

# **Sexually Transmitted Disease Surveillance 2005**

**Division of STD Prevention  
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DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Centers for Disease Control and Prevention  
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## Selected STD Surveillance and Prevention References and Websites

### Supplemental STD Surveillance Reports – 2005

- 2005 Chlamydia Prevalence Monitoring Project: <http://www.cdc.gov/std/chlamydia2005/>
- 2005 Gonococcal Isolate Surveillance Project: <http://www.cdc.gov/std/GISP2005/>
- 2005 Syphilis Surveillance Project: <http://www.cdc.gov/std/Syphilis2005/>

### STD Surveillance Reports 1993 – 2005

- [http://www.cdc.gov/nchstp/dstd/Stats\\_Trends/Stats\\_and\\_Trends.htm](http://www.cdc.gov/nchstp/dstd/Stats_Trends/Stats_and_Trends.htm)

### STD Data on Wonder

- <http://wonder.cdc.gov/sexu00.html>

### STD Fact Sheets

- [http://www.cdc.gov/std/healthcomm/fact\\_sheets.htm](http://www.cdc.gov/std/healthcomm/fact_sheets.htm)

### STD Treatment Guidelines

- <http://www.cdc.gov/STD/treatment/>

### STD Program Operation Guidelines

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

### Recommendations for Public Health Surveillance of Syphilis in the United States

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

### Behavioral Surveillance

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

# Foreword

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

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

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<sup>1</sup>Concluding statement from the Institute of Medicine’s Summary Report, *The Hidden Epidemic: Confronting Sexually Transmitted Diseases*, National Academy Press, Washington, DC, 1997, p.43.

# Preface

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*Sexually Transmitted Disease Surveillance, 2005* presents statistics and trends for sexually transmitted diseases (STDs) in the United States through 2005. This annual publication is intended as a reference document for policy makers, program managers, health planners, researchers, and others who are concerned with the public health implications of these diseases. ***The figures and tables in this edition supersede those in earlier publications of these data.***

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

The STD surveillance systems operated by state and local STD control programs, which provide the case report data for chlamydia, gonorrhea, syphilis, and chancroid are the data sources of many of the figures and most of the statistical tables in this publication. These systems are an integral part of program management at all levels of STD prevention and control in the United States. Because of incomplete diagnosis and reporting, the number of STD cases reported to CDC is less than the actual number of cases occurring in the

United States population. Case report data for other STDs are not available because they are not nationally notifiable diseases.

*Sexually Transmitted Disease Surveillance, 2005* consists of four parts. The **National Profile** contains figures that provide an overview of STD morbidity in the United States. The accompanying text identifies major findings and trends for selected STDs. The **Special Focus Profiles** contain figures and text describing STDs in selected subgroups and populations that are a focus of national and state prevention efforts. The **Detailed Tables** provide statistical information about STDs at the county, metropolitan statistical area (MSA), regional, state, and national levels. The **Appendix** includes information on interpreting the STD surveillance data used to produce this report, Healthy People 2010 STD objectives, Government Performance and Results Act (GPRA) goals, and STD surveillance case definitions.

Selected figures and tables in this document identify goals that reflect progress towards some of the Healthy People 2010 (HP2010) national health status objectives for STDs.<sup>1</sup> **Appendix** Table A3 displays progress made towards the HP2010 targets for STDs. These targets are used as reference points throughout this edition of *Sexually Transmitted Disease Surveillance 2005*.

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

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

## **Acknowledgments**

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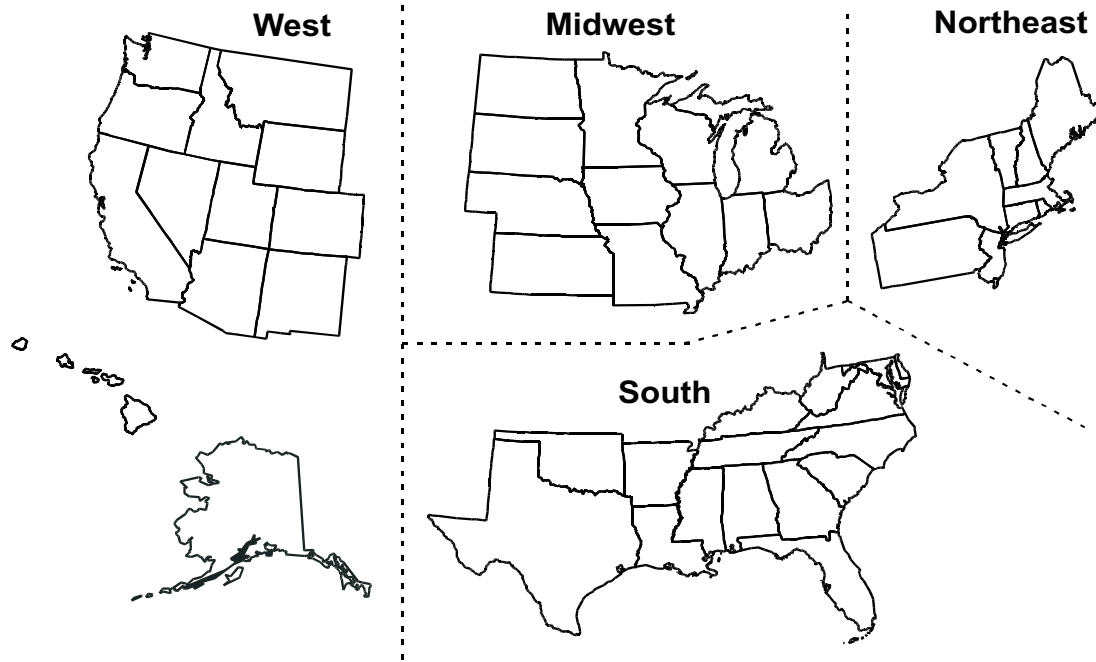
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**Interpreting STD Surveillance Data**

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## Geographic Divisions of the United States



### West

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

### Midwest

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

### South

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

### Northeast

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



# National Overview of Sexually Transmitted Diseases, 2005

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The logo on the cover of *Sexually Transmitted Disease Surveillance, 2005* is a reminder of the multifaceted, national dimensions of the morbidity, mortality, and costs that result from sexually transmitted diseases (STDs) in the United States. It highlights the central role of STD prevention in improving health among women and infants and in promoting HIV prevention. Organized collaboration among interested, committed public and private organizations is the key to reducing STDs and their related health burdens. As noted in the report of the Institute of Medicine, *The Hidden Epidemic: Confronting Sexually Transmitted Diseases*,<sup>1</sup> surveillance is a key component of our efforts to prevent and control these diseases.

This overview summarizes national surveillance data on the three diseases for which there are federally-funded control programs: chlamydia, gonorrhea, and syphilis. Several observations for 2005 are worthy of note.

## Chlamydia

In 2005, 976,445 cases of genital *Chlamydia trachomatis* infection were reported to CDC (Table 1). This case count corresponds to a rate of 332.5 cases per 100,000 population, an increase of 5.1% compared with the rate in 2004. Rates of reported chlamydia infections among women have been increasing annually since the late 1980s when public programs for screening and treatment of women were first established to avert pelvic inflammatory disease and related

complications. The continued increase in chlamydia case reports in 2005 most likely represents a continued increase in screening for this infection, but it may also reflect a true increase in morbidity.

In 2005, the overall rate of chlamydia infection in the United States among women (496.5 cases per 100,000 females) was over three times the rate among men (161.1 cases per 100,000 males), reflecting the large number of women screened for this disease (Tables 4 and 5). However, with the increased availability of urine testing, men are increasingly being tested for chlamydia infection. From 2001 through 2005, the chlamydia rate in men increased by 43.5% (compared with a 15.6% increase in women over this period).

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

In 2005, the median state-specific chlamydia test positivity among women 15 to 24 years old who were screened at selected family planning clinics in all states, the District of Columbia, Puerto Rico, and the Virgin Islands was 6.3% (range 3.0% to 20.3%) (Figure 8).

At selected prenatal clinics in 25 states, Puerto Rico, and the Virgin Islands the median state-specific chlamydia prevalence was 8.0% (range 2.8% to 16.9%) (Figure E).

The prevalence of infection is greater among economically-disadvantaged

women 16 to 24 years of age who entered the National Job Training Program in 2005 from 39 states, the District of Columbia, and Puerto Rico. The median state-specific prevalence was 9.2% (range 3.1% to 14.5%) (Figure K). Among men entering the program in 2005 from 48 states, the District of Columbia, and Puerto Rico the median state-specific chlamydia prevalence was 8.1% (range 0.0% to 14.8%) (Figure L).

The prevalence is even greater among adolescent women entering 57 juvenile detention centers; the median chlamydia positivity by facility was 14.2% (range 3.7% to 33.7%) (Table AA).

Among adolescent men entering 87 juvenile detention centers, the median chlamydia positivity was 6.0% by facility (range 0.0% to 44.8%) (Table AA).

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

## Gonorrhea

Following a 74% decline in the rate of reported gonorrhea from 1975 to 1997, overall gonorrhea rates appeared to plateau. In 2005, 339,593 cases of gonorrhea were reported in the United States, corresponding to a rate of 115.6 per 100,000 population, a slight increase from 2004 (Figure 11 and Table 1). This rate considerably exceeds the Healthy People 2010 (HP2010) target of 19 cases per 100,000 population.

As in previous years, in 2005 the South had the highest gonorrhea rate among the four regions of the country (Table 12). However, the rate in the South has declined by 17.6% since 2001, and declines have also been observed in the Northeast. Minimal

change has been seen in the Midwest. In contrast, the rate in the West has increased by 35.4% from 60.2 cases per 100,000 population in 2001 to 81.5 cases in 2005.

For the fourth straight year, the gonorrhea rate in women in 2005 was slightly higher (119.1 per 100,000 population) than the rate among men (111.5 per 100,000 population) (Figure 12). As with chlamydia, rates of gonorrhea in women are particularly high in 15- to 19-year-olds, and in men, are highest in 20- to 24-year-olds (Figure 18). Although the gonorrhea rate among 15- to 19-year-olds has decreased in recent years, from 2004 to 2005 this rate increased 3.9% (Table 19). Similar to previous years, in 2005, African-American 15- to 19-year-old females had the highest gonorrhea rate of any age and race/ethnic group (2,814.0 cases per 100,000 population) (Table 20B). However, gonorrhea rates among both African-American men and women decreased from 2001 through 2005 (19.4% and 16.1%, respectively). In contrast, gonorrhea rates among both white men and women have increased between 2001 and 2005 (18.9% and 20.4%, respectively).

In 2005, data on gonorrhea prevalence in defined populations were available from several sources. These data showed a continuing high burden of disease in adolescents and young adults in some parts of the United States.

For 16- to 24-year-old women entering the National Job Training Program in 32 states and the District of Columbia in 2005, the median state-specific gonorrhea prevalence was 2.4% (range 0.0% to 6.6%).

Among men entering the program from 14 states, the median state-specific gonorrhea prevalence was 2.2% (range 0.0% to 6.1%).

Among women entering juvenile corrections facilities the median gonorrhea positivity was 4.7% (range 0.9% to 14.2%); the median gonorrhea positivity for men

entering juvenile corrections facilities was 1.0% (range 0.0% to 19.0%).

Among women entering adult corrections facilities, the median gonorrhea positivity was 2.8% (range 0% to 13.8%). In men, the median gonorrhea positivity was 2.3% (range 0.0 to 11.8%) in adult corrections facilities.

Among men who have sex with men attending eight STD clinics, the median clinic urethral positivity was 11% (range 8% to 14%).

There remains considerable geographic variation in the prevalence of fluoroquinolone-resistance within the United States, at least for heterosexuals, with rates highest in the Western part of the country. In the Gonococcal Isolate Surveillance Project (GISP), a sentinel surveillance project located in 27 STD clinics throughout the United States, the proportion of isolates among men who have sex with men (MSM) that were resistant to ciprofloxacin increased again in 2005 to 29%. The overall proportion of resistant isolates among heterosexuals was 3.8% in 2005, up from 2.9% in 2004. Fluoroquinolone-resistant isolates were identified in 25 of the 27 GISP clinics but prevalence was highest in Western sites.

## Syphilis

The rate of primary and secondary (P&S) syphilis reported in the United States decreased during the 1990s and in 2000 was the lowest since reporting began in 1941. The low rate of syphilis and the concentration of the majority of syphilis cases in a small number of geographic areas led to the development of the National Plan to Eliminate Syphilis from the United States, which was announced by the Surgeon General in 1999 and revised in 2006.<sup>2</sup> The rate of P&S syphilis in the United States declined by 89.7% from 1990 through 2000. However, the rate of P&S syphilis has increased each year since 2001,

mostly among men, but also in women for the past year. In 2005, P&S syphilis cases reported to CDC increased to 8,724 from 7,980 in 2004, an increase of 9.3%. The rate in men increased 8.5% while that in women increased 12.5%. Cases of congenital syphilis continued to decline; 329 cases of congenital were reported in 2005, down from 371 in 2004.

Although wide disparities exist in the rates of STDs among racial and ethnic groups, there has been a reduction in these differences for syphilis over the past five years. The P&S syphilis rate for 2005 among African Americans was 5.4 times the rate among whites, reflecting a substantial decline from 1999, when the rate among African Americans was 29 times greater than that among whites (Table 32B). While this has reflected decreasing rates among African Americans, it also reflects significant increases among white men during the past five years. In 2005, increases were observed among both African-American men (15.7 cases per 100,000 population, up from 13.9 in 2004) and African-American women (4.4 cases per 100,000 population, up from 4.2 in 2004). An increase was also observed among white men (3.3 cases per 100,000 population), up from 3.1 in 2004, while the rate in white women remained the same (0.3 per 100,000 population).

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

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

<sup>2</sup> Division of STD Prevention. *The National Plan to Eliminate Syphilis from the United States*. National Center for HIV, STD, and TB Prevention, Centers for Disease Control and Prevention, 2006.