Sexually Transmitted Disease Surveillance 2006 Supplement

Chlamydia Prevalence Monitoring Project Annual Report 2006

Division of STD Prevention
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In the May 2008 edition, Figure 10 has been corrected.

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The report is also available by Internet via the CDC home page at: **http://www.cdc.gov/std/Chlamydia2006/**. To view the State and City Profiles, please use the drop down boxes on **http://www.cdc.gov/std/Chlamydia2006/**.

Preface

Chlamydia Prevalence Monitoring Project Annual Report, 2006 presents statistics and trends for genital *Chlamydia trachomatis* infections in the United States through 2006. This annual publication is intended as a reference document for policy makers, program managers, health planners, researchers, and others who are concerned with the public health implications of this disease. 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 reporting from all 50 states, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands; and (2) prevalence data from the Regional Infertility Prevention Projects, the Corrections STD Prevalence Monitoring Project, and the National Job Training Program.

Chlamydia Prevalence Monitoring Project Annual Report, 2006 consists of four parts. The National Profile contains text and figures that provide an overview of chlamydia surveillance in sexually active women and men in the United States. It also includes the sources and limitations of the data used to produce this report. The Regional Profiles contain chlamydia trend data in women in all ten Health and Human Services regions. The State Profiles provide statistical information about chlamydia in women in all 50 states, Puerto Rico, and the Virgin Islands. The City Profiles provide statistical information about chlamydia in women for selected cities, including Washington, D.C.

Any comments and suggestions that would improve the usefulness of future publications are appreciated and should be sent to the Division of STD Prevention at DSTD@cdc.gov.

Acknowledgements

The publication of this report would not have been possible without the contributions of the State and Territorial Health Departments, the STD Control Programs, the Regional Infertility Prevention Projects, the Office of Population Affairs, the Corrections STD Prevalence Monitoring Project, and the National Job Training Program, which provided state and local surveillance data to the Centers for Disease Control and Prevention.

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NATIONAL PROFILE

NATIONAL PROFILE

Chlamydia Prevalence Monitoring Project Annual Report – 2006

The Centers for Disease Control and Prevention's (CDC) Chlamydia Prevalence Monitoring Project is a collaborative effort among the Regional Infertility Prevention Projects, federally-funded STD programs, state epidemiologists, public health laboratory directors, the U.S. Department of Labor, and the Indian Health Service (IHS). The purpose of the project is to monitor the prevalence of genital *Chlamydia trachomatis* infections among women screened for this infection in the United States through publicly-funded programs. The data presented on chlamydial infection in this report complement and supplement data presented in CDC's *Sexually Transmitted Disease Surveillance, 2006*.[1]

Introduction

Since 1988, CDC has supported screening programs for *Chlamydia trachomatis* infections and has monitored positivity to evaluate program impact. As documented by chlamydia case reporting (i.e., morbidity) data, case rates following initiation of chlamydia screening and treatment programs have resulted in increases in cases detected and reported. To minimize the impact of variation in chlamydia testing and reporting on the interpretation of surveillance data, CDC, states, and Regional Infertility Prevention Projects use screening positivity data to estimate chlamydia prevalence among selected populations. This report compares data on chlamydia prevalence in selected populations with data reported to CDC through the case reporting system.

Sources of Data

Regional Infertility Prevention Projects

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, as part of the development of the National Infertility Prevention Program (IPP), chlamydia screening services for women were initiated in three additional HHS regions (III, VII, VIII); in 1995, services were implemented in the remaining HHS regions (I, II, IV, V, VI, IX).[2,3] All regional projects, in collaboration with state STD control and family planning programs, have reported their chlamydia positivity data to CDC since 1997. In some of the HHS regions, federally-funded chlamydia screening supplements existing local- and state-funded testing programs. These publicly-funded programs support chlamydia screening primarily in family planning clinics, but also in some STD clinics, prenatal clinics, jails and juvenile detention centers, and other sites.

The 10 HHS regions referred to in the text and figures are as follows: Region I = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; Region II = New Jersey, New York, Puerto Rico, and U.S. Virgin Islands; Region III = Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia; Region IV = Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee; Region V = Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; Region VI = Arkansas, Louisiana, New Mexico, Oklahoma, and Texas; Region VII = Iowa, Kansas, Missouri, and Nebraska; Region VIII = Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming; Region IX = Arizona, California, Hawaii, and Nevada; and Region X = Alaska, Idaho, Oregon, and Washington.

State and Local Health Departments

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

Corrections Facilities

In 2006, 34 states reported chlamydia screening data from corrections facilities. These data were reported as part of the Corrections STD Prevalence Monitoring Project, the Regional Infertility Prevention Projects, or in response to CDC's request for data.

National Job Training Program

Since 1990, approximately 20,000 female National Job Training Program entrants have been screened each year for chlamydia, with all tests performed at a central contract laboratory.[4] Changes in test type for females occurred in 1998, switching from the EIA to the DNA hybridization probe (GenProbe PACE 2).[5] Beginning in 2000, a small proportion of females were screened using the strand displacement assay (BDProbeTec ET).[5] By 2006, most females were screened using the strand displacement assay. Since July 2003, male National Job Training Program entrants have also been screened for chlamydia using the strand displacement assay.[6] The National Job Training Program is primarily a residential job training program for urban and rural economically-disadvantaged youth aged 16 to 24 years at more than 100 sites throughout the country. The chlamydia test results from the National Job Training Program were used to calculate prevalence in this population.

Data Limitations

The interpretation of chlamydia data is complicated by several factors. First, case reports and prevalence data result from the use of several different types of diagnostic tests for chlamydial infection (e.g., direct fluorescent antibody, EIA, DNA probe assay, nucleic acid amplification); these tests vary in their sensitivity and specificity. Second, chlamydia positivity in women attending clinics is an estimate of prevalence; it is not true prevalence. Crude positivity may include those women who are tested two or more times during a single year. Comparisons of positivity with prevalence have shown that in family planning clinics, positivity is generally similar to or slightly higher than prevalence, and in STD clinics, positivity is somewhat lower than prevalence; however, these differences are usually small, with a relative difference of less than 10%.[7] Third, while nearly all family planning clinics perform universal screening of sexually active women < 20 years of age, and most clinics do so among women < 26 years of age, some selective screening is performed among women 20- to 25-years old and selective screening is frequently performed among women > 26 years of age. Fourth, while monitoring prevalence among persons seeking care at clinics provides important information on certain segments of the population, these data cannot be generalized to the population as a whole.

In the National Job Training Program data are limited to entrance exam testing; therefore, no one is included twice and true prevalence is ascertained. All persons entering the National Job Training Program are required to be tested.

As noted above, various laboratory test methods were used for all data. The figures presented in this report do not include an adjustment of test positivity based on laboratory test type and sensitivity, with the exception of Figures 7, 8, and those figures presented in the Regional Profiles. The chlamydia test results for each test type were weighted to reflect the sensitivity of the test used.[8] These test-specific sensitivities were defined as estimates from published evaluations of chlamydia screening tests.[9,10] Limitations of this adjustment include the fact that information regarding the type of test used may be missing, test sensitivity within a technology type and among laboratories may vary, and no adjustment for specificity or use of supplemental methods that could increase test sensitivity was utilized.

Chlamydia Data – 2006

Case reports

In 2006, 1,030,911 chlamydial infections were reported to CDC from 50 states and the District of Columbia. The reported number of cases of chlamydial infection was nearly three times greater than the reported cases of gonorrhea (358,366 gonorrhea cases were reported in 2006). From 1987 through 2006, the reported rate of chlamydial infection in women increased from 78.5 cases to 515.8 cases per 100,000 population (Figure 1). These increases in the reported national chlamydia rate likely represent increased chlamydia screening, increased use of nucleic acid amplification tests, which are more sensitive than other types of screening tests, and improved reporting, as well as the continuing high burden of disease.

In 2006, state- and outlying area-specific chlamydia rates among women ranged from 201.2 per 100,000 to 988.6 per 100,000 (Figure 2). This variation in rates reflects both state-specific differences in screening and reporting practices and true disease burden.

Chlamydia case rates continue to remain high in all races and ethnicities (Figure 3). In 2006, the rate of chlamydia among blacks was over eight times higher than that of whites (1275.0 and 153.1 cases per 100,000, respectively). In 2006, case rates were higher than 2005 case rates in all racial/ethnic groups, with the exception of Asian Pacific Islanders.

Among women, the highest age-specific rates of reported chlamydia in 2006 were among 15- to 19-year-olds (2862.7 cases per 100,000 females) and 20- to 24-year-olds (2797.0 cases per 100,000 females) (Figure 4).

Chlamydia positivity in women in family planning and prenatal clinics

In 2006, the median state-specific chlamydia test positivity in 15- to 24-year-old women who were screened at selected family planning clinics in all 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands was 6.7% (range: 2.8% to 16.9%) (Figures 5 and 6).

The effectiveness of large-scale screening programs in reducing chlamydia prevalence has been documented in areas where this intervention has been in place for several years.[11,12] After adjusting estimates in chlamydia positivity to account for changes in laboratory test methods and associated increases in test sensitivity,

chlamydia test positivity in women aged 15-24 years screened in family planning clinics decreased in three of 10 HHS regions from 2005 to 2006, increased in five regions, and remained the same in two regions (Figure 7). Similar trends in positivity are seen for adolescent women aged 15-19 years screened in family planning clinics (Figure 8). Over time, positivity in both age groups has remained fairly stable, with small fluctuations from year to year.

In 2006, the median state-specific chlamydia test positivity among 15- to 24-year-old women screened in selected prenatal clinics in 25 states, Puerto Rico, and the Virgin Islands was 8.1% (range: 3.5% to 16.7%) (Figure 9).

Chlamydia prevalence in National Job Training Program entrants

In women entering the National Job Training Program in 2006, based on their place of residence before program entry, state-specific chlamydia prevalence ranged from 4.9% to 20.0% in 40 states, the District of Columbia, and Puerto Rico (Figure 10). The median state-specific chlamydia prevalence was 13.1%.

In men entering the program from 48 states, the District of Columbia and Puerto Rico in 2006, the median state-specific chlamydia prevalence was 7.9% (range: 1.8% to 12.4%) (Figure 11).

Chlamydia positivity in women and men entering juvenile and adult corrections facilities

In 2006, data on the positivity of chlamydial infection in persons entering juvenile or adult corrections facilities were reported to CDC from 34 states (Tables 1 and 2). In adolescent women entering 57 juvenile detention facilities, the median facility-specific positivity for chlamydia was 14.2% (range: 2.8% to 29.4%). In women entering 40 adult corrections facilities, the median chlamydia positivity was 8.5% (range: 1.3% to 22.3%).

The median facility-specific chlamydia positivity in adolescent men entering 83 juvenile corrections facilities in 2006 was 5.3% (range: 0.5% to 46.7%). In men entering 60 adult corrections facilities, the median positivity was 8.9% (range: 0.9% to 26.7%).

References

[1]Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance, 2006*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, October 2007.

[2]Hillis S, Black C, Newhall J, Walsh C, Groseclose SL. New opportunities for chlamydia prevention: applications of science to public health practice. *Sex Transm Dis* 1995;22:70-5.

[3]Centers for Disease Control and Prevention. *Chlamydia trachomatis* genital infections - United States, 1995. *MMWR* 1997;46:193-8.

[4]Mertz KJ, Ransom RL, St. Louis ME, Groseclose SL, et al. Decline in the prevalence of genital chlamydial infection in young women entering a National Job Training Program. *Am J Pub Health* 2001;91(8);1287-90.

[5]Joesoef MR, Mosure DJ. Prevalence trends in chlamydial infections among young women entering the National Job Training Program, 1998-2004. *Sex Transm Dis* 2006;33(9):571-575.

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

[7]Dicker LW, Mosure DJ, Levine WC. Chlamydia positivity versus prevalence: what's the difference? *Sex Transm Dis* 1998;25:251-3.

[8]Dicker LW, Mosure DJ, Levine WC, Black CM, Berman SM. Impact of switching laboratory tests on reported trends in *Chlamydia trachomatis* infections. *Am J Epidemiol* 2000;151:430-5.

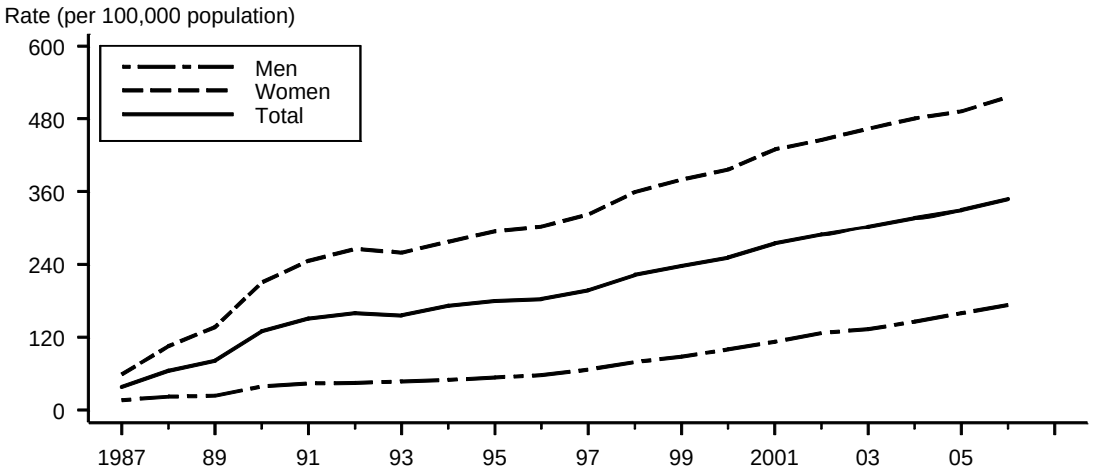
[9]Newhall WJ, DeLisle S, Fine D, et al. Head-to-head evaluation of five different non-culture chlamydia tests relative to a quality-assured culture standard. *Sex Transm Dis* 1994;21:s165-6.

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

[11]Addiss DG, Vaugh ML, Ludka D, Pfister J, Davis JP. Decreased prevalence of *Chlamydia trachomatis* infection associated with a selective screening program in family planning clinics in Wisconsin. *Sex Transm Dis* 1993;20:28-35.

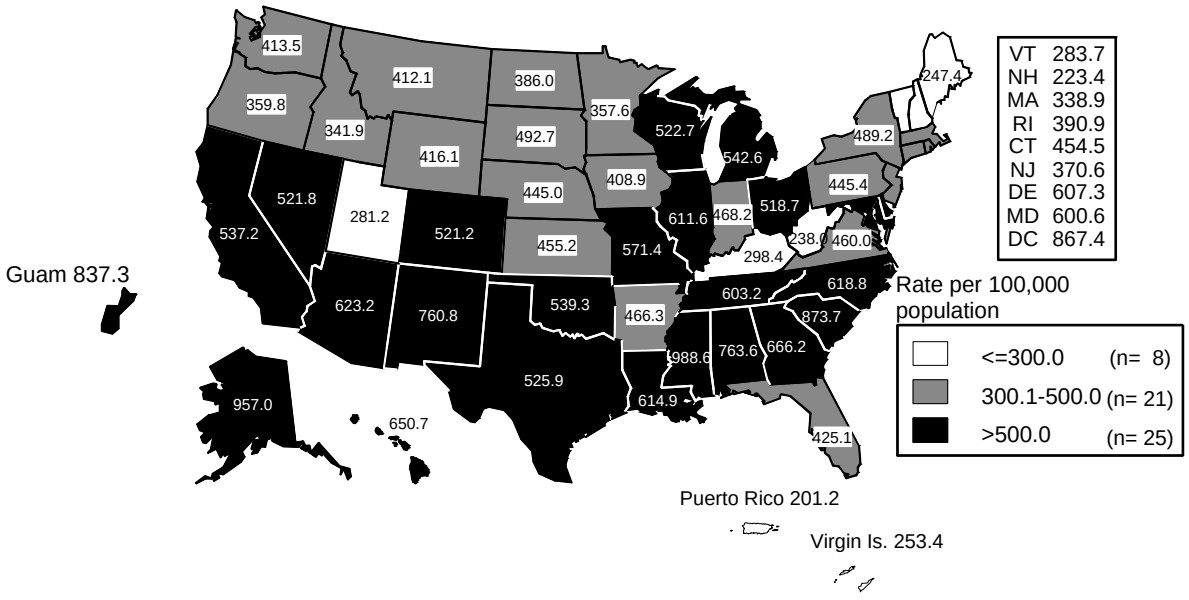
[12]Mertz KJ, Levine WC, Mosure DJ, Berman SM, Dorian KJ. Trends in the prevalence of chlamydial infections: the impact of community-wide testing. *Sex Transm Dis* 1997;24:169-75.

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



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

Figure 2. Chlamydia — Rates among women by state: United States and outlying areas, 2006



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

Figure 3. Chlamydia — Rates by race/ethnicity: United States, 1997–2006

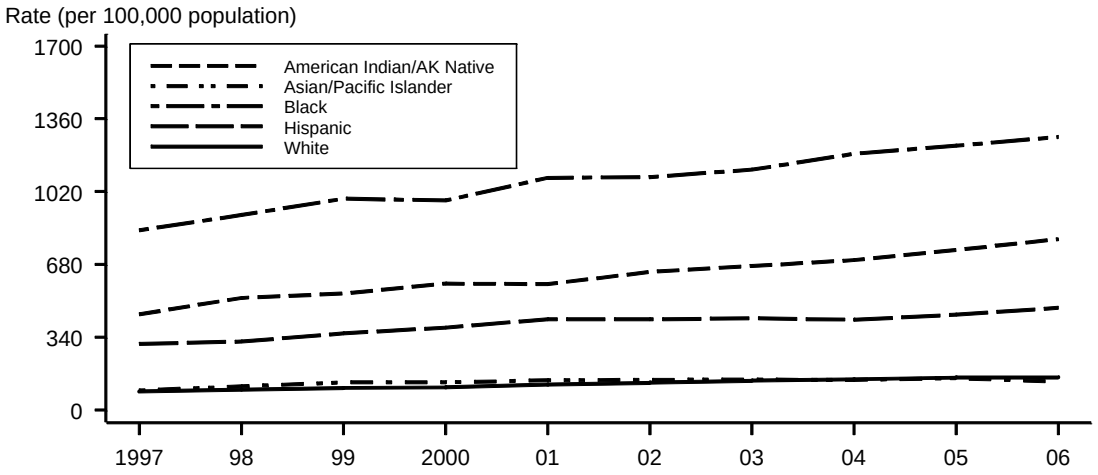


Figure 4. Chlamydia — Age- and sex-specific rates: United States, 2006

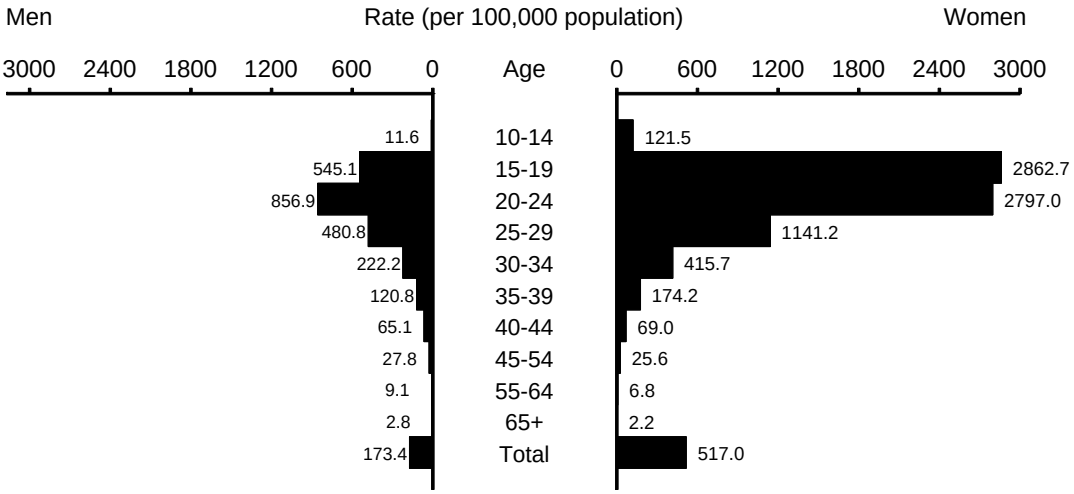
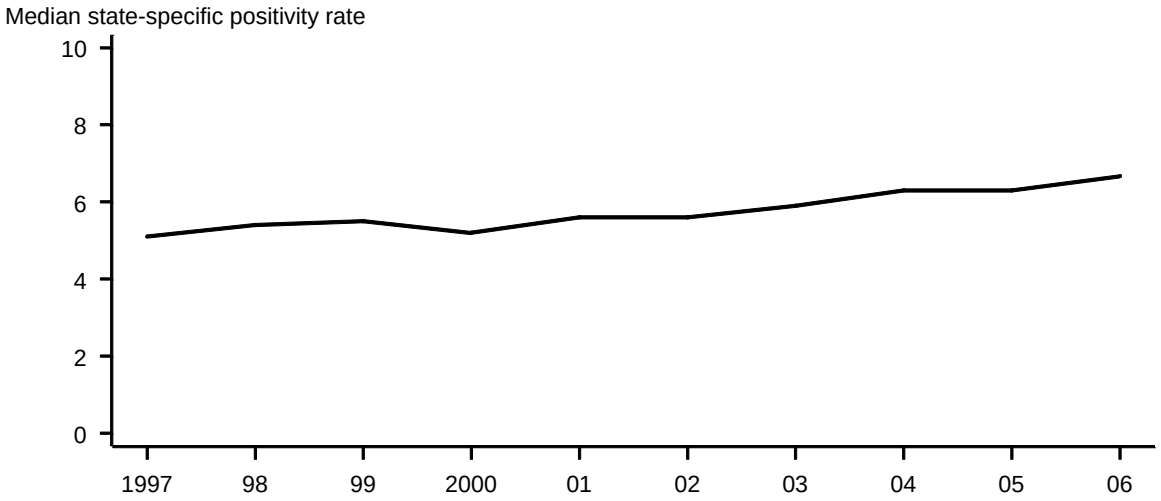


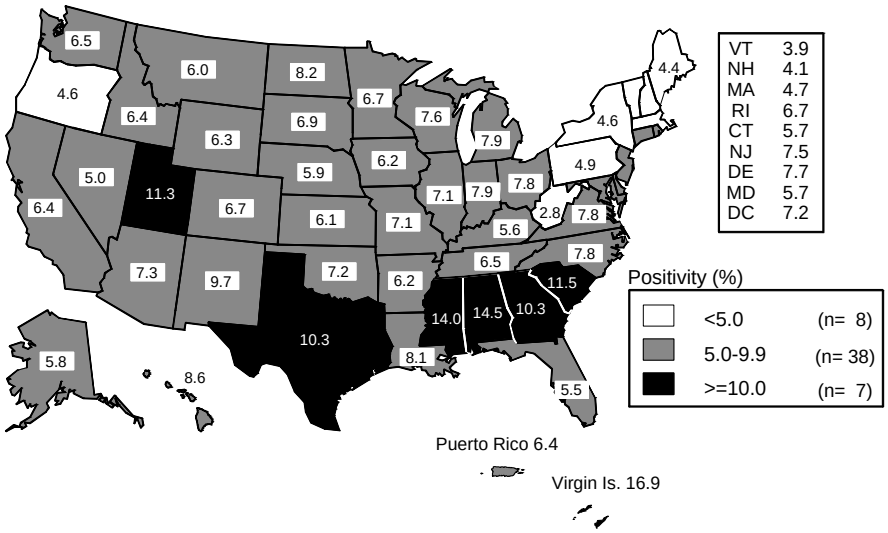
Figure 5. Chlamydia — Median state-specific positivity among 15- to 24-year-old women tested in family planning clinics: United States, 1997–2006



Note: As of 1997, all 10 Health and Human Services (HHS) regions, representing all 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands, reported chlamydia positivity data. See Sources of Data for definitions of HHS regions.

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

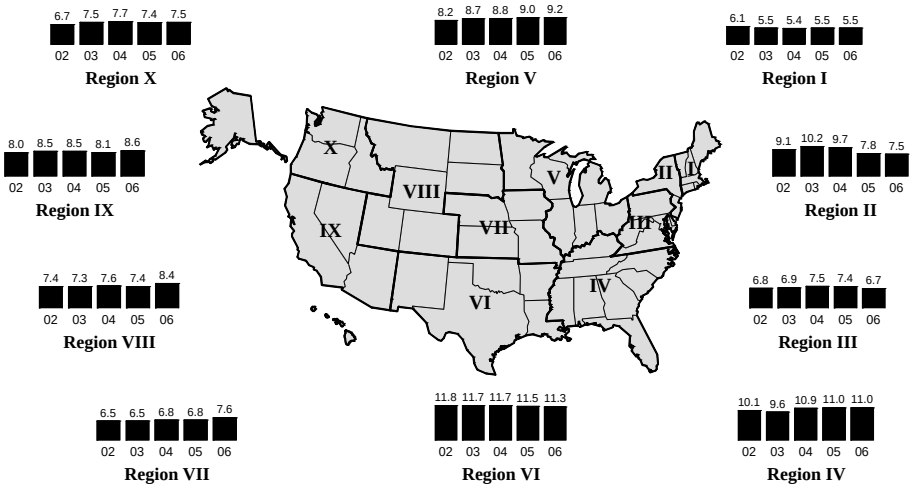
Figure 6. Chlamydia — Positivity among 15- to 24-year-old women tested in family planning clinics by state: United States and outlying areas, 2006



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

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

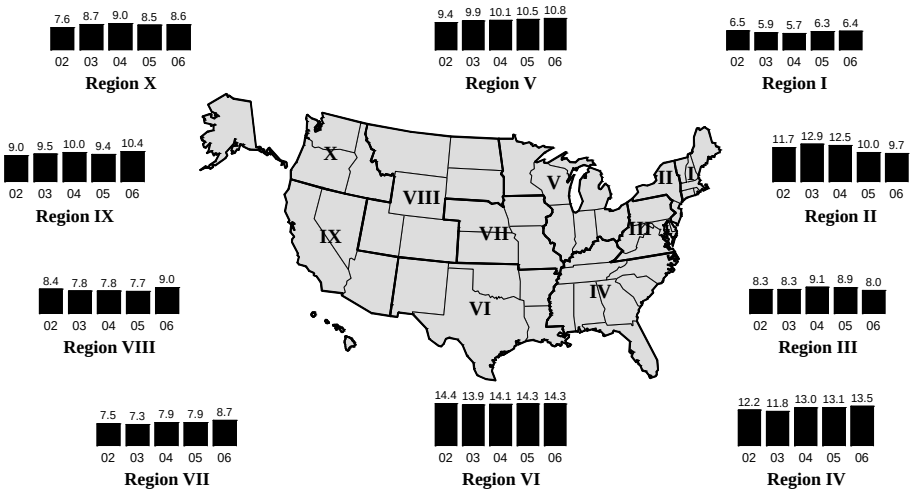
Figure 7. Chlamydia — Trends in positivity among 15- to 24-year-old women tested in family planning clinics by HHS region, 2002–2006



Note: Trends adjusted for changes in laboratory test method and associated increases in test sensitivity.

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

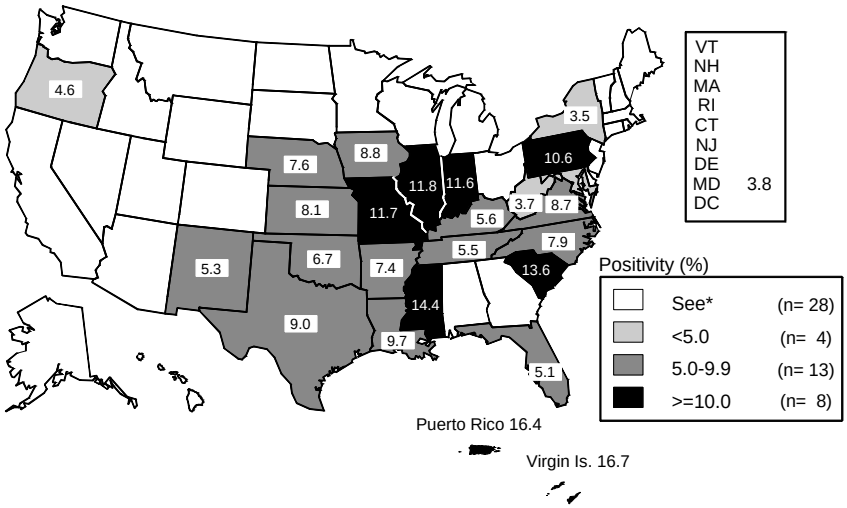
Figure 8. Chlamydia — Trends in positivity among 15- to 19-year-old women tested in family planning clinics by HHS region, 2002–2006



Note: Trends adjusted for changes in laboratory test method and associated increases in test sensitivity.

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

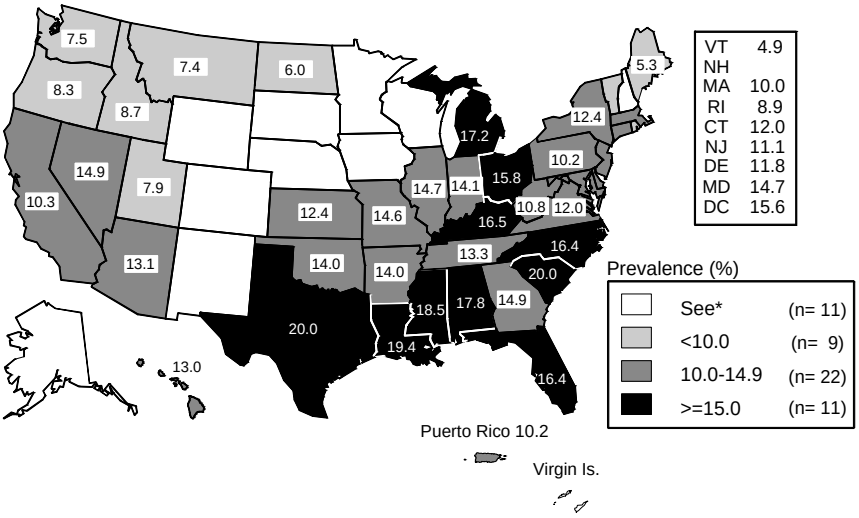
Figure 9. Chlamydia — Positivity in 15- to 24-year-old women tested in prenatal clinics by state: United States and outlying areas, 2006



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

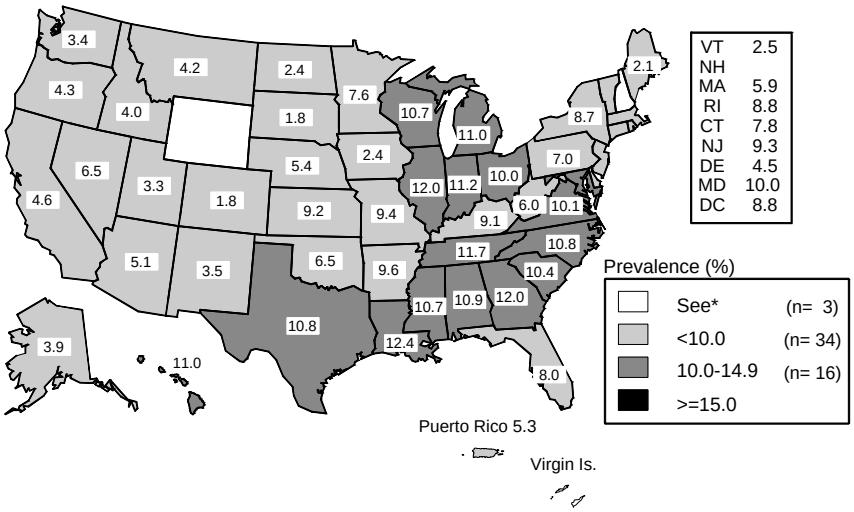
SOURCE: Regional Infertility Prevention Projects; Office of Population Affairs; Local and State STD Control Programs; Centers for Disease Control and Prevention

Figure 10. Chlamydia — Prevalence among 16- to 24-year-old women entering the National Job Training Program by state of residence: United States and outlying areas, 2006



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

Figure 11. Chlamydia — Prevalence among 16- to 24-year-old men entering the National Job Training Program by state of residence: United States and outlying areas, 2006



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

Table 1. Chlamydia – Positivity among men and women in juvenile corrections facilities, 2006

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

Table 2. Chlamydia – Positivity among men and women in adult corrections facilities, 2006

	Men			Women		
State	*No. of Facilities*	*No. of Tests*	*Median % Positivity (Range)*	*No. of Facilities*	*No. of Tests*	*Median % Positivity (Range)*
Arizona	6	1,137	14.3 (3.6-17.0)	4	1,736	11.9 (8.9-12.9)
California*	7	4,416	5.5 (3.1-7.9)	5	7,264	10.3 (4.6-18.2)
Delaware	1	776	5.9	2	960	9.2 (7.3-11.1)
Hawaii	0	—	—	2	235	12.3 (4.5-20.0)
Illinois	6	15,688	9.8 (8.5-10.9)	3	8,676	7.8 (4.8-8.3)
Indiana	1	1,928	8.5	1	834	12.6
Iowa	3	986	12.5 (9.7-19.2)	2	657	9.2 (2.8-15.7)
Maryland	1	573	6.3	0	—	—
Massachusetts	2	2,964	6.4 (5.6-7.1)	2	746	4.7 (3.8-5.6)
Michigan	3	717	12.3 (11.6-21.6)	0	—	—
Missouri	1	3785	6.6	1	824	4.9
Montana	0	-	.	1	191	2.6
Nebraska	3	1593	6.6 (5.5-16.7)	1	234	10.3
Nevada	1	297	12.5	1	190	15.8
New Mexico	1	338	9.2	0	—	—
New York	2	8,866	6.2 (3.7-8.7)	1	317	5.0
North Dakota	1	649	7.1	0	—	—
Oregon	2	236	17.6 (15.9-19.2)	1	229	3.5
Pennsylvania	5	2,730	12.1 (4.8-23.1)	3	811	7.3 (2.4-9.2)
South Carolina	1	451	10.6	1	211	8.1
Texas	5	4,693	9.1 (1.3-26.7)	4	2,093	18.7 (17.0-22.3)
Utah	0	—	—	1	153	17.6
Washington	0	—	—	1	668	4.9
West Virginia	3	1,133	1.8 (0.9-2.1)	0	—	—
Wisconsin	5	5,897	10.8 (5.1-15.4)	3	1,045	4.8 (1.3-5.8)
TOTAL	60	60,053	8.9 (0.9-26.7)	40	28,074	8.5 (1.3-22.3)

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

REGIONAL PROFILES

REGIONAL PROFILES

Regional Profiles

This section contains ten profiles on chlamydia positivity trends in family planning clinics, one for each of the ten HHS Regions. Each of the following profiles contains a map of the region and a bar graph showing trends in chlamydia positivity rates (Figure 1). Accompanying text describes the data and provides additional details, including the proportion of all chlamydia tests performed that were nucleic acid amplification tests (NAATs). NAATs are the most sensitive tests currently available for the detection of genital *Chlamydia trachomatis* infections and may be performed on a variety of biologic specimens.

The figure displaying chlamydia positivity trends consists of a stacked bar graph showing trends in both unadjusted and adjusted chlamydia rates. The solid, lower portion of the bar represents the chlamydia positivity rate, calculated by dividing the total number of positive chlamydia tests by the total number of positive and negative chlamydia tests. The hatched, upper portion of the bar designates the additional chlamydia positivity that may be due to differences in the test types used to identify chlamydial infections. The adjusted positivity rate is displayed above the hatched portion of the bar. Full details on the adjustment process are described in the Data Limitations section.

In 2006, the chlamydia positivity rate in 15- to 24-year-old women tested in family planning clinics in Region I was 4.7%, representing no change since 2005. Region I has been using nucleic acid amplification tests for all chlamydia testing (100%) in this population since 2004.

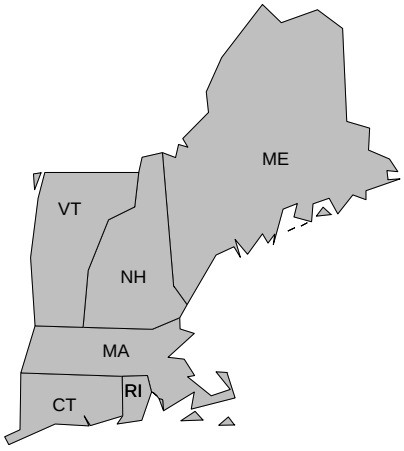
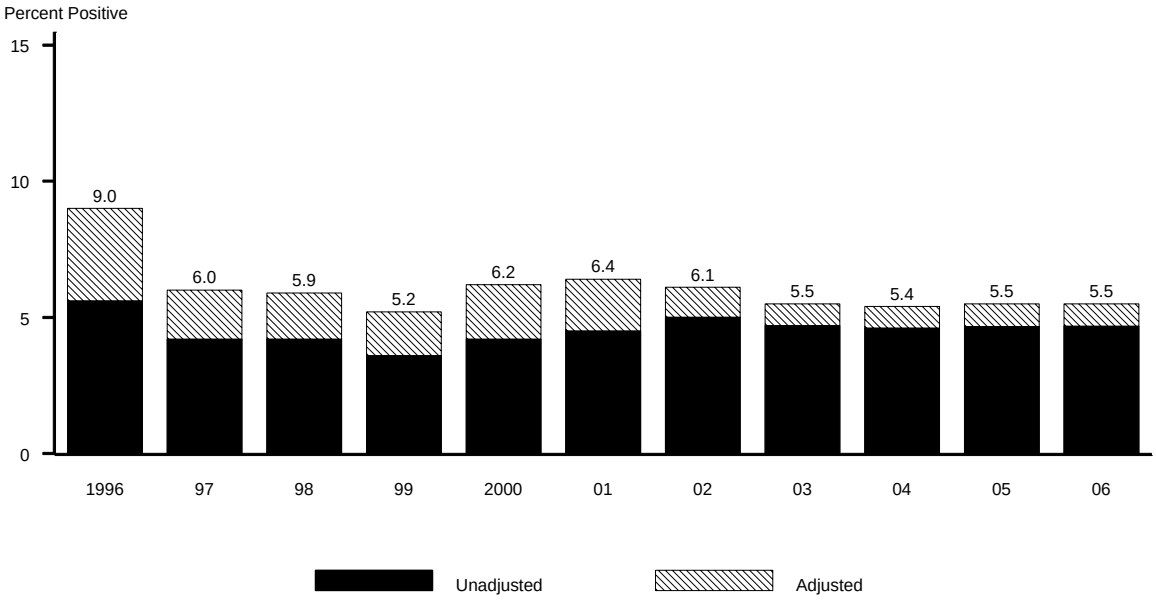


Figure 1. Chlamydia — Trends in positivity in 15- to 24-year-old women tested in family planning clinics: Region I, 1996-2006



Note: The adjusted positivity rate is displayed above the hatched portion of the bar. Trends are adjusted for changes in laboratory test method and associated increases in test sensitivity.

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

In 2006, the chlamydia positivity rate in 15- to 24-year-old women tested in family planning clinics in Region II was 5.6%, representing a slight decrease since 2005 (5.7% positivity). In 2006, 53.2% of all chlamydia tests reported in this population were nucleic acid amplification tests.

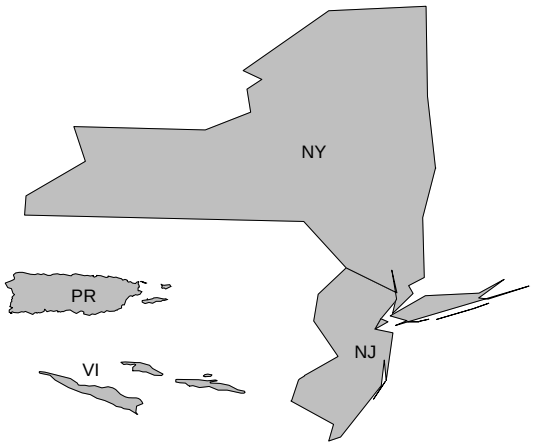
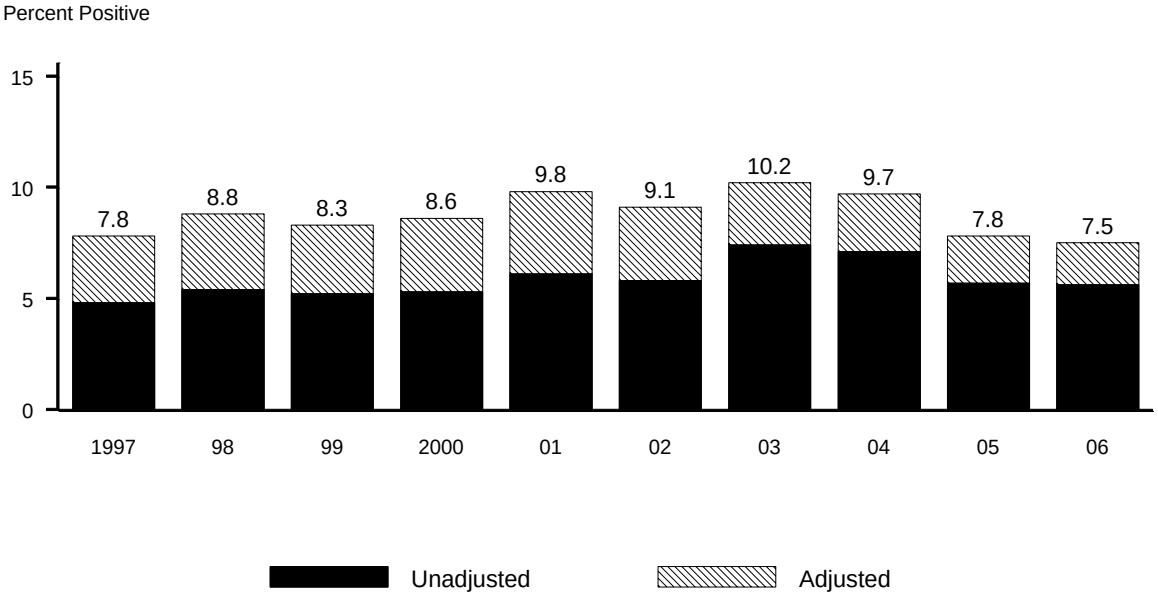


Figure 1. Chlamydia — Trends in positivity in 15- to 24-year-old women tested in family planning clinics: Region II, 1997-2006



Note: The adjusted positivity rate is displayed above the hatched portion of the bar. Trends are adjusted for changes in laboratory test method and associated increases in test sensitivity.

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

In 2006, the chlamydia positivity rate in 15- to 24-year-old women tested in family planning clinics in Region III was 5.4%, representing a slight decrease since 2005 (5.8% positivity). In 2006, 79.1% of all chlamydia tests reported in this population were nucleic acid amplification tests.

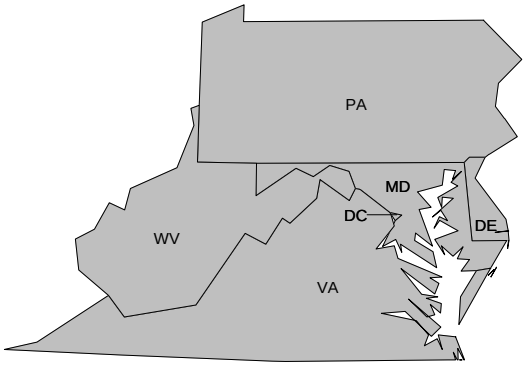
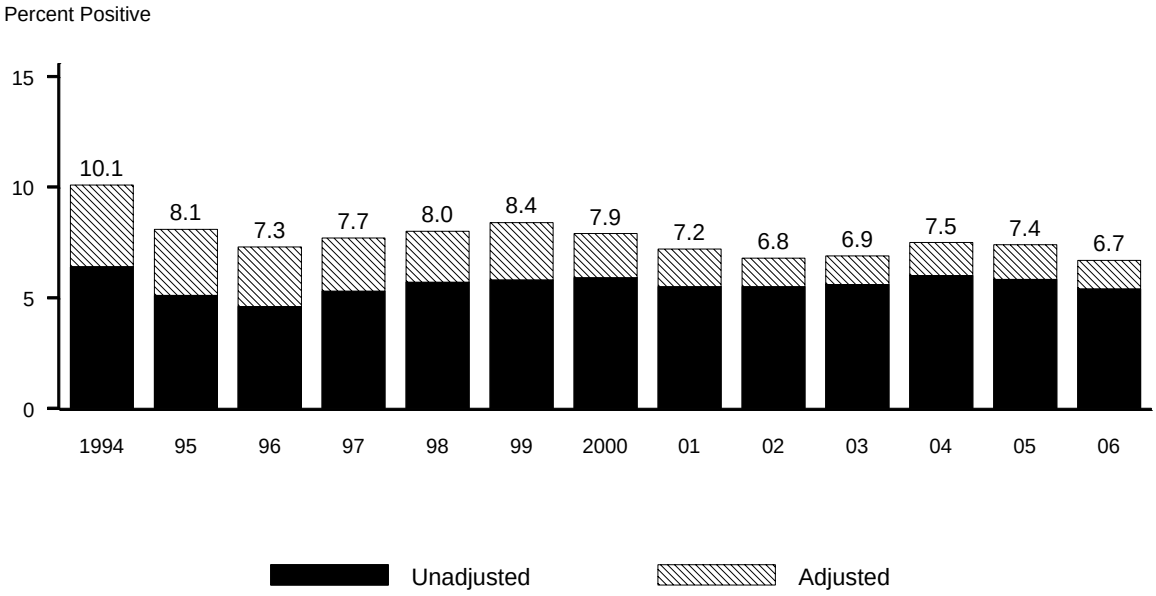


Figure 1. Chlamydia — Trends in positivity in 15- to 24-year-old women tested in family planning clinics: Region III, 1994-2006



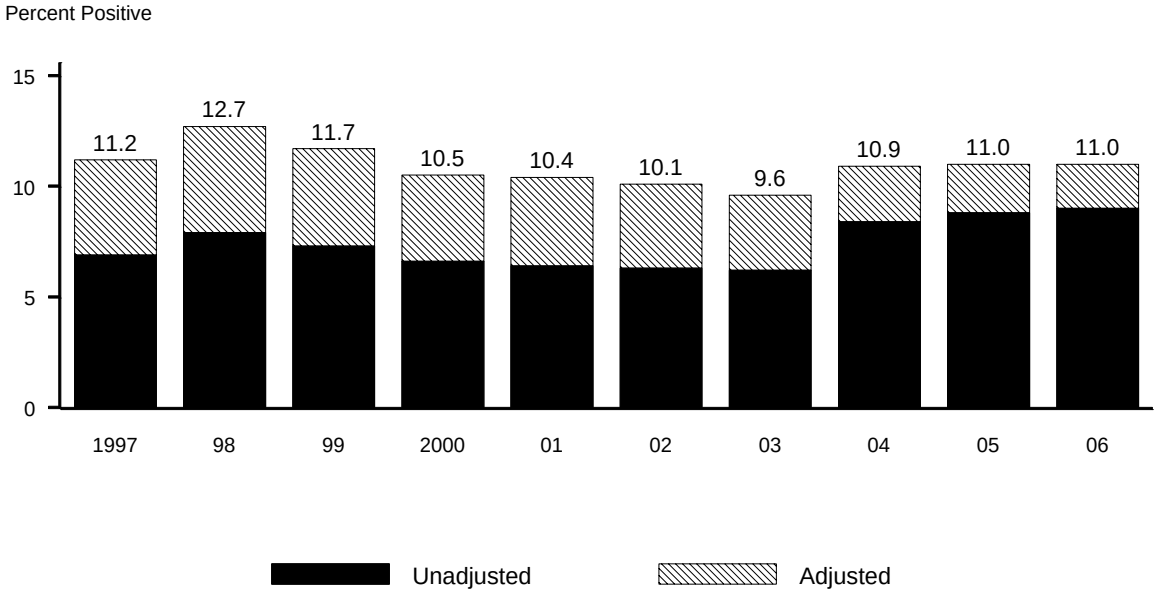
Note: The adjusted positivity rate is displayed above the hatched portion of the bar. Trends are adjusted for changes in laboratory test method and associated increases in test sensitivity.

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

Region IV

In 2006, the chlamydia positivity rate in 15- to 24-year-old women tested in family planning clinics in Region IV was 9.0%, representing a slight increase since 2005 (8.8% positivity). In 2006, 79.3% of all chlamydia tests reported in this population were nucleic acid amplification tests.

Figure 1. Chlamydia — Trends in positivity in 15- to 24-year-old women tested in family planning clinics: Region IV, 1997-2006



Note: The adjusted positivity rate is displayed above the hatched portion of the bar. Trends are adjusted for changes in laboratory test method and associated increases in test sensitivity.

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

In 2006, the chlamydia positivity rate in 15- to 24-year-old women tested in family planning clinics in Region V was 7.6%, representing a slight decrease since 2005 (7.7% positivity). In 2006, 89.8% of all chlamydia tests reported in this population were nucleic acid amplification tests.

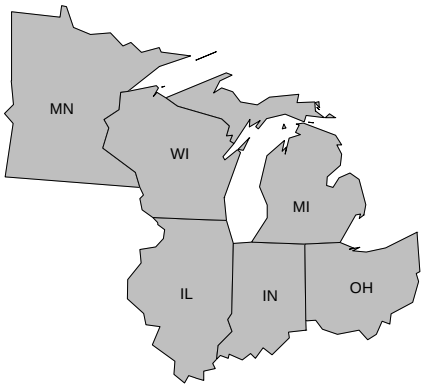
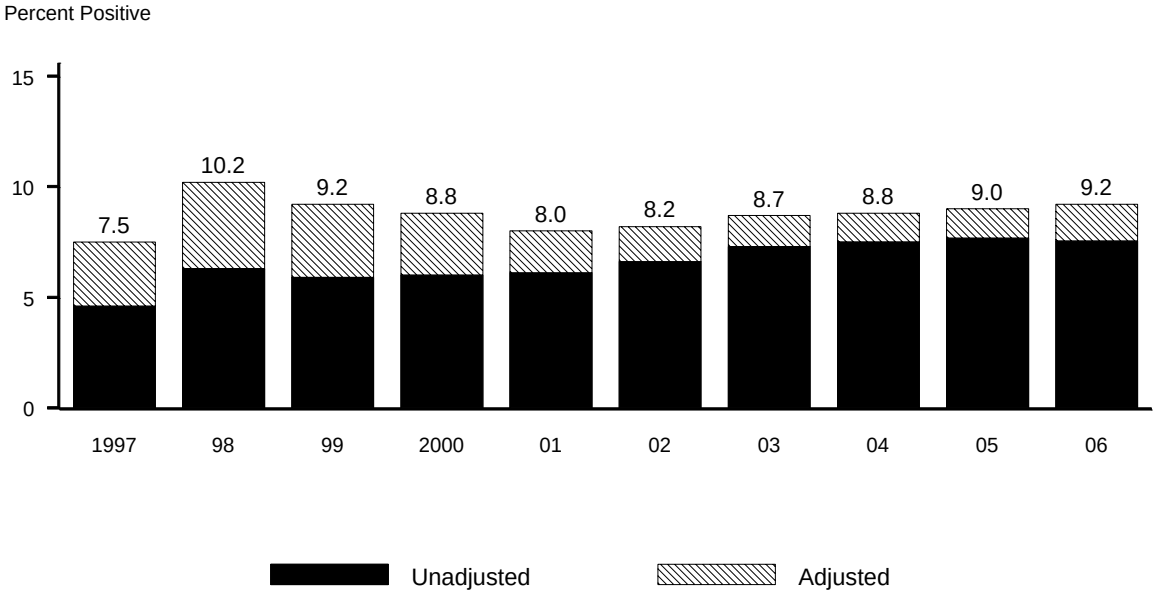


Figure 1. Chlamydia — Trends in positivity in 15- to 24-year-old women tested in family planning clinics: Region V, 1997-2006



Note: The adjusted positivity rate is displayed above the hatched portion of the bar. Trends are adjusted for changes in laboratory test method and associated increases in test sensitivity.

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

Region VI

In 2006, the chlamydia positivity rate in 15- to 24-year-old women tested in family planning clinics in Region VI was 7.9%, representing a slight increase since 2005 (7.4% positivity). In 2006, 39.1% of all chlamydia tests reported in this population were nucleic acid amplification tests.

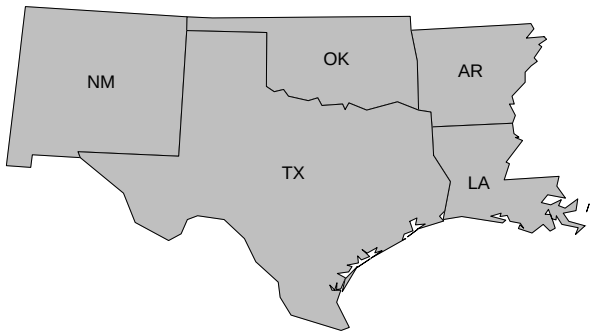
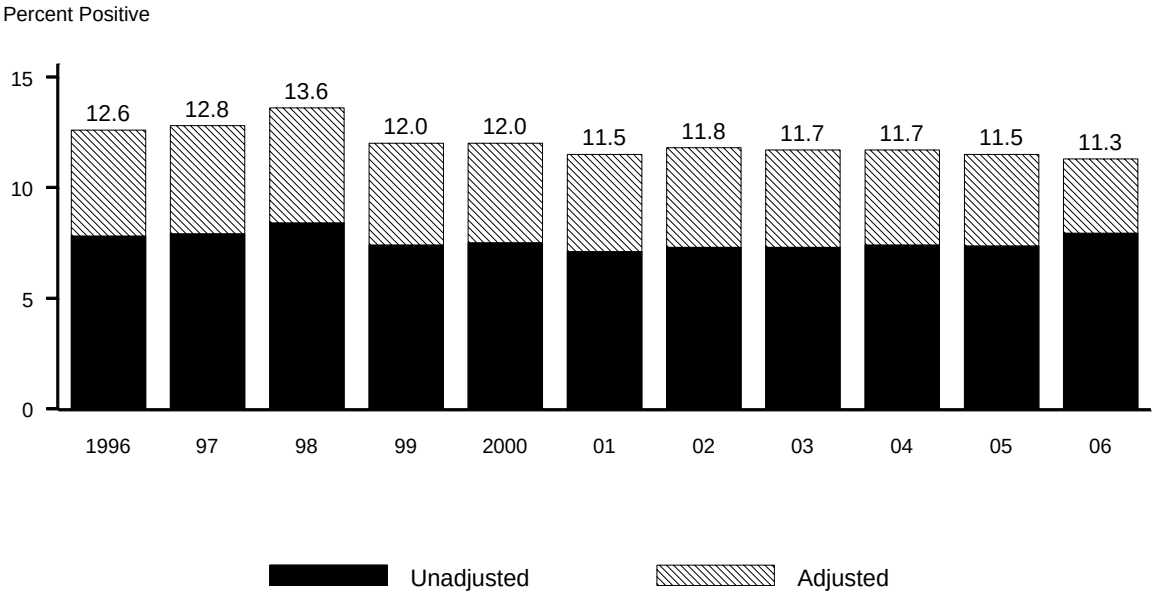


Figure 1. Chlamydia — Trends in positivity in 15- to 24-year-old women tested in family planning clinics: Region VI, 1996-2006



Note: The adjusted positivity rate is displayed above the hatched portion of the bar. Trends are adjusted for changes in laboratory test method and associated increases in test sensitivity.

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

Region VII

In 2006, the chlamydia positivity rate in 15- to 24-year-old women tested in family planning clinics in Region VII was 6.5%, representing a slight increase since 2005 (5.8% positivity). Region VII has been using nucleic acid amplification tests for all chlamydia testing (100%) in this population since 2004.

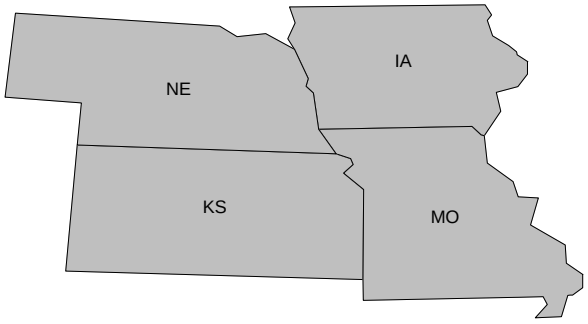
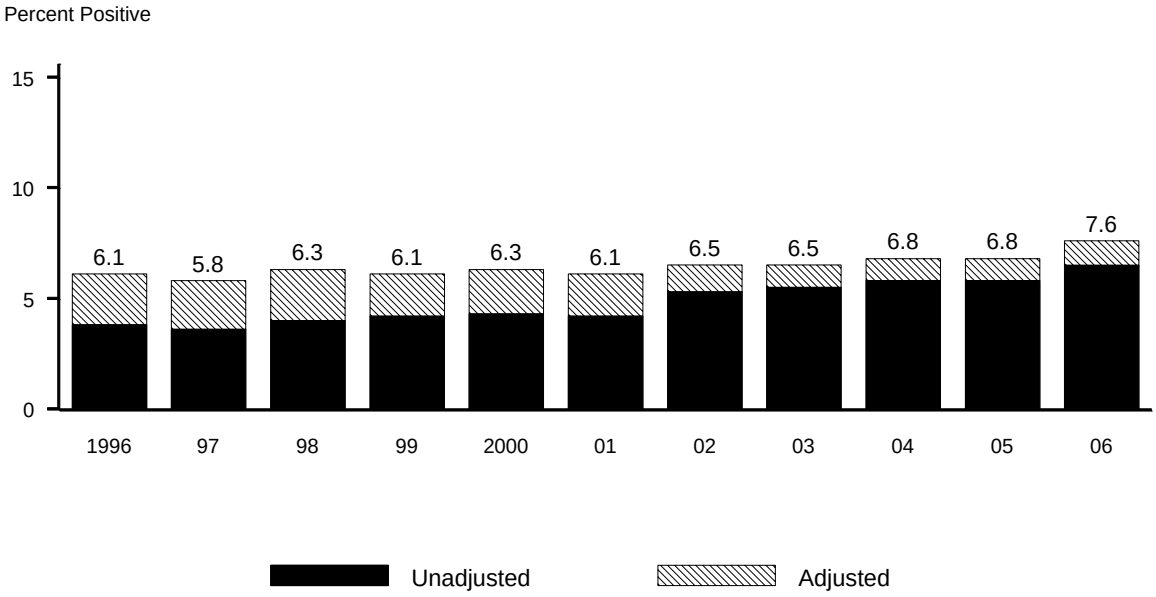


Figure 1. Chlamydia — Trends in positivity in 15- to 24-year-old women tested in family planning clinics: Region VII, 1996-2006



Note: The adjusted positivity rate is displayed above the hatched portion of the bar. Trends are adjusted for changes in laboratory test method and associated increases in test sensitivity.

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

Region VIII

In 2006, the chlamydia positivity rate in 15- to 24-year-old women tested in family planning clinics in Region VIII was 7.2%, representing a slight increase since 2005 (6.3% positivity). Region VIII has been using nucleic acid amplification tests for all chlamydia testing (100%) in this population since 2005.

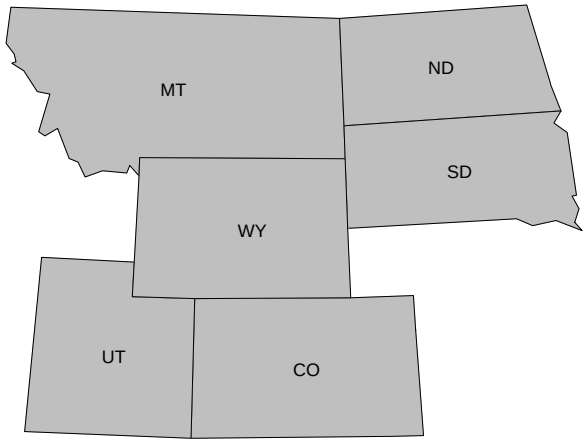
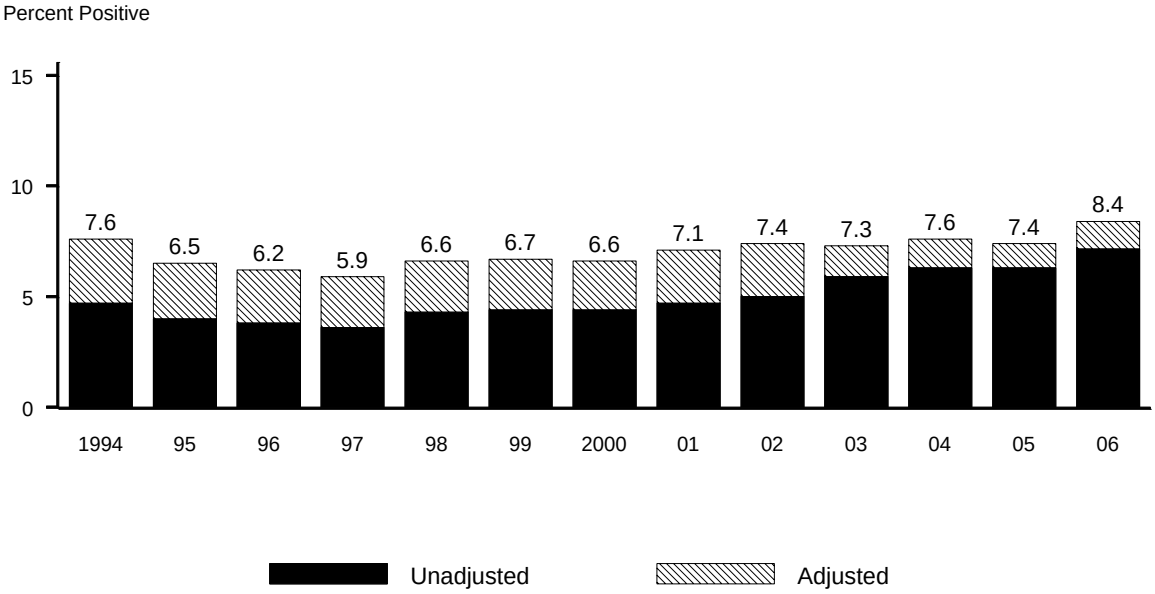


Figure 1. Chlamydia — Trends in positivity in 15- to 24-year-old women tested in family planning clinics: Region VIII, 1994-2006



Note: The adjusted positivity rate is displayed above the hatched portion of the bar. Trends are adjusted for changes in laboratory test method and associated increases in test sensitivity.

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

In 2006, the chlamydia positivity rate in 15- to 24-year-old women tested in family planning clinics in Region IX was 6.8%, representing a slight increase since 2005 (6.4% positivity). In 2006, 75.0% of all chlamydia tests reported in this population were nucleic acid amplification tests.

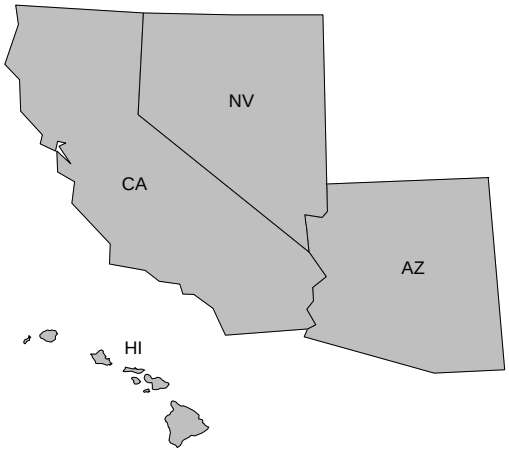
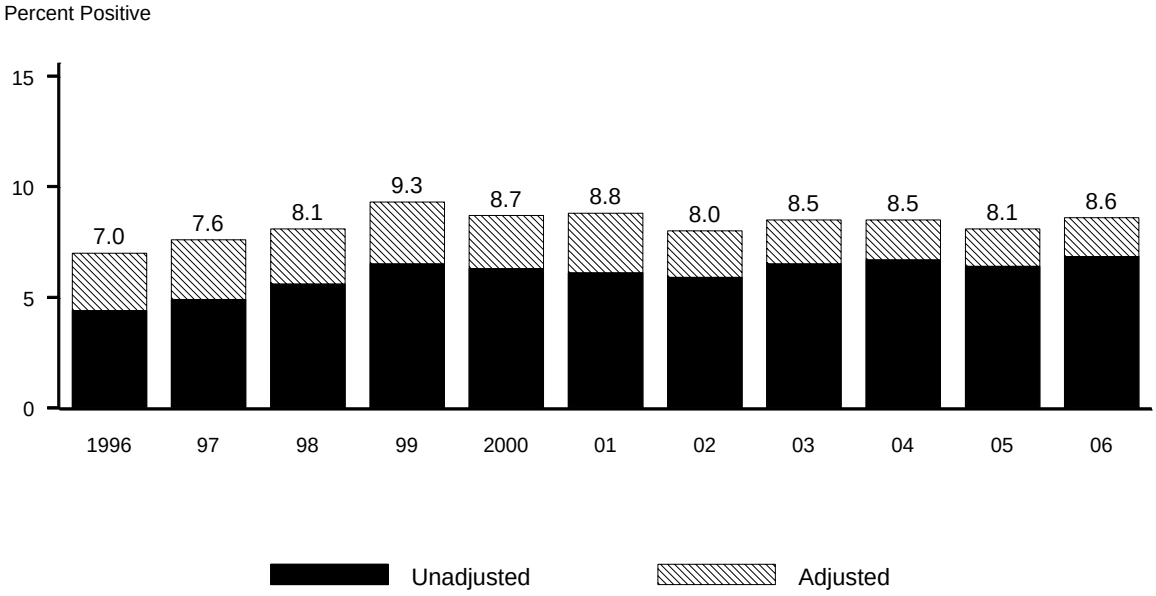


Figure 1. Chlamydia — Trends in positivity in 15- to 24-year-old women tested in family planning clinics: Region IX, 1996-2006



Note: The adjusted positivity rate is displayed above the hatched portion of the bar. Trends are adjusted for changes in laboratory test method and associated increases in test sensitivity.

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

In 2006, the chlamydia positivity rate in 15- to 24-year-old women tested in family planning clinics in Region X was 5.7%, representing a slight increase since 2005 (5.6% positivity). In 2006, 61.2% of all chlamydia tests reported in this population were nucleic acid amplification tests.

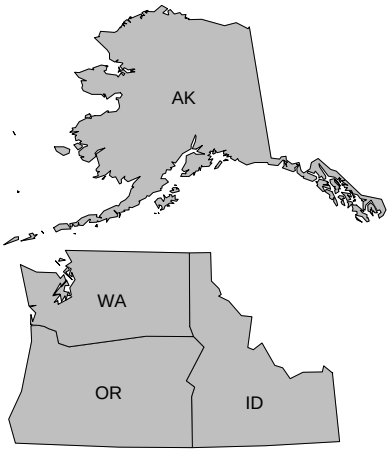
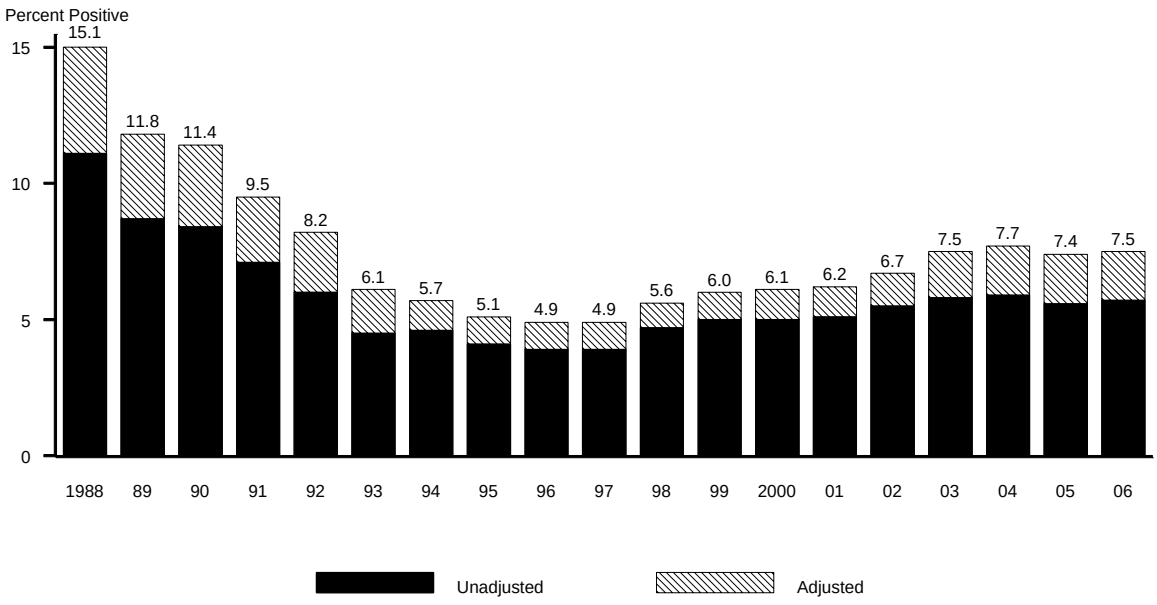


Figure 1. Chlamydia — Trends in positivity in 15- to 24-year-old women tested in family planning clinics: Region X, 1988-2006



Note: The adjusted positivity rate is displayed above the hatched portion of the bar. Trends are adjusted for changes in laboratory test method and associated increases in test sensitivity.

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