	67	7.9	5.8	3.7	3.6	4.1
St Louis, MO	1,212	734	329	261	170	329.2	204.6	94.2	76.3	49.7
St Paul, MN	27	28	17	8	10	9.8	10.2	6.2	2.9	3.6
St Petersburg, FL	317	168	86	79	56	36.6	19.3	9.9	9.1	6.4
Tampa, FL	355	277	314	207	177	40.6	31.3	35.1	22.8	19.5
Toledo, OH	79	52	63	25	23	17.3	11.4	13.9	5.5	5.1
Tucson, AZ	104	78	61	52	36	14.2	10.4	7.9	6.7	4.6
Tulsa, OK	52	105	109	35	75	13.8	27.8	28.6	9.1	19.4
Washington, DC	967	722	626	644	579	170.5	130.3	116.1	121.7	109.5
Wichita, KS	27	42	58	85	20	6.4	10.0	13.4	19.4	4.6
Yonkers, NY	74	64	33	34	22	38.7	33.4	17.2	17.6	11.4
U.S. CITY TOTAL	41,309	35,315	27,858	24,979	20,727	60.2	51.3	40.2	35.8	29.7
San Juan, PR	1,015	692	722	719	673	116.4	79.3	82.8	82.4	77.2
TOTAL	42,324	36,007	28,580	25,698	21,400	60.9	51.6	40.7	36.4	30.3

Table 23A. Primary and secondary syphilis — Reported cases by age, gender, and race/ethnicity: United States, 1994–1998

	Age	Total			White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Asian/Pacific Islander			American Indian/ Alaska Native		
	Group	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1994	10-14	118	9	109	10	1	9	105	8	97	3	0	3	0	0	0	0	0	0
	15-19	2,234	747	1,487	167	44	123	1,996	662	1,334	62	38	24	5	1	4	4	2	2
	20-24	4,071	1,821	2,250	291	102	189	3,603	1,619	1,984	160	90	70	12	8	4	5	2	3
	25-29	3,819	1,759	2,060	304	134	170	3,321	1,507	1,814	160	99	61	22	15	7	12	4	8
	30-34	3,755	1,922	1,833	382	189	193	3,198	1,609	1,589	153	109	44	13	11	2	9	4	5
	35-39	2,893	1,722	1,171	272	162	110	2,492	1,474	1,018	108	74	34	12	8	4	9	4	5
	40-44	1,632	1,079	553	168	121	47	1,396	912	484	64	43	21	1	1	0	3	2	1
	45-54	1,364	1,013	351	164	119	45	1,150	862	288	47	31	16	3	1	2	0	0	0
	55-64	504	409	95	74	64	10	392	312	80	35	31	4	3	2	1	0	0	0
	65+	195	168	27	23	21	2	159	137	22	11	9	2	2	1	1	0	0	0
	TOTAL	20,618	10,666	9,952	1,856	957	899	17,843	9,119	8,724	804	524	280	73	48	25	42	18	24
1995	10-14	106	11	95	5	0	5	98	11	87	3	0	3	0	0	0	0	0	0
	15-19	1,796	604	1,192	132	28	104	1,601	555	1,046	53	20	33	3	0	3	7	1	6
	20-24	3,067	1,476	1,591	242	99	143	2,683	1,303	1,380	126	70	56	12	1	11	4	3	1
	25-29	2,853	1,390	1,463	258	121	137	2,433	1,174	1,259	141	86	55	9	3	6	12	6	6
	30-34	2,919	1,482	1,437	255	130	125	2,506	1,260	1,246	134	81	53	15	6	9	9	5	4
	35-39	2,412	1,369	1,043	253	146	107	2,043	1,148	895	108	72	36	5	1	4	3	2	1
	40-44	1,472	980	492	153	100	53	1,265	840	425	46	36	10	4	2	2	4	2	2
	45-54	1,272	939	333	140	108	32	1,067	784	283	57	43	14	3	1	2	5	3	2
	55-64	385	311	74	51	45	6	317	254	63	16	11	5	1	1	0	0	0	0
	65+	186	149	37	29	23	6	139	111	28	14	11	3	2	2	0	2	2	0
	TOTAL	16,503	8,729	7,774	1,519	801	718	14,186	7,457	6,729	698	430	268	54	17	37	46	24	22
1996	10-14	49	6	43	3	0	3	43	6	37	3	0	3	0	0	0	0	0	0
	15-19	1,125	388	737	107	28	79	968	340	628	43	18	25	5	1	4	2	1	1
	20-24	1,933	875	1,058	162	41	121	1,645	762	883	106	65	41	13	5	8	7	2	5
	25-29	1,889	919	970	211	99	112	1,562	738	824	100	72	28	10	6	4	6	4	2
	30-34	2,001	1,026	975	197	103	94	1,704	853	851	85	63	22	6	3	3	9	4	5
	35-39	1,854	1,022	832	203	107	96	1,563	854	709	78	55	23	6	4	2	4	2	2
	40-44	1,122	703	419	110	65	45	962	605	357	40	30	10	5	3	2	5	0	5
	45-54	967	714	253	130	97	33	795	585	210	32	22	10	3	3	0	7	7	0
	55-64	281	234	47	55	48	7	210	172	38	16	14	2	0	0	0	0	0	0
	65+	107	93	14	18	18	0	78	66	12	9	7	2	2	2	0	0	0	0
	TOTAL	11,339	5,982	5,357	1,197	606	591	9,540	4,983	4,557	512	346	166	50	27	23	40	20	20
1997	10-14	43	4	39	4	0	4	36	3	33	3	1	2	0	0	0	0	0	0
	15-19	775	253	522	69	16	53	648	213	435	54	23	31	3	1	2	1	0	1
	20-24	1,318	619	699	110	44	66	1,116	518	598	79	53	26	6	1	5	7	3	4
	25-29	1,434	720	714	143	67	76	1,179	568	611	101	76	25	4	4	0	7	5	2
	30-34	1,475	759	716	162	73	89	1,227	630	597	73	51	22	7	3	4	6	2	4
	35-39	1,405	779	626	197	101	96	1,151	637	514	49	37	12	3	2	1	5	2	3
	40-44	942	626	316	106	74	32	786	521	265	38	24	14	5	2	3	7	5	2
	45-54	770	565	205	108	82	26	621	456	165	30	20	10	4	2	2	7	5	2
	55-64	255	223	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	8	8	0	0	0	0	0	0	0
	TOTAL	8,536	4,652	3,884	977	525	452	7,035	3,780	3,255	452	310	142	32	15	17	40	22	18
1998	10-14	39	5	34	4	0	4	34	5	29	1	0	1	0	0	0	0	0	0
	15-19	605	191	414	53	11	42	503	162	341	39	15	24	3	0	3	7	3	4
	20-24	1,022	502	520	103	29	74	835	415	420	68	49	19	5	3	2	11	6	5
	25-29	1,026	507	519	128	49	79	782	385	397	99	64	35	5	4	1	12	5	7
	30-34	1,175	624	551	146	77	69	943	481	462	68	55	13	9	7	2	9	4	5
	35-39	1,172	678	494	172	104	68	924	520	404	62	44	18	7	6	1	7	4	3
	40-44	829	536	293	129	95	34	650	404	246	42	32	10	3	2	1	5	3	2
	45-54	773	573	200	121	101	20	608	438	170	42	33	9	1	1	0	1	0	1
	55-64	233	194	39	50	47	3	162	129	33	17	14	3	2	2	0	2	2	0
	65+	103	87	16	21	18	3	71	60	11	9	7	2	1	1	0	1	1	0
	TOTAL	6,985	3,899	3,086	928	531	397	5,519	3,001	2,518	447	313	134	36	26	10	55	28	27

NOTE: In most instances, if age or race/ethnicity was not specified, cases were prorated according to the distribution of cases for which these variables were specified. In 1996, cases from Rhode Island were excluded because race was not reported for most cases. Differences between total cases from this table and others in the report are due to different reporting forms and above exclusions. Cases aged 0 to 9 years are not shown because some of these may not be due to sexual transmission; however, they are included in the totals.

Table 23B. Primary and secondary syphilis — Reported rates by age, gender, and race/ethnicity: United States, 1994–1998

Age	Total			White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Asian/Pacific Islander			American Indian/ Alaska Native			
Group	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	
10-14	0.6	0.1	1.2	0.1	0.0	0.1	3.8	0.6	7.2	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1994
15-19	12.7	8.3	17.3	1.4	0.7	2.1	76.5	50.1	103.5	2.8	3.4	2.2	0.8	0.3	1.3	2.4	2.4	2.4	
20-24	22.2	19.6	25.0	2.3	1.6	3.0	141.9	129.9	153.4	6.8	7.2	6.4	1.7	2.3	1.1	3.1	2.5	3.8	
25-29	19.9	18.3	21.6	2.3	2.0	2.6	134.2	128.3	139.5	6.4	7.4	5.3	3.0	4.2	1.9	8.0	5.3	10.8	
30-34	16.9	17.4	16.5	2.4	2.4	2.4	118.8	128.2	110.5	6.2	8.4	3.8	1.6	2.8	0.5	5.7	5.1	6.2	
35-39	13.2	15.8	10.6	1.7	2.0	1.3	95.5	121.3	73.1	5.2	7.0	3.4	1.6	2.2	1.0	6.0	5.5	6.5	
40-44	8.3	11.1	5.5	1.1	1.6	0.6	63.2	89.4	40.7	3.9	5.3	2.6	0.1	0.3	0.0	2.3	3.1	1.5	
45-54	4.6	6.9	2.3	0.7	1.0	0.4	38.9	64.5	17.8	2.2	3.0	1.5	0.3	0.2	0.4	0.0	0.0	0.0	
55-64	2.4	4.1	0.9	0.4	0.8	0.1	19.4	35.6	7.0	2.6	4.9	0.6	0.5	0.8	0.3	0.0	0.0	0.0	
65+	0.6	1.2	0.1	0.1	0.2	0.0	6.1	13.6	1.4	0.8	1.5	0.2	0.4	0.4	0.3	0.0	0.0	0.0	
TOTAL	7.9	8.4	7.5	1.0	1.0	0.9	57.2	61.8	53.1	3.1	4.0	2.2	0.9	1.2	0.6	2.2	1.9	2.5	
10-14	0.6	0.1	1.0	0.0	0.0	0.1	3.5	0.8	6.4	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1995
15-19	10.1	6.6	13.8	1.1	0.4	1.8	60.9	41.6	80.6	2.4	1.8	3.0	0.5	0.0	1.0	4.2	1.2	7.3	
20-24	17.0	16.1	17.9	2.0	1.6	2.4	105.9	104.5	107.2	5.4	5.7	5.1	1.7	0.3	3.1	2.5	3.7	1.3	
25-29	15.3	14.9	15.8	2.0	1.9	2.1	100.5	102.1	99.1	5.6	6.4	4.8	1.2	0.8	1.6	8.2	8.1	8.3	
30-34	13.2	13.4	12.9	1.6	1.6	1.6	92.7	99.9	86.4	5.3	6.0	4.4	1.8	1.5	2.1	5.6	6.3	5.0	
35-39	10.8	12.3	9.3	1.5	1.8	1.3	76.1	91.6	62.5	5.0	6.5	3.4	0.6	0.3	1.0	2.0	2.7	1.3	
40-44	7.4	9.9	4.9	1.0	1.3	0.7	55.4	79.7	34.6	2.7	4.2	1.2	0.6	0.6	0.5	3.0	3.1	2.8	
45-54	4.1	6.2	2.1	0.6	0.9	0.3	34.6	56.3	16.8	2.5	3.9	1.2	0.3	0.2	0.4	2.6	3.2	2.0	
55-64	1.8	3.1	0.7	0.3	0.6	0.1	15.6	28.8	5.5	1.2	1.7	0.7	0.2	0.4	0.0	0.0	0.0	0.0	
65+	0.6	1.1	0.2	0.1	0.2	0.0	5.3	10.8	1.7	0.9	1.8	0.3	0.3	0.8	0.0	1.6	3.7	0.0	
TOTAL	6.3	6.8	5.8	0.8	0.8	0.7	44.9	49.9	40.4	2.6	3.2	2.0	0.6	0.4	0.8	2.4	2.5	2.2	
10-14	0.3	0.1	0.5	0.0	0.0	0.0	1.6	0.4	2.7	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1996
15-19	6.1	4.1	8.2	0.9	0.4	1.3	35.1	24.3	46.1	1.7	1.4	2.1	0.8	0.3	1.2	1.1	1.1	1.1	
20-24	11.0	9.8	12.4	1.4	0.7	2.1	66.8	62.8	70.7	4.2	4.8	3.6	1.8	1.4	2.2	4.5	2.5	6.5	
25-29	10.0	9.7	10.3	1.6	1.5	1.7	63.5	63.1	63.9	3.9	5.2	2.4	1.2	1.5	0.9	3.9	5.1	2.7	
30-34	9.4	9.7	9.2	1.3	1.4	1.3	64.2	68.8	60.1	3.3	4.5	1.8	0.7	0.8	0.7	5.8	5.2	6.4	
35-39	8.3	9.1	7.4	1.2	1.3	1.2	58.0	67.9	49.4	3.4	4.5	2.1	0.7	1.0	0.5	2.6	2.7	2.5	
40-44	5.4	6.8	4.0	0.7	0.8	0.6	40.6	55.2	28.1	2.1	3.2	1.1	0.7	0.9	0.5	3.6	0.0	6.9	
45-54	3.0	4.5	1.5	0.5	0.8	0.3	24.3	39.6	11.7	1.3	1.8	0.8	0.3	0.6	0.0	3.5	7.2	0.0	
55-64	1.3	2.3	0.4	0.3	0.6	0.1	10.1	19.1	3.2	1.1	2.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	
65+	0.3	0.7	0.1	0.1	0.2	0.0	2.9	6.3	0.7	0.6	1.0	0.2	0.3	0.7	0.0	0.0	0.0	0.0	
TOTAL	4.3	4.6	4.0	0.6	0.6	0.6	29.9	33.0	27.1	1.8	2.4	1.2	0.5	0.6	0.5	2.1	2.1	2.0	
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	1997
15-19	4.1	2.6	5.6	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	45.3	42.6	47.9	3.1	3.8	2.2	0.8	0.3	1.4	4.5	3.8	5.2	
25-29	7.6	7.6	7.6	1.1	1.0	1.2	47.6	48.1	47.1	3.9	5.4	2.1	0.5	1.0	0.0	4.5	6.2	2.6	
30-34	7.1	7.3	6.9	1.1	1.0	1.2	47.0	51.7	42.9	2.7	3.6	1.8	0.8	0.8	0.9	4.0	2.6	5.3	
35-39	6.2	6.9	5.5	1.2	1.2	1.2	42.4	50.2	35.5	2.0	2.9	1.0	0.4	0.5	0.2	3.2	2.6	3.8	
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	0.5	0.7	4.9	7.3	2.7	
45-54	2.3	3.4	1.2	0.4	0.6	0.2	18.1	29.4	8.8	1.1	1.5	0.8	0.3	0.4	0.3	3.3	4.9	1.8	
55-64	1.2	2.1	0.3	0.3	0.5	0.1	8.7	17.6	2.0	1.1	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	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	3.2	3.6	2.8	0.5	0.6	0.5	21.8	24.7	19.1	1.5	2.1	1.0	0.3	0.3	0.3	2.0	2.3	1.8	
10-14	0.2	0.1	0.4	0.0	0.0	0.1	1.2	0.4	2.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1998
15-19	3.2	1.9	4.5	0.4	0.2	0.7	17.8	11.3	24.6	1.5	1.1	2.0	0.4	0.0	0.9	3.8	3.2	4.4	
20-24	5.8	5.6	6.1	0.9	0.5	1.3	33.9	34.1	33.6	2.6	3.5	1.6	0.7	0.8	0.6	7.1	7.7	6.5	
25-29	5.4	5.4	5.5	1.0	0.8	1.2	31.6	32.6	30.6	3.9	4.6	3.0	0.6	1.0	0.2	7.6	6.2	9.2	
30-34	5.7	6.0	5.3	1.0	1.1	1.0	36.1	39.5	33.2	2.6	3.9	1.0	1.1	1.8	0.5	5.9	5.3	6.6	
35-39	5.2	6.0	4.4	1.0	1.3	0.8	34.0	41.0	27.9	2.6	3.5	1.6	0.8	1.5	0.2	4.5	5.2	3.8	
40-44	3.9	5.1	2.7	0.8	1.2	0.4	26.4	35.3	18.6	2.1	3.2	1.0	0.4	0.5	0.2	3.5	4.4	2.7	
45-54	2.3	3.5	1.2	0.5	0.8	0.2	17.7	28.3	9.0	1.6	2.6	0.7	0.1	0.2	0.0	0.5	0.0	0.9	
55-64	1.1	1.9	0.3	0.3	0.6	0.0	7.6	14.0	2.7	1.1	2.0	0.4	0.3	0.7	0.0	1.6	3.4	0.0	
65+	0.3	0.6	0.1	0.1	0.2	0.0	2.6	5.7	0.7	0.5	1.0	0.2	0.1	0.3	0.0	0.7	1.7	0.0	
TOTAL	2.6	3.0	2.3	0.5	0.6	0.4	17.1	19.6	14.8	1.5	2.1	0.9	0.4	0.6	0.2	2.8	2.9	2.7	

NOTE: In 1996, cases from Rhode Island were excluded because race was not reported for most cases. Rates for the 0-9 year age group are not shown: however, these cases are included in the calculation of total rates.

Table 24. Primary and secondary syphilis — Reported cases and rates by state/area, ranked according to rates: United States and outlying areas, 1998

Rank	*State/Area*	*Cases*	*Rate per 100,000 Population*
1	Maryland	648	12.7
2	Tennessee	567	10.6
3	Louisiana	430	9.9
4	North Carolina	723	9.7
5	Mississippi	261	9.6
6	South Carolina	271	7.2
7	Virgin Islands	7	6.4
8	Alabama	274	6.3
9	Puerto Rico	177	4.6
10	Georgia	333	4.4
11	Arkansas	108	4.3
12	Arizona	185	4.1
	YEAR 2000 OBJECTIVE		**4.0**
13	Indiana	215	3.7
14	Illinois	424	3.6
15	Oklahoma	98	3.0
16	Delaware	21	2.9
17	Kentucky	106	2.7
	U.S. TOTAL[1]	**6,993**	**2.6**
18	Texas	443	2.3
19	Michigan	211	2.2
20	Virginia	149	2.2
21	Florida	294	2.0
22	Missouri	109	2.0
23	New Jersey	107	1.3
24	Ohio	134	1.2
25	Wisconsin	60	1.2
26	California	303	0.9
27	Nevada	15	0.9
28	Connecticut	26	0.8
29	Massachusetts	46	0.8
30	New Mexico	14	0.8
31	Pennsylvania	98	0.8
32	Washington	44	0.8
33	New York	119	0.7
34	Vermont	4	0.7
35	Kansas	14	0.5
36	Nebraska	8	0.5
37	Colorado	10	0.3
38	Hawaii	4	0.3
39	Alaska	1	0.2
40	Idaho	2	0.2
41	Iowa	5	0.2
42	Minnesota	9	0.2
43	New Hampshire	2	0.2
44	Oregon	6	0.2
45	Utah	4	0.2
46	West Virginia	3	0.2
47	Wyoming	1	0.2
48	Maine	1	0.1
49	Rhode Island	1	0.1
50	South Dakota	1	0.1
51	Montana	0	0.0
52	North Dakota	0	0.0
53	Guam	0	0.0

[1]Includes cases reported by Washington, D.C., but excludes outlying areas (Guam, Puerto Rico and Virgin Islands).

Table 25. Primary and secondary syphilis — Reported cases and rates by state/area and region: United States and outlying areas, 1994–1998

	Cases					Rates per 100,000 Population				
State/Area	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Alabama	661	612	528	410	274	15.7	14.4	12.3	9.5	6.3
Alaska	3	2	0	1	1	0.5	0.3	0.0	0.2	0.2
Arizona	50	46	102	132	185	1.2	1.1	2.3	2.9	4.1
Arkansas	446	495	262	173	108	18.2	19.9	10.5	6.9	4.3
California	825	584	509	386	303	2.6	1.8	1.6	1.2	0.9
Colorado	126	100	26	15	10	3.4	2.7	0.7	0.4	0.3
Connecticut	105	86	103	62	26	3.2	2.6	3.2	1.9	0.8
Delaware	27	19	35	22	21	3.8	2.6	4.8	3.0	2.9
Florida	745	383	368	296	294	5.3	2.7	2.6	2.0	2.0
Georgia	820	901	689	515	333	11.6	12.5	9.4	6.9	4.4
Hawaii	4	0	3	1	4	0.3	0.0	0.3	0.1	0.3
Idaho	2	0	4	1	2	0.2	0.0	0.3	0.1	0.2
Illinois	1,099	1,026	501	435	424	9.4	8.7	4.2	3.7	3.6
Indiana	286	321	207	151	215	5.0	5.5	3.6	2.6	3.7
Iowa	75	48	23	7	5	2.7	1.7	0.8	0.2	0.2
Kansas	73	47	28	32	14	2.9	1.8	1.1	1.2	0.5
Kentucky	208	185	154	135	106	5.4	4.8	4.0	3.5	2.7
Louisiana	1,608	1,024	533	364	430	37.3	23.6	12.3	8.4	9.9
Maine	4	2	1	2	1	0.3	0.2	0.1	0.2	0.1
Maryland	325	554	729	891	648	6.5	11.0	14.4	17.5	12.7
Massachusetts	90	69	85	78	46	1.5	1.1	1.4	1.3	0.8
Michigan	292	304	183	153	211	3.1	3.2	1.9	1.6	2.2
Minnesota	56	45	16	16	9	1.2	1.0	0.3	0.3	0.2
Mississippi	2,084	1,952	817	390	261	78.1	72.4	30.1	14.3	9.6
Missouri	987	584	221	118	109	18.7	11.0	4.1	2.2	2.0
Montana	3	4	0	0	0	0.4	0.5	0.0	0.0	0.0
Nebraska	10	14	6	3	8	0.6	0.9	0.4	0.2	0.5
Nevada	31	36	20	11	15	2.1	2.4	1.2	0.7	0.9
New Hampshire	4	0	1	0	2	0.4	0.0	0.1	0.0	0.2
New Jersey	240	188	177	150	107	3.0	2.4	2.2	1.9	1.3
New Mexico	18	13	3	9	14	1.1	0.8	0.2	0.5	0.8
New York	802	449	214	138	119	4.4	2.5	1.2	0.8	0.7
North Carolina	1,672	1,132	1,052	721	723	23.7	15.7	14.4	9.7	9.7
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	1,187	896	584	218	134	10.7	8.0	5.2	1.9	1.2
Oklahoma	157	197	179	117	98	4.8	6.0	5.4	3.5	3.0
Oregon	22	5	9	10	6	0.7	0.2	0.3	0.3	0.2
Pennsylvania	404	248	164	123	98	3.4	2.1	1.4	1.0	0.8
Rhode Island	16	4	4	2	1	1.6	0.4	0.4	0.2	0.1
South Carolina	799	570	402	378	271	21.8	15.5	10.8	10.1	7.2
South Dakota	2	0	0	1	1	0.3	0.0	0.0	0.1	0.1
Tennessee	1,044	906	850	747	567	20.2	17.2	16.0	13.9	10.6
Texas	1,913	1,557	890	676	443	10.4	8.3	4.7	3.5	2.3
Utah	12	4	3	5	4	0.6	0.2	0.1	0.2	0.2
Vermont	0	0	0	0	4	0.0	0.0	0.0	0.0	0.7
Virginia	796	600	393	237	149	12.2	9.1	5.9	3.5	2.2
Washington	36	17	9	17	44	0.7	0.3	0.2	0.3	0.8
West Virginia	8	16	7	1	3	0.4	0.9	0.4	0.1	0.2
Wisconsin	298	185	176	89	60	5.9	3.6	3.4	1.7	1.2
Wyoming	0	1	2	0	1	0.0	0.2	0.4	0.0	0.2
U.S. TOTAL[1]	20,645	16,543	11,388	8,556	6,993	7.9	6.3	4.3	3.2	2.6
Northeast	1,665	1,046	749	555	404	3.2	2.0	1.5	1.1	0.8
Midwest	4,365	3,470	1,945	1,223	1,190	7.1	5.6	3.1	2.0	1.9
South	13,483	11,215	8,004	6,190	4,810	14.9	12.2	8.6	6.6	5.1
West	1,132	812	690	588	589	2.0	1.4	1.2	1.0	1.0
Guam	2	0	0	0	0	1.4	0.0	0.0	0.0	0.0
Puerto Rico	311	285	208	249	177	8.5	7.7	5.6	6.5	4.6
Virgin Islands	7	2	11	2	7	6.5	1.8	10.0	1.8	6.4
OUTLYING AREAS	320	287	219	251	184	8.2	7.3	5.5	6.1	4.5
TOTAL	20,965	16,830	11,607	8,807	7,177	7.9	6.3	4.3	3.2	2.6

[1]Includes cases reported by Washington, D.C.

Table 26. Primary and secondary syphilis — Women – Reported cases and rates by state/area: United States and outlying areas, 1994–1998

	Cases					Rates per 100,000 Population				
State/Area	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Alabama	289	257	244	183	133	13.2	11.6	11.0	8.2	5.9
Alaska	1	1	0	0	0	0.3	0.4	0.0	0.0	0.0
Arizona	13	14	43	37	67	0.6	0.7	1.9	1.6	2.9
Arkansas	229	267	144	103	59	18.0	20.8	11.1	7.9	4.5
California	314	219	187	116	120	2.0	1.4	1.2	0.7	0.7
Colorado	48	42	10	5	3	2.6	2.2	0.5	0.3	0.2
Connecticut	54	34	58	25	16	3.2	2.0	3.5	1.5	1.0
Delaware	12	7	14	10	11	3.3	1.9	3.8	2.7	2.9
Florida	337	189	172	131	116	4.7	2.6	2.3	1.7	1.5
Georgia	350	360	284	194	130	9.7	9.7	7.6	5.1	3.4
Hawaii	0	0	1	0	0	0.0	0.0	0.2	0.0	0.0
Idaho	2	0	3	0	0	0.4	0.0	0.5	0.0	0.0
Illinois	536	500	246	194	171	8.9	8.2	4.1	3.2	2.8
Indiana	147	151	115	82	113	5.0	5.1	3.8	2.7	3.8
Iowa	41	31	16	4	0	2.8	2.1	1.1	0.3	0.0
Kansas	46	22	10	12	6	3.5	1.7	0.8	0.9	0.5
Kentucky	108	83	81	66	49	5.5	4.2	4.1	3.3	2.4
Louisiana	853	505	271	187	196	38.1	22.4	12.0	8.3	8.7
Maine	3	0	0	1	0	0.5	0.0	0.0	0.2	0.0
Maryland	129	233	329	400	302	5.0	9.0	12.7	15.3	11.6
Massachusetts	39	27	30	33	15	1.2	0.9	1.0	1.0	0.5
Michigan	138	132	82	68	86	2.8	2.7	1.6	1.4	1.7
Minnesota	23	25	8	4	4	1.0	1.1	0.3	0.2	0.2
Mississippi	1,058	1,000	427	201	128	76.1	71.2	30.3	14.2	9.0
Missouri	450	283	103	63	50	16.5	10.3	3.7	2.3	1.8
Montana	3	2	0	0	0	0.7	0.5	0.0	0.0	0.0
Nebraska	3	4	4	0	3	0.4	0.5	0.5	0.0	0.4
Nevada	9	12	10	6	3	1.3	1.6	1.3	0.7	0.4
New Hampshire	0	0	0	0	1	0.0	0.0	0.0	0.0	0.2
New Jersey	113	72	81	59	37	2.8	1.8	2.0	1.4	0.9
New Mexico	10	3	1	5	8	1.2	0.4	0.1	0.6	0.9
New York	322	218	92	56	28	3.4	2.3	1.0	0.6	0.3
North Carolina	838	536	484	353	347	23.0	14.5	12.9	9.3	9.1
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	601	417	287	101	72	10.5	7.2	5.0	1.8	1.2
Oklahoma	70	90	80	53	45	4.2	5.4	4.8	3.1	2.7
Oregon	11	2	3	2	2	0.7	0.1	0.2	0.1	0.1
Pennsylvania	164	92	62	52	31	2.6	1.5	1.0	0.8	0.5
Rhode Island	7	2	1	1	1	1.4	0.4	0.2	0.2	0.2
South Carolina	403	285	182	173	131	21.3	15.0	9.5	8.9	6.7
South Dakota	0	0	0	0	1	0.0	0.0	0.0	0.0	0.3
Tennessee	510	432	422	370	284	19.0	15.9	15.4	13.3	10.2
Texas	993	770	437	315	183	10.7	8.1	4.5	3.2	1.9
Utah	4	0	0	2	0	0.4	0.0	0.0	0.2	0.0
Vermont	0	0	0	0	1	0.0	0.0	0.0	0.0	0.3
Virginia	400	299	204	112	61	12.0	8.8	6.0	3.3	1.8
Washington	11	6	2	8	7	0.4	0.2	0.1	0.3	0.2
West Virginia	1	11	6	1	2	0.1	1.2	0.6	0.1	0.2
Wisconsin	170	93	85	49	32	6.6	3.6	3.3	1.9	1.2
Wyoming	0	0	1	0	0	0.0	0.0	0.4	0.0	0.0
U.S. TOTAL[1]	9,935	7,776	5,379	3,895	3,089	7.5	5.8	4.0	2.9	2.3
Guam	1	0	0	0	0	1.5	0.0	0.0	0.0	0.0
Puerto Rico	152	141	100	116	81	8.0	7.4	5.2	5.8	4.1
Virgin Islands	4	0	5	0	1	7.1	0.0	8.8	0.0	1.8
OUTLYING AREAS	157	141	105	116	82	7.8	6.9	5.1	5.5	3.9
TOTAL	10,092	7,917	5,484	4,011	3,171	7.5	5.8	4.0	2.9	2.3

[1]Includes cases reported by Washington, D.C.

NOTE: Cases and rates underestimated in some areas because of under-reporting or non-reporting by gender.

Table 27. Primary and secondary syphilis — Men – Reported cases and rates by state/area: United States and outlying areas, 1994–1998

State/Area	Cases					Rates per 100,000 Population				
	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Alabama	372	355	284	227	141	18.4	17.4	13.8	10.9	6.8
Alaska	2	1	0	1	1	0.6	0.3	0.0	0.3	0.3
Arizona	37	32	59	95	118	1.8	1.5	2.7	4.2	5.2
Arkansas	217	228	118	70	49	18.3	19.0	9.7	5.7	4.0
California	511	363	322	270	183	3.3	2.3	2.0	1.7	1.1
Colorado	78	58	16	10	7	4.3	3.1	0.8	0.5	0.4
Connecticut	51	52	45	37	10	3.2	3.3	2.8	2.3	0.6
Delaware	15	12	21	12	10	4.3	3.4	6.0	3.4	2.8
Florida	408	194	196	165	178	6.0	2.8	2.8	2.3	2.5
Georgia	470	541	405	321	203	13.7	15.5	11.3	8.8	5.6
Hawaii	4	0	2	1	4	0.7	0.0	0.3	0.2	0.7
Idaho	0	0	1	1	2	0.0	0.0	0.2	0.2	0.3
Illinois	563	526	255	241	253	9.8	9.1	4.4	4.1	4.4
Indiana	139	169	92	69	102	5.0	6.0	3.2	2.4	3.6
Iowa	34	17	7	3	5	2.5	1.2	0.5	0.2	0.4
Kansas	27	25	18	20	8	2.2	2.0	1.4	1.6	0.6
Kentucky	100	102	73	69	57	5.4	5.5	3.9	3.6	3.0
Louisiana	755	519	262	177	234	36.4	24.9	12.5	8.4	11.2
Maine	1	2	1	1	1	0.2	0.3	0.2	0.2	0.2
Maryland	163	321	400	490	346	6.7	13.1	16.2	19.8	13.9
Massachusetts	51	42	55	45	31	1.8	1.4	1.9	1.5	1.0
Michigan	154	172	101	85	125	3.3	3.7	2.1	1.8	2.6
Minnesota	33	20	8	12	5	1.5	0.9	0.3	0.5	0.2
Mississippi	1,026	952	390	189	131	80.2	73.6	30.0	14.4	10.0
Missouri	537	301	118	55	59	21.1	11.7	4.5	2.1	2.3
Montana	0	2	0	0	0	0.0	0.5	0.0	0.0	0.0
Nebraska	7	10	2	3	5	0.9	1.3	0.2	0.4	0.6
Nevada	22	24	10	5	12	3.0	3.1	1.2	0.6	1.4
New Hampshire	4	0	1	0	1	0.7	0.0	0.2	0.0	0.2
New Jersey	127	116	96	91	70	3.3	3.0	2.5	2.3	1.8
New Mexico	8	10	2	4	6	1.0	1.2	0.2	0.5	0.7
New York	480	231	122	82	91	5.5	2.6	1.4	0.9	1.0
North Carolina	834	596	568	368	376	24.3	17.1	16.0	10.2	10.4
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	586	479	297	117	62	10.9	8.9	5.5	2.2	1.1
Oklahoma	87	107	99	64	53	5.5	6.7	6.1	3.9	3.3
Oregon	11	3	6	8	4	0.7	0.2	0.4	0.5	0.2
Pennsylvania	240	156	102	71	67	4.1	2.7	1.8	1.2	1.2
Rhode Island	9	2	3	1	0	1.9	0.4	0.6	0.2	0.0
South Carolina	396	285	220	205	140	22.4	16.1	12.3	11.3	7.7
South Dakota	2	0	0	1	0	0.6	0.0	0.0	0.3	0.0
Tennessee	534	474	428	377	283	21.4	18.7	16.7	14.5	10.9
Texas	920	787	453	361	260	10.2	8.5	4.8	3.8	2.7
Utah	8	4	3	3	4	0.8	0.4	0.3	0.3	0.4
Vermont	0	0	0	0	3	0.0	0.0	0.0	0.0	1.0
Virginia	396	301	189	125	88	12.3	9.3	5.8	3.8	2.7
Washington	25	11	7	9	37	0.9	0.4	0.3	0.3	1.3
West Virginia	7	5	1	0	1	0.8	0.6	0.1	0.0	0.1
Wisconsin	128	92	91	40	28	5.1	3.7	3.6	1.6	1.1
Wyoming	0	1	1	0	1	0.0	0.4	0.4	0.0	0.4
U.S. TOTAL[1]	10,677	8,764	6,009	4,660	3,902	8.4	6.8	4.6	3.6	3.0
Guam	1	0	0	0	0	1.3	0.0	0.0	0.0	0.0
Puerto Rico	159	144	108	133	96	9.0	8.1	6.0	7.2	5.2
Virgin Islands	3	2	6	2	6	5.8	3.8	11.4	3.8	11.4
OUTLYING AREAS	163	146	114	135	102	8.6	7.6	5.9	6.8	5.2
TOTAL	10,840	8,910	6,123	4,795	4,004	8.4	6.8	4.7	3.6	3.0

[1]Includes cases reported by Washington, D.C.

NOTE: Cases and rates underestimated in some areas because of under-reporting or non-reporting by gender.

Table 28. Primary and secondary syphilis — Reported cases and rates in selected cities of >200,000 population, ranked according to rates: United States and outlying areas, 1998

Rank	*City*	*Cases*	*Rate per 100,000 Population*
1	Baltimore, MD	466	70.9
2	Nashville, TN	210	39.3
3	Memphis, TN	260	30.0
4	Atlanta, GA	163	22.6
5	New Orleans, LA	105	22.4
6	Indianapolis, IN	165	20.3
7	St Louis, MO	58	17.0
8	Washington, DC	81	15.3
9	Norfolk, VA	33	14.4
10	Detroit, MI	152	14.0
11	Oklahoma City, OK	61	13.8
12	Louisville, KY	91	13.6
13	Chicago, IL	338	11.6
14	Richmond, VA	22	11.4
15	Charlotte, NC	69	11.3
16	Newark, NJ	27	9.5
17	San Juan, PR	79	9.1
18	Phoenix, AZ	173	6.4
19	Dallas, TX	126	6.2
20	Philadelphia, PA	89	6.1
21	Milwaukee, WI	54	5.9
22	Birmingham, AL	36	5.5
23	Columbus, OH	55	5.4
24	Boston, MA	23	4.1
	YEAR 2000 OBJECTIVE		**4.0**
25	Tulsa, OK	14	3.6
26	Tampa, FL	32	3.5
27	San Francisco, CA	25	3.4
28	Houston, TX	99	3.1
29	Rochester, NY	7	2.9
30	Jacksonville, FL	16	2.2
31	Cleveland, OH	30	2.2
32	Austin, TX	15	2.2
33	Albuquerque, NM	11	2.1
34	Fort Worth, TX	26	2.0
35	San Antonio, TX	26	2.0
36	Seattle, WA	33	2.0
37	Toledo, OH	8	1.8
38	Miami, FL	31	1.5
39	Cincinnati, OH	12	1.4
40	Kansas City, MO	6	1.3
41	Buffalo, NY	4	1.2
42	Los Angeles, CA	96	1.1
43	St Paul, MN	3	1.1
44	New York City, NY	81	1.1
45	Dayton, OH	6	1.1
46	Minneapolis, MN	4	1.0
47	Tucson, AZ	7	0.9
48	Oakland, CA	11	0.9
49	San Diego, CA	24	0.9
50	St Petersburg, FL	8	0.9
51	Omaha, NE	4	0.9
52	Des Moines, IA	3	0.8
53	Portland, OR	4	0.8
54	Wichita, KS	3	0.7
55	Denver, CO	3	0.6
56	Akron, OH	3	0.6
57	Honolulu, HI	4	0.5
58	Jersey City, NJ	1	0.5
59	Yonkers, NY	1	0.5
60	El Paso, TX	2	0.3
61	San Jose, CA	3	0.2
62	Sacramento, CA	1	0.1
63	Pittsburgh, PA	0	0.0
64	Corpus Christi, TX	0	0.0

Table 29. Primary and secondary syphilis — Reported cases and rates in selected cities of >200,000 population: United States and outlying areas, 1994–1998

	Cases					Rates per 100,000 Population				
City	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Akron, OH	2	1	0	4	3	0.4	0.2	0.0	0.8	0.6
Albuquerque, NM	13	6	2	9	11	2.5	1.1	0.4	1.7	2.1
Atlanta, GA	261	320	247	204	163	37.8	45.7	34.6	28.2	22.6
Austin, TX	60	17	9	8	15	9.3	2.6	1.3	1.2	2.2
Baltimore, MD	192	417	553	669	466	27.3	60.3	82.3	101.8	70.9
Birmingham, AL	260	264	202	107	36	39.6	40.1	30.6	16.2	5.5
Boston, MA	24	40	42	52	23	4.4	7.2	7.5	9.3	4.1
Buffalo, NY	8	2	6	2	4	2.4	0.6	1.9	0.6	1.2
Charlotte, NC	214	125	135	48	69	38.0	21.6	22.6	7.8	11.3
Chicago, IL	648	582	343	346	338	22.0	19.7	11.7	11.9	11.6
Cincinnati, OH	473	252	76	34	12	54.5	29.2	8.9	4.0	1.4
Cleveland, OH	411	263	130	61	30	29.3	18.8	9.3	4.4	2.2
Columbus, OH	8	7	54	54	55	0.8	0.7	5.3	5.3	5.4
Corpus Christi, TX	20	8	0	2	0	6.4	2.6	0.0	0.6	0.0
Dallas, TX	292	268	236	148	126	15.0	13.7	11.8	7.3	6.2
Dayton, OH	127	244	201	28	6	22.2	42.8	35.5	5.0	1.1
Denver, CO	83	68	11	8	3	16.8	13.8	2.2	1.6	0.6
Des Moines, IA	37	27	6	0	3	10.7	7.7	1.7	0.0	0.8
Detroit, MI	153	130	92	94	152	14.5	12.4	8.4	8.6	14.0
El Paso, TX	5	2	10	3	2	0.8	0.3	1.5	0.4	0.3
Fort Worth, TX	190	140	95	39	26	15.1	10.9	7.3	2.9	2.0
Honolulu, HI	4	0	3	1	4	0.5	0.0	0.3	0.1	0.5
Houston, TX	443	417	151	180	99	14.5	13.6	4.8	5.7	3.1
Indianapolis, IN	62	74	85	71	165	7.6	9.1	10.4	8.7	20.3
Jacksonville, FL	108	50	75	36	16	15.4	7.1	10.3	4.9	2.2
Jersey City, NJ	14	27	10	9	1	6.4	12.4	4.6	4.1	0.5
Kansas City, MO	73	24	7	2	6	16.7	5.5	1.6	0.4	1.3
Los Angeles, CA	346	273	213	108	96	4.0	3.2	2.5	1.3	1.1
Louisville, KY	147	128	104	107	91	21.9	19.0	15.5	16.0	13.6
Memphis, TN	533	477	397	343	260	62.1	55.1	45.9	39.6	30.0
Miami, FL	175	51	38	49	31	8.6	2.5	1.9	2.4	1.5
Milwaukee, WI	279	150	158	84	54	29.7	16.1	17.2	9.2	5.9
Minneapolis, MN	38	24	4	12	4	9.9	6.3	1.0	3.1	1.0
Nashville, TN	100	97	193	203	210	19.0	18.3	36.2	38.0	39.3
New Orleans, LA	203	221	169	132	105	41.9	45.9	35.6	28.1	22.4
New York City, NY	629	364	138	97	81	8.6	5.0	1.9	1.3	1.1
Newark, NJ	60	43	25	26	27	20.7	15.0	8.8	9.1	9.5
Norfolk, VA	122	130	92	44	33	50.5	54.7	39.5	19.2	14.4
Oakland, CA	47	16	10	7	11	3.9	1.3	0.8	0.6	0.9
Oklahoma City, OK	115	106	114	39	61	26.4	24.3	26.0	8.9	13.8
Omaha, NE	5	7	0	1	4	1.2	1.6	0.0	0.2	0.9
Philadelphia, PA	298	199	141	108	89	19.6	13.3	9.6	7.4	6.1
Phoenix, AZ	28	43	89	118	173	1.2	1.8	3.4	4.4	6.4
Pittsburgh, PA	9	4	2	5	0	0.7	0.3	0.2	0.4	0.0
Portland, OR	18	4	7	3	4	3.7	0.8	1.4	0.6	0.8
Richmond, VA	39	37	66	49	22	19.4	18.7	34.6	25.5	11.4
Rochester, NY	59	18	13	2	7	24.2	7.4	5.4	0.8	2.9
Sacramento, CA	9	5	6	4	1	0.8	0.5	0.5	0.4	0.1
San Antonio, TX	62	50	25	27	26	4.8	3.9	1.9	2.0	2.0
San Diego, CA	100	53	36	23	24	3.8	2.0	1.3	0.8	0.9
San Francisco, CA	45	32	33	52	25	6.1	4.4	4.5	7.1	3.4
San Jose, CA	4	2	3	5	3	0.3	0.1	0.2	0.3	0.2
Seattle, WA	11	5	1	11	33	0.7	0.3	0.1	0.7	2.0
St Louis, MO	651	361	142	64	58	176.8	100.6	40.7	18.7	17.0
St Paul, MN	7	7	3	0	3	2.5	2.5	1.1	0.0	1.1
St Petersburg, FL	74	20	8	11	8	8.5	2.3	0.9	1.3	0.9
Tampa, FL	31	33	44	34	32	3.5	3.7	4.9	3.7	3.5
Toledo, OH	35	22	30	6	8	7.6	4.8	6.6	1.3	1.8
Tucson, AZ	12	1	10	12	7	1.6	0.1	1.3	1.5	0.9
Tulsa, OK	9	48	40	8	14	2.4	12.7	10.5	2.1	3.6
Washington, DC	170	112	116	117	81	30.0	20.2	21.5	22.1	15.3
Wichita, KS	10	16	15	16	3	2.4	3.8	3.5	3.6	0.7
Yonkers, NY	5	2	0	2	1	2.6	1.0	0.0	1.0	0.5
U.S. CITY TOTAL	8,670	6,936	5,266	4,148	3,524	12.6	10.1	7.6	6.0	5.1
San Juan, PR	131	70	74	99	79	15.0	8.0	8.5	11.4	9.1
TOTAL	8,801	7,006	5,340	4,247	3,603	12.7	10.0	7.6	6.0	5.1

Table 30. Primary and secondary syphilis — Women – Reported cases and rates in selected cities of >200,000 population: United States and outlying areas, 1994–1998

	Cases					Rates per 100,000 Population				
City	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Akron, OH	0	0	0	2	1	0.0	0.0	0.0	0.7	0.4
Albuquerque, NM	8	2	1	5	6	3.0	0.7	0.4	1.9	2.2
Atlanta, GA	87	110	86	67	62	24.1	30.0	23.1	17.8	16.4
Austin, TX	29	7	6	3	6	9.0	2.1	1.8	0.9	1.7
Baltimore, MD	72	166	240	309	222	19.2	45.0	66.9	87.9	63.2
Birmingham, AL	106	109	81	43	15	30.3	31.1	23.0	12.3	4.3
Boston, MA	8	15	14	19	5	2.8	5.2	4.8	6.6	1.7
Buffalo, NY	4	1	1	1	1	2.3	0.6	0.6	0.6	0.6
Charlotte, NC	102	61	64	18	36	34.9	20.3	20.7	5.7	11.3
Chicago, IL	287	254	169	145	132	18.7	16.6	11.2	9.6	8.8
Cincinnati, OH	250	121	39	13	8	54.7	26.6	8.7	2.9	1.8
Cleveland, OH	215	128	61	27	15	28.9	17.3	8.3	3.7	2.0
Columbus, OH	2	5	27	30	32	0.4	1.0	5.2	5.7	6.1
Corpus Christi, TX	10	6	0	0	0	6.3	3.8	0.0	0.0	0.0
Dallas, TX	130	135	113	66	46	13.2	13.6	11.2	6.4	4.5
Dayton, OH	53	100	96	15	3	17.8	33.7	32.6	5.1	1.0
Denver, CO	31	25	6	3	2	12.2	9.8	2.4	1.2	0.8
Des Moines, IA	19	19	5	0	0	10.5	10.4	2.7	0.0	0.0
Detroit, MI	72	54	40	45	67	12.9	9.8	7.0	7.9	11.7
El Paso, TX	0	0	3	0	0	0.0	0.0	0.9	0.0	0.0
Fort Worth, TX	97	73	41	12	9	15.3	11.3	6.2	1.8	1.3
Honolulu, HI	0	0	1	0	0	0.0	0.0	0.2	0.0	0.0
Houston, TX	231	215	84	84	44	15.1	13.9	5.4	5.3	2.8
Indianapolis, IN	30	34	48	36	87	7.0	7.9	11.2	8.5	20.4
Jacksonville, FL	52	22	38	12	8	14.4	6.1	10.2	3.2	2.1
Jersey City, NJ	6	8	3	5	0	5.3	7.1	2.7	4.5	0.0
Kansas City, MO	36	15	2	1	2	15.7	6.5	0.9	0.4	0.9
Los Angeles, CA	140	95	86	32	38	3.3	2.2	2.0	0.7	0.9
Louisville, KY	78	60	57	51	45	22.0	16.9	16.1	14.5	12.8
Memphis, TN	279	238	199	165	134	62.1	52.6	44.0	36.4	29.6
Miami, FL	69	19	14	16	11	6.5	1.8	1.3	1.5	1.0
Milwaukee, WI	158	75	76	46	28	32.1	15.3	15.8	9.7	5.9
Minneapolis, MN	14	14	2	3	2	7.1	7.1	1.0	1.5	1.0
Nashville, TN	49	43	97	97	93	17.7	15.4	34.8	34.7	33.3
New Orleans, LA	98	88	70	57	41	37.8	34.0	27.5	22.7	16.3
New York City, NY	247	180	61	37	18	6.4	4.6	1.6	1.0	0.5
Newark, NJ	25	14	14	12	14	16.4	9.2	9.3	8.0	9.4
Norfolk, VA	61	62	51	25	13	53.4	55.0	45.1	22.5	11.7
Oakland, CA	24	8	3	0	5	3.9	1.3	0.5	0.0	0.8
Oklahoma City, OK	51	49	51	15	26	22.5	21.6	22.5	6.6	11.4
Omaha, NE	3	2	0	0	1	1.3	0.9	0.0	0.0	0.4
Philadelphia, PA	110	72	51	43	30	13.5	9.0	6.5	5.5	3.9
Phoenix, AZ	7	13	35	31	64	0.6	1.1	2.6	2.3	4.7
Pittsburgh, PA	1	2	0	4	0	0.1	0.3	0.0	0.6	0.0
Portland, OR	9	1	3	1	1	3.6	0.4	1.2	0.4	0.4
Richmond, VA	18	19	31	21	8	16.4	17.6	29.7	20.0	7.6
Rochester, NY	25	10	6	1	4	19.7	7.9	4.8	0.8	3.2
Sacramento, CA	3	2	2	2	0	0.5	0.4	0.4	0.3	0.0
San Antonio, TX	37	27	16	12	8	5.6	4.0	2.4	1.7	1.2
San Diego, CA	33	20	11	5	7	2.5	1.5	0.8	0.4	0.5
San Francisco, CA	13	5	3	8	4	3.5	1.4	0.8	2.2	1.1
San Jose, CA	3	1	0	0	1	0.4	0.1	0.0	0.0	0.1
Seattle, WA	3	1	0	6	1	0.4	0.1	0.0	0.7	0.1
St Louis, MO	304	165	66	36	25	151.7	84.5	34.8	19.4	13.5
St Paul, MN	3	4	0	0	2	2.1	2.8	0.0	0.0	1.4
St Petersburg, FL	31	9	2	7	4	6.7	1.9	0.4	1.5	0.9
Tampa, FL	15	19	22	21	20	3.3	4.2	4.8	4.5	4.3
Toledo, OH	19	9	17	3	4	7.9	3.8	7.2	1.3	1.7
Tucson, AZ	3	0	5	5	1	0.8	0.0	1.3	1.3	0.3
Tulsa, OK	2	23	14	4	6	1.0	11.8	7.1	2.0	3.0
Washington, DC	72	48	57	58	34	23.8	16.2	19.9	20.7	12.1
Wichita, KS	6	8	6	4	1	2.8	3.7	2.7	1.8	0.4
Yonkers, NY	2	1	0	0	1	2.0	1.0	0.0	0.0	1.0
U.S. CITY TOTAL	3,952	3,091	2,397	1,789	1,504	11.2	8.7	6.7	5.0	4.2
San Juan, PR	65	40	38	41	38	13.6	8.3	7.9	8.5	7.9
TOTAL	4,017	3,131	2,435	1,830	1,542	11.2	8.7	6.7	5.0	4.2

Table 31. Primary and secondary syphilis — Men – Reported cases and rates in selected cities of >200,000 population: United States and outlying areas, 1994–1998

	Cases					Rates per 100,000 Population				
City	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Akron, OH	2	1	0	2	2	0.8	0.4	0.0	0.8	0.8
Albuquerque, NM	5	4	1	4	5	2.0	1.6	0.4	1.6	1.9
Atlanta, GA	174	210	161	137	101	52.8	62.8	47.1	39.6	29.2
Austin, TX	31	10	3	5	9	9.6	3.0	0.9	1.4	2.6
Baltimore, MD	87	251	313	359	244	26.5	77.9	100.1	117.4	79.8
Birmingham, AL	154	155	121	64	21	50.2	50.4	39.1	20.8	6.8
Boston, MA	16	25	28	33	18	6.1	9.3	10.4	12.3	6.7
Buffalo, NY	4	1	5	1	3	2.6	0.6	3.2	0.7	2.0
Charlotte, NC	112	64	71	30	33	41.3	22.9	24.7	10.1	11.1
Chicago, IL	361	328	174	201	206	25.4	23.1	12.4	14.3	14.6
Cincinnati, OH	223	131	37	21	4	54.3	32.0	9.1	5.2	1.0
Cleveland, OH	196	135	69	34	15	29.7	20.5	10.5	5.2	2.3
Columbus, OH	6	2	27	24	23	1.2	0.4	5.5	4.9	4.7
Corpus Christi, TX	10	2	0	2	0	6.6	1.3	0.0	1.3	0.0
Dallas, TX	162	133	123	82	80	16.9	13.8	12.5	8.2	8.0
Dayton, OH	74	144	105	13	3	27.0	52.6	38.7	4.8	1.1
Denver, CO	52	43	5	5	1	21.7	17.9	2.1	2.1	0.4
Des Moines, IA	18	8	1	0	3	10.9	4.8	0.6	0.0	1.8
Detroit, MI	81	76	52	49	85	16.2	15.2	10.0	9.5	16.4
El Paso, TX	5	2	7	3	2	1.6	0.6	2.1	0.9	0.6
Fort Worth, TX	93	67	54	27	17	14.9	10.6	8.4	4.1	2.6
Honolulu, HI	4	0	2	1	4	0.9	0.0	0.5	0.2	0.9
Houston, TX	212	202	67	96	55	14.0	13.2	4.3	6.1	3.5
Indianapolis, IN	32	40	37	35	78	8.2	10.3	9.5	9.0	20.1
Jacksonville, FL	56	28	37	24	8	16.3	8.2	10.5	6.8	2.3
Jersey City, NJ	8	19	7	4	1	7.6	18.1	6.6	3.8	0.9
Kansas City, MO	37	9	5	1	4	17.7	4.3	2.4	0.5	1.9
Los Angeles, CA	206	176	127	76	58	4.8	4.1	3.0	1.8	1.4
Louisville, KY	69	68	47	56	46	21.7	21.4	14.8	17.6	14.5
Memphis, TN	254	239	198	178	126	62.2	58.0	48.0	43.1	30.5
Miami, FL	106	32	24	33	20	10.9	3.3	2.5	3.4	2.0
Milwaukee, WI	121	75	82	38	26	27.2	17.0	18.8	8.8	6.0
Minneapolis, MN	24	10	2	9	2	12.9	5.4	1.1	4.8	1.1
Nashville, TN	51	54	96	106	117	20.4	21.4	37.8	41.7	46.1
New Orleans, LA	105	133	99	75	64	46.8	59.5	45.0	34.5	29.4
New York City, NY	382	184	77	60	63	11.1	5.3	2.2	1.7	1.8
Newark, NJ	35	29	11	14	13	25.5	21.3	8.1	10.4	9.6
Norfolk, VA	61	68	41	19	20	47.9	54.5	34.3	16.1	16.9
Oakland, CA	23	8	7	7	6	3.9	1.3	1.1	1.1	1.0
Oklahoma City, OK	64	57	63	24	35	30.5	27.1	29.8	11.3	16.5
Omaha, NE	2	5	0	1	3	1.0	2.4	0.0	0.5	1.4
Philadelphia, PA	188	127	90	65	59	26.5	18.2	13.2	9.6	8.8
Phoenix, AZ	21	30	54	87	109	1.8	2.5	4.2	6.5	8.2
Pittsburgh, PA	8	2	2	1	0	1.3	0.3	0.3	0.2	0.0
Portland, OR	9	3	4	2	3	3.8	1.3	1.7	0.8	1.2
Richmond, VA	21	18	35	28	14	22.9	20.0	40.4	32.1	16.0
Rochester, NY	34	8	7	1	3	28.9	6.8	6.0	0.9	2.6
Sacramento, CA	6	3	4	2	1	1.1	0.6	0.7	0.4	0.2
San Antonio, TX	25	23	9	15	18	4.0	3.7	1.4	2.3	2.8
San Diego, CA	67	33	25	18	17	5.0	2.5	1.9	1.3	1.2
San Francisco, CA	32	27	30	44	21	8.8	7.4	8.3	12.2	5.8
San Jose, CA	1	1	3	5	2	0.1	0.1	0.4	0.6	0.2
Seattle, WA	8	4	1	5	32	1.0	0.5	0.1	0.6	4.0
St Louis, MO	347	196	76	28	33	206.8	119.9	47.7	17.9	21.1
St Paul, MN	4	3	3	0	1	3.0	2.3	2.3	0.0	0.8
St Petersburg, FL	43	11	6	4	4	10.6	2.7	1.5	1.0	1.0
Tampa, FL	16	14	22	13	12	3.8	3.2	5.0	2.9	2.7
Toledo, OH	16	13	13	3	4	7.3	6.0	6.0	1.4	1.9
Tucson, AZ	9	1	5	7	6	2.5	0.3	1.3	1.8	1.6
Tulsa, OK	7	25	26	4	8	3.8	13.7	14.1	2.1	4.3
Washington, DC	98	64	59	59	47	37.0	24.8	23.4	23.8	18.9
Wichita, KS	4	8	9	12	2	1.9	3.9	4.2	5.6	0.9
Yonkers, NY	3	1	0	2	0	3.3	1.1	0.0	2.2	0.0
U.S. CITY TOTAL	4,685	3,843	2,869	2,358	2,020	14.1	11.5	8.5	7.0	6.0
San Juan, PR	66	30	36	58	41	16.8	7.6	9.2	14.8	10.4
TOTAL	4,751	3,873	2,905	2,416	2,061	14.1	11.5	8.5	7.1	6.0

Table 32. Primary and secondary syphilis — Counties and independent cities* ranked by number of reported cases: United States, 1998

Rank	*County/Independent City*	*Cases*	*Rate per 100,000 Population*	*Cumulative Percent*
1	Baltimore (City), MD	456	69.4	7
2	Cook County, IL (includes Chicago)	364	7.2	12
3	Shelby County, TN	260	30.0	16
4	Davidson County, TN	210	39.3	19
5	Maricopa County, AZ	173	6.4	21
6	Wayne County, MI	169	7.9	24
7	Marion County, IN	161	19.8	26
8	Fulton County, GA	151	20.9	28
9	Dallas County, TX	126	6.2	30
10	Los Angeles County, CA	108	1.2	32
11	Orleans County, LA	105	22.4	33
12	Harris County, TX	99	3.1	34
13	Guilford County, NC	98	25.7	36
14	Jefferson County, KY	91	13.6	37
15	Philadelphia County, PA	89	6.1	39
16	Washington, DC	81	15.3	40
17	Tuscaloosa County, AL	74	46.0	41
18	Mecklenburg County, NC	73	11.9	42
19	Oklahoma County, OK	71	11.3	43
20	St Louis (City), MO	58	17.0	44
21	Franklin County, OH	56	5.5	45
22	Forsyth County, NC	54	18.9	45
23	Prince George's County, MD	51	6.6	46
24	Hinds County, MS	51	20.6	47
25	Milwaukee County, WI	51	5.6	48
26	Wake County, NC	49	8.9	48
27	Lancaster County, SC	47	81.2	49
28	Robeson County, NC	46	40.3	50

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

Table 33. Early latent syphilis — Reported cases and rates by state/area: United States and outlying areas, 1994–1998

State/Area	Cases					Rates per 100,000 Population				
	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Alabama	799	676	801	623	440	18.9	15.9	18.7	14.4	10.2
Alaska	1	3	0	0	0	0.2	0.5	0.0	0.0	0.0
Arizona	97	113	129	201	206	2.4	2.7	2.9	4.4	4.5
Arkansas	656	529	446	237	185	26.7	21.3	17.8	9.4	7.3
California	1,833	1,426	1,148	961	682	5.8	4.5	3.6	3.0	2.1
Colorado	51	68	21	13	10	1.4	1.8	0.6	0.3	0.3
Connecticut	104	92	104	86	37	3.2	2.8	3.2	2.6	1.1
Delaware	59	57	40	37	44	8.3	7.9	5.5	5.1	6.0
Florida	2,320	1,484	1,323	1,179	1,092	16.6	10.5	9.2	8.0	7.5
Georgia	1,639	1,616	1,304	1,085	740	23.2	22.4	17.8	14.5	9.9
Hawaii	5	0	2	0	0	0.4	0.0	0.2	0.0	0.0
Idaho	0	1	5	5	0	0.0	0.1	0.4	0.4	0.0
Illinois	1,685	1,774	917	1,032	641	14.3	15.0	7.7	8.7	5.4
Indiana	338	377	265	169	121	5.9	6.5	4.5	2.9	2.1
Iowa	90	77	38	27	20	3.2	2.7	1.3	0.9	0.7
Kansas	48	40	46	58	39	1.9	1.6	1.8	2.2	1.5
Kentucky	179	166	126	122	101	4.7	4.3	3.2	3.1	2.6
Louisiana	2,314	1,598	959	550	446	53.6	36.8	22.1	12.6	10.2
Maine	5	0	2	2	0	0.4	0.0	0.2	0.2	0.0
Maryland	651	703	1,152	1,218	848	13.0	13.9	22.8	23.9	16.6
Massachusetts	200	154	178	127	104	3.3	2.5	2.9	2.1	1.7
Michigan	589	567	413	354	261	6.2	5.9	4.2	3.6	2.7
Minnesota	81	55	29	21	8	1.8	1.2	0.6	0.4	0.2
Mississippi	2,160	2,389	1,484	962	650	80.9	88.6	54.7	35.2	23.8
Missouri	707	506	259	202	165	13.4	9.5	4.8	3.7	3.1
Montana	5	9	4	4	0	0.6	1.0	0.5	0.5	0.0
Nebraska	13	3	5	5	3	0.8	0.2	0.3	0.3	0.2
Nevada	75	68	32	24	38	5.1	4.4	2.0	1.4	2.3
New Hampshire	4	3	3	0	1	0.4	0.3	0.3	0.0	0.1
New Jersey	357	294	303	236	231	4.5	3.7	3.8	2.9	2.9
New Mexico	17	25	5	8	8	1.0	1.5	0.3	0.5	0.5
New York	2,682	2,100	1,203	763	679	14.8	11.6	6.6	4.2	3.7
North Carolina	1,488	1,231	1,071	879	846	21.1	17.1	14.7	11.8	11.4
North Dakota	1	0	0	0	0	0.2	0.0	0.0	0.0	0.0
Ohio	1,105	723	508	331	227	10.0	6.5	4.6	3.0	2.0
Oklahoma	230	280	216	179	158	7.1	8.5	6.6	5.4	4.8
Oregon	21	17	9	14	7	0.7	0.5	0.3	0.4	0.2
Pennsylvania	1,897	1,212	883	668	424	15.7	10.0	7.3	5.6	3.5
Rhode Island	11	14	8	7	0	1.1	1.4	0.8	0.7	0.0
South Carolina	793	791	581	481	383	21.6	21.5	15.6	12.8	10.2
South Dakota	0	1	0	2	0	0.0	0.1	0.0	0.3	0.0
Tennessee	1,289	1,129	957	984	659	24.9	21.5	18.0	18.3	12.3
Texas	3,869	3,015	2,167	1,863	1,480	21.1	16.1	11.4	9.6	7.6
Utah	3	7	8	2	3	0.2	0.4	0.4	0.1	0.1
Vermont	0	0	0	0	2	0.0	0.0	0.0	0.0	0.3
Virginia	613	546	406	379	230	9.4	8.2	6.1	5.6	3.4
Washington	35	12	5	13	16	0.7	0.2	0.1	0.2	0.3
West Virginia	17	11	8	1	2	0.9	0.6	0.4	0.1	0.1
Wisconsin	382	299	243	169	88	7.5	5.8	4.7	3.3	1.7
Wyoming	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
U.S. TOTAL[1]	32,020	26,657	20,187	16,631	12,613	12.3	10.1	7.6	6.2	4.7
Guam	1	0	0	0	0	0.7	0.0	0.0	0.0	0.0
Puerto Rico	934	738	631	679	659	25.5	20.0	17.0	17.7	17.2
Virgin Islands	23	17	6	8	28	21.3	15.5	5.5	7.3	25.5
OUTLYING AREAS	958	755	637	687	687	24.5	19.1	16.0	16.8	16.8
TOTAL	32,978	27,412	20,824	17,318	13,300	12.5	10.3	7.7	6.4	4.9

[1]Includes cases reported by Washington, D.C.

Table 34. Early latent syphilis — Reported cases and rates in selected cities of >200,000 population: United States and outlying areas, 1994–1998

	Cases					Rates per 100,000 Population				
City	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Akron, OH	5	6	4	0	4	0.9	1.1	0.8	0.0	0.8
Albuquerque, NM	5	9	0	6	5	1.0	1.7	0.0	1.1	1.0
Atlanta, GA	515	531	383	367	303	74.6	75.8	53.6	50.8	41.9
Austin, TX	149	79	49	33	19	23.0	11.9	7.2	4.8	2.7
Baltimore, MD	371	466	896	975	646	52.8	67.4	133.4	148.3	98.3
Birmingham, AL	264	289	341	225	95	40.2	43.9	51.6	34.2	14.4
Boston, MA	94	65	83	62	60	17.1	11.7	14.9	11.1	10.8
Buffalo, NY	19	6	6	5	2	5.8	1.8	1.9	1.6	0.6
Charlotte, NC	243	180	144	86	97	43.1	31.1	24.2	14.0	15.8
Chicago, IL	1,307	1,400	745	918	563	44.3	47.5	25.5	31.5	19.3
Cincinnati, OH	260	115	43	26	11	30.0	13.3	5.0	3.1	1.3
Cleveland, OH	599	361	202	164	98	42.7	25.8	14.5	11.8	7.1
Columbus, OH	18	11	32	34	42	1.8	1.1	3.2	3.3	4.1
Corpus Christi, TX	45	29	10	6	13	14.5	9.3	3.2	1.9	4.1
Dallas, TX	520	410	335	306	405	26.8	20.9	16.8	15.1	20.0
Dayton, OH	42	98	93	28	5	7.3	17.2	16.4	5.0	0.9
Denver, CO	34	46	7	7	7	6.9	9.3	1.4	1.4	1.4
Des Moines, IA	60	54	23	19	11	17.3	15.4	6.5	5.4	3.1
Detroit, MI	388	364	271	254	180	36.7	34.6	24.8	23.3	16.5
El Paso, TX	42	21	44	34	14	6.3	3.1	6.4	4.8	2.0
Fort Worth, TX	283	280	216	192	121	22.5	21.9	16.6	14.5	9.1
Honolulu, HI	5	0	0	0	0	0.6	0.0	0.0	0.0	0.0
Houston, TX	1,157	892	703	528	367	38.0	29.0	22.6	16.7	11.6
Indianapolis, IN	69	55	56	33	44	8.4	6.7	6.9	4.1	5.4
Jacksonville, FL	128	111	104	81	69	18.2	15.8	14.3	11.1	9.4
Jersey City, NJ	36	30	17	10	2	16.5	13.8	7.8	4.6	0.9
Kansas City, MO	78	29	13	6	6	17.8	6.6	2.9	1.3	1.3
Los Angeles, CA	1,139	952	718	649	424	13.3	11.1	8.4	7.6	5.0
Louisville, KY	109	81	71	66	64	16.2	12.0	10.6	9.8	9.5
Memphis, TN	717	652	548	591	382	83.6	75.4	63.4	68.2	44.1
Miami, FL	686	499	437	427	242	33.9	24.6	21.4	20.9	11.8
Milwaukee, WI	310	229	183	140	71	33.0	24.6	19.9	15.4	7.8
Minneapolis, MN	49	24	16	14	5	12.8	6.3	4.2	3.7	1.3
Nashville, TN	79	97	99	173	148	15.0	18.3	18.6	32.4	27.7
New Orleans, LA	311	215	153	119	84	64.2	44.6	32.3	25.4	17.9
New York City, NY	2,364	1,945	1,077	670	645	32.2	26.6	14.7	9.1	8.8
Newark, NJ	56	77	55	30	56	19.3	26.8	19.3	10.5	19.7
Norfolk, VA	82	110	101	87	50	34.0	46.3	43.4	37.9	21.8
Oakland, CA	95	55	25	33	25	7.9	4.5	2.0	2.6	2.0
Oklahoma City, OK	142	140	89	50	70	32.6	32.0	20.3	11.3	15.9
Omaha, NE	9	3	0	2	3	2.1	0.7	0.0	0.5	0.7
Philadelphia, PA	1,708	1,100	839	648	407	112.1	73.4	56.9	44.6	28.0
Phoenix, AZ	63	79	108	189	193	2.7	3.2	4.1	7.0	7.2
Pittsburgh, PA	10	13	3	2	1	0.8	1.0	0.2	0.2	0.1
Portland, OR	11	11	6	8	5	2.3	2.3	1.2	1.6	1.0
Richmond, VA	60	70	78	58	36	29.8	35.3	40.8	30.1	18.7
Rochester, NY	59	23	23	9	9	24.2	9.5	9.5	3.7	3.7
Sacramento, CA	31	21	15	10	12	2.8	1.9	1.3	0.9	1.1
San Antonio, TX	240	161	115	96	63	18.7	12.4	8.8	7.2	4.7
San Diego, CA	102	60	43	17	21	3.9	2.3	1.6	0.6	0.8
San Francisco, CA	21	14	11	16	15	2.9	1.9	1.5	2.2	2.0
San Jose, CA	5	4	6	4	5	0.3	0.3	0.4	0.2	0.3
Seattle, WA	7	1	0	5	8	0.4	0.1	0.0	0.3	0.5
St Louis, MO	391	289	136	83	63	106.2	80.6	38.9	24.3	18.4
St Paul, MN	14	9	2	1	1	5.1	3.3	0.7	0.4	0.4
St Petersburg, FL	140	83	35	28	19	16.1	9.5	4.0	3.2	2.2
Tampa, FL	100	79	139	83	76	11.4	8.9	15.5	9.1	8.4
Toledo, OH	28	27	23	6	5	6.1	5.9	5.1	1.3	1.1
Tucson, AZ	22	29	14	6	6	3.0	3.9	1.8	0.8	0.8
Tulsa, OK	27	44	48	16	44	7.1	11.6	12.6	4.1	11.4
Washington, DC	502	396	371	348	288	88.5	71.4	68.8	65.8	54.4
Wichita, KS	8	12	30	45	13	1.9	2.9	6.9	10.3	3.0
Yonkers, NY	26	16	12	5	2	13.6	8.4	6.3	2.6	1.0
U.S. CITY TOTAL	16,459	13,557	10,449	9,139	6,750	24.0	19.7	15.1	13.1	9.7
San Juan, PR	406	313	308	305	300	46.6	35.9	35.3	35.0	34.4
TOTAL	16,865	13,870	10,757	9,444	7,050	24.2	19.9	15.3	13.4	10.0

Table 35. Late and late latent syphilis — Reported cases and rates by state/area: United States and outlying areas, 1994–1998

State/Area	Cases					Rates per 100,000 Population				
	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Alabama	453	334	538	419	410	10.7	7.9	12.5	9.7	9.5
Alaska	18	15	15	11	12	3.0	2.5	2.5	1.8	2.0
Arizona	256	248	231	255	281	6.3	5.9	5.2	5.6	6.2
Arkansas	197	217	103	121	183	8.0	8.7	4.1	4.8	7.3
California	5,105	3,417	2,567	2,319	1,514	16.2	10.8	8.1	7.2	4.7
Colorado	115	134	112	123	97	3.1	3.6	2.9	3.2	2.5
Connecticut	122	86	125	175	114	3.7	2.6	3.8	5.4	3.5
Delaware	47	52	49	52	49	6.6	7.3	6.8	7.1	6.7
Florida	1,909	1,489	1,128	1,198	1,082	13.7	10.5	7.8	8.2	7.4
Georgia	683	1,104	931	1,218	749	9.7	15.3	12.7	16.3	10.0
Hawaii	32	25	25	44	11	2.7	2.1	2.1	3.7	0.9
Idaho	8	11	14	18	13	0.7	0.9	1.2	1.5	1.1
Illinois	835	728	549	414	892	7.1	6.2	4.6	3.5	7.5
Indiana	209	172	197	199	173	3.6	3.0	3.4	3.4	3.0
Iowa	64	45	25	38	23	2.3	1.6	0.9	1.3	0.8
Kansas	64	62	62	76	60	2.5	2.4	2.4	2.9	2.3
Kentucky	134	143	113	141	127	3.5	3.7	2.9	3.6	3.2
Louisiana	1,409	1,034	902	872	767	32.7	23.8	20.8	20.0	17.6
Maine	0	2	1	9	3	0.0	0.2	0.1	0.7	0.2
Maryland	553	394	317	288	616	11.1	7.8	6.3	5.7	12.1
Massachusetts	326	283	364	524	416	5.4	4.7	6.0	8.6	6.8
Michigan	325	304	233	252	198	3.4	3.2	2.4	2.6	2.0
Minnesota	62	85	69	87	57	1.4	1.8	1.5	1.9	1.2
Mississippi	247	126	10	48	235	9.3	4.7	0.4	1.8	8.6
Missouri	219	135	123	172	86	4.1	2.5	2.3	3.2	1.6
Montana	1	0	0	1	0	0.1	0.0	0.0	0.1	0.0
Nebraska	23	18	16	24	22	1.4	1.1	1.0	1.4	1.3
Nevada	62	89	89	84	83	4.3	5.8	5.6	5.0	4.9
New Hampshire	10	29	25	23	11	0.9	2.5	2.2	2.0	0.9
New Jersey	1,411	893	888	681	402	17.9	11.2	11.1	8.5	5.0
New Mexico	143	100	70	86	54	8.6	5.9	4.1	5.0	3.1
New York	5,503	6,005	4,957	4,639	4,291	30.3	33.1	27.3	25.6	23.7
North Carolina	819	670	516	584	540	11.6	9.3	7.1	7.9	7.3
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	377	281	217	202	109	3.4	2.5	1.9	1.8	1.0
Oklahoma	95	95	62	100	92	2.9	2.9	1.9	3.0	2.8
Oregon	57	45	52	23	19	1.8	1.4	1.6	0.7	0.6
Pennsylvania	322	420	335	354	367	2.7	3.5	2.8	2.9	3.1
Rhode Island	112	72	60	75	54	11.2	7.3	6.1	7.6	5.5
South Carolina	252	266	259	261	198	6.9	7.2	7.0	6.9	5.3
South Dakota	6	6	2	4	1	0.8	0.8	0.3	0.5	0.1
Tennessee	588	540	480	605	515	11.4	10.3	9.0	11.3	9.6
Texas	3,022	3,152	2,674	2,694	1,930	16.4	16.8	14.0	13.9	9.9
Utah	36	39	38	49	47	1.9	2.0	1.9	2.4	2.3
Vermont	1	0	0	1	0	0.2	0.0	0.0	0.2	0.0
Virginia	492	419	450	485	324	7.5	6.3	6.8	7.2	4.8
Washington	207	181	114	101	80	3.9	3.3	2.1	1.8	1.4
West Virginia	152	38	44	17	6	8.3	2.1	2.4	0.9	0.3
Wisconsin	99	90	74	50	54	1.9	1.8	1.4	1.0	1.0
Wyoming	3	1	6	1	1	0.6	0.2	1.2	0.2	0.2
U.S. TOTAL[1]	27,452	24,295	20,356	20,385	17,570	10.5	9.2	7.7	7.6	6.6
Guam	4	6	3	1	3	2.7	4.0	2.0	0.6	1.9
Puerto Rico	753	582	620	640	597	20.6	15.8	16.7	16.7	15.6
Virgin Islands	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
OUTLYING AREAS	757	588	623	641	600	19.4	14.9	15.6	15.7	14.7
TOTAL	28,209	24,883	20,979	21,026	18,170	10.7	9.3	7.8	7.7	6.7

[1]Includes cases reported by Washington, D.C.

Table 36. Late and late latent syphilis — Reported cases and rates in selected cities of >200,000 population: United States and outlying areas, 1994–1998

	Cases					Rates per 100,000 Population				
City	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Akron, OH	6	1	4	0	0	1.1	0.2	0.8	0.0	0.0
Albuquerque, NM	69	26	31	41	29	13.4	5.0	5.9	7.8	5.5
Atlanta, GA	130	207	190	289	120	18.8	29.5	26.6	40.0	16.6
Austin, TX	48	87	30	57	22	7.4	13.1	4.4	8.2	3.2
Baltimore, MD	109	191	73	81	331	15.5	27.6	10.9	12.3	50.4
Birmingham, AL	132	78	149	136	110	20.1	11.9	22.5	20.6	16.7
Boston, MA	97	88	130	191	155	17.7	15.8	23.3	34.3	27.8
Buffalo, NY	24	23	8	13	6	7.3	7.1	2.5	4.1	1.9
Charlotte, NC	46	41	31	19	44	8.2	7.1	5.2	3.1	7.2
Chicago, IL	203	141	100	NR	507	6.9	4.8	3.4	.	17.4
Cincinnati, OH	91	26	46	33	9	10.5	3.0	5.4	3.9	1.1
Cleveland, OH	106	108	40	19	20	7.6	7.7	2.9	1.4	1.4
Columbus, OH	44	13	3	28	17	4.4	1.3	0.3	2.8	1.7
Corpus Christi, TX	18	24	19	14	13	5.8	7.7	6.0	4.4	4.1
Dallas, TX	308	334	217	260	187	15.9	17.0	10.9	12.9	9.2
Dayton, OH	62	50	66	70	28	10.8	8.8	11.7	12.5	5.0
Denver, CO	57	65	48	55	24	11.5	13.1	9.7	11.0	4.8
Des Moines, IA	10	11	5	7	6	2.9	3.1	1.4	2.0	1.7
Detroit, MI	211	192	144	171	130	20.0	18.2	13.2	15.7	11.9
El Paso, TX	126	115	60	73	65	19.0	17.0	8.8	10.4	9.3
Fort Worth, TX	112	60	63	62	27	8.9	4.7	4.8	4.7	2.0
Honolulu, HI	32	22	23	39	11	3.7	2.5	2.6	4.5	1.3
Houston, TX	1,223	1,283	1,095	1,128	879	40.2	41.7	35.2	35.7	27.8
Indianapolis, IN	42	39	45	21	30	5.1	4.8	5.5	2.6	3.7
Jacksonville, FL	51	30	48	89	69	7.2	4.3	6.6	12.1	9.4
Jersey City, NJ	112	70	68	61	28	51.3	32.2	31.3	28.0	12.9
Kansas City, MO	10	13	18	4	1	2.3	3.0	4.0	0.9	0.2
Los Angeles, CA	2,254	1,605	1,165	806	434	26.3	18.8	13.7	9.4	5.1
Louisville, KY	59	59	49	56	54	8.8	8.8	7.3	8.4	8.1
Memphis, TN	453	442	399	473	383	52.8	51.1	46.1	54.6	44.2
Miami, FL	573	409	364	367	463	28.3	20.1	17.9	17.9	22.6
Milwaukee, WI	81	74	53	42	37	8.6	7.9	5.8	4.6	4.1
Minneapolis, MN	34	36	31	27	24	8.9	9.4	8.1	7.0	6.3
Nashville, TN	54	7	0	36	58	10.2	1.3	0.0	6.7	10.9
New Orleans, LA	307	213	198	208	157	63.4	44.2	41.8	44.3	33.5
New York City, NY	4,678	5,291	4,455	4,110	3,881	63.8	72.4	60.7	56.0	52.9
Newark, NJ	346	232	256	157	78	119.3	80.7	89.6	55.2	27.4
Norfolk, VA	41	31	24	25	23	17.0	13.0	10.3	10.9	10.0
Oakland, CA	171	91	96	86	91	14.2	7.5	7.8	6.9	7.3
Oklahoma City, OK	30	32	20	15	37	6.9	7.3	4.6	3.4	8.4
Omaha, NE	14	11	1	12	17	3.3	2.5	0.2	2.7	3.9
Philadelphia, PA	282	329	255	300	287	18.5	21.9	17.3	20.7	19.8
Phoenix, AZ	133	142	143	156	187	5.7	5.8	5.5	5.8	6.9
Pittsburgh, PA	19	10	11	14	11	1.4	0.8	0.9	1.1	0.9
Portland, OR	34	27	32	11	8	7.0	5.6	6.5	2.2	1.6
Richmond, VA	29	14	27	27	20	14.4	7.1	14.1	14.0	10.4
Rochester, NY	78	59	31	21	21	31.9	24.3	12.8	8.7	8.7
Sacramento, CA	86	54	34	36	16	7.8	4.9	3.0	3.2	1.4
San Antonio, TX	179	174	231	182	143	14.0	13.4	17.6	13.7	10.7
San Diego, CA	291	252	143	206	135	11.1	9.5	5.3	7.6	5.0
San Francisco, CA	19	37	105	101	88	2.6	5.1	14.4	13.8	12.0
San Jose, CA	122	68	59	83	54	7.8	4.3	3.7	5.2	3.4
Seattle, WA	106	87	58	42	26	6.7	5.5	3.6	2.6	1.6
St Louis, MO	121	60	43	109	46	32.9	16.7	12.3	31.9	13.5
St Paul, MN	6	12	12	7	6	2.2	4.4	4.4	2.5	2.2
St Petersburg, FL	103	63	42	40	29	11.9	7.2	4.8	4.6	3.3
Tampa, FL	218	156	115	83	65	24.9	17.6	12.9	9.1	7.1
Toledo, OH	16	3	10	13	10	3.5	0.7	2.2	2.9	2.2
Tucson, AZ	67	47	35	34	23	9.2	6.2	4.6	4.4	2.9
Tulsa, OK	15	13	18	10	14	4.0	3.4	4.7	2.6	3.6
Washington, DC	267	201	125	168	202	47.1	36.3	23.2	31.8	38.2
Wichita, KS	9	14	13	22	4	2.1	3.3	3.0	5.0	0.9
Yonkers, NY	35	43	21	27	17	18.3	22.4	10.9	14.0	8.8
U.S. CITY TOTAL	14,809	13,736	11,428	11,073	10,017	21.6	19.9	16.5	15.9	14.4
San Juan, PR	468	309	339	312	293	53.7	35.4	38.9	35.8	33.6
TOTAL	15,277	14,045	11,767	11,385	10,310	22.0	20.1	16.8	16.1	14.6

*NR = No report (see Appendix).

Table 37. Congenital syphilis — Reported cases and rates in infants <1 year of age: United States (excluding outlying areas), 1963–1998

Year	*Cases*	*Rate per 100,000 Live Births*
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	7.0
1986	357	9.5
1987	444	11.6
1988	658	16.8
1989	1,807	44.7
1990	3,816	91.0
1991	4,410	107.3
1992	3,851	94.7
1993	3,237	80.9
1994	2,204	55.8
1995	1,850	47.4
1996	1,295	33.3
1997	1,070	27.5
1998	801	20.6

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.

Table 38. Congenital syphilis — Reported cases and rates in infants <1 year of age by state/area, ranked according to rates: United States and outlying areas, 1998

Rank	*State/Area**	*Cases*	*Rate per 100,000 Live Births*
1	Arkansas	30	82.5
2	New Jersey	86	75.2
3	Maryland	44	61.5
4	Puerto Rico	27	42.8
	YEAR 2000 OBJECTIVE		**40.0**
5	Illinois	71	38.8
6	Florida	71	37.5
7	South Carolina	19	37.2
8	Mississippi	15	36.6
9	Arizona	25	33.2
10	Oklahoma	15	32.5
11	Texas	102	30.9
12	North Carolina	24	23.0
13	California	119	22.1
14	New York	56	21.2
	U.S. TOTAL[1]	**801**	**20.6**
15	Missouri	15	20.3
16	Alabama	9	14.9
17	Pennsylvania	21	14.2
18	Georgia	14	12.3
19	Louisiana	8	12.3
20	Tennessee	9	12.2
21	Michigan	16	12.0
22	Kentucky	5	9.5
23	Wisconsin	6	8.9
24	Virginia	4	4.3
25	Ohio	4	2.6
26	Massachusetts	2	2.5
27	Utah	1	2.4
28	Colorado	1	1.8
29	Washington	1	1.3
30	Alaska	0	0.0
31	Connecticut	0	0.0
32	Delaware	0	0.0
33	Hawaii	0	0.0
34	Idaho	0	0.0
35	Indiana	0	0.0
36	Iowa	0	0.0
37	Kansas	0	0.0
38	Maine	0	0.0
39	Minnesota	0	0.0
40	Montana	0	0.0
41	Nebraska	0	0.0
42	Nevada	0	0.0
43	New Hampshire	0	0.0
44	New Mexico	0	0.0
45	North Dakota	0	0.0
46	Oregon	0	0.0
47	Rhode Island	0	0.0
48	South Dakota	0	0.0
49	Vermont	0	0.0
50	West Virginia	0	0.0
51	Wyoming	0	0.0
52	Guam	0	0.0
53	Virgin Islands	0	0.0

*Mother's state of residence used to assign case.
[1]Includes cases reported by Washington, D.C. but excludes outlying areas (Guam, Puerto Rico and Virgin Islands).

Table 39. Congenital syphilis — Reported cases and rates in infants <1 year of age by state/area: United States and outlying areas, 1994–1998

	Cases					Rates per 100,000 Live Births				
*State/Area**	*1994*	*1995*	*1996*	*1997*	*1998*	*1994*	*1995*	*1996*	*1997*	*1998*
Alabama	18	18	23	31	9	29.5	29.8	38.0	51.2	14.9
Alaska	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Arizona	16	10	6	12	25	22.6	13.8	8.0	15.9	33.2
Arkansas	29	29	32	40	30	83.5	82.4	88.0	110.0	82.5
California	194	344	195	159	119	34.2	62.3	36.1	29.5	22.1
Colorado	4	1	3	0	1	7.4	1.8	5.4	0.0	1.8
Connecticut	6	6	2	2	0	13.1	13.5	4.5	4.5	0.0
Delaware	5	1	0	2	0	48.0	9.7	0.0	19.7	0.0
Florida	74	109	93	72	71	38.8	57.8	49.1	38.0	37.5
Georgia	42	45	29	17	14	37.8	40.1	25.4	14.9	12.3
Hawaii	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Idaho	0	0	1	0	0	0.0	0.0	5.4	0.0	0.0
Illinois	258	184	104	73	71	136.3	99.0	56.8	39.9	38.8
Indiana	11	0	6	3	0	13.3	0.0	7.2	3.6	0.0
Iowa	6	0	0	0	0	16.2	0.0	0.0	0.0	0.0
Kansas	2	1	0	2	0	5.4	2.7	0.0	5.5	0.0
Kentucky	13	7	5	5	5	24.5	13.4	9.5	9.5	9.5
Louisiana	87	36	15	22	8	128.3	54.8	23.0	33.7	12.3
Maine	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Maryland	9	28	36	58	44	12.2	38.7	50.3	81.1	61.5
Massachusetts	6	0	6	1	2	7.2	0.0	7.5	1.2	2.5
Michigan	28	28	22	29	16	20.3	20.8	16.5	21.7	12.0
Minnesota	2	2	2	0	0	3.1	3.2	3.1	0.0	0.0
Mississippi	56	65	54	41	15	133.5	157.2	131.7	100.0	36.6
Missouri	72	40	15	10	15	97.9	54.8	20.3	13.5	20.3
Montana	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Nebraska	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Nevada	3	0	1	0	0	12.5	0.0	3.8	0.0	0.0
New Hampshire	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
New Jersey	178	94	99	84	86	151.5	81.9	86.6	73.5	75.2
New Mexico	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
New York	388	326	155	105	56	139.4	120.1	58.7	39.8	21.2
North Carolina	44	33	31	18	24	43.4	32.5	29.7	17.2	23.0
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	71	38	15	10	4	45.5	24.7	9.9	6.6	2.6
Oklahoma	15	17	10	9	15	32.8	37.2	21.6	19.5	32.5
Oregon	0	0	0	1	0	0.0	0.0	0.0	2.3	0.0
Pennsylvania	115	68	58	37	21	73.2	44.8	39.1	24.9	14.2
Rhode Island	2	0	0	0	0	14.9	0.0	0.0	0.0	0.0
South Carolina	100	42	44	18	19	192.1	82.5	86.1	35.2	37.2
South Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Tennessee	57	29	34	32	9	77.9	39.6	46.1	43.4	12.2
Texas	224	199	164	149	102	69.8	61.7	49.6	45.1	30.9
Utah	0	0	0	0	1	0.0	0.0	0.0	0.0	2.4
Vermont	0	0	1	0	0	0.0	0.0	14.8	0.0	0.0
Virginia	18	25	16	7	4	18.9	27.0	17.3	7.6	4.3
Washington	3	1	1	0	1	3.9	1.3	1.3	0.0	1.3
West Virginia	2	0	0	1	0	9.4	0.0	0.0	4.8	0.0
Wisconsin	18	11	3	9	6	26.4	16.3	4.5	13.4	8.9
Wyoming	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
U.S. TOTAL[1]	2,204	1,850	1,295	1,070	801	55.8	47.4	33.3	27.5	20.6
Guam	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Puerto Rico	20	14	10	9	27	31.1	22.1	15.8	14.3	42.8
Virgin Islands	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
OUTLYING AREAS	20	14	10	9	27	28.2	20.1	14.4	13.0	39.0
TOTAL	2,224	1,864	1,305	1,079	828	55.3	47.0	32.9	27.2	20.9

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

[1]Includes cases reported by Washington, D.C.

NOTE: As of 1995, cases of congenital syphilis <1 year of age are obtained using case reporting form CDC 73.126.

Table 40. Congenital syphilis — Reported cases and rates in infants <1 year of age in selected cities of >200,000 population, ranked according to rates: United States and outlying areas, 1998

Rank	*City**	*Cases*	*Rate per 100,000 Live Births*
1	Newark, NJ	26	510.5
2	Baltimore, MD	29	279.7
3	Miami, FL	37	246.5
4	Oklahoma City, OK	10	136.6
5	Houston, TX	52	124.8
6	Washington, DC	8	95.4
7	Chicago, IL	49	92.7
8	Philadelphia, PA	21	92.1
9	Phoenix, AZ	19	81.1
10	Memphis, TN	9	81.0
11	Dallas, TX	17	76.4
12	Jersey City, NJ	3	74.5
13	Birmingham, AL	3	72.4
14	Detroit, MI	12	72.3
15	Yonkers, NY	2	70.8
16	Richmond, VA	2	68.1
17	Atlanta, GA	5	61.6
18	Louisville, KY	4	58.9
19	Tampa, FL	4	58.0
20	Los Angeles, CA	40	56.6
21	Milwaukee, WI	6	53.4
22	St Louis, MO	3	51.2
23	Tulsa, OK	3	50.5
24	Rochester, NY	2	49.0
	YEAR 2000 OBJECTIVE		**40.0**
25	San Diego, CA	7	35.6
26	New York City, NY	43	35.0
27	Cleveland, OH	3	32.3
28	New Orleans, LA	2	26.4
29	Boston, MA	2	25.8
30	San Antonio, TX	5	23.3
31	Corpus Christi, TX	1	21.9
32	Sacramento, CA	2	18.5
33	Oakland, CA	1	15.6
34	San Juan, PR	1	14.3
35	San Francisco, CA	1	11.9
36	Denver, CO	1	10.9
37	Fort Worth, TX	1	10.7
38	Columbus, OH	1	9.1
39	Tucson, AZ	0	0.0
40	San Jose, CA	0	0.0
41	Jacksonville, FL	0	0.0
42	St Petersburg, FL	0	0.0
43	Honolulu, HI	0	0.0
44	Indianapolis, IN	0	0.0
45	Des Moines, IA	0	0.0
46	Wichita, KS	0	0.0
47	Minneapolis, MN	0	0.0
48	St Paul, MN	0	0.0
49	Kansas City, MO	0	0.0
50	Omaha, NE	0	0.0
51	Albuquerque, NM	0	0.0
52	Buffalo, NY	0	0.0
53	Charlotte, NC	0	0.0
54	Akron, OH	0	0.0
55	Cincinnati, OH	0	0.0
56	Dayton, OH	0	0.0
57	Toledo, OH	0	0.0
58	Portland, OR	0	0.0
59	Pittsburgh, PA	0	0.0
60	Nashville, TN	0	0.0
61	Austin, TX	0	0.0
62	El Paso, TX	0	0.0
63	Norfolk, VA	0	0.0
64	Seattle, WA	0	0.0

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

Table 41. Congenital syphilis — Reported cases and rates in infants <1 year of age in selected cities of >200,000 population: United States and outlying areas, 1994–1998

	Cases					Rates per 100,000 Live Births				
City*	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
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	11	16	15	12	5	129.3	196.4	184.7	147.7	61.6
Austin, TX	3	0	0	0	0	31.6	0.0	0.0	0.0	0.0
Baltimore, MD	1	15	30	56	29	8.6	140.9	289.3	540.0	279.7
Birmingham, AL	7	9	11	6	3	164.6	219.0	265.3	144.7	72.4
Boston, MA	4	0	2	0	2	47.2	0.0	25.8	0.0	25.8
Buffalo, NY	1	1	2	3	0	17.7	19.4	41.6	62.5	0.0
Charlotte, NC	3	1	2	0	0	42.4	12.5	23.7	0.0	0.0
Chicago, IL	177	121	66	50	49	308.7	221.9	124.9	94.6	92.7
Cincinnati, OH	15	6	1	0	0	249.0	105.4	17.3	0.0	0.0
Cleveland, OH	44	18	5	6	3	446.6	189.6	53.8	64.5	32.3
Columbus, OH	1	0	0	1	1	9.6	0.0	0.0	9.1	9.1
Corpus Christi, TX	0	1	0	0	1	0.0	21.2	0.0	0.0	21.9
Dallas, TX	10	10	2	3	17	47.0	46.2	9.0	13.5	76.4
Dayton, OH	5	7	7	0	0	164.4	239.0	246.1	0.0	0.0
Denver, CO	3	0	1	0	1	34.8	0.0	10.9	0.0	10.9
Des Moines, IA	2	0	0	0	0	58.0	0.0	0.0	0.0	0.0
Detroit, MI	19	21	15	25	12	98.0	119.4	90.4	150.7	72.3
El Paso, TX	10	4	4	2	0	71.0	28.8	29.7	14.8	0.0
Fort Worth, TX	7	9	5	6	1	79.8	98.8	53.3	64.0	10.7
Honolulu, HI	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Houston, TX	86	99	98	101	52	214.8	244.5	235.2	242.4	124.8
Indianapolis, IN	3	0	0	0	0	22.0	0.0	0.0	0.0	0.0
Jacksonville, FL	1	1	1	0	0	9.1	9.2	9.0	0.0	0.0
Jersey City, NJ	9	9	2	4	3	213.5	225.2	49.7	99.4	74.5
Kansas City, MO	7	2	0	1	0	107.3	29.3	0.0	13.7	0.0
Los Angeles, CA	190	125	68	50	40	258.5	175.5	96.2	70.7	56.6
Louisville, KY	10	4	3	3	4	160.5	62.2	44.2	44.2	58.9
Memphis, TN	35	25	26	28	9	302.1	225.8	234.1	252.1	81.0
Miami, FL	14	47	37	31	37	86.4	302.7	246.5	206.5	246.5
Milwaukee, WI	15	11	3	9	6	127.7	98.4	26.7	80.1	53.4
Minneapolis, MN	1	2	1	0	0	16.9	34.9	17.2	0.0	0.0
Nashville, TN	1	1	1	0	0	12.5	12.4	12.4	0.0	0.0
New Orleans, LA	23	0	0	4	2	264.6	0.0	0.0	52.7	26.4
New York City, NY	329	281	131	84	43	257.7	222.9	106.5	68.3	35.0
Newark, NJ	55	40	35	26	26	985.8	740.3	687.2	510.5	510.5
Norfolk, VA	2	7	5	1	0	43.7	160.1	122.2	24.4	0.0
Oakland, CA	0	23	8	2	1	0.0	357.2	124.7	31.2	15.6
Oklahoma City, OK	12	13	4	5	10	167.9	183.2	54.6	68.3	136.6
Omaha, NE	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Philadelphia, PA	106	68	58	37	21	406.8	281.0	254.4	162.3	92.1
Phoenix, AZ	13	6	2	10	19	60.8	27.0	8.5	42.7	81.1
Pittsburgh, PA	1	0	0	0	0	21.1	0.0	0.0	0.0	0.0
Portland, OR	0	0	0	1	0	0.0	0.0	0.0	14.0	0.0
Richmond, VA	0	1	0	1	2	0.0	34.7	0.0	34.0	68.1
Rochester, NY	4	4	1	0	2	81.1	89.9	24.5	0.0	49.0
Sacramento, CA	0	6	3	5	2	0.0	52.8	27.7	46.2	18.5
San Antonio, TX	10	9	7	4	5	47.2	42.9	32.6	18.6	23.3
San Diego, CA	0	6	5	13	7	0.0	30.0	25.5	66.2	35.6
San Francisco, CA	4	1	2	2	1	44.1	11.6	23.9	23.9	11.9
San Jose, CA	0	4	2	1	0	0.0	25.3	12.3	6.2	0.0
Seattle, WA	2	0	0	0	0	27.6	0.0	0.0	0.0	0.0
St Louis, MO	49	24	8	5	3	729.1	398.1	136.7	85.4	51.2
St Paul, MN	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
St Petersburg, FL	0	2	1	0	0	0.0	59.6	29.2	0.0	0.0
Tampa, FL	4	9	16	7	4	53.5	123.5	232.2	101.6	58.0
Toledo, OH	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Tucson, AZ	3	1	2	0	0	33.7	11.8	22.9	0.0	0.0
Tulsa, OK	1	0	3	1	3	16.3	0.0	50.5	16.8	50.5
Washington, DC	28	13	14	11	8	282.0	144.2	166.9	131.1	95.4
Wichita, KS	0	0	0	2	0	0.0	0.0	0.0	33.8	0.0
Yonkers, NY	8	3	0	0	2	279.8	110.8	0.0	0.0	70.8
U.S. CITY TOTAL	1,349	1,086	715	619	436	162.7	134.4	89.1	77.2	54.3
San Juan, PR	10	0	1	3	1	110.8	0.0	14.3	42.9	14.3
TOTAL	1,359	1,086	716	622	437	162.1	132.9	88.5	76.9	54.0

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

NOTE: As of 1995, cases of congenital syphilis <1 year of age are obtained using case reporting form CDC 73.126.

Table 42. Chancroid — Reported cases and rates by state/area: United States and outlying areas, 1994–1998

State/Area	Cases					Rates per 100,000 Population				
	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Alabama	24	7	0	1	1	0.6	0.2	0.0	0.0	0.0
Alaska	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Arizona	3	2	2	0	2	0.1	0.0	0.0	0.0	0.0
Arkansas	0	1	1	1	7	0.0	0.0	0.0	0.0	0.3
California	31	8	8	19	8	0.1	0.0	0.0	0.1	0.0
Colorado	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Connecticut	0	0	0	0	2	0.0	0.0	0.0	0.0	0.1
Delaware	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Florida	20	24	3	3	3	0.1	0.2	0.0	0.0	0.0
Georgia	0	2	0	1	2	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	38	21	20	5	0	0.3	0.2	0.2	0.0	0.0
Indiana	0	0	1	0	1	0.0	0.0	0.0	0.0	0.0
Iowa	1	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Kansas	5	2	2	0	1	0.2	0.1	0.1	0.0	0.0
Kentucky	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Louisiana	209	129	58	3	1	4.8	3.0	1.3	0.1	0.0
Maine	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Maryland	0	0	2	1	0	0.0	0.0	0.0	0.0	0.0
Massachusetts	1	7	2	4	0	0.0	0.1	0.0	0.1	0.0
Michigan	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Minnesota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Mississippi	0	0	1	1	3	0.0	0.0	0.0	0.0	0.1
Missouri	2	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Montana	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Nebraska	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Nevada	0	2	0	2	0	0.0	0.1	0.0	0.1	0.0
New Hampshire	0	0	1	0	0	0.0	0.0	0.1	0.0	0.0
New Jersey	0	4	4	0	0	0.0	0.1	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	365	336	182	119	82	2.0	1.9	1.0	0.7	0.5
North Carolina	10	18	14	9	9	0.1	0.3	0.2	0.1	0.1
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	8	5	6	3	3	0.1	0.0	0.1	0.0	0.0
Oklahoma	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Oregon	5	0	0	1	0	0.2	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	0	0	0	0.0	0.0	0.0	0.0	0.0
South Carolina	0	0	8	15	19	0.0	0.0	0.2	0.4	0.5
South Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Tennessee	3	2	2	1	0	0.1	0.0	0.0	0.0	0.0
Texas	51	26	65	53	34	0.3	0.1	0.3	0.3	0.2
Utah	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Vermont	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Virginia	0	2	1	1	7	0.0	0.0	0.0	0.0	0.1
Washington	1	5	1	2	1	0.0	0.1	0.0	0.0	0.0
West Virginia	0	1	0	0	0	0.0	0.1	0.0	0.0	0.0
Wisconsin	2	3	2	0	2	0.0	0.1	0.0	0.0	0.0
Wyoming	0	0	0	1	1	0.0	0.0	0.0	0.2	0.2
U.S. TOTAL[1]	779	607	386	246	189	0.3	0.2	0.1	0.1	0.1
Guam	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Puerto Rico	32	1	2	1	2	0.9	0.0	0.1	0.0	0.1
Virgin Islands	1	2	0	0	0	0.9	1.8	0.0	0.0	0.0
OUTLYING AREAS	33	3	2	1	2	0.8	0.1	0.1	0.0	0.0
TOTAL	812	610	388	247	191	0.3	0.2	0.1	0.1	0.1

[1]Includes cases reported by Washington, D.C.

Table 43. Chancroid — Reported cases and rates in selected cities of >200,000 population: United States and outlying areas, 1994–1998

	Cases					Rates per 100,000 Population				
City	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
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	0	0	0	1	1	0.0	0.0	0.0	0.1	0.1
Austin, TX	5	0	0	0	0	0.8	0.0	0.0	0.0	0.0
Baltimore, MD	0	0	1	0	0	0.0	0.0	0.1	0.0	0.0
Birmingham, AL	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Boston, MA	0	2	0	3	0	0.0	0.4	0.0	0.5	0.0
Buffalo, NY	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Charlotte, NC	0	3	4	1	0	0.0	0.5	0.7	0.2	0.0
Chicago, IL	36	21	20	5	0	1.2	0.7	0.7	0.2	0.0
Cincinnati, OH	3	1	0	0	0	0.3	0.1	0.0	0.0	0.0
Cleveland, OH	2	0	0	0	2	0.1	0.0	0.0	0.0	0.1
Columbus, OH	0	0	0	3	1	0.0	0.0	0.0	0.3	0.1
Corpus Christi, TX	0	1	0	0	0	0.0	0.3	0.0	0.0	0.0
Dallas, TX	0	12	13	13	6	0.0	0.6	0.7	0.6	0.3
Dayton, OH	3	1	1	0	0	0.5	0.2	0.2	0.0	0.0
Denver, CO	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Des Moines, IA	1	0	0	0	0	0.3	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	1	0	1	2	4	0.2	0.0	0.1	0.3	0.6
Fort Worth, TX	0	0	0	1	0	0.0	0.0	0.0	0.1	0.0
Honolulu, HI	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Houston, TX	38	0	25	23	20	1.2	0.0	0.8	0.7	0.6
Indianapolis, IN	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Jacksonville, FL	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Jersey City, NJ	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Kansas City, MO	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Los Angeles, CA	20	4	2	12	1	0.2	0.0	0.0	0.1	0.0
Louisville, KY	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Memphis, TN	3	2	2	0	0	0.3	0.2	0.2	0.0	0.0
Miami, FL	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Milwaukee, WI	0	0	1	0	2	0.0	0.0	0.1	0.0	0.2
Minneapolis, MN	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Nashville, TN	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
New Orleans, LA	201	125	52	3	0	41.5	25.9	11.0	0.6	0.0
New York City, NY	357	334	181	119	82	4.9	4.6	2.5	1.6	1.1
Newark, NJ	0	1	0	0	0	0.0	0.3	0.0	0.0	0.0
Norfolk, VA	0	1	0	0	0	0.0	0.4	0.0	0.0	0.0
Oakland, CA	0	2	0	1	0	0.0	0.2	0.0	0.1	0.0
Oklahoma City, OK	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Omaha, NE	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Philadelphia, PA	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Phoenix, AZ	3	0	1	0	2	0.1	0.0	0.0	0.0	0.1
Pittsburgh, PA	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Portland, OR	2	0	0	0	0	0.4	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	0	0	0.0	0.0	0.0	0.0	0.0
San Diego, CA	2	2	2	0	0	0.1	0.1	0.1	0.0	0.0
San Francisco, CA	2	0	1	3	4	0.3	0.0	0.1	0.4	0.5
San Jose, CA	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Seattle, WA	0	4	0	1	0	0.0	0.3	0.0	0.1	0.0
St Louis, MO	1	0	0	0	0	0.3	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	1	0	0	0.0	0.0	0.1	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	1	0	0	0.0	0.0	0.2	0.0	0.0
Yonkers, NY	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
U.S. CITY TOTAL	680	516	309	191	125	1.0	0.7	0.4	0.3	0.2
San Juan, PR	10	0	1	0	1	1.1	0.0	0.1	0.0	0.1
TOTAL	690	516	310	191	126	1.0	0.7	0.4	0.3	0.2

Sources and Limitations of Data

CDC Surveillance Data

Much of the information in this document was based on cases of sexually transmitted diseases (STDs) reported to the Division of STD Prevention (DSTD), 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, 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 U.S." in selected tables and figures.

At present, STD data are submitted to CDC on a variety of hardcopy summary reports (monthly, quarterly, and annually) and electronically either in summary or individual case-listed format via the National Electronic Telecommunications System for Surveillance (NETSS) — the system that provides notifiable disease information that is published in the *Morbidity and Mortality Weekly Report*, or *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 1998, 29 states have been notified to discontinue hardcopy reporting and are sending primary and secondary syphilis, chlamydia and gonorrhea as line-listed extended, electronic data. See Figures A1-A3 in this **Appendix** for type of reporting by state and disease. "Summary" refers to aggregate electronic data. "Case" refers to case-specific, 60-byte core records. "Extended case" refers to case-specific, 60-byte core records plus STD-specific information beyond the core 60-byte record. "Discontinue hardcopy" refers to those states that sent consistent, quality case-extended data and were notified to discontinue hardcopy reporting.

The data used in this report are based on a combination of aggregated NETSS data and summary hardcopy reports. Monthly reports included summary data for syphilis by county and state. Quarterly reports included summary data for syphilis, gonorrhea, chlamydia, and other STDs by gender and source of report (STD clinic or non-STD clinic) for the 50 states, 64 large cities (most with a population over 200,000 in 1980), and outlying areas of the United States. Annual reports included summary data for P&S syphilis, gonorrhea, and chlamydia by age, race, and gender for the 50 states and six large cities. In addition, data on antimicrobial susceptibility in *Neisseria gonorrhoeae* were collected through the Gonococcal Isolate Surveillance Project (GISP), a sentinel system of 28 STD clinics and five regional laboratories located throughout the United States. Provisional data on syphilis, gonorrhea, and chlamydia reported to CDC weekly by states for inclusion in the *Morbidity and Mortality Weekly Report* were not included in this document.

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 total cases in the tables and figures. In most instances, these discrepancies are less than 5% of total reported cases and have minimal impact on national total cases and rates. However, for a specific area, the discrepancies may be larger.

Reports and corrections sent to CDC on hardcopy forms through June 15, 1999 and for NETSS electronic data through July 19, 1999 have been included. Hardcopy data received after these dates will appear in subsequent issues. The data in the tables and figures 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. 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: US Government Printing Office, 1990; and *United States Population Estimates by Age, Sex and Race: 1989* [Series P-25, No. 1057]; Washington: US 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 1991-1997 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; *1991-1997 Estimates of the Population of Counties by Age, Sex and Race/Hispanic Origin: 1990 to 1997;* machine-readable data files). Rates for 1998 use population estimates for 1997.

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 counties in which the city is located. For the remaining cities, incidence rates were calculated by using population estimates based on the Bureau of the Census (Irwin R, see above) and a marketing survey (Market Statistics, Inc; *Sales and Marketing Management*; New York: Bill Communications, Inc, August 1989).

1980-1988 population estimates 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: US Government Printing Office, 1989). After 1988, population estimates for outlying areas were obtained directly from the health departments in these areas. For Puerto Rico and Virgin Islands, current population estimates through 1997 were obtained from their area's data centers. Rates for 1998 were based on the 1997 population estimates. Population estimates for Guam were updated through 1995 and were used to calculate rates for 1995-1998.

The percentage of cases for which race/ethnicity and age were unknown or unspecified differed considerably by year and area. States were excluded from analysis if race/ethnicity and age were not reported for the majority of cases. Otherwise, if race/ethnicity or age was unknown or unspecified, cases were distributed according to the distribution of cases for which these data were available. In this edition, 1981 through 1998 age- and race-specific rates (for chlamydia (1996-98 only), gonorrhea, and syphilis in the **National Profile**, **Special Focus Profiles** and **Detailed Tables**) are calculated from estimates based on this redistribution.

Rates of congenital syphilis for 1989-1998 were calculated using live births from the National Center for Health Statistics (NCHS) (Vital Statistics: Natality Tapes 1989-1996 or Vital Statistics Reports, United States 1998, Vol. 46 No.12—Natality). Race-specific rates for 1996-1998 were calculated using live births for 1996. Rates before 1989 were calculated using published live birth data (NCHS; Vital Statistics Report, United States, 1988 [Vol.1—Natality]).

Case Definitions and Reporting Practices

Although most areas generally adhere to the case definitions for STDs found in *Case Definitions for Infectious Conditions Under Public Health Surveillance (MMWR* 1997;46(RR-10):1-56), there are differences between individual areas in case definitions as well as in the policies and systems for collecting surveillance data. Thus, comparisons of case numbers and rates between 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, 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 Congenital Syphilis Cases

In 1988, a new surveillance case definition for congenital syphilis was introduced. The new case definition has greater sensitivity than the former definition. In addition, many areas greatly enhanced active case finding for congenital syphilis during this time. For these reasons, the number of reported cases increased dramatically during 1989-1991. As is true of any change, 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 after January 1, 1992. Therefore, the reliability of trends is expected to have stabilized after this date.

In addition to changing the case definition, 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 collects individual case information which allows more thorough analysis of cases. For the purposes of these analyses 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 have been reported by state and city of residence of the mother for 1995-1998.

Reporting of Syphilis Cases

Cases of unknown duration have been counted with late and late latent syphilis.

Reporting of Gonorrhea Cases

In 1994, Georgia reported gonorrhea cases to CDC for only part of a year. Therefore, Georgia cases and population were excluded from gonorrhea figures and tables for 1994. The city of Atlanta was also excluded from city gonorrhea figures and tables for 1994.

For more details on GISP gonorrhea cases, refer to the following annual publication: Division of STD Prevention. *Sexually Transmitted Disease Surveillance 1997 Supplement: Gonococcal Isolate Surveillance Project (GISP) Annual Report 1997*, U.S. Department of Health and Human Services, Public Health Service. Atlanta: Centers for Disease Control and Prevention, October 1998.

Reporting of Chlamydia Cases

In 1998, New York was the only state that did not yet have laws or policies for uniform reporting of *Chlamydia trachomatis* cases. Chlamydia cases for New York were exclusively based on cases reported by New York City (i.e., no cases were reported outside of New York City). When calculating U.S. total rates, the population denominators were adjusted to include only the New York City population. Trends in many areas were more representative of increases in reporting of cases rather than actual trends in disease. Cases and rates of chlamydia reported in gender-specific tables are underestimated due to some reported cases with unknown gender. Despite problems with under-reporting, it is important to publish the 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.

Chlamydia test positivity was calculated by dividing the number of women testing positive for chlamydia (numerator) by the total number of women tested for chlamydia (denominator) and was expressed as a percentage. While not common, the denominator may contain multiple tests from the same individual if that person was tested more than once during a year. Various chlamydia test methods were used and no adjustments of test positivity were made based on test type. Chlamydia testing data for region- and state-specific figures were published with permission from the HHS Regional Infertility Prevention Programs, selected state STD prevention programs, and the Job Corps, U.S. Department of Labor. Health and Human Services (HHS) regions 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.

For more details on chlamydia prevalence, refer to the following annual publication: Division of STD Prevention. *Sexually Transmitted Disease Surveillance 1997 Supplement: Chlamydia Prevalence Monitoring Project Annual Report 1997*, U.S. Department of Health and Human Services, Public Health Service. Atlanta: Centers for Disease Control and Prevention.

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 1966-1998). For more information on this database, contact IMS America, Ltd., 660 West Germantown Pike, Plymouth Meeting, PA 19462; Telephone: (610) 834-5000.

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 1980-1997), 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 1995-1997) 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 2000 Revisions

In 1995, the Healthy People year 2000 objectives were revised[1]. The year 2000 objectives for the diseases in this report were revised as follows: primary and secondary syphilis—10 per 100,000 population to 4; congenital syphilis—50 per 100,000 livebirths to 40; and gonorrhea —225 per 100,000 population to 100.

Urban Rural Categorization Method

Aggregate county-specific case report data on P&S syphilis are submitted monthly by state health departments (via Form CDC-73. 998) to the Centers for Disease Control and Prevention (CDC). These P&S syphilis case report data were summarized using urban-to-rural continuum codes for metro and nonmetro counties that were developed by the U.S. Department of Agriculture (USDA)[2] and incorporated the Office of Management and Budget's (OMB) official metro status based on the results of the 1990 Population Census[3]. The 1993 urban-rural continuum codes form a classification scheme that distinguishes metropolitan counties by size, and nonmetropolitan counties by degree of urbanization and proximity to metro areas. The standard Office of Management and Budget (OMB) metro and nonmetro categories have been subdivided into four metro and six nonmetro categories[2]. The county-specific USDA codes used to place counties into urban-to-rural categories are as follows:

U.S. Department of Agriculture Urban-to-Rural Continuum Codes for Metro and Nonmetro Counties (as of June 1993)

Code	Metro Counties:
0	Central counties of metro areas of 1 million population or more
1	Fringe counties of metro areas of 1 million population or more
2	Counties in metro areas of 250,000 to 1 million population
3	Counties in metro areas of fewer than 250,000 population
	Nonmetro Counties:
4	Urban population of 20,000 or more, adjacent to a metro area
5	Urban population of 20,000 or more, not adjacent to a metro area
6	Urban population of 2,500 to 19,999, adjacent to a metro area
7	Urban population of 2,500 to 19,999, not adjacent to a metro area
8	Completely rural or fewer than 2,500 urban population, adjacent to a metro area
9	Completely rural or fewer than 2,500 urban population, not adjacent to a metro area

An aggregate *urban* category (codes 0, 2, and 3) was defined to include central counties with at least one million or more persons (code 0) and non-fringe counties in metro areas (codes 2 and 3). Fringe metro counties (code 1) were combined with the non-metro counties adjacent to a metro area and with an urban population of at least 2,500 population (codes 4 and 6) to form an aggregate category designated as *peri-urban* (codes 1, 4, and 6). An aggregate *peri-rural* category was defined to include nonmetro counties not adjacent to a metro area and with an urban population of at least 2,500 population (codes 5 and 7), and an aggregate *rural* (codes 8 and 9) category was defined to include nonmetro counties that were completely rural or had fewer than 2,500 urban population.

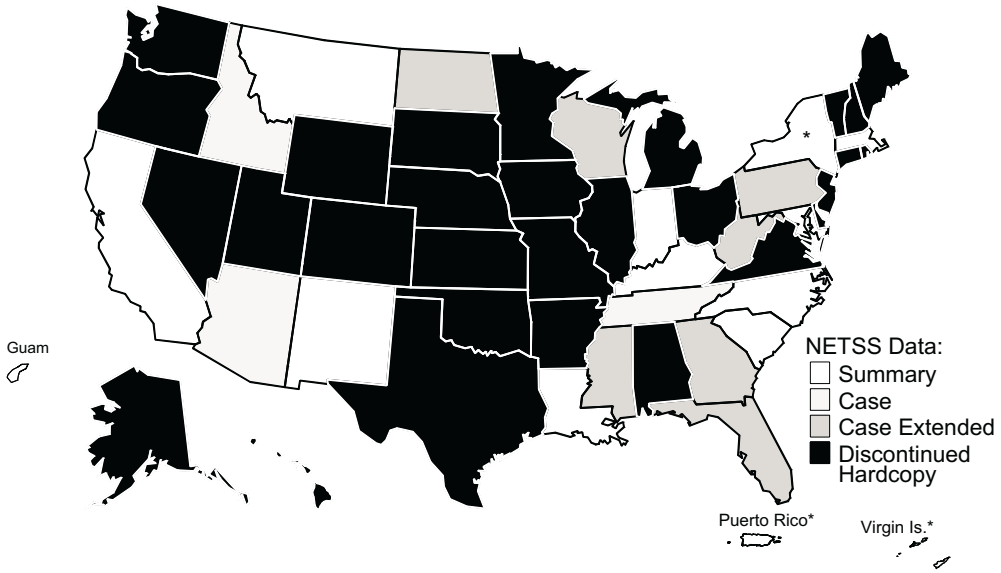
---

[1]Department of Health and Human Services. Healthy People 2000: Midcourse Review and 1995 Revisions. U.S. Department of Health and Human Services, Public Health Service. U.S. Government Printing Office, Washington, D.C., 1995.

[2]Rural-Urban Continuum Codes for Metro and Nonmetro Counties, 1993. Butler MA, Beal CL, Agriculture and Rural Economy Division, Economic Research Service, U.S. Department of Agriculture. Staff Report No. AGES 9425, September 1994.

[3]Federal Register, Part IV, Office of Management and Budget, Revised Standards for Defining Metropolitan Areas in the 1990's. Vol .55 No.62, Friday March 30, 1990.

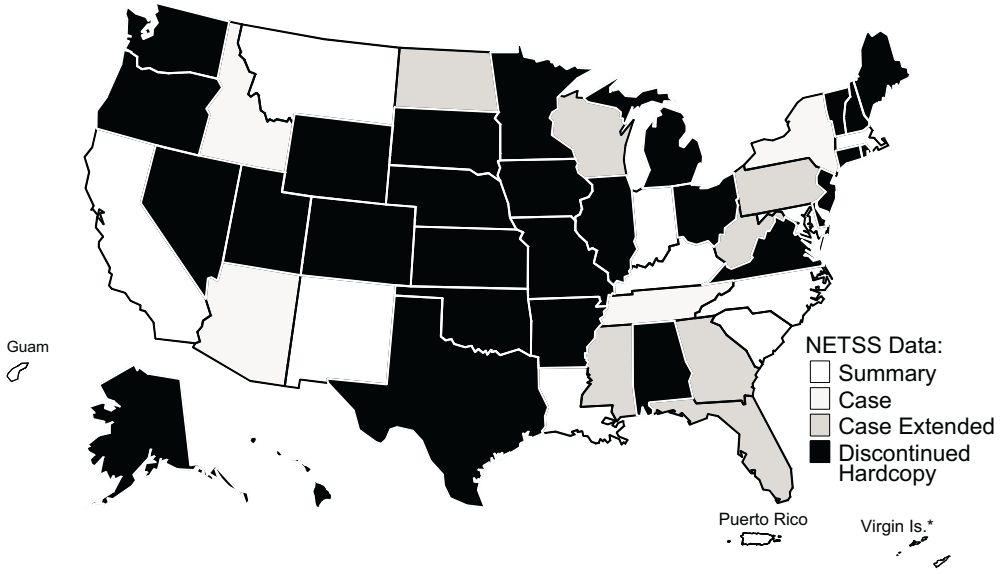
Figure A1. Chlamydia — National electronic telecommunications surveillance system (NETSS) transmission status by state, 1998



*Upstate New York (New York City reports summary chlamydia records to NETSS), Washington, DC, Puerto Rico and Virgin Islands did not report.

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

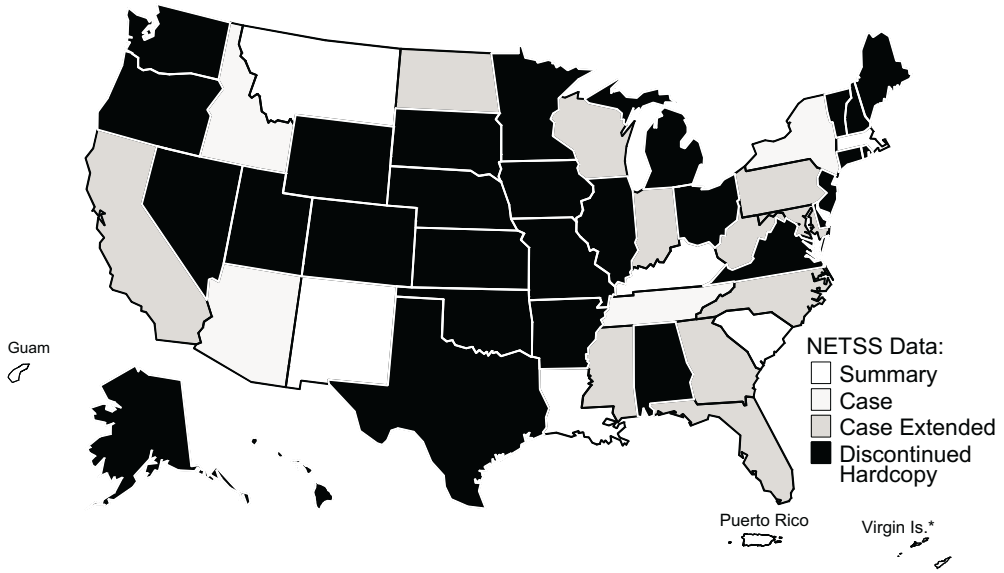
Figure A2. Gonorrhea — National electronic telecommunications surveillance system (NETSS) transmission status by state, 1998



* Virgin Islands did not report.

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

Figure A3. Primary and secondary syphilis — National electronic telecommunications surveillance system (NETSS) transmission status by state, 1998



*Virgin Islands did not report.

Note: Large city projects transmit records in the same format as states.

Table A1. Healthy People 2000 Sexually Transmitted Diseases Objective 19.1–19.8 Status

	Objective	Baseline Year	Baseline	1994	1995	1996	1997	1998	2000
19.1	**Gonorrhea (per 100,000 persons)**	1989	300	166	149	123	122	133	100
	a. Black (non-Hispanic)	1989	1,990	1,163	1,046	817	802	862	650
	b. Adolescents 15-19 years	1989	1,123	734	671	544	522	561	375
	c. Female 15-44 years	1989	501	315	299	259	261	292	175
19.2	**Chlamydia prevalence among females 15-24 years**								
	Female 15-19 years	1988	12.2%	—-	6.7%	5.4%	—-	6.9%*	5%
	Female 20-24 years	1988	8.5%	—-	4.2%	3.4%	—-	4.4%*	5%
19.3	**Primary and secondary syphilis (per 100,000 persons)**	1989	18.1	7.9	6.3	4.3	3.2	2.6	4
	a. Black	1989	118	57	45	30	22	17	30
19.4	**Congenital syphilis (per 100,000 live births)**	1990	91.0	55.8	47.4	33.3	27.5	20.6	40
	a. Black	1992	[a]417.8	249.6	213.2	150.5	122.7	87.0	175
	b. Hispanic	1992	[a]134.6	73.8	61.2	38.9	33.5	27.9	50
19.5	**Annual number of first time consultations**[1]								
	Genital herpes	1988	163,000	142,000	160,000	208,000	176,000	188,000	138,500
	Genital warts	1988	290,000	238,000	253,000	191,000	145,000	211,000	246,500
19.6	**Pelvic inflammatory disease**								
	Hospitalizations per 100,000 females 15-44 years	1988	311	177	162	164	157	—-	100
	Initial visits to physicians (number of visits)[1]	1988	430,800	332,000	262,000	286,000	261,000	234,000	290,000
	Hospitalizations per 100,000 females								
	a. Black 15-44 years	1988	655	378	296	320	281	—-	150
	b. Adolescents 15-19 years	1988	342	184	141	168	186	—-	110
19.7**	**Sexually transmitted Hepatitis B (number of cases)**	1987	47,593	35,077	[2]29,446	—-	—-	—-	30,500
19.8	**Repeat gonorrhea infection in last 12 months**	1987	20%	18.6%	18.4%	18.5%	17.0%	17.5%	15%
	a. Black	1992	21.3%	20.3%	20.1%	19.8%	18.3%	18.6%	17%

—-Data not available.
[a]Baseline has been revised.
[1]As measured by first-time visits to physicians' offices.
[2]Data are provisional.

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

Data Sources

Objective number	Data Source
19.1,19a-c	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.2	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.3, 19.3a	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.4	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.5	National Disease and Therapeutic Index, IMS America, Ltd.
19.6, 19.6a-b	For hospitalizations, National Hospital Discharge Survey, CDC, NCHS. For number of visits, National Disease and Therapeutic Index, IMS America, Ltd.
19.7**	Viral Hepatitis Surveillance System, CDC, NCID.
19.8	Gonococcal Isolate Surveillance Project, CDC, NCHSTP.

*Positivity not adjusted for changes in laboratory test method in 1998 and associated increases in test sensitivity.
**Duplicate Objective.

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 24, 1999.

	Project Directors	Program Managers	Epidemiologists
Alabama	Charles H. Woernle, M.D., M.P.H.	Mike O'Cain	J.P. Lofgren, M.D.
Alaska	John P. Middaugh, M.D.	Wendy Craytor	John P. Middaugh, M.D.
Arizona	Chris Brown	Frank Slaughter	Lee A. Bland, M.A., M.P.H.
Arkansas	Martha Hiett	Gary Horton	Thomas McChesney, D.V.M.
California	Gail Bolan, M.D.	Tom Ault	Duc J. Vugia, M.D., M. P.H.
Los Angeles	Robert H. Settlage, M.D. (acting)	A. Michael Lawrence, M.P.A.	Duc J. Vugia, M.D., M. P.H.
San Francisco	Jeffrey Klausner, M.D.	Wendy Wolf, M.P.A.	Duc J. Vugia, M.D., M. P.H.
Colorado	Ellen Mangione, M.D., M.P.H.	Nancy Spencer, M.P.H.	Richard E. Hoffman, M.D., M.P.H.
Connecticut	James L. Hadler, M.D., M.P.H.	Heidi Jenkins	James L. Hadler, M.D., M.P.H.
Delaware	James C. Welch, R.N.	Paulette Jackson	A. LeRoy Hathcock, Ph.D.
District of Columbia	M. Ricardo Calderon, M.D., M.P.H.	Peter Moore	Martin E. Levy, M.D., M.P.H.
Florida	Landis Crockett, M.D., M.P.H.	Jack E. Wroten	Richard S. Hopkins, M.D., M.S.P.H.
Georgia	William C. Fields	Mark Schrader	Kathleen E. Toomey, M.D., M.P.H.
Hawaii	Peter Whiticar	Roy Ohye	Paul Effler, M.D., M.P.H.
Idaho	Roger Perotto	Anne Williamson, M.H.E.	Christine G. Hahn, M.D.
Illinois	Charlie Rabins, M.P.H.	Charlie Rabins, M.P.H.	Shari L. Bornstein, M.D., M.P.H.
Chicago	Christine Kosmos	Janice M. Johnson	Shari L. Bornstein, M.D., M.P.H.
Indiana	Lori Phillips (acting)	Jim Beall	Robert Teclaw, D.V.M., Ph.D., M.P.H.
Iowa	Mary Weaver, R.N., M.S.N.	John Katz	Patricia Quinlisk, M.D., M.P.H.
Kansas	Gianfranco Pezzino, M.D., M.P.H.	R. Allen Mayer	Gianfranco Pezzino, M.D., M.P.H.
Kentucky	Clarkson Palmer, M.D., M.P.H.	David Raines	Glyn G. Caldwell, M.D.
Louisiana	Thomas Farley, M.D., M.P.H.	Jim Scioneaux	Louise McFarland, Dr.P.H.
Maine	Sally Lou Patterson	Bob Woods	Kathleen F. Gensheimer, M.D., M.P.H.
Maryland	Rafiq Miazad, M.D., M.P.H.	Dave Akers	Diane M. Dwyer, M.D.
Baltimore	David C. Rose, M.D., F.A.A.P.	Wayne Brathwaite	Diane M. Dwyer, M.D.
Massachusetts	Paul Etkind, M.P.H.	Paul Etkind, M.P.H.	Alfred DeMaria, Jr., M.D.
Michigan	David R. Johnson, M.D.	Mark A. Miller	Matthew L. Boulton, M.D., M.P.H.
Minnesota	Jill M. DeBoer, M.P.H.	Jill M. DeBoer, M.P.H.	Richard Danila, Ph.D., M.P.H.
Mississippi	Robert Hotchkiss, M.D.	Mike Cassell	Mary Currier, M.D., M.P.H.
Missouri	Mahree Skala, M.A.	Mary Menges	Denny H. Donnell, Jr., M.D., M.P.H.
Montana	Kathleen Martin	Sally Klein, R.N.	Todd A. Damrow, Ph.D., M.P.H.
Nebraska	Christine M. Newlon	Dan Harrah	Thomas J. Safranek, M.D.
Nevada	Yvonne Silva	Robert Nellis	Randall Todd, Dr.P.H.
New Hampshire	David R. Ayotte, M.S.P.H.	David R. Ayotte, M.S.P.H.	Jesse Greenblatt, M.D., M.P.H.
New Jersey	Janet DeGraaf, M.P.A.	Jerry Carolina	Eddy A. Bresnitz, M.D., M.S.
New Mexico	Susan Eastman	Al Chowning	Mack C. Sewell, Dr.P.H., M.S.
New York	F. Bruce Coles, D.O.	F. Bruce Coles, D.O.	Perry F. Smith, M.D.
New York City	Isaac Weisfuse, M.D., M.P.H.	Steve Rubin	Perry F. Smith, M.D.
North Carolina	Evelyn M. Foust, M.P.H.	Paul Esbrandt	Newton J. MacCormack, M.D., M.P.H.
North Dakota	Fred F. Heer	Kirby Kruger	Larry Shireley, M.S., M.P.H.
Ohio	J. Nick Baird, M.D.	J. Nick Baird, M.D.	Forrest W. Smith, M.D.
Oklahoma	William R. Pierson, M.B.A.	Mark Turner, M.P.H.	Michael Crutcher, M.D., M.P.H.
Oregon	David W. Fleming, M.D.	Doug Harger	David W. Fleming, M.D.
Pennsylvania	Michelle Patrick, M.P.A.	Ed Powers	James T. Rankin, Jr., D.V.M., Ph.D., M.P.H.
Philadelphia	Robert Levenson	Martin Goldberg	James T. Rankin, Jr., D.V.M., Ph.D., M.P.H.
Rhode Island	Tom Bertrand	Tom Bertrand	Utpala Bandy, M.D., M.P.H.
South Carolina	Lynda Kettinger, M.P.H.	Tim Lindman	James Jerome Gibson, M.D., M.P.H.
South Dakota	John N. Jones	David Morgan	Sarah L. Patrick, M.P.H., Ph.D.
Tennessee	William L. Moore, Jr., M.D.	Chris Freeman	William L. Moore, Jr., M.D.
Texas	Charles E. Bell, M.D.	Casey S. Blass	Dennis M. Perrotta, Ph.D.
Utah	Craig R. Nichols, M.P.A.	Cristie Chesler	Craig R. Nichols, M.P.A.
Vermont	Peter D. Galbraith, D.M.D., M.P.H.	Marilyn Richards	Peter D. Galbraith, D.M.D., M.P.H.
Virginia	Grayson B. Miller, Jr., M.D., M.P.H.	Casey Riley	Robert B. Stroube, M.D., M.P.H.
Washington	Larry Klopfenstein	Larry Klopfenstein	Juliet VanEenwyk, Ph.D.
West Virginia	Loretta E. Haddy, M.S., M.A.	Robert Johnson	Loretta E. Haddy, M.S., M.A.
Wisconsin	Herb Bostrom	Anthony Wade	Jeffrey P. Davis, M.D.
Wyoming	Jimm Murray	Roger Burr	Karl Musgrave, D.V.M., M.P.H.
American Samoa	Joseph Tufa, D.S.M., M.P.H.	Tai Ripley, R.N.	Joseph Tufa, D.S.M., M.P.H.
Federated States of Micronesia	Eliuel K. Pretrick, M.O., M.P.H.	Kidsen K. Iohp, M.P.H.	Jean Paul Chaine
Government of the Marshall Islands	Donald F. Copelle	Peter Bien	Tom D. Kijiner
Guam	Dennis Rodriguez	Josie O'Mallen	Robert L. Haddock, D.V.M., M.P.H.
Puerto Rico	Orlando Lopez, M.D.	Nelson Colon-Cartagena	Carmen Deseda, M.D.
Republic of Palau	Anthony Pollai, M.D.	Caleb T. Otto, M.D.	Jill McCready, M.S., M.P.H.
Virgin Islands	Wilbur K. Callender, M.D.	Paul Arguin, M.D.	Jose Poblete, M.D., SACS, FICA