

Sexually Transmitted Disease Surveillance 2010

National Center for HIV/AIDS, Viral Hepatitis, STD & TB Prevention
Division of STD Prevention



CHLAMYDIA

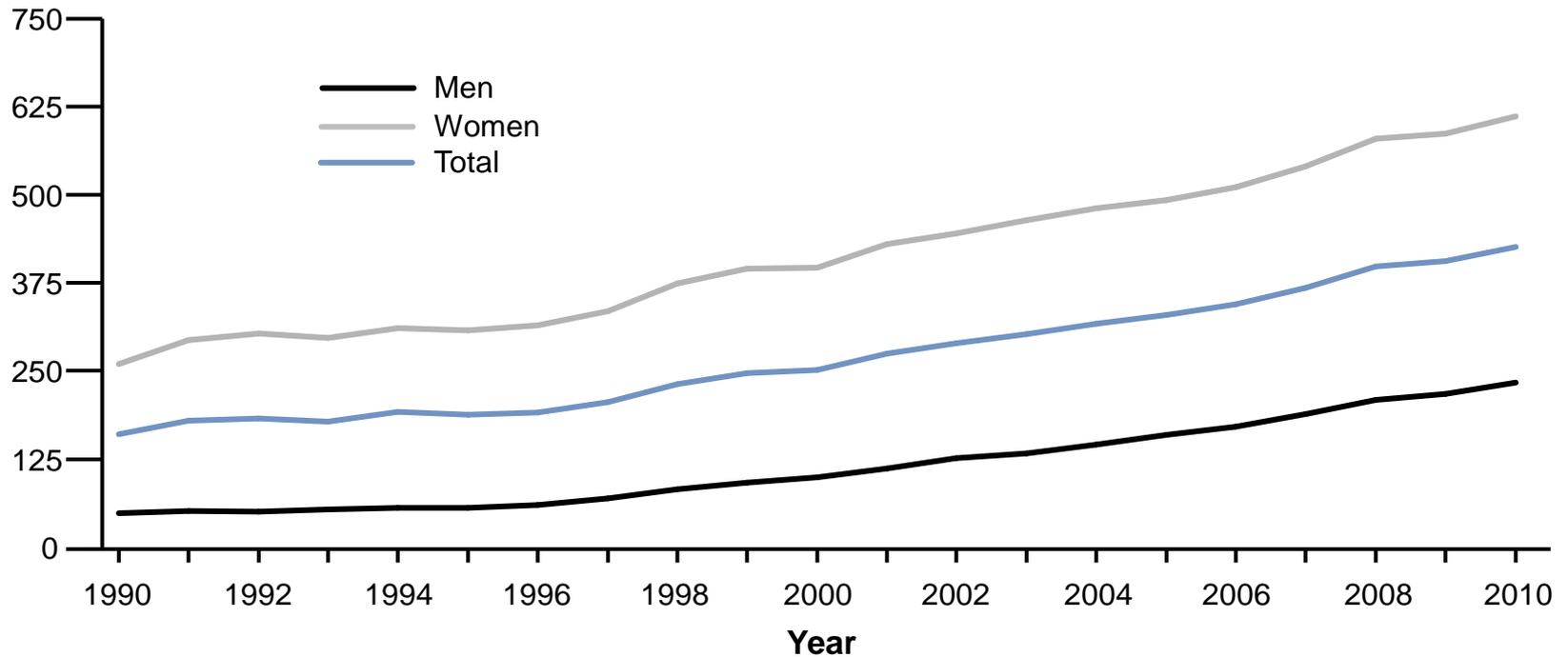
Sexually Transmitted Disease Surveillance 2010

Division of STD Prevention



Chlamydia—Rates by Sex, United States, 1990–2010

Rate (per 100,000 population)

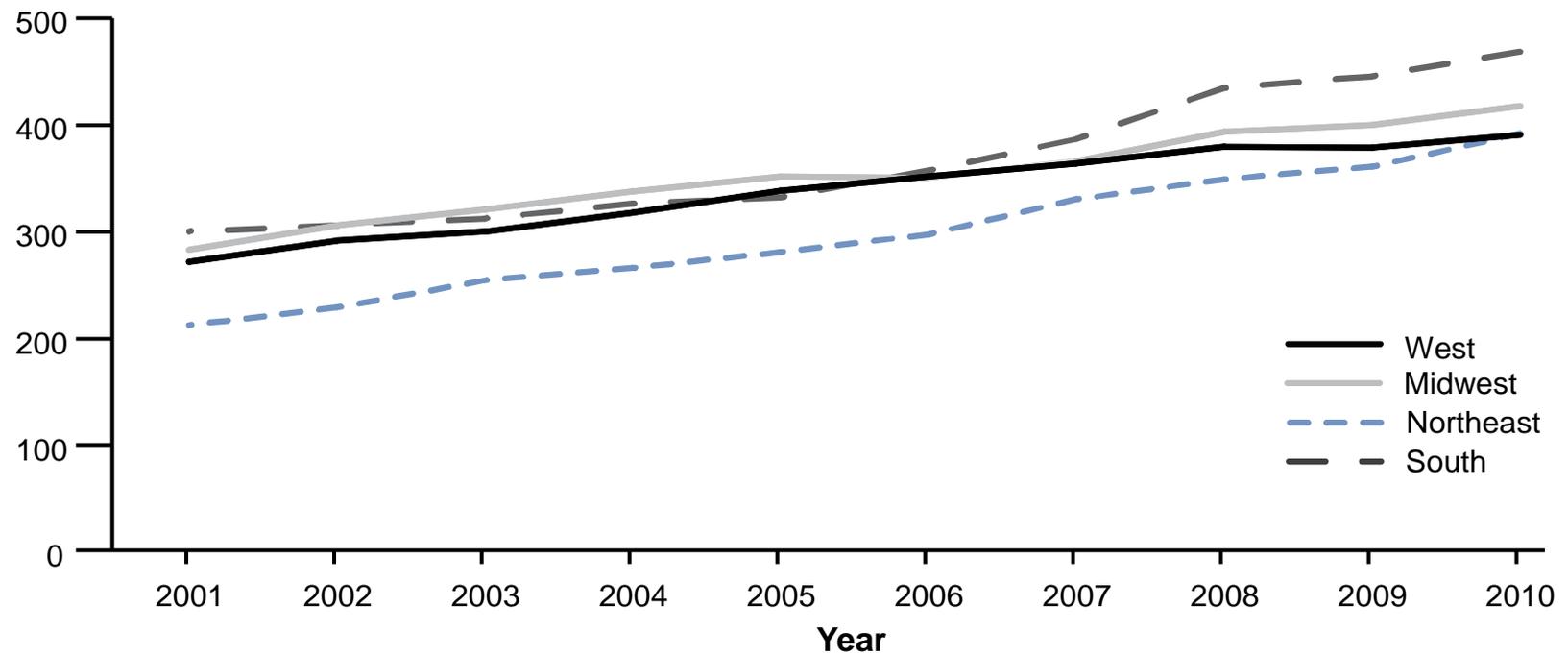


NOTE: As of January 2000, all 50 states and the District of Columbia have regulations that require the reporting of chlamydia cases.

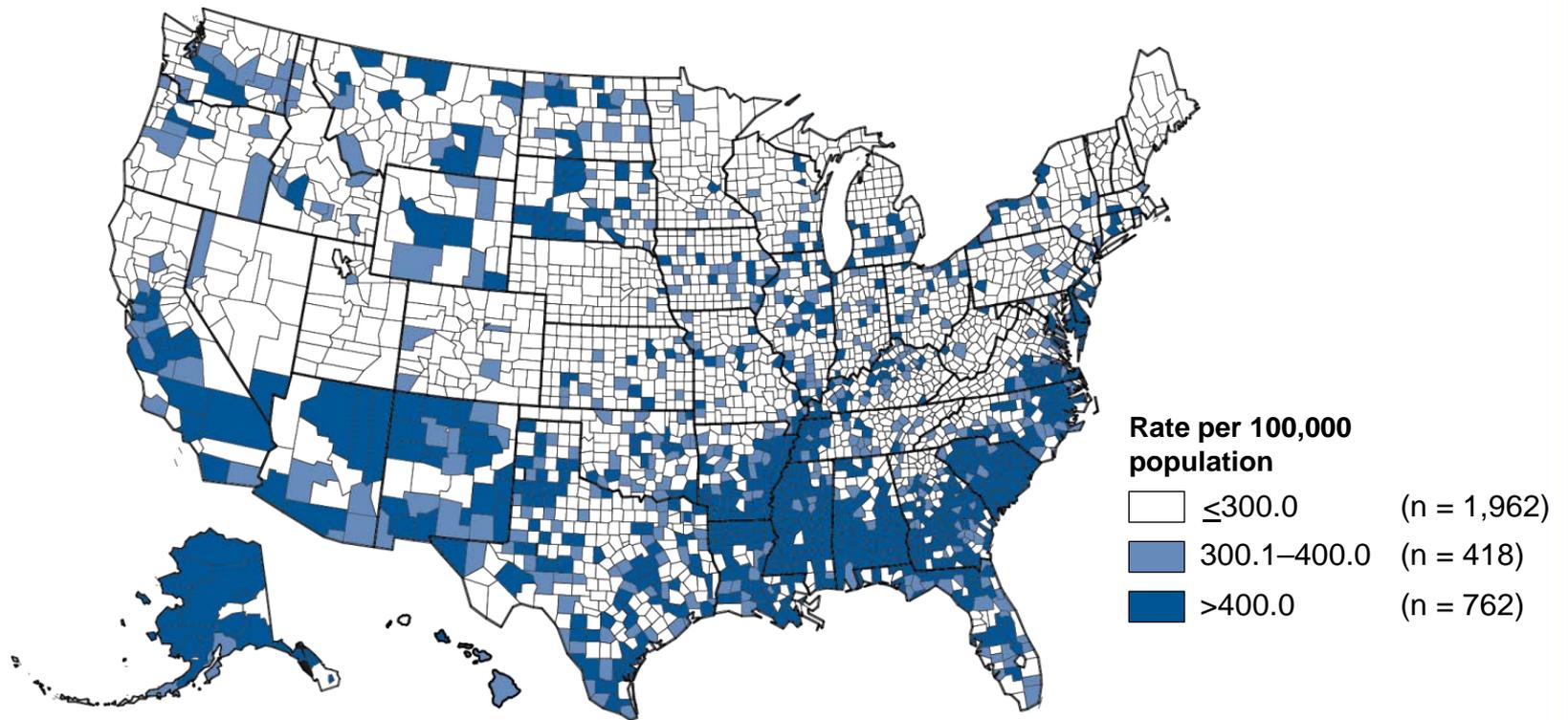


Chlamydia—Rates by Region, United States, 2001–2010

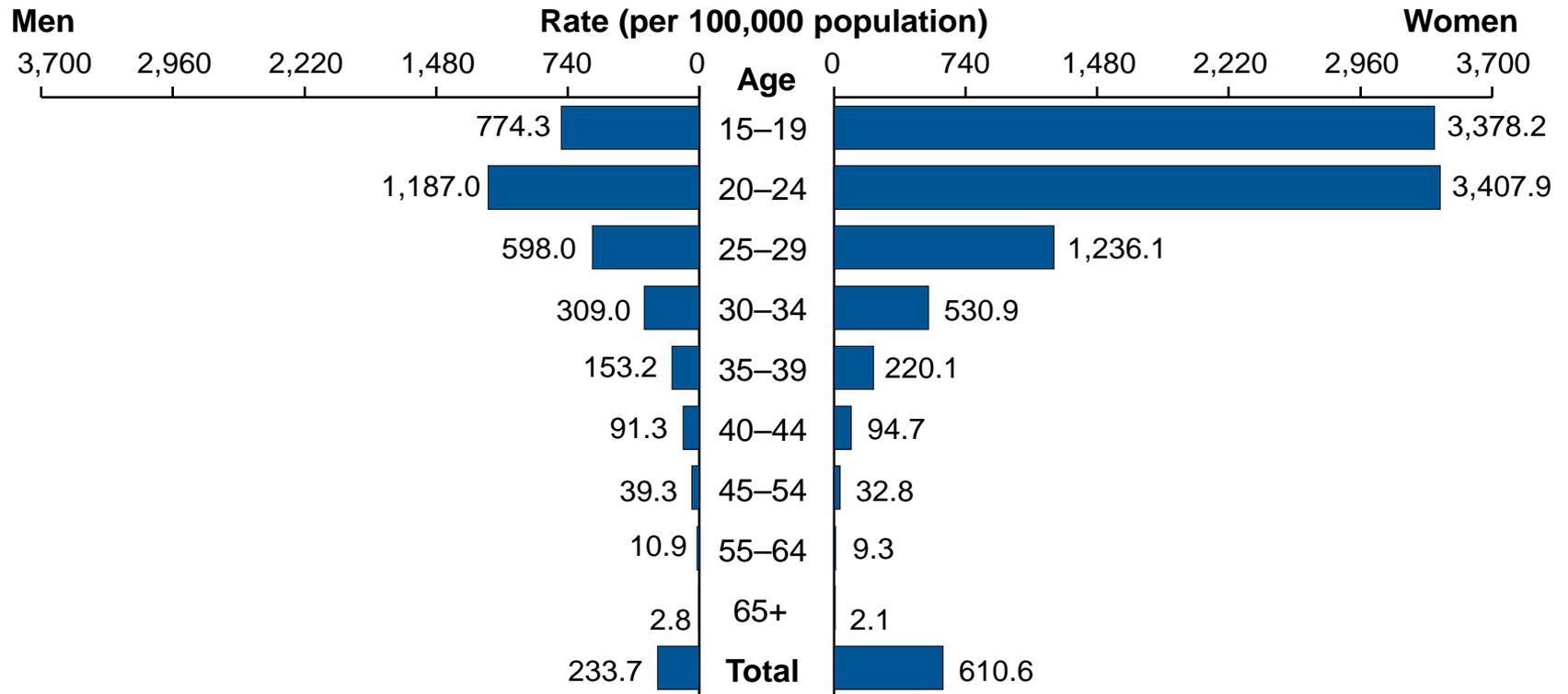
Rate (per 100,000 population)



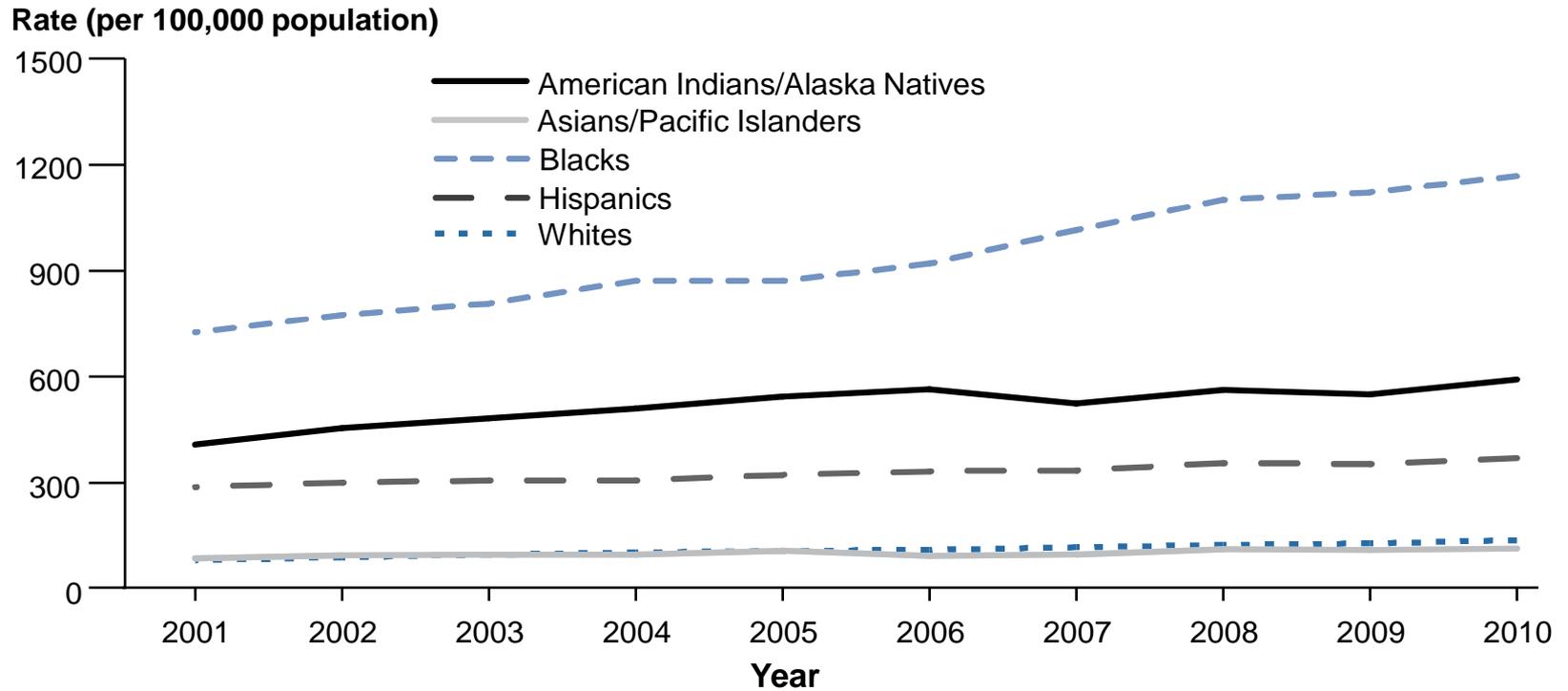
Chlamydia—Rates by County, United States, 2010



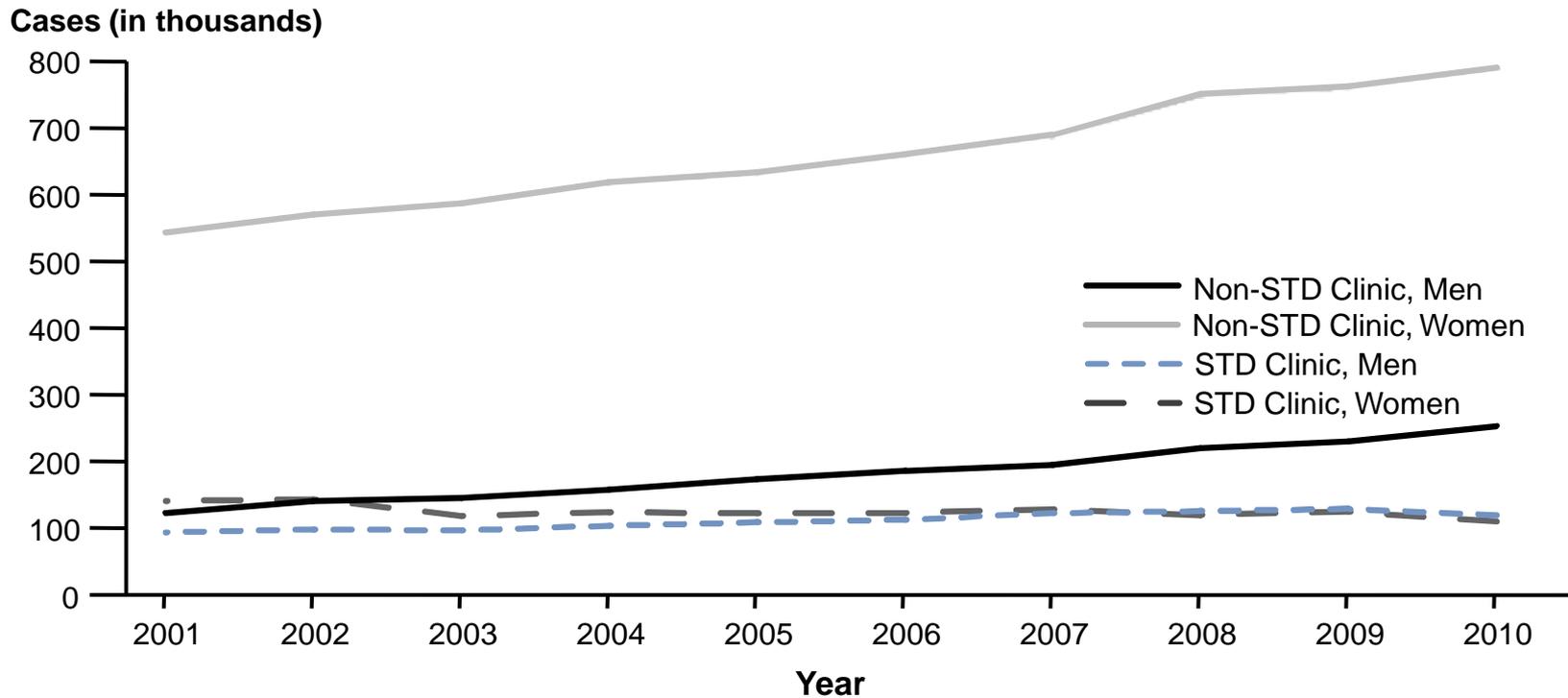
Chlamydia—Rates by Age and Sex, United States, 2010



Chlamydia—Rates by Race/Ethnicity, United States, 2001–2010

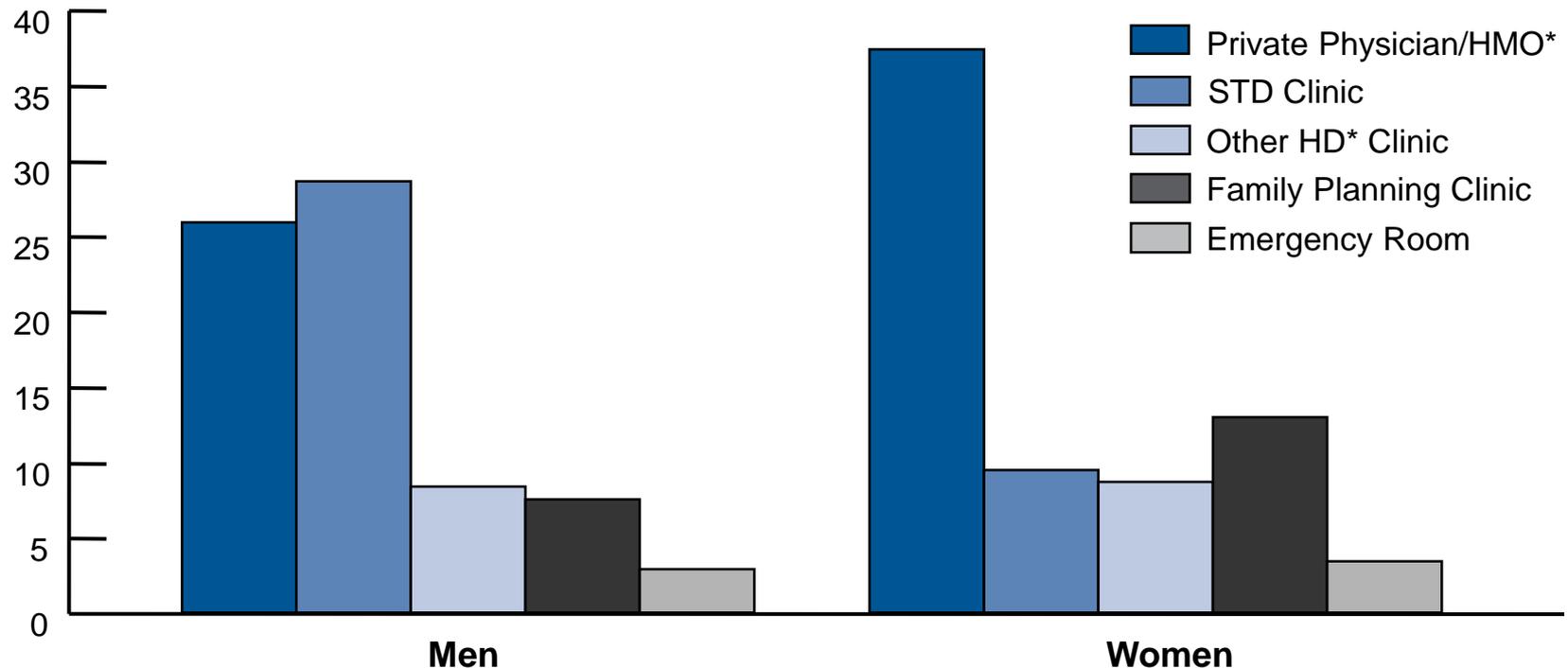


Chlamydia—Cases by Reporting Source and Sex, United States, 2001–2010



Chlamydia—Percentage of Reported Cases by Sex and Selected Reporting Sources, United States, 2010

Percentage

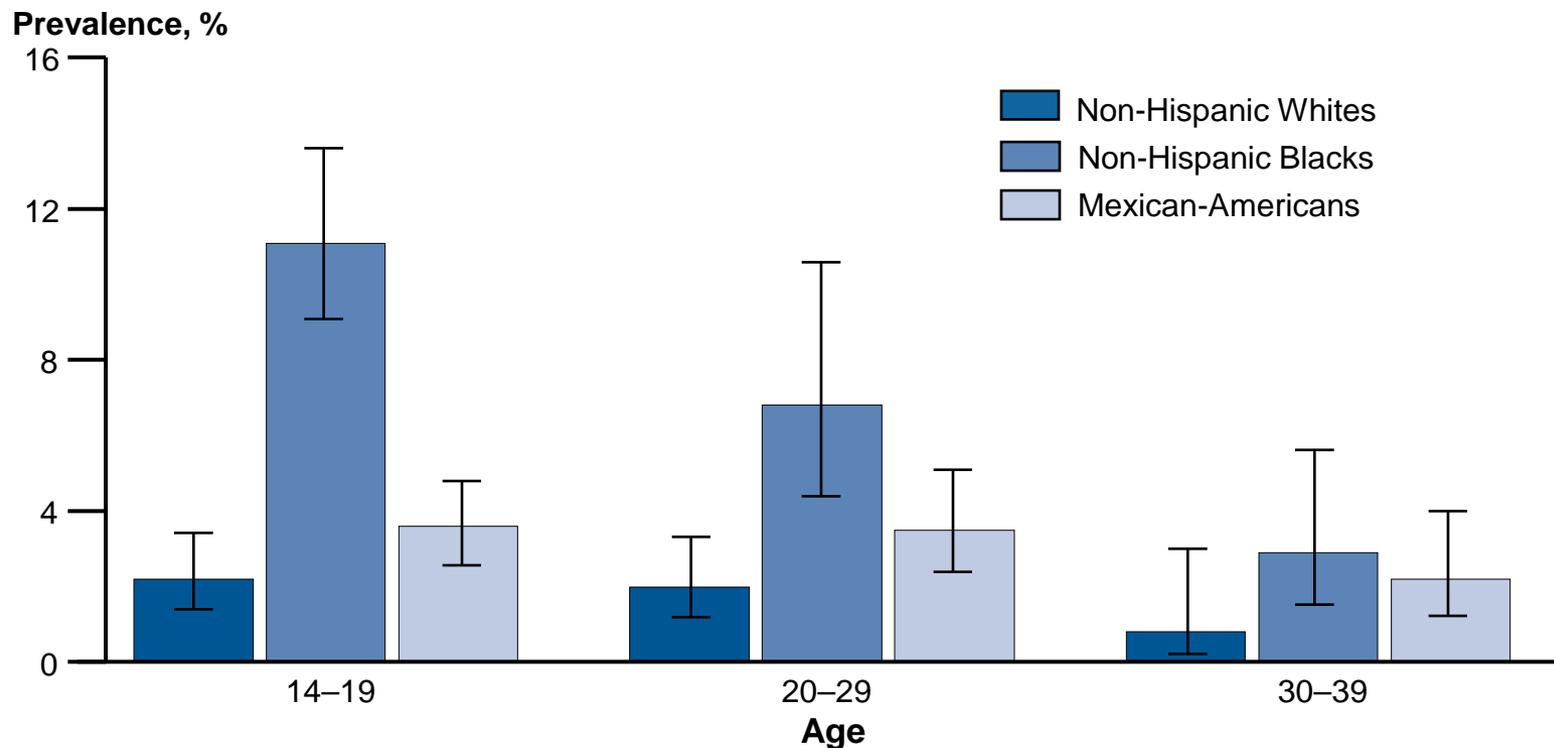


*HMO = health maintenance organization; HD = health department.

NOTE: These categories represent 72.5% of cases with a known reporting source. Of all cases, 11.6% had a missing or unknown reporting source.



Chlamydia—Prevalence by Age Group and Race/Ethnicity, National Health and Nutrition Examination Survey, 1999–2002



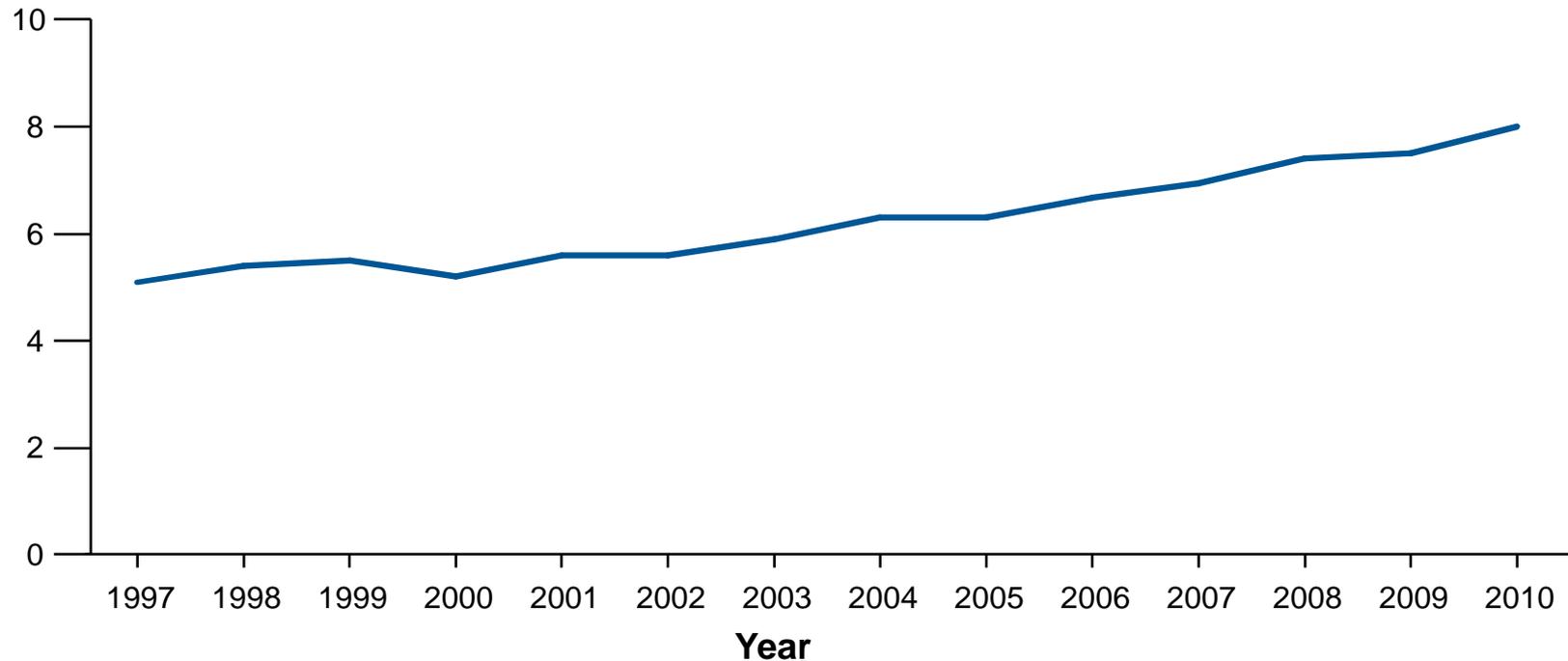
NOTE: Error bars indicate 95% confidence intervals.

SOURCE: Datta SD, Sternberg M, Johnson RE, Berman S, Papp JR, McQuillan G, et al. Gonorrhea and chlamydia in the United States among persons 14 to 39 years of age, 1999 to 2002. *Ann Intern Med.* 2007;147(2):89-96.



Chlamydia—Median State-specific Positivity Rates Among Women Aged 15–24 Years Tested in Family Planning Clinics, Infertility Prevention Project, United States, 1997–2010

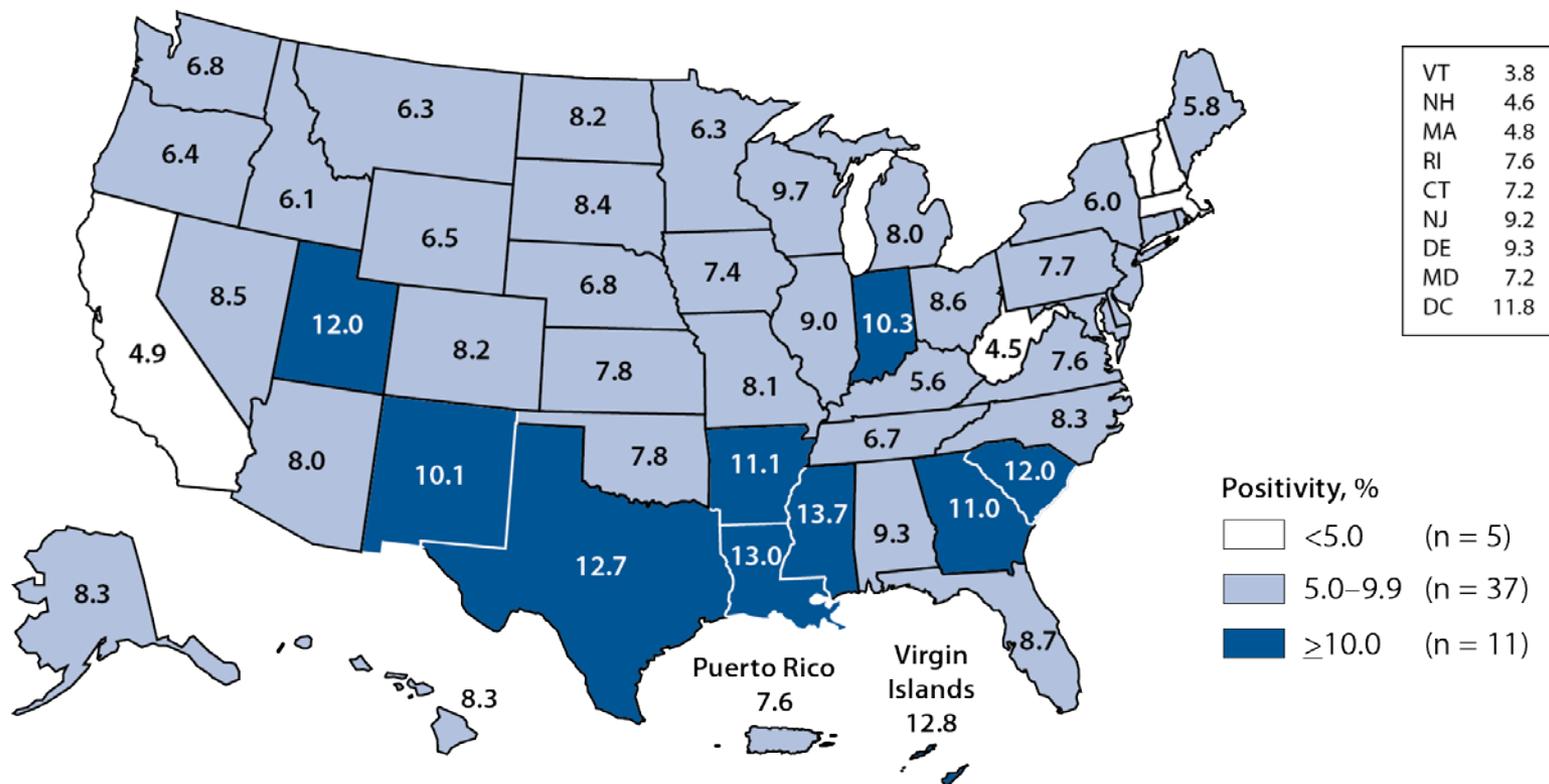
Median State-Specific Positivity Rate, %



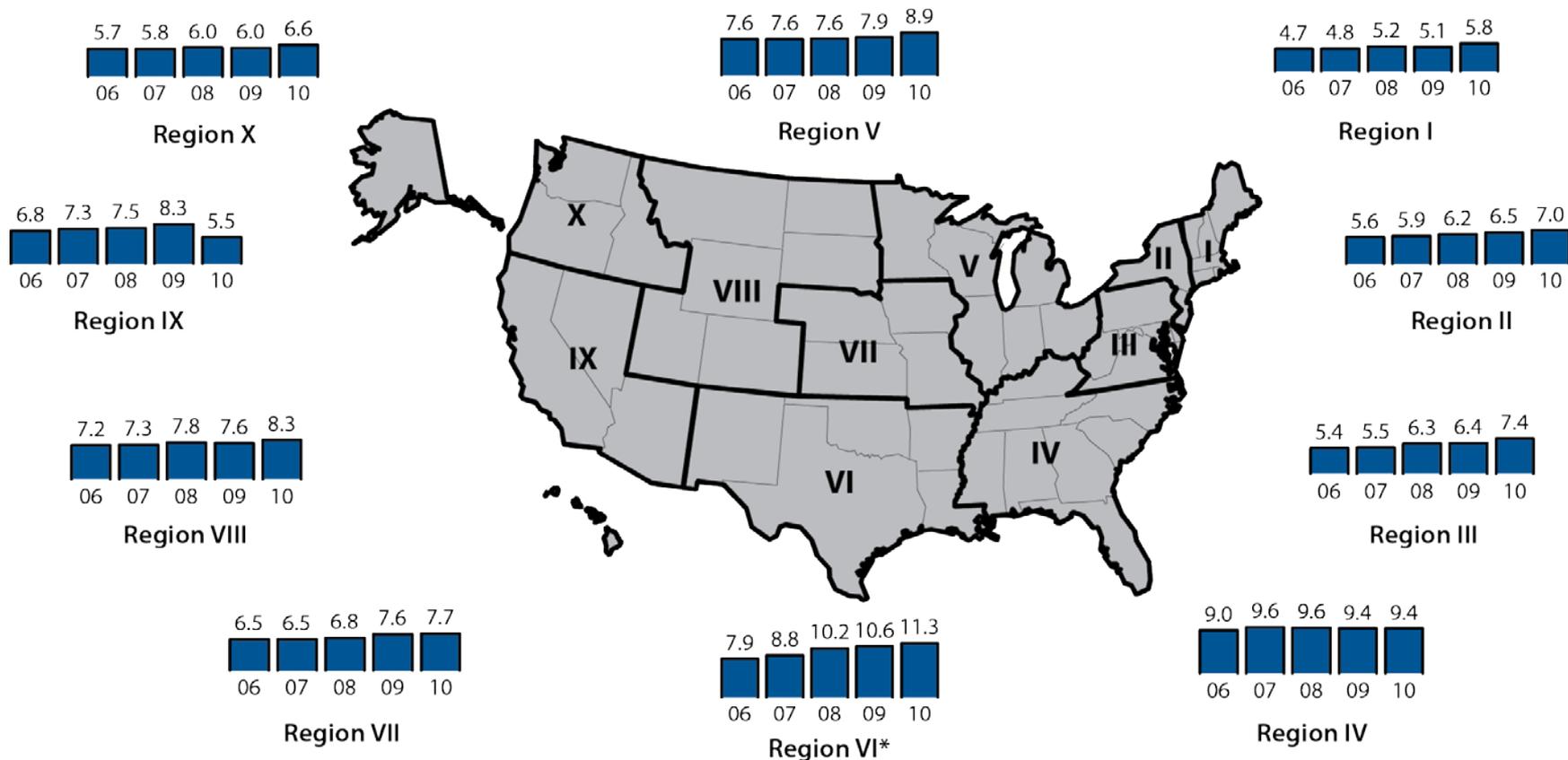
NOTE: As of 1997, all 10 U.S. Department of Health and Human Services (HHS) regions, which represent all 50 states, the District of Columbia, and outlying areas, reported chlamydia positivity data.



Chlamydia—Positivity Among Women Aged 15–24 Years Tested in Family Planning Clinics, by State, Infertility Prevention Project, United States and Outlying Areas, 2010



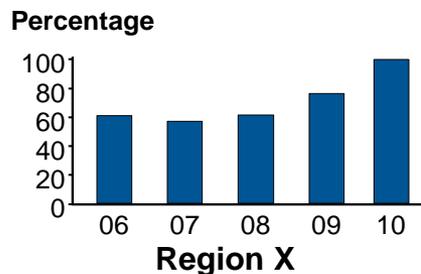
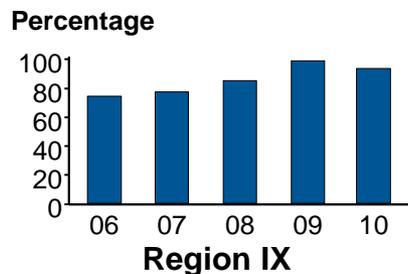
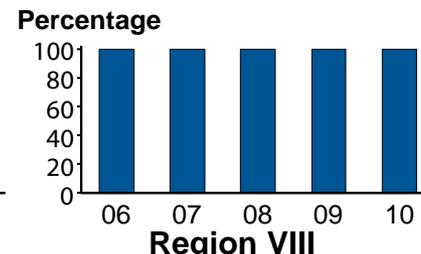
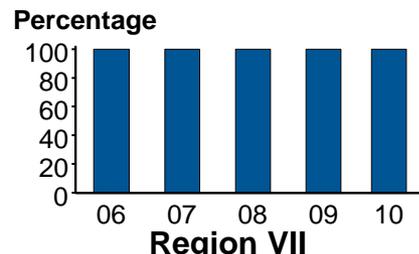
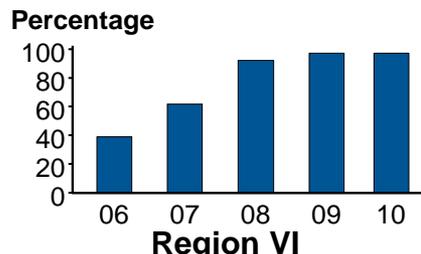
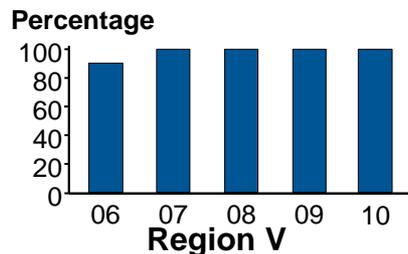
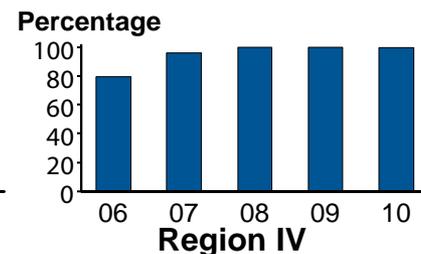
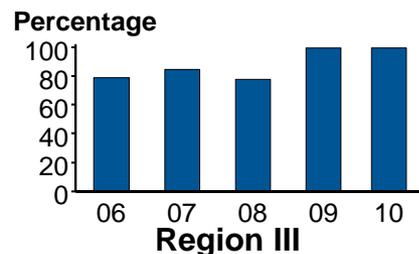
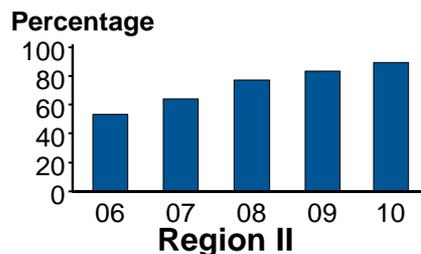
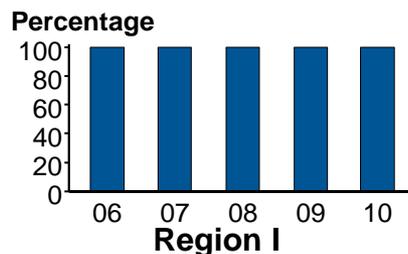
Chlamydia—Trends in Positivity Rates Among Women Aged 15–24 Years Tested in Family Planning Clinics, by U.S. Department of Health and Human Services (HHS) Region, Infertility Prevention Project, 2006–2010



* 2009 percent positivity for Region VI previously published in the 2009 Surveillance report has been corrected.



Chlamydia—Percentage of Nucleic Acid Amplification Tests Used Among Women Aged 15–24 Years Tested in Family Planning Clinics, by U.S. Department of Health and Human Services (HHS) Region, Infertility Prevention Project, 2006–2010



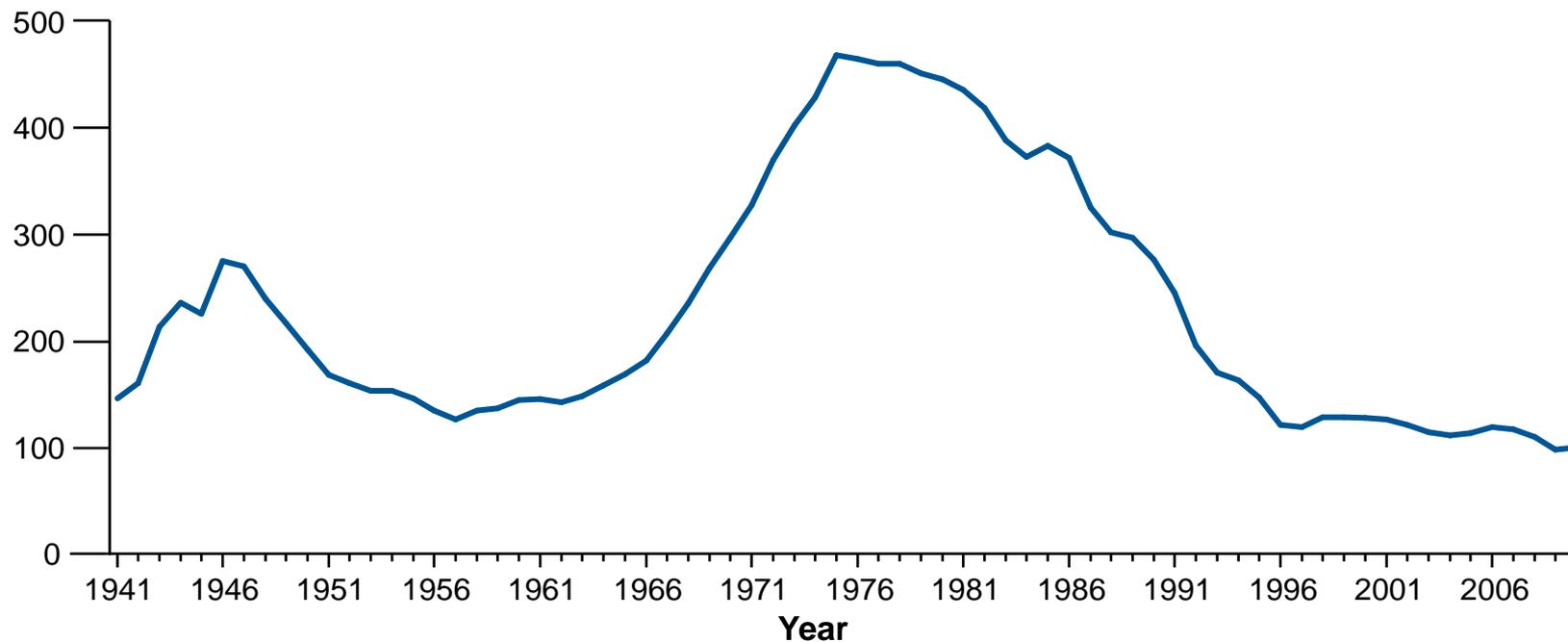
GONORRHEA

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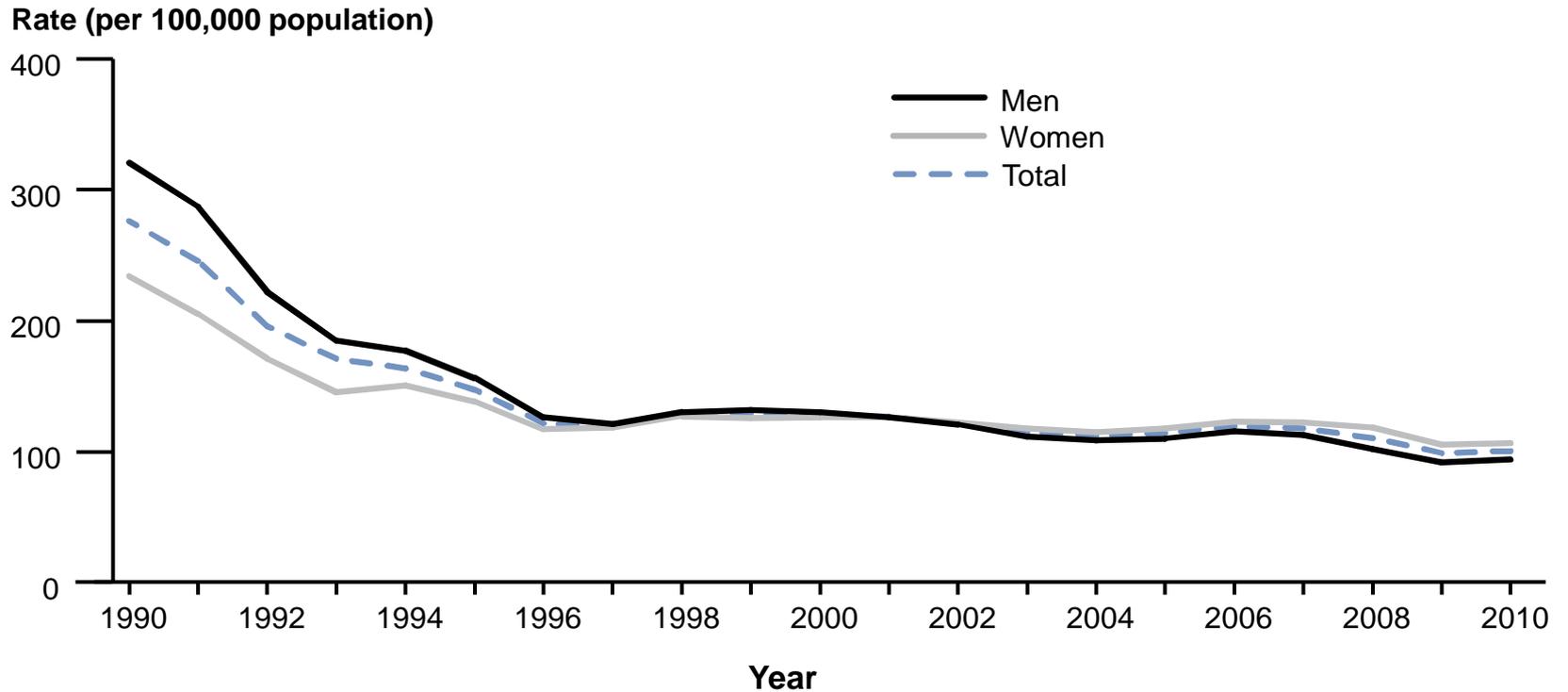


Gonorrhea—Rates, United States, 1941–2010

Rate (per 100,000 population)

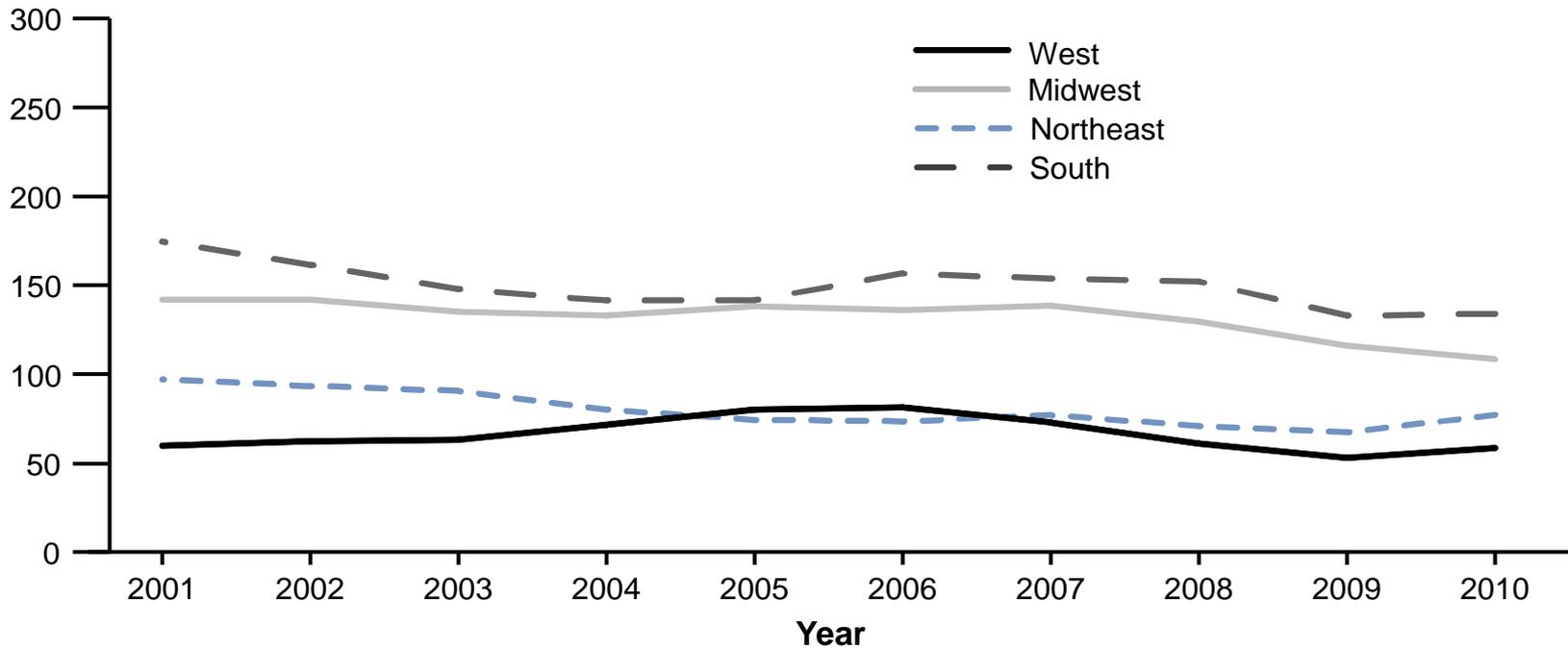


Gonorrhea—Rates by Sex, United States, 1990–2010

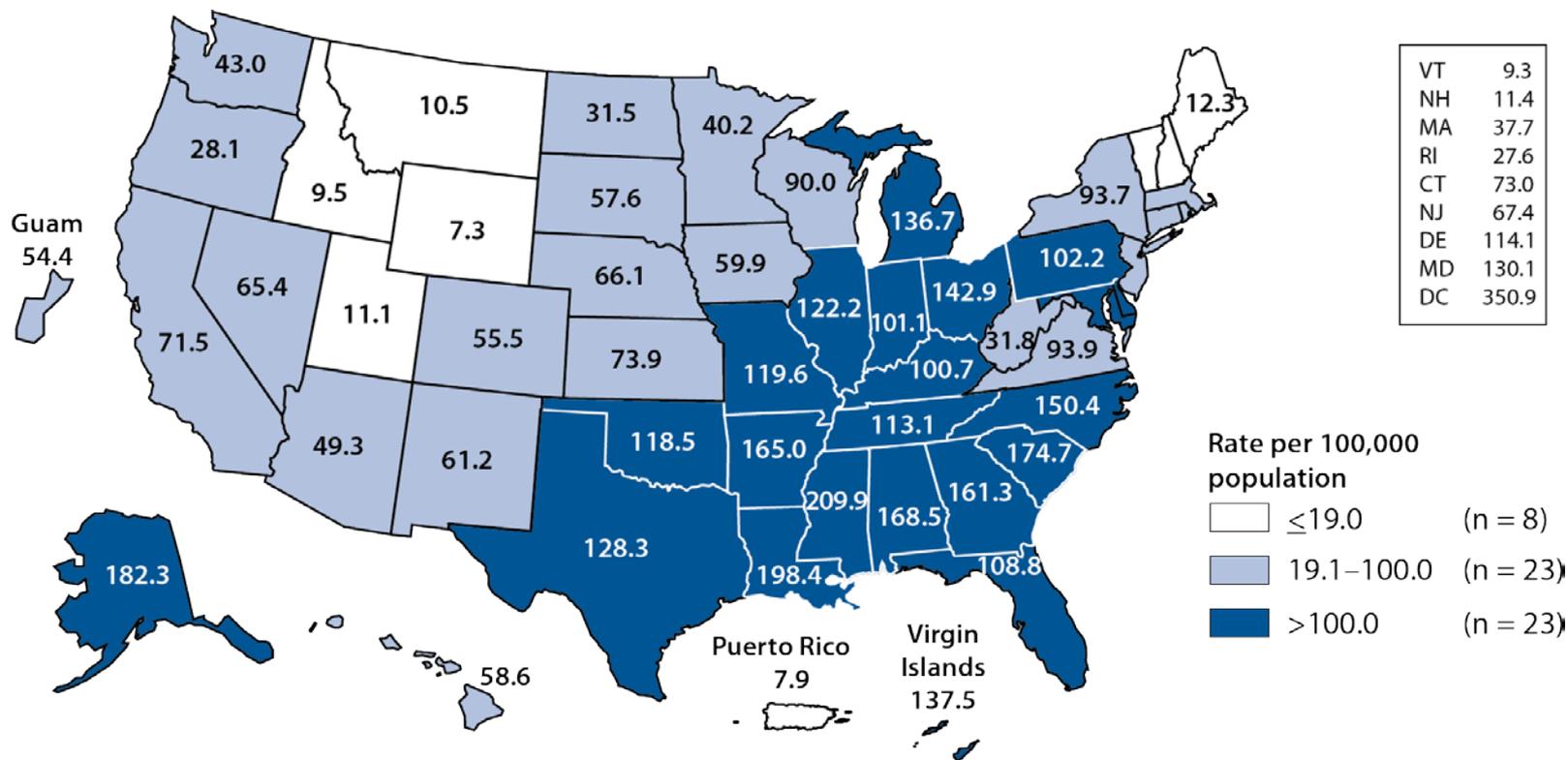


Gonorrhea—Rates by Region, United States, 2001–2010

Rate (per 100,000 population)



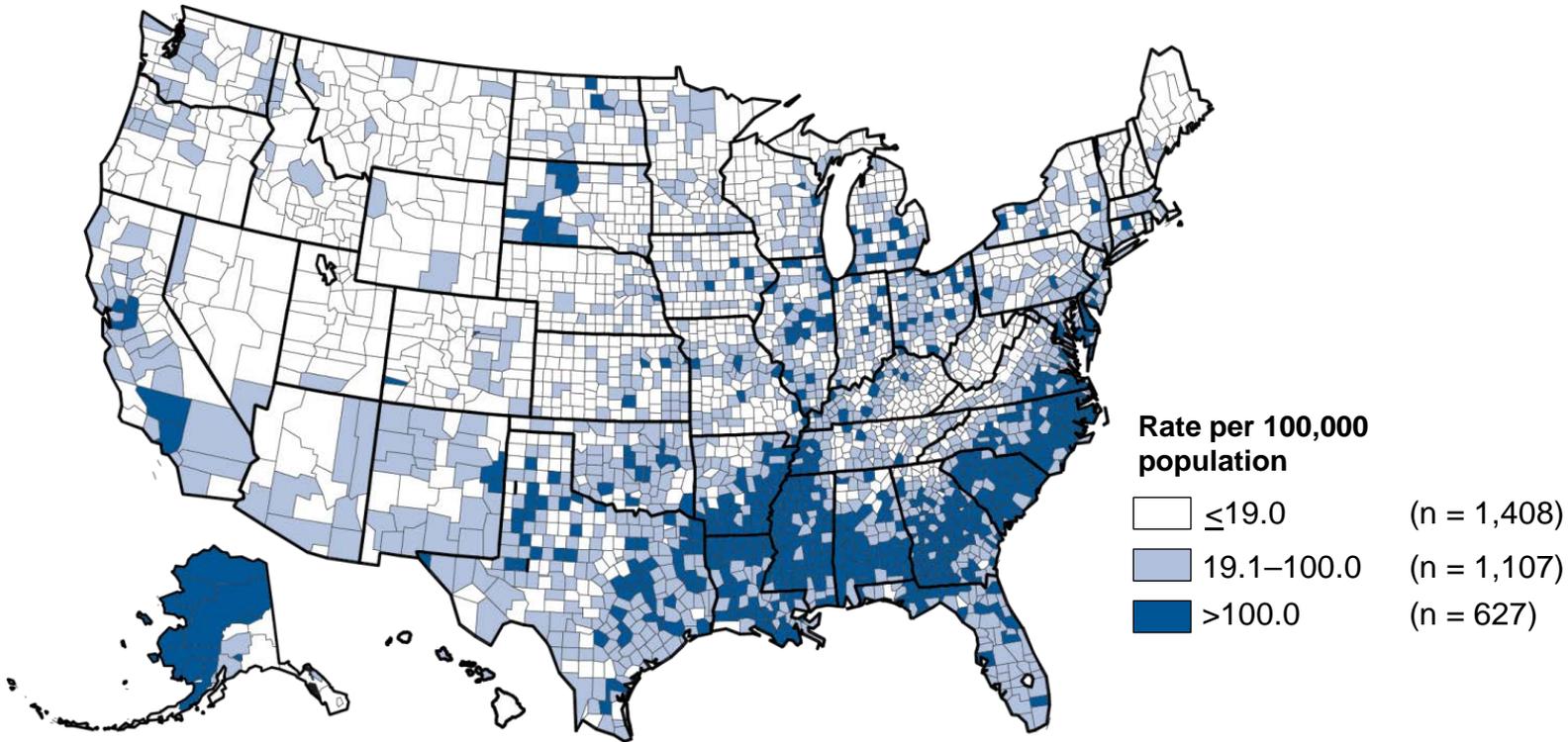
Gonorrhea—Rates by State, United States and Outlying Areas, 2010



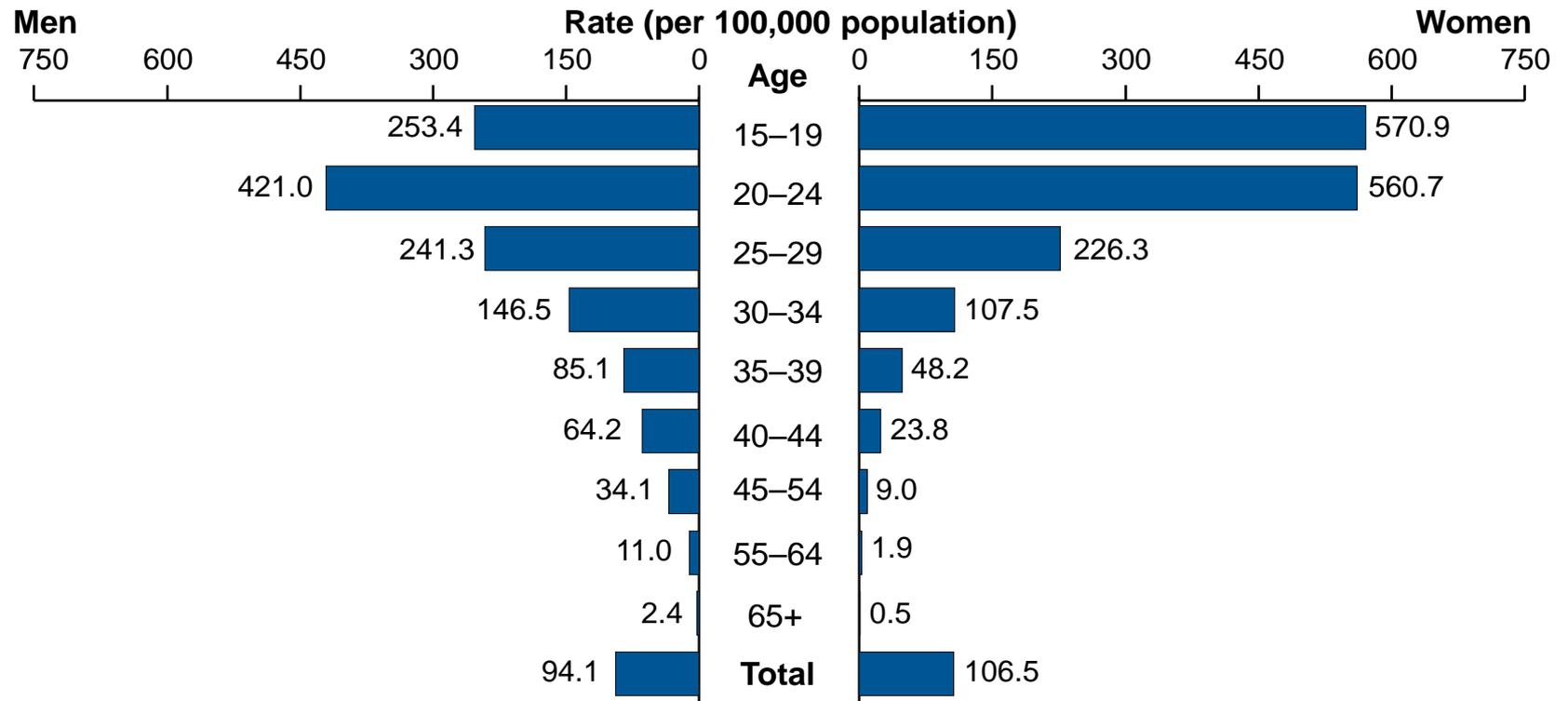
NOTE: The total rate of gonorrhea for the United States and outlying areas (Guam, Puerto Rico, and Virgin Islands) was 99.6 per 100,000 population.



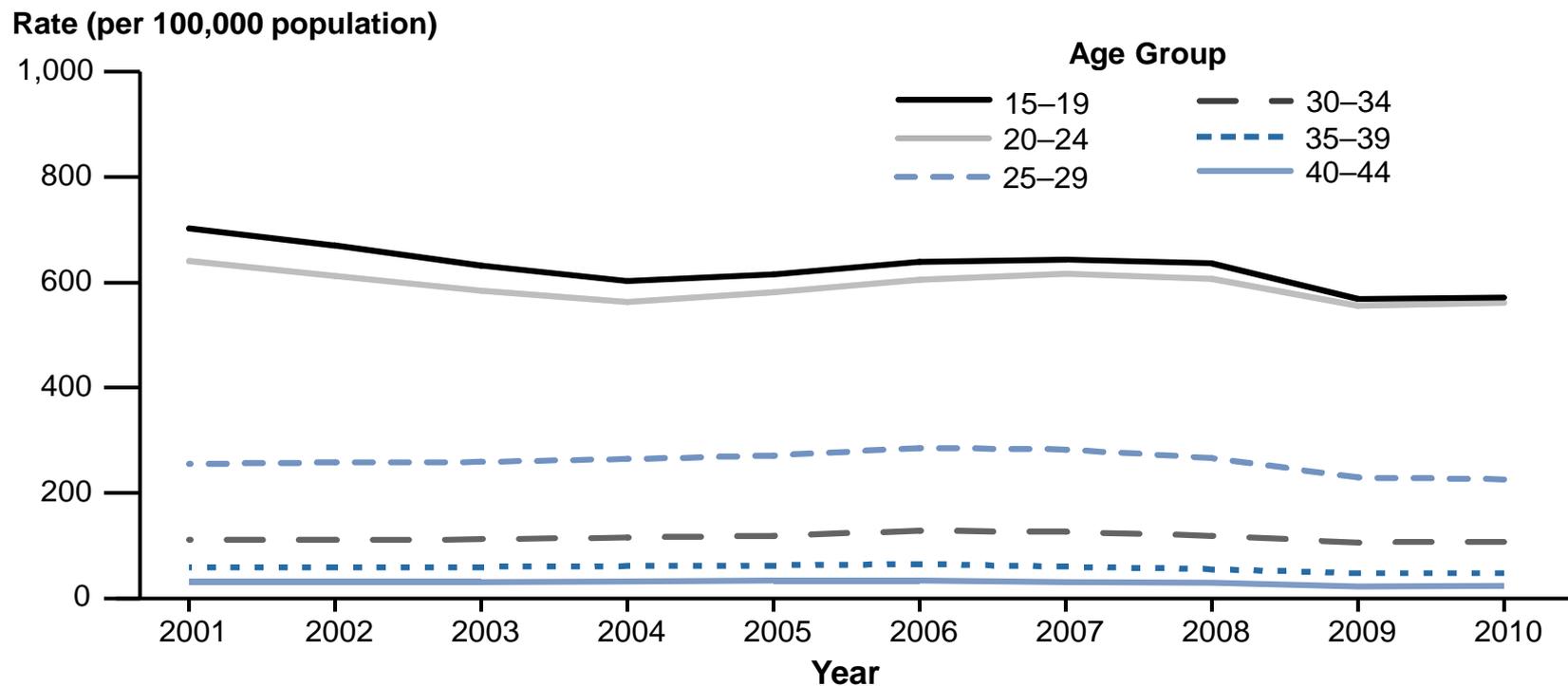
Gonorrhea—Rates by County, United States, 2010



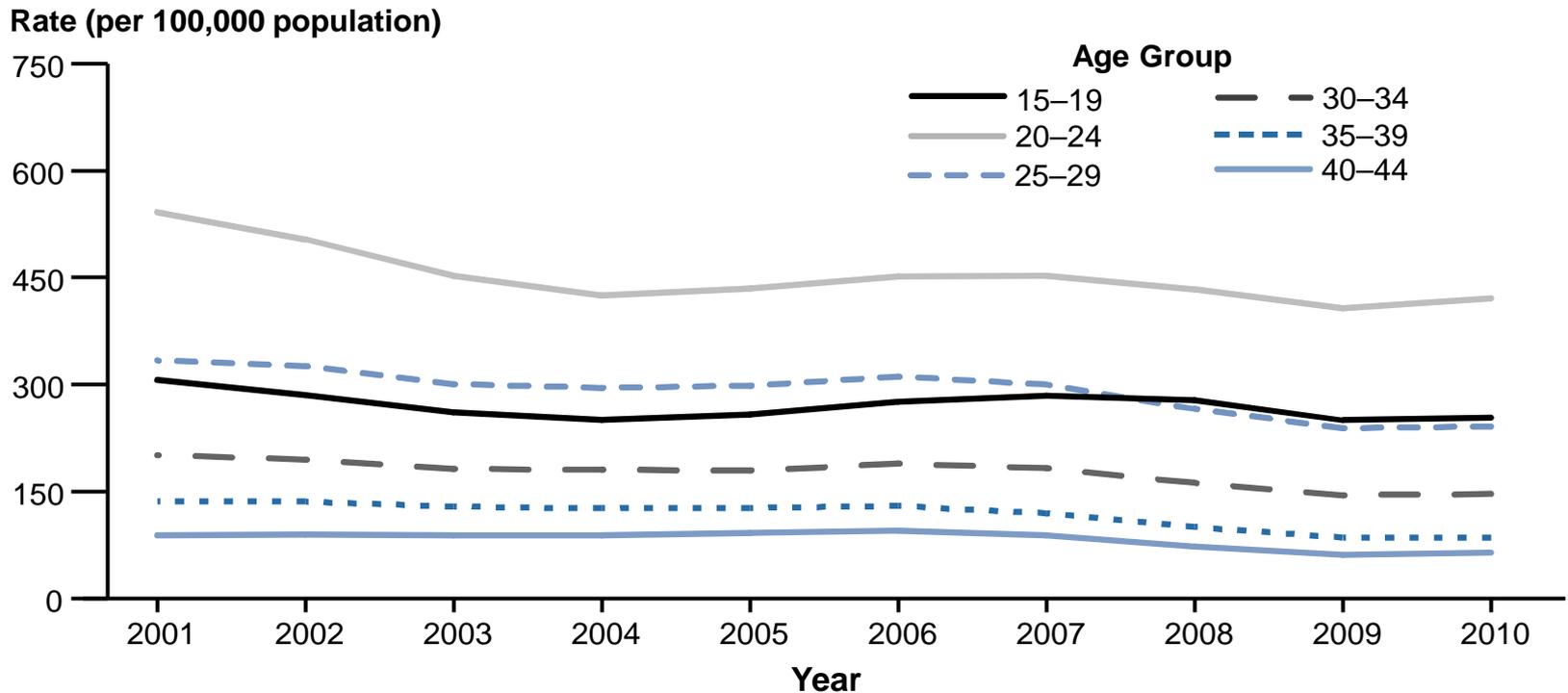
Gonorrhea—Rates by Age and Sex, United States, 2010



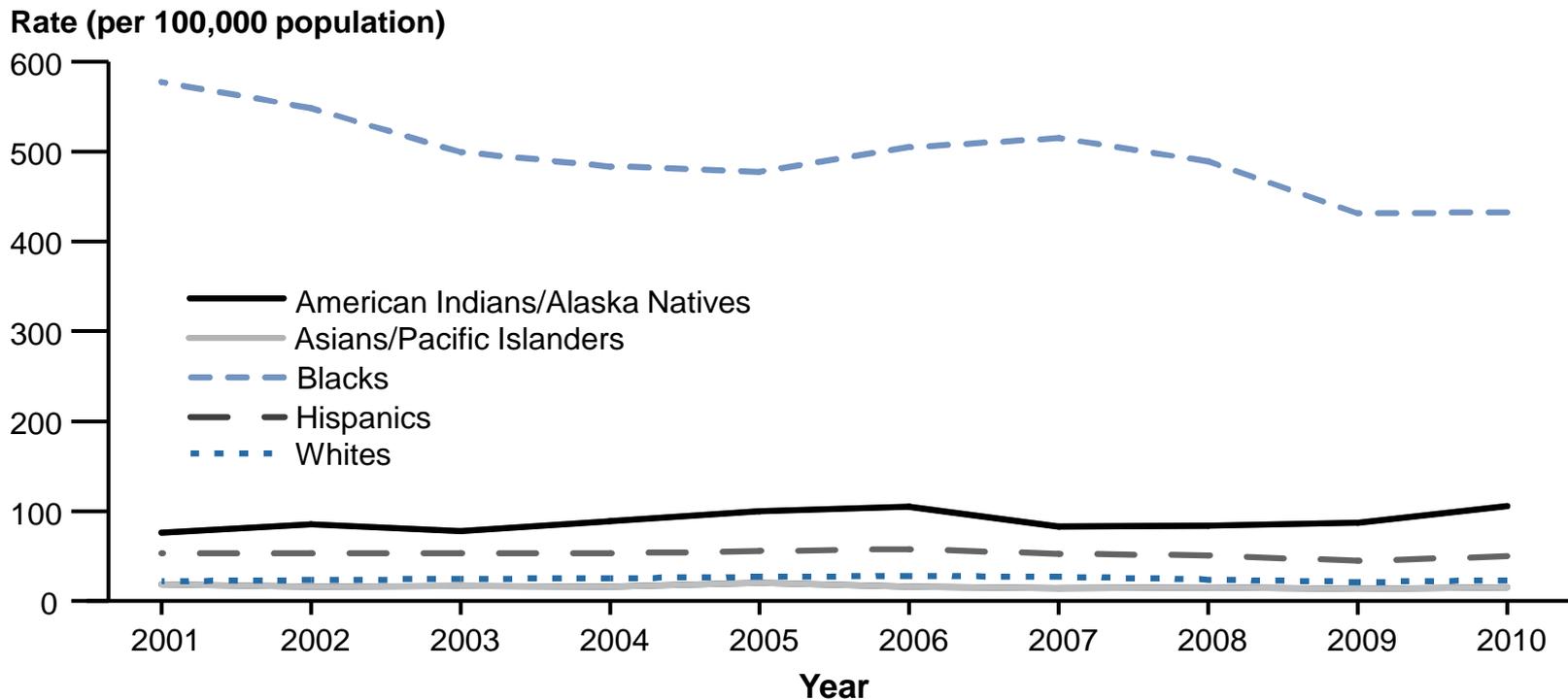
Gonorrhea—Rates by Age Among Women Aged 15–44 Years, United States, 2001–2010



Gonorrhea—Rates by Age Among Men Aged 15–44 Years, United States, 2001–2010

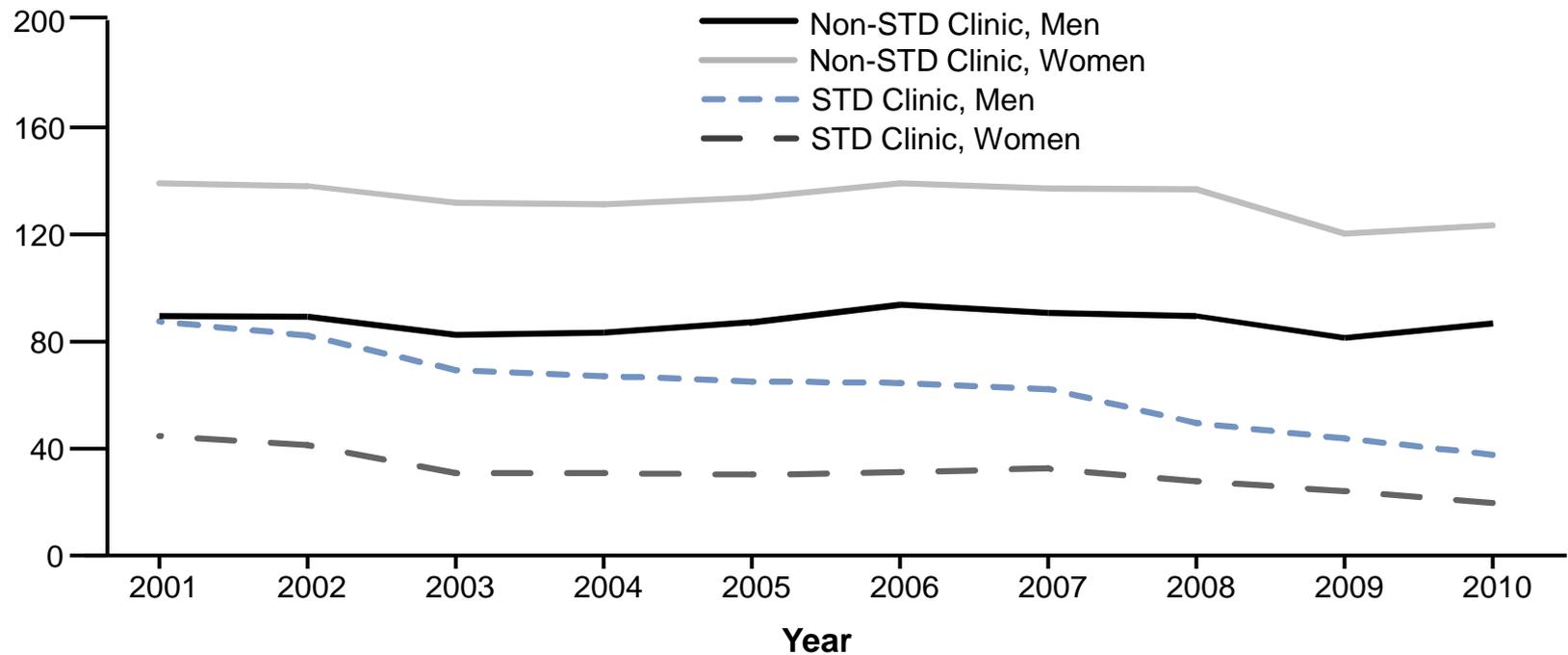


Gonorrhea—Rates by Race/Ethnicity, United States, 2001–2010

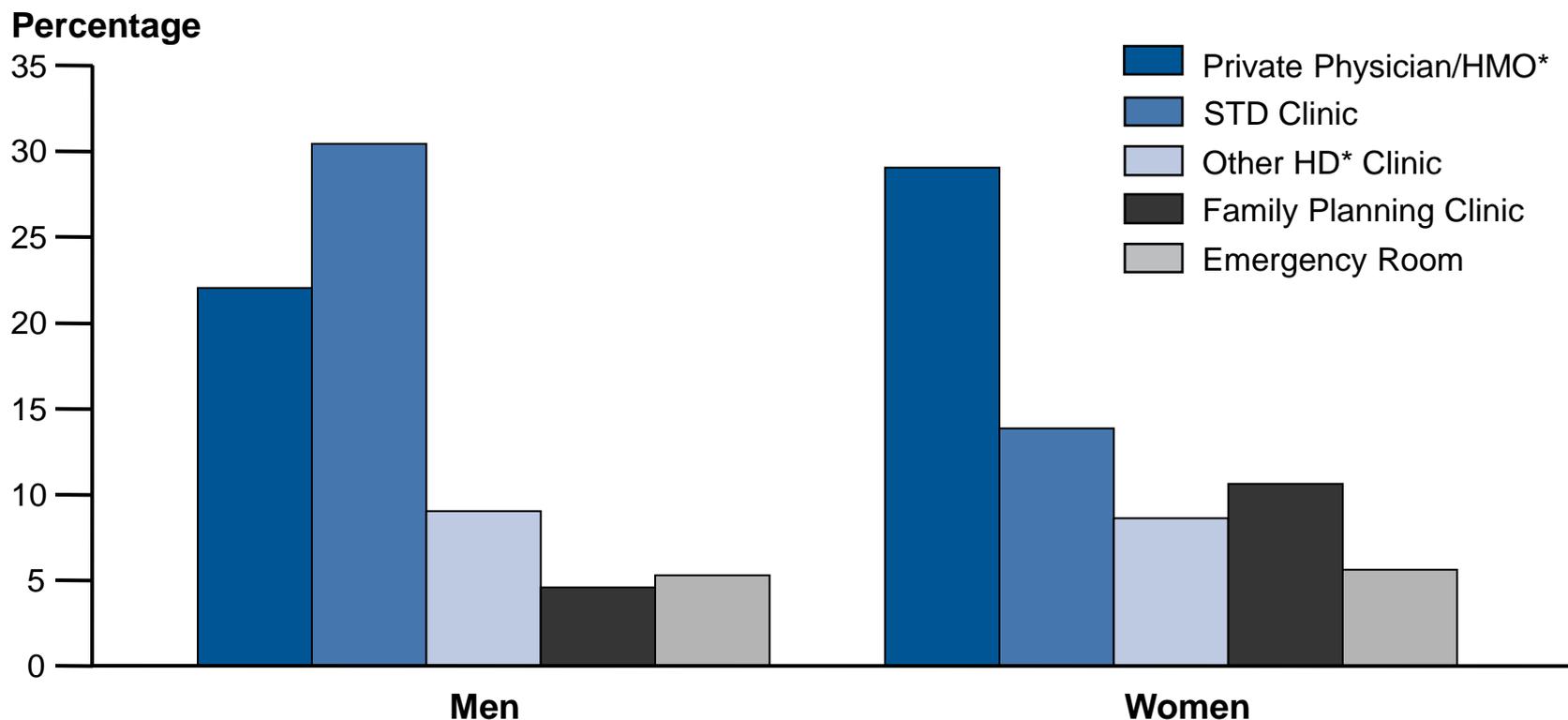


Gonorrhea—Cases by Reporting Source and Sex, United States, 2001–2010

Cases (in thousands)



Gonorrhea—Percentage of Reported Cases by Sex and Selected Reporting Sources, United States, 2010



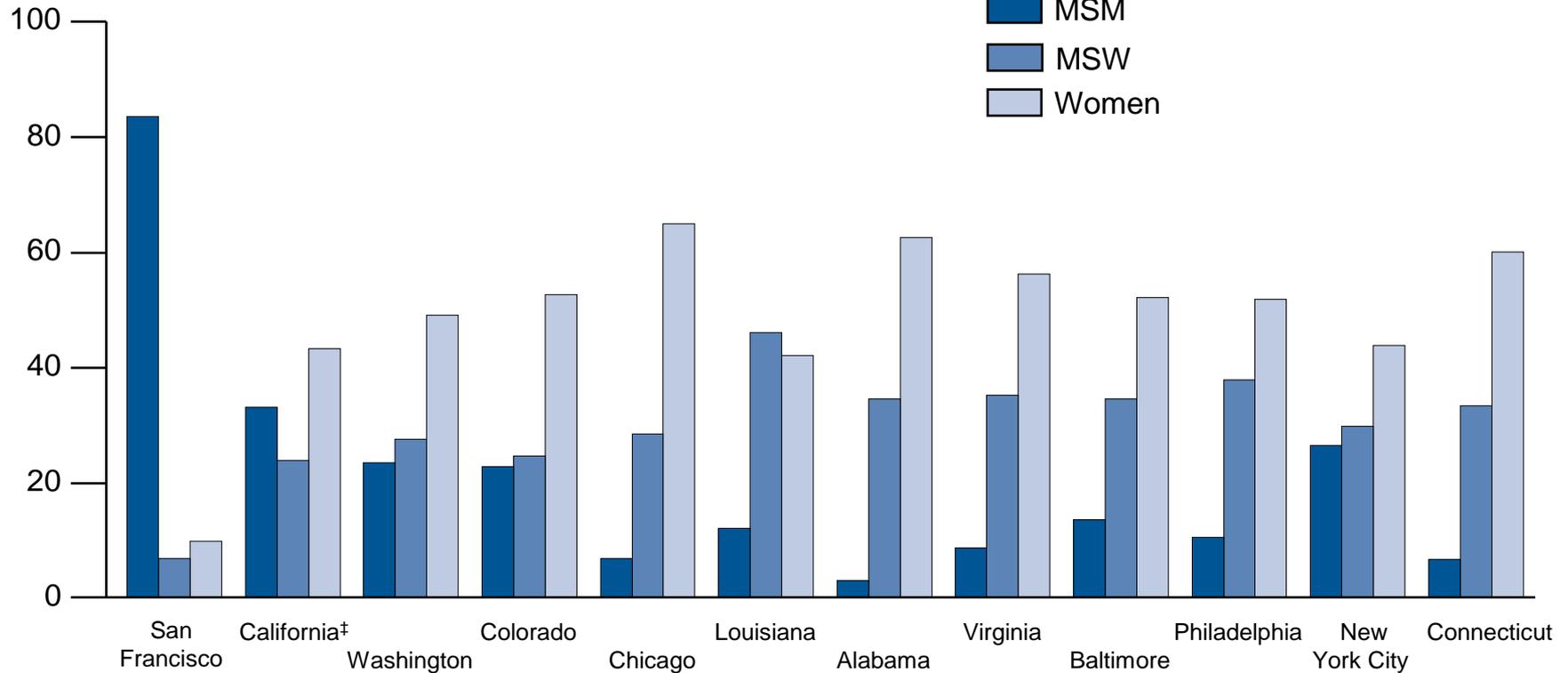
* HMO = health maintenance organization; HD = health department.

NOTE: These categories represent 69.5% of cases with known reporting source. Of all cases, 13.2% had a missing or unknown reporting source.



STD Surveillance Network (SSuN)—Proportion of MSM,* MSW,* and Women Among Interviewed[†] Gonorrhea Cases by Site, 2010

Percentage



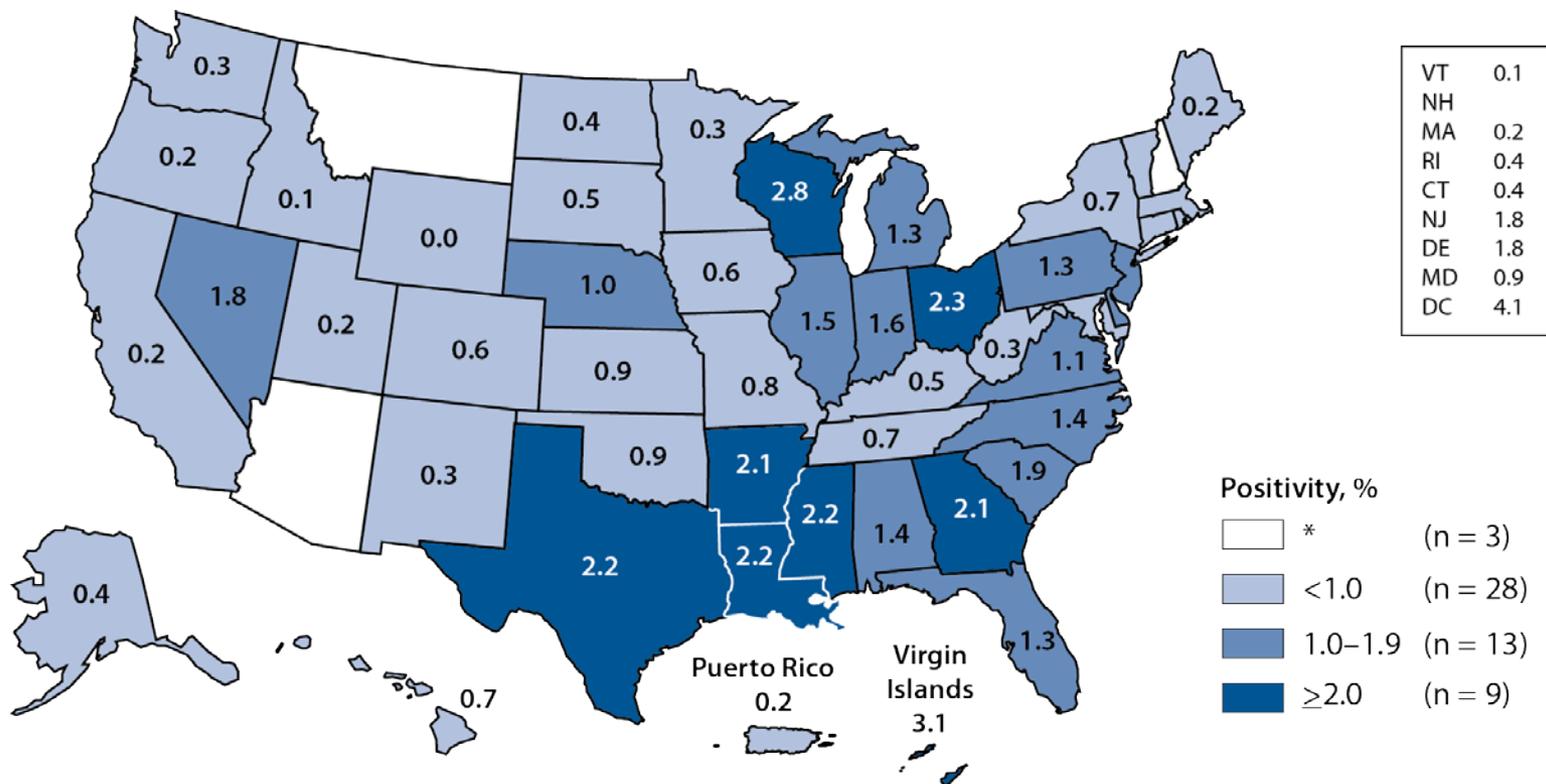
* MSM = men who have sex with men; MSW = men who have sex with women only.

[†] SSuN interviews conducted from a randomly selected patient population with gonorrhea (n = 3,446).

[‡] California data excludes San Francisco.



Gonorrhea—Positivity Among Women Aged 15–24 Years Tested in Family Planning Clinics, by State, Infertility Prevention Project, United States and Outlying Areas, 2010



* States/areas not meeting minimum inclusion criteria.

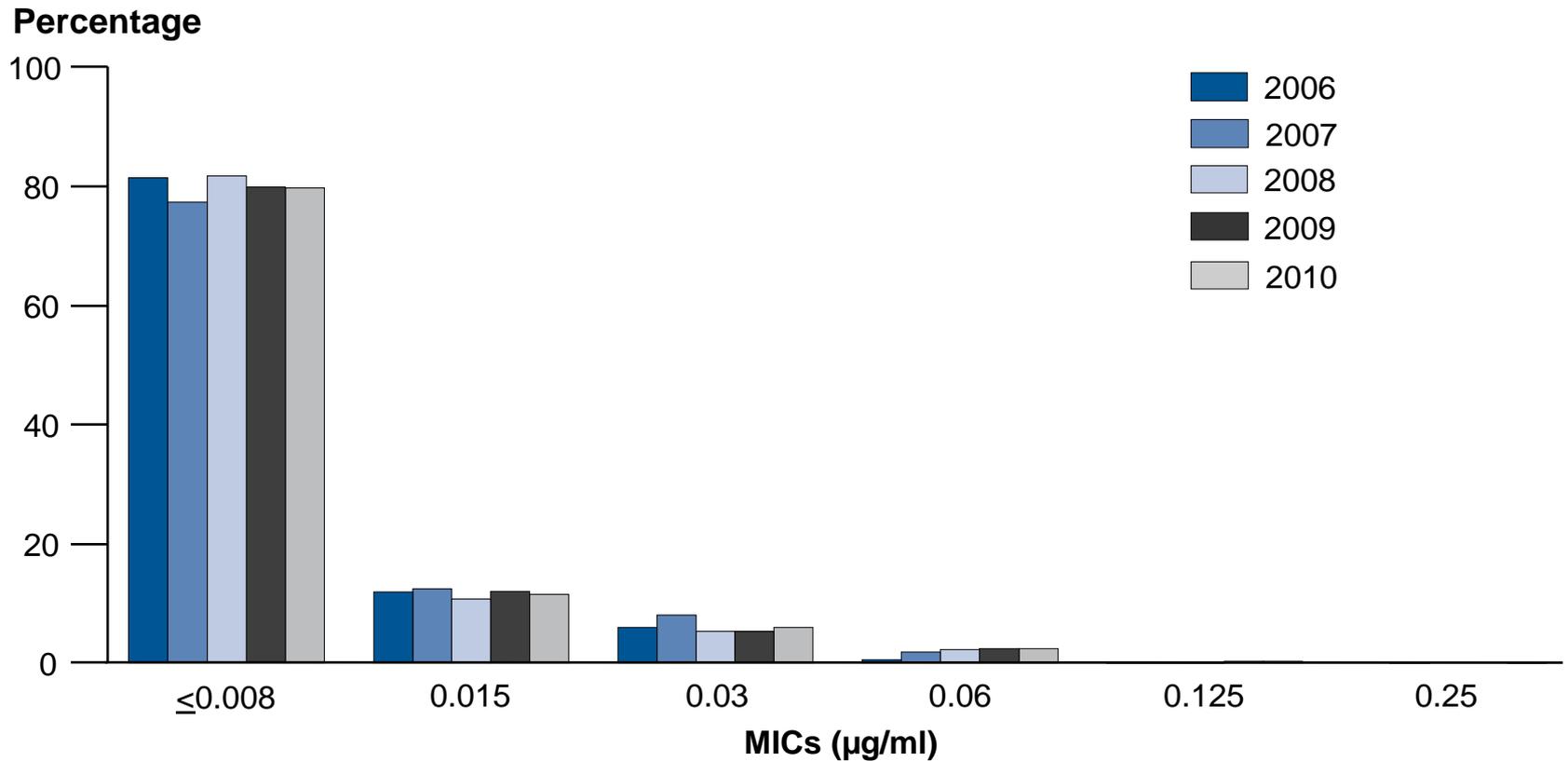
NOTE: Includes states and outlying areas that reported positivity data on at least 500 women aged 15–24 years who were screened during 2010.



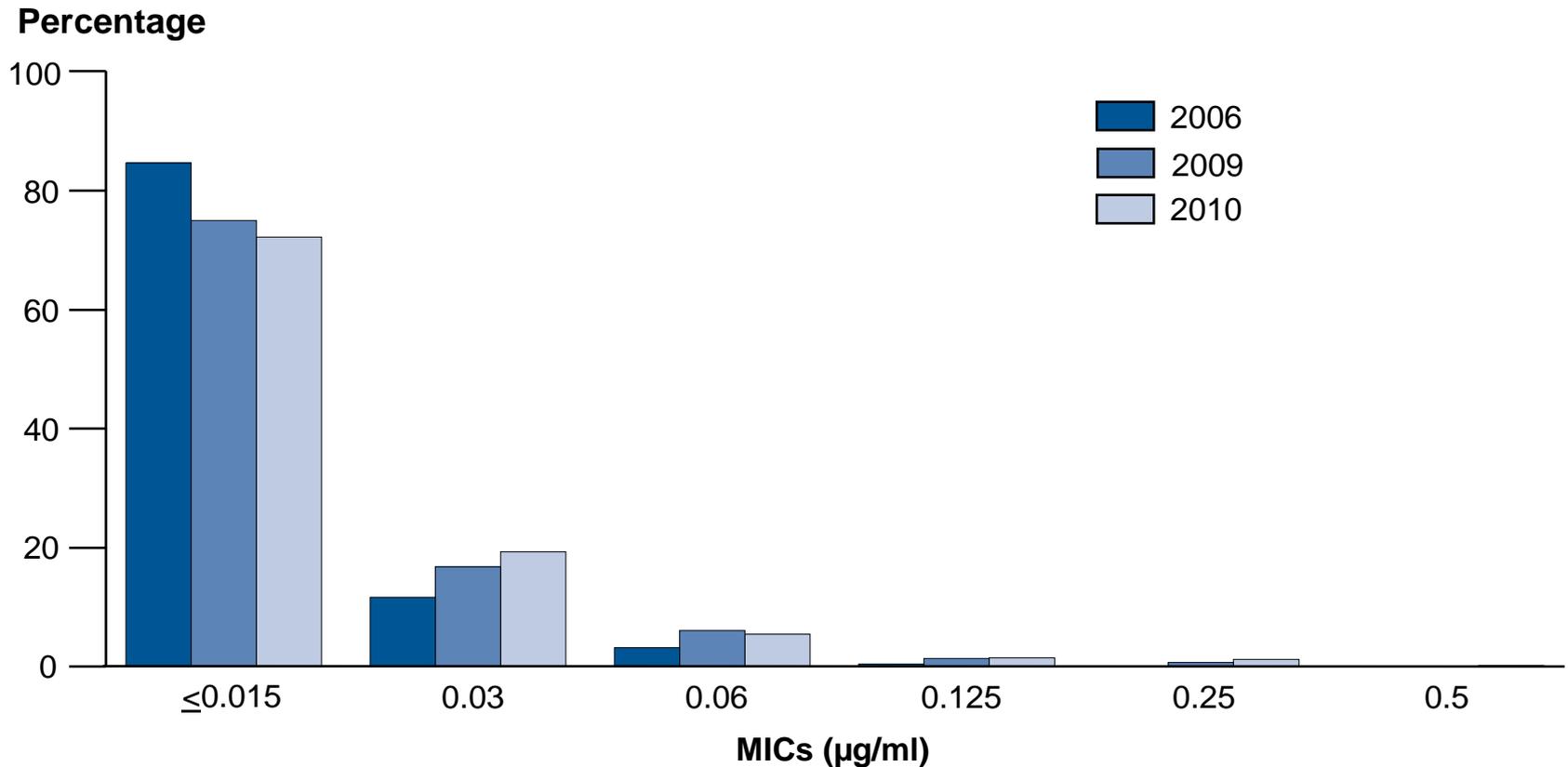
Gonococcal Isolate Surveillance Project (GISP)—Location of Participating Sentinel Sites and Regional Laboratories, United States, 2010



Gonococcal Isolate Surveillance Project (GISP)—Distribution of Minimum Inhibitory Concentrations (MICs) to Ceftriaxone Among GISP Isolates, 2006–2010



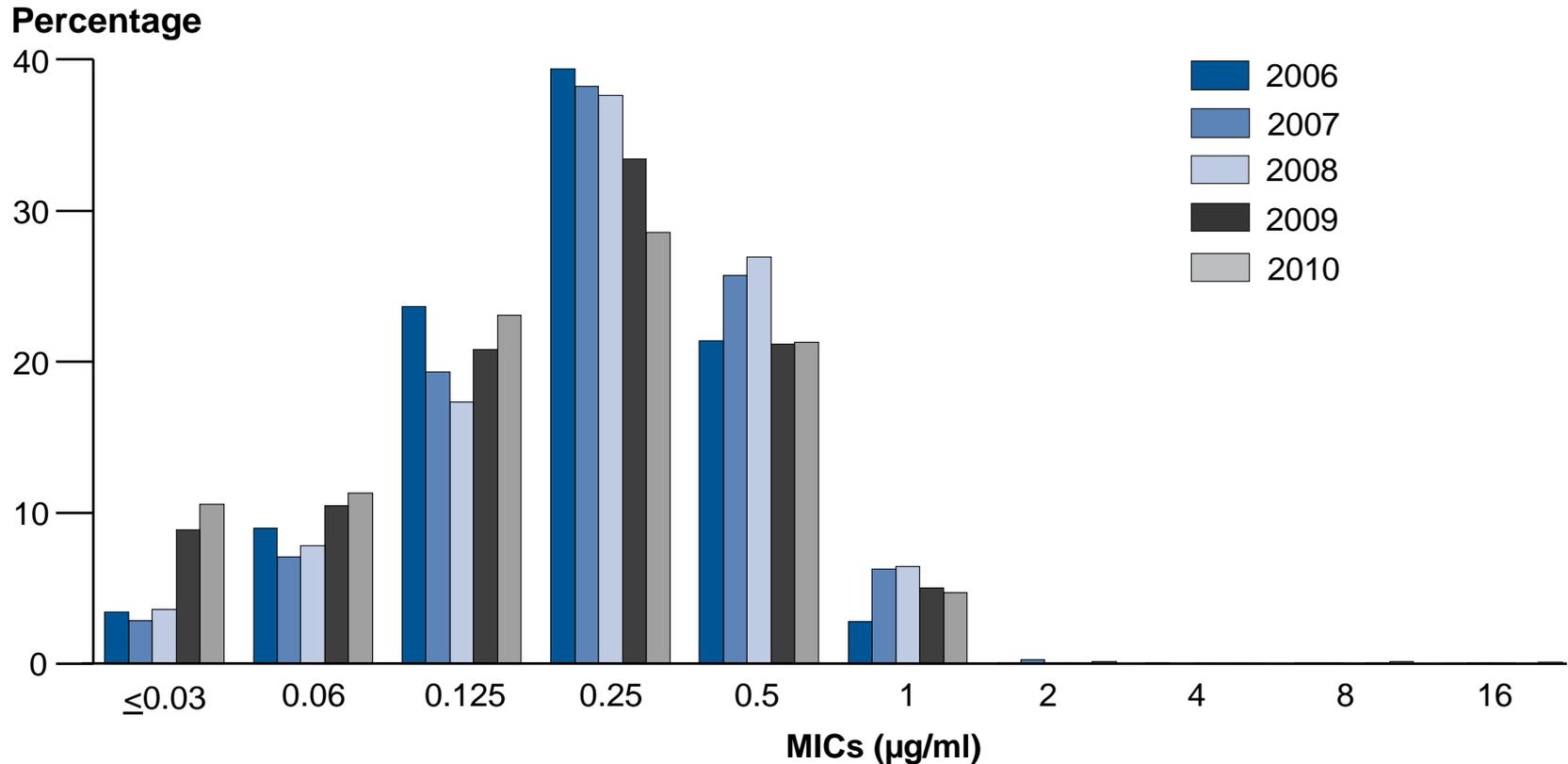
Gonococcal Isolate Surveillance Project (GISP)—Distribution of Minimum Inhibitory Concentrations (MICs) to Cefixime Among GISP Isolates, 2006 and 2009–2010



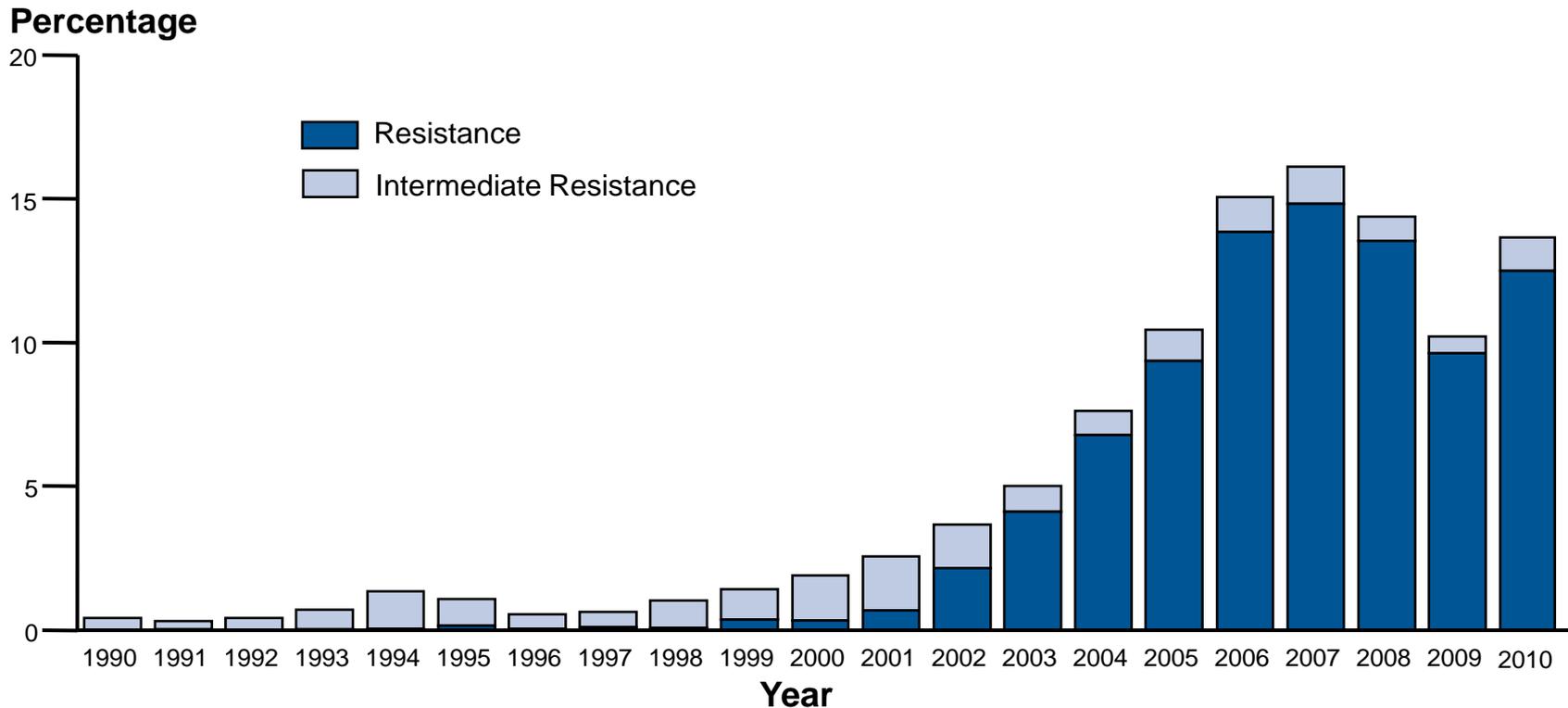
NOTE: Isolates were not tested for cefixime susceptibility in 2007 and 2008.



Gonococcal Isolate Surveillance Project (GISP)—Distribution of Minimum Inhibitory Concentrations (MICs) to Azithromycin Among GISP Isolates, 2006–2010



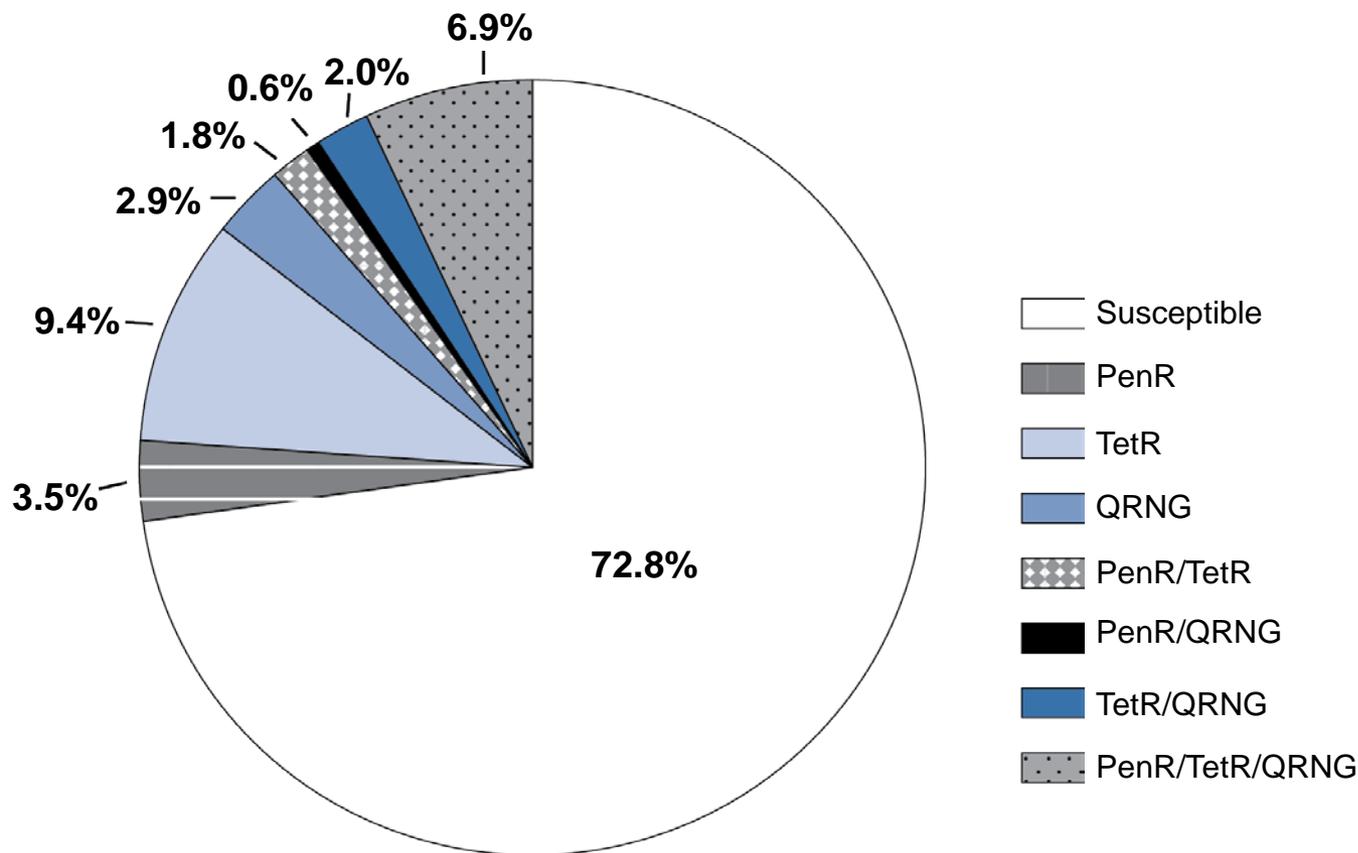
Gonococcal Isolate Surveillance Project (GISP)—Percentage of *Neisseria gonorrhoeae* Isolates with Resistance or Intermediate Resistance to Ciprofloxacin, 1990–2010



NOTE: Resistant isolates have ciprofloxacin minimum inhibitory concentrations (MICs) ≥ 1 $\mu\text{g/ml}$. Isolates with intermediate resistance have ciprofloxacin MICs of 0.125–0.5 $\mu\text{g/ml}$. Susceptibility to ciprofloxacin was first measured in GISP in 1990.



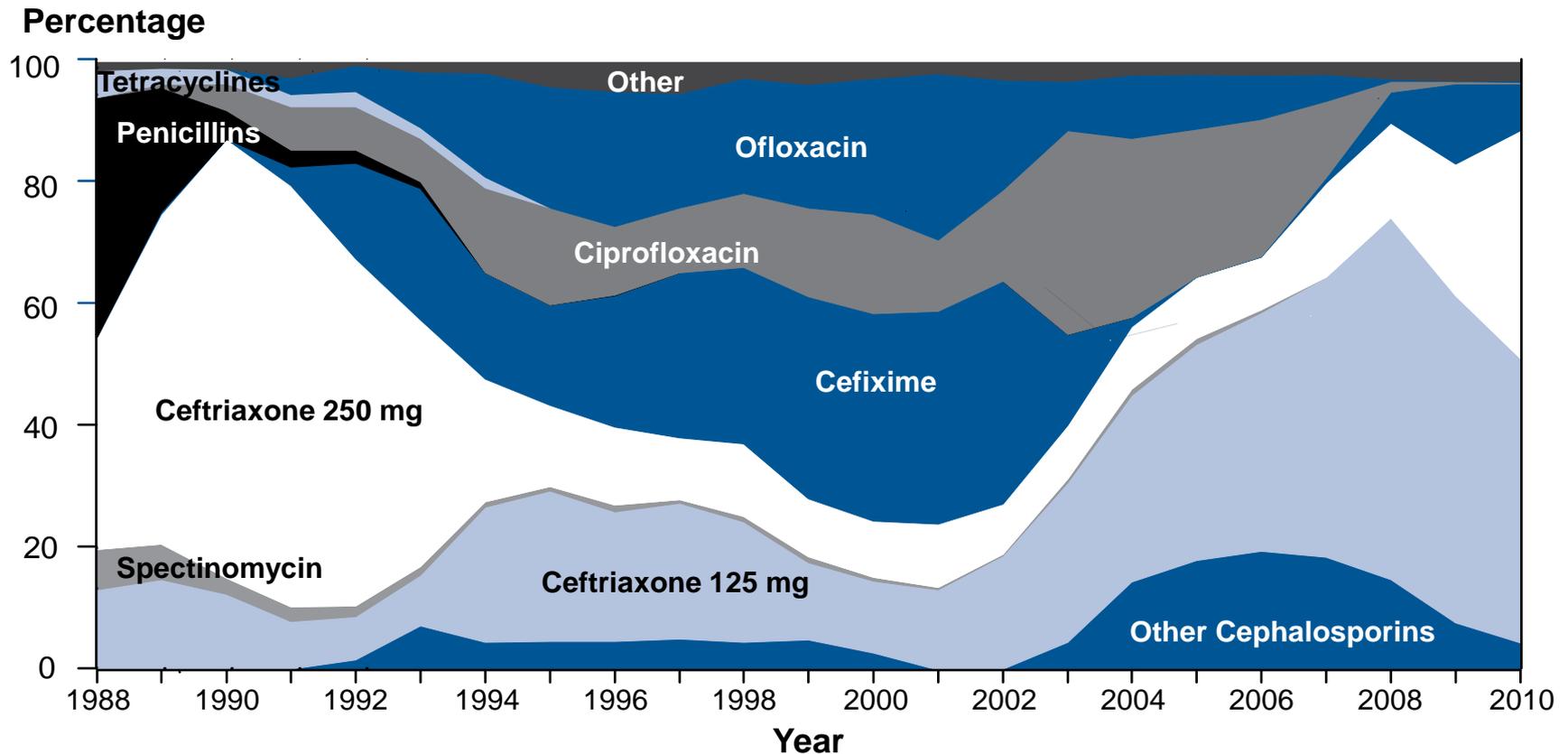
Gonococcal Isolate Surveillance Project (GISP)— Penicillin, Tetracycline, and Ciprofloxacin Resistance Among GISP Isolates, 2010



NOTE: PenR = penicillinase producing *Neisseria gonorrhoeae* and chromosomally mediated penicillin-resistant *N. gonorrhoeae*; TetR = chromosomally and plasmid mediated tetracycline-resistant *N. gonorrhoeae*; and QRNG = quinolone-resistant *N. gonorrhoeae*.



Gonococcal Isolate Surveillance Project (GISP)—Drugs Used to Treat Gonorrhea Among GISP Participants, 1988–2010



NOTE: For 2010, "Other" includes no therapy (1.2%), azithromycin 2 g (1.7%), and other less frequently used drugs.

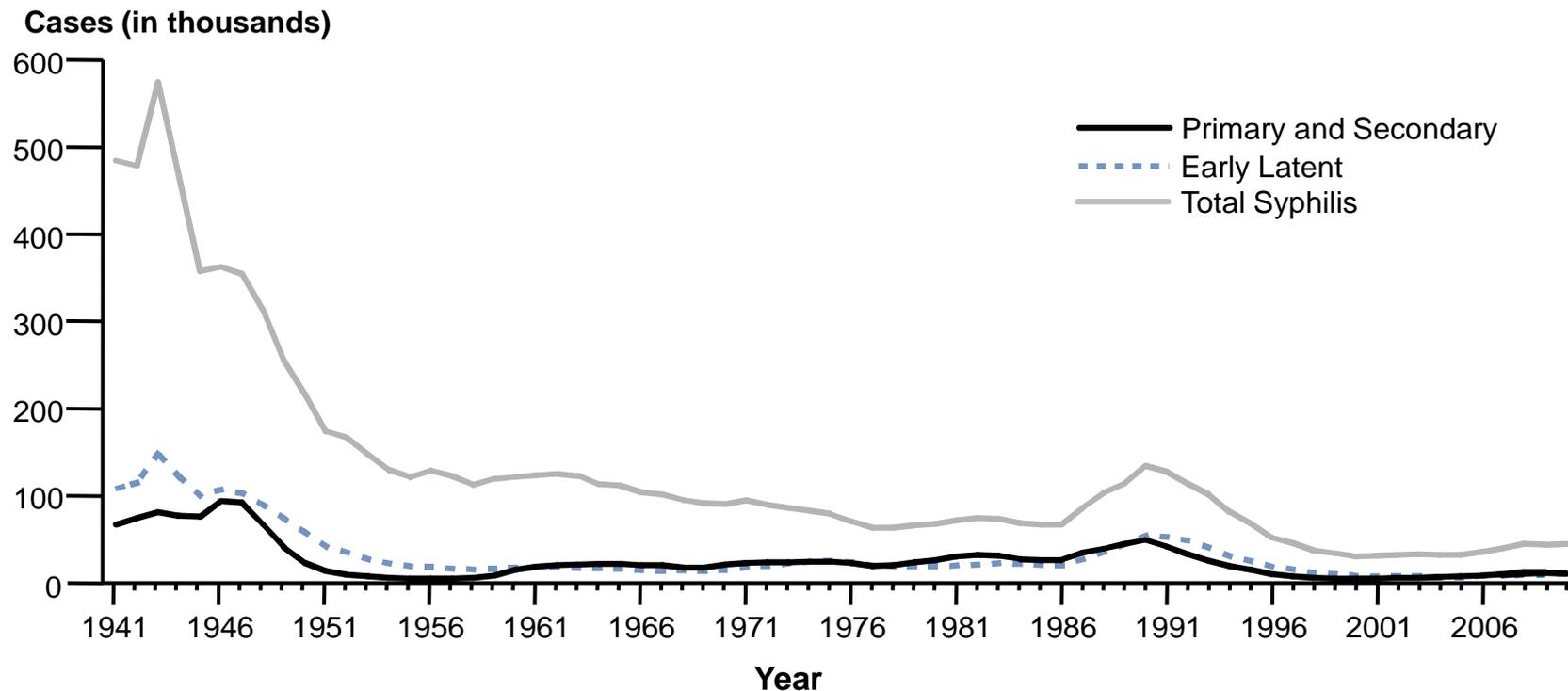


SYPHILIS

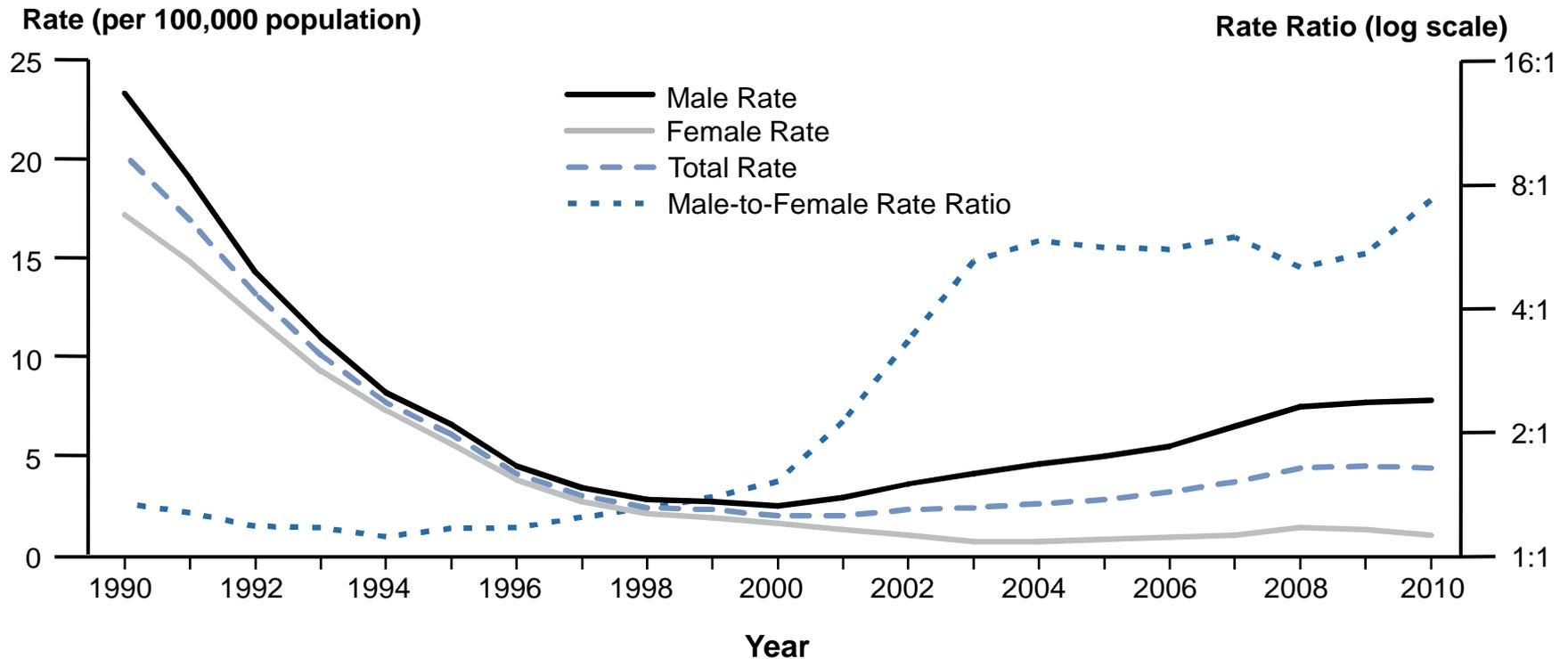
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Syphilis—Reported Cases by Stage of Infection, United States, 1941–2010

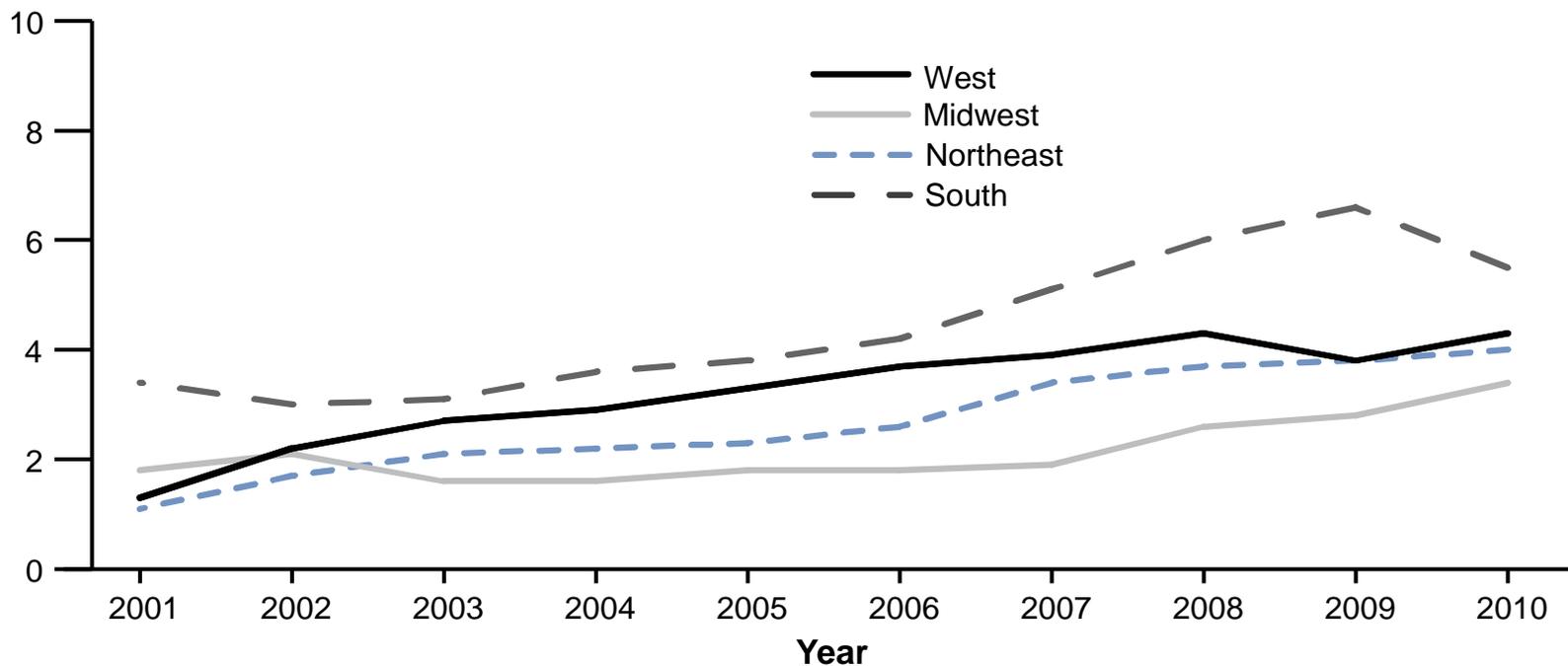


Primary and Secondary Syphilis—Rates by Sex and Male-to-Female Rate Ratios, United States, 1990–2010

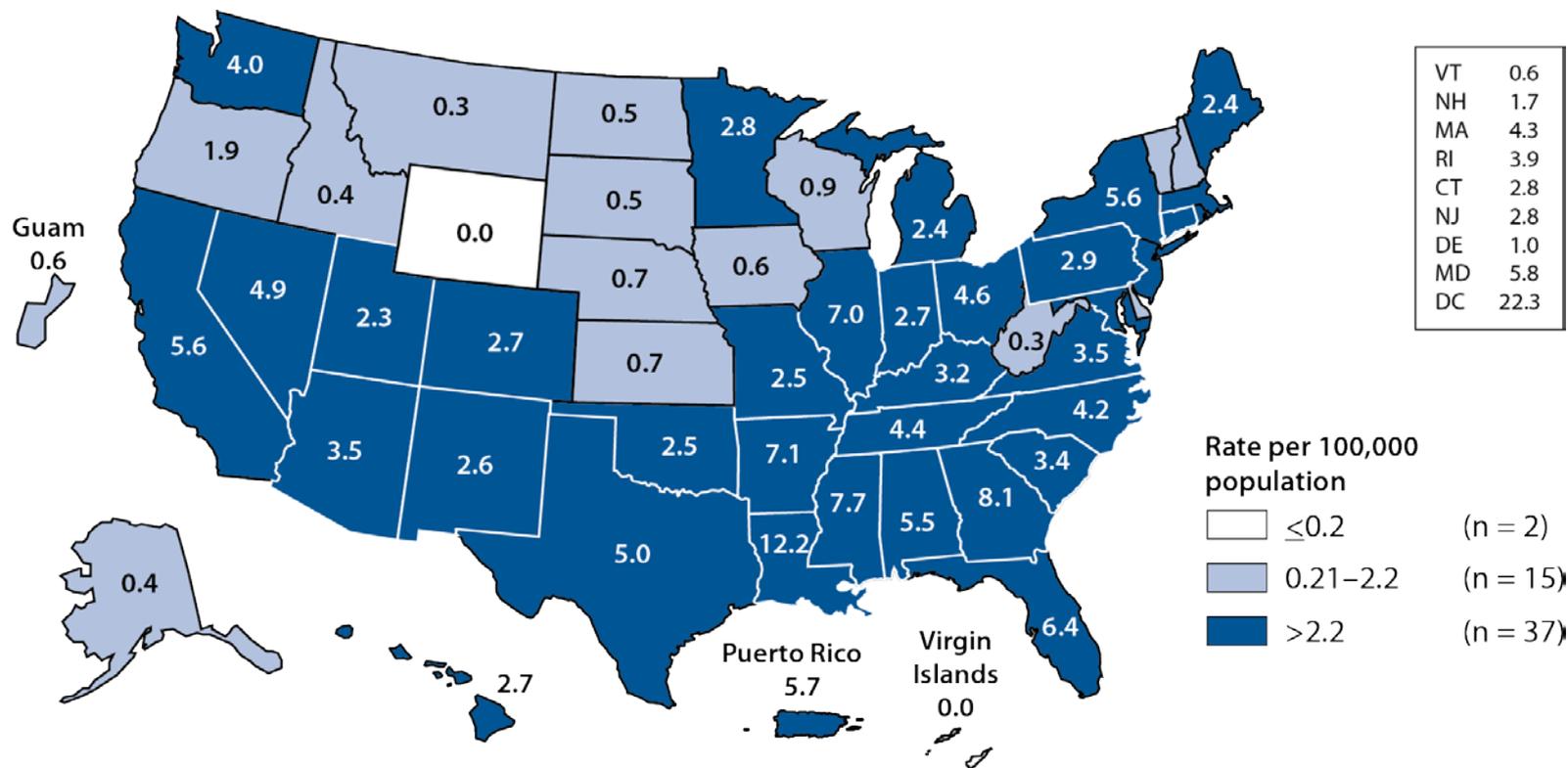


Primary and Secondary Syphilis—Rates by Region, United States, 2001–2010

Rate (per 100,000 population)



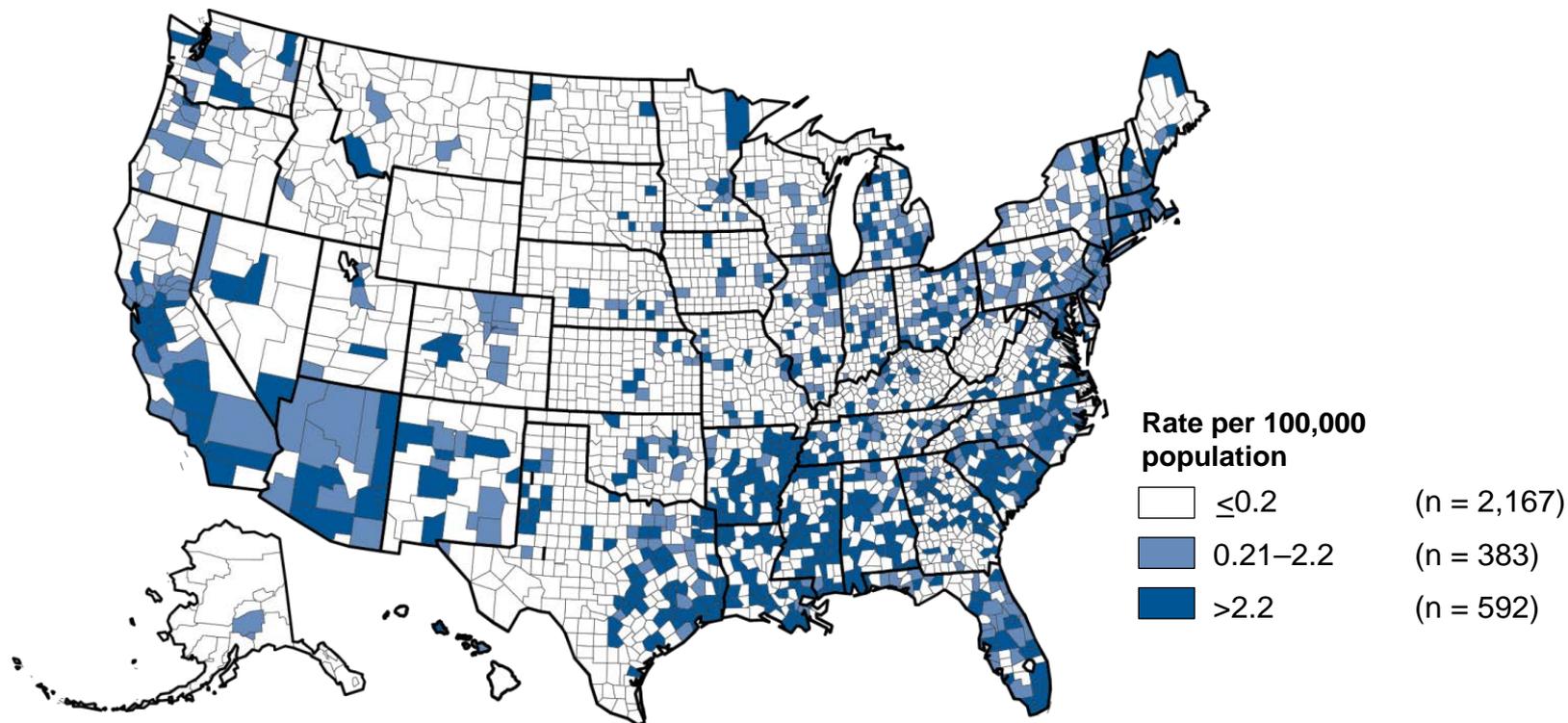
Primary and Secondary Syphilis—Rates by State, United States and Outlying Areas, 2010



NOTE: The total rate of primary and secondary syphilis for the United States and outlying areas (Guam, Puerto Rico, and Virgin Islands) was 4.5 per 100,000 population.

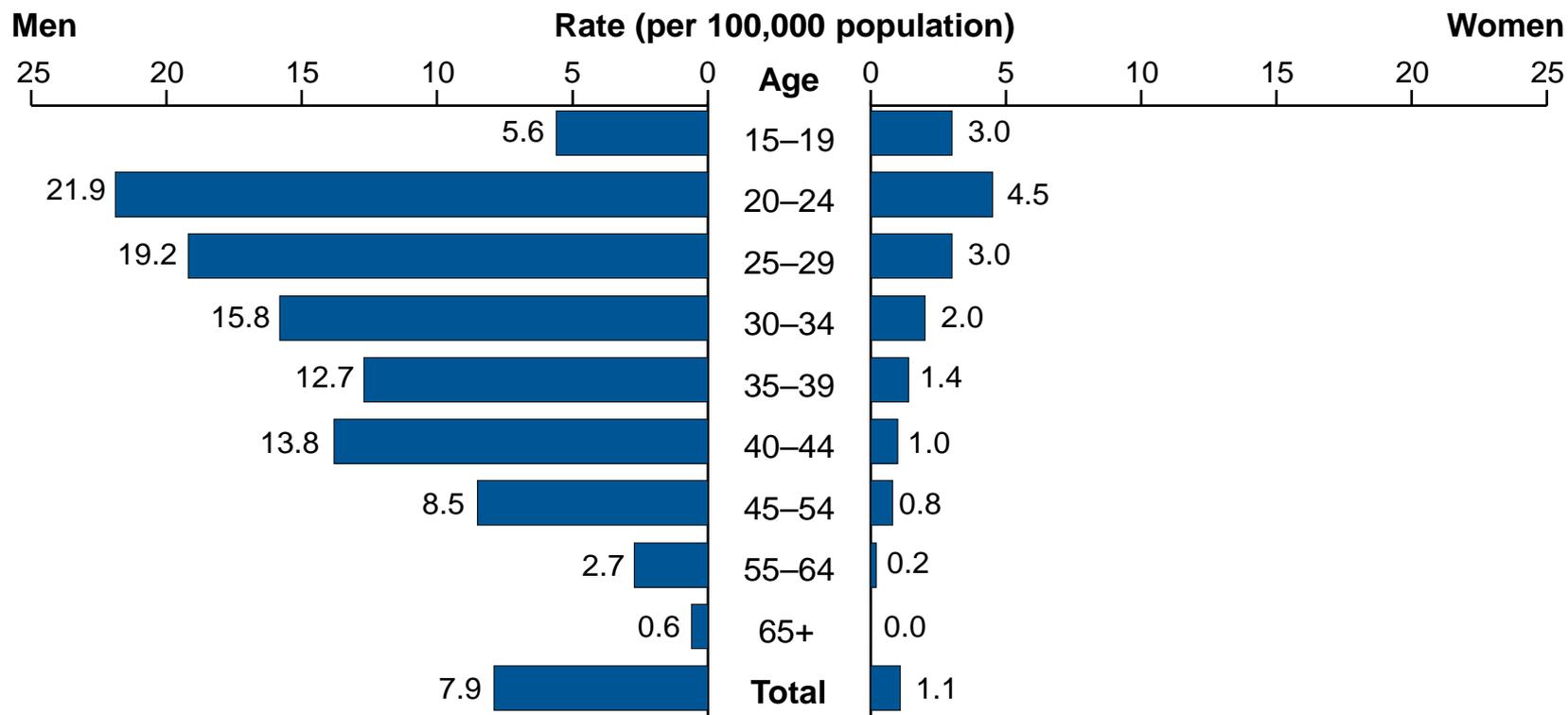


Primary and Secondary Syphilis—Rates by County, United States, 2010



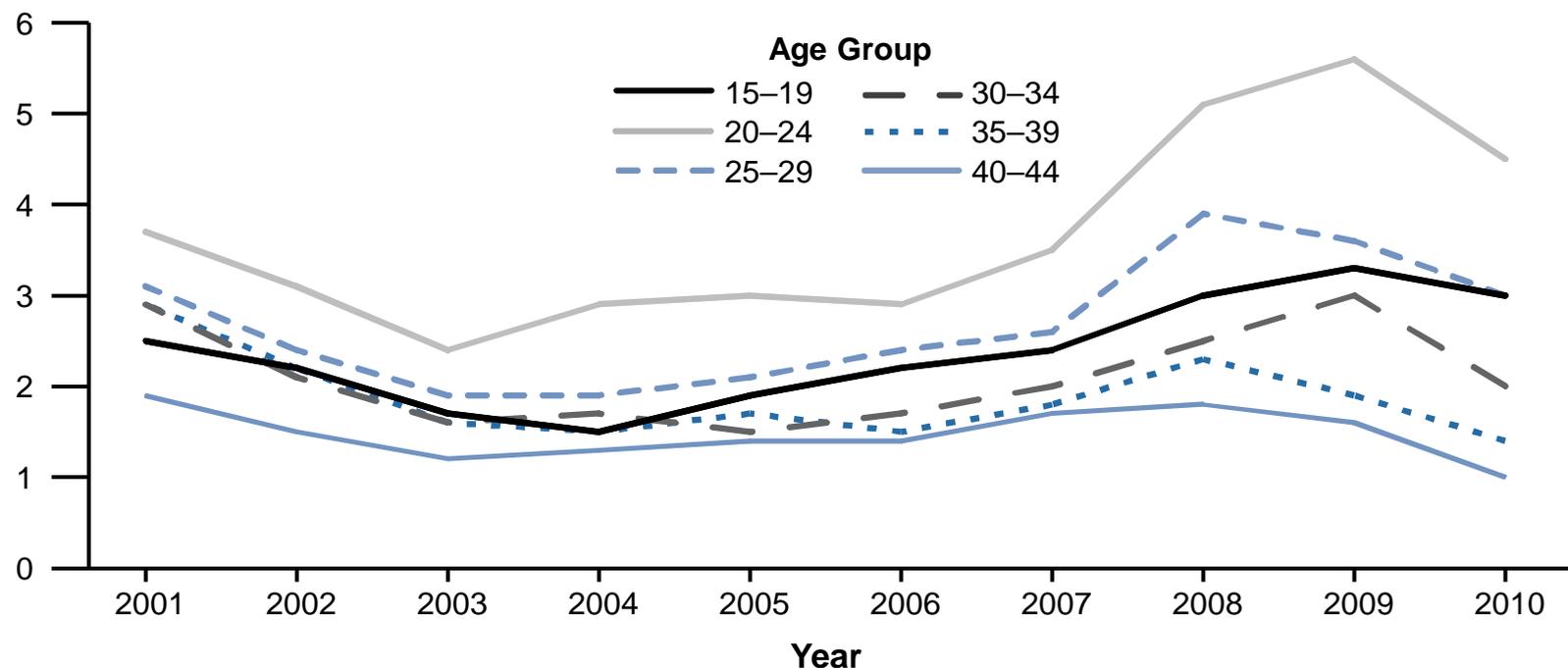
NOTE: In 2010, 2,167 (69.0%) of 3,141 counties in the United States reported no cases of primary and secondary syphilis.

Primary and Secondary Syphilis—Rates by Age and Sex, United States, 2010



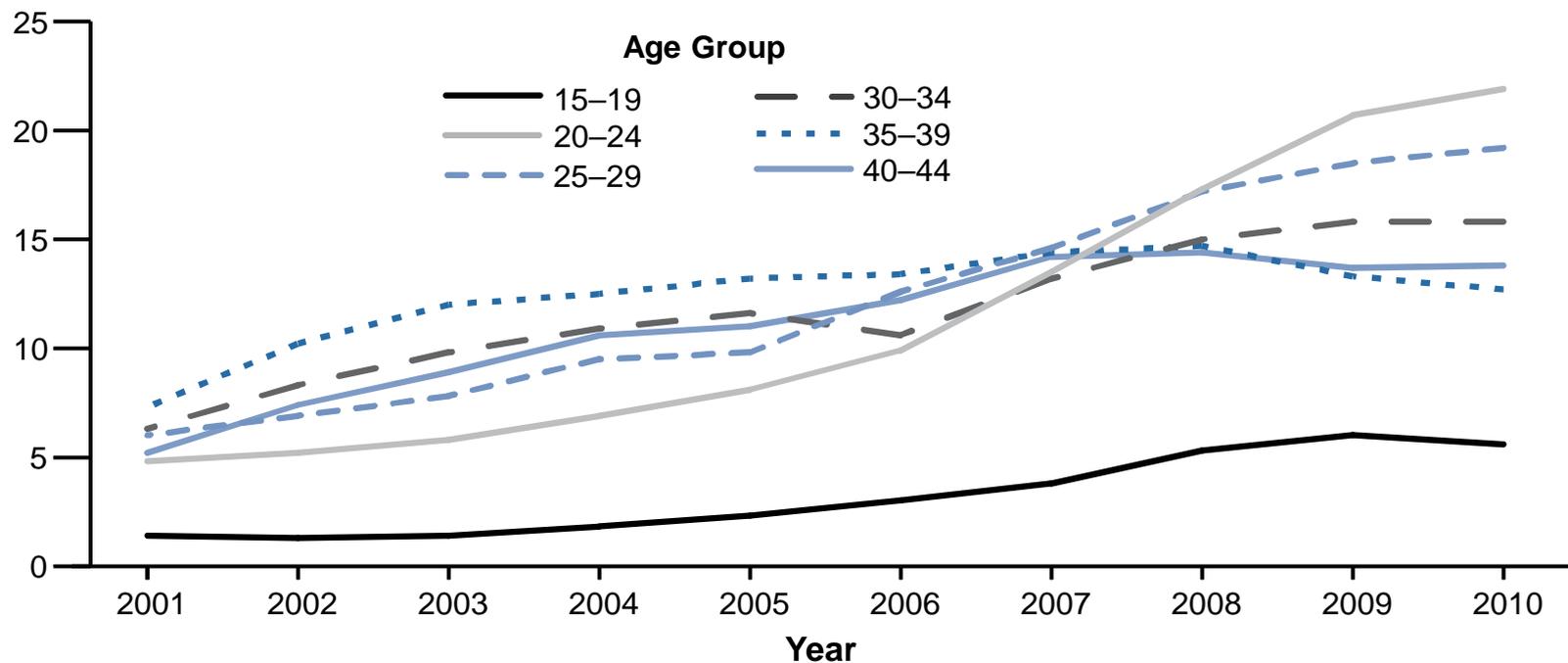
Primary and Secondary Syphilis—Rates by Age Among Women Aged 15–44 Years, United States, 2001–2010

Rate (per 100,000 population)



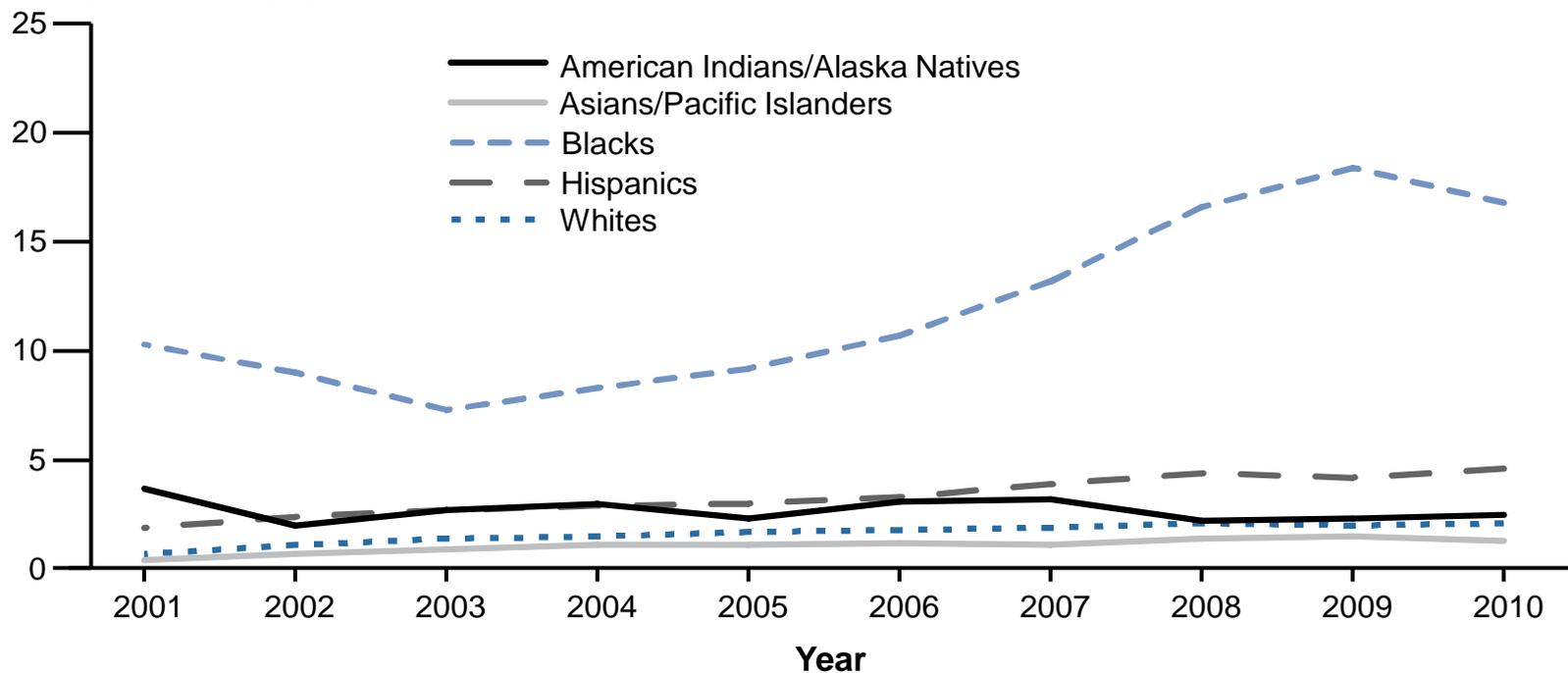
Primary and Secondary Syphilis—Rates by Age Among Men Aged 15–44 Years, United States, 2001–2010

Rate (per 100,000 population)

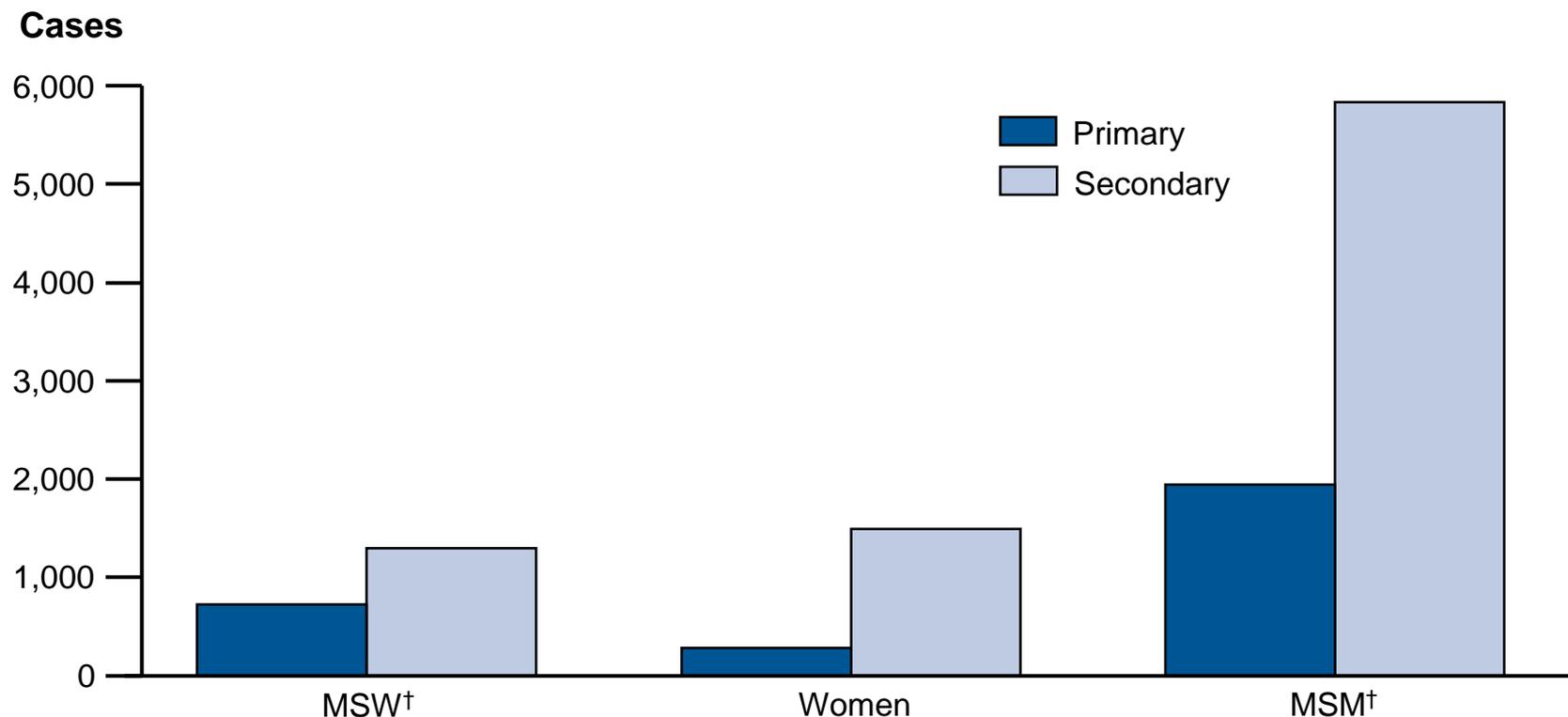


Primary and Secondary Syphilis—Rates by Race/Ethnicity, United States, 2001–2010

Rate (per 100,000 population)



Primary and Secondary Syphilis—Reported Cases* by Stage, Sex, and Sexual Behavior, United States, 2010

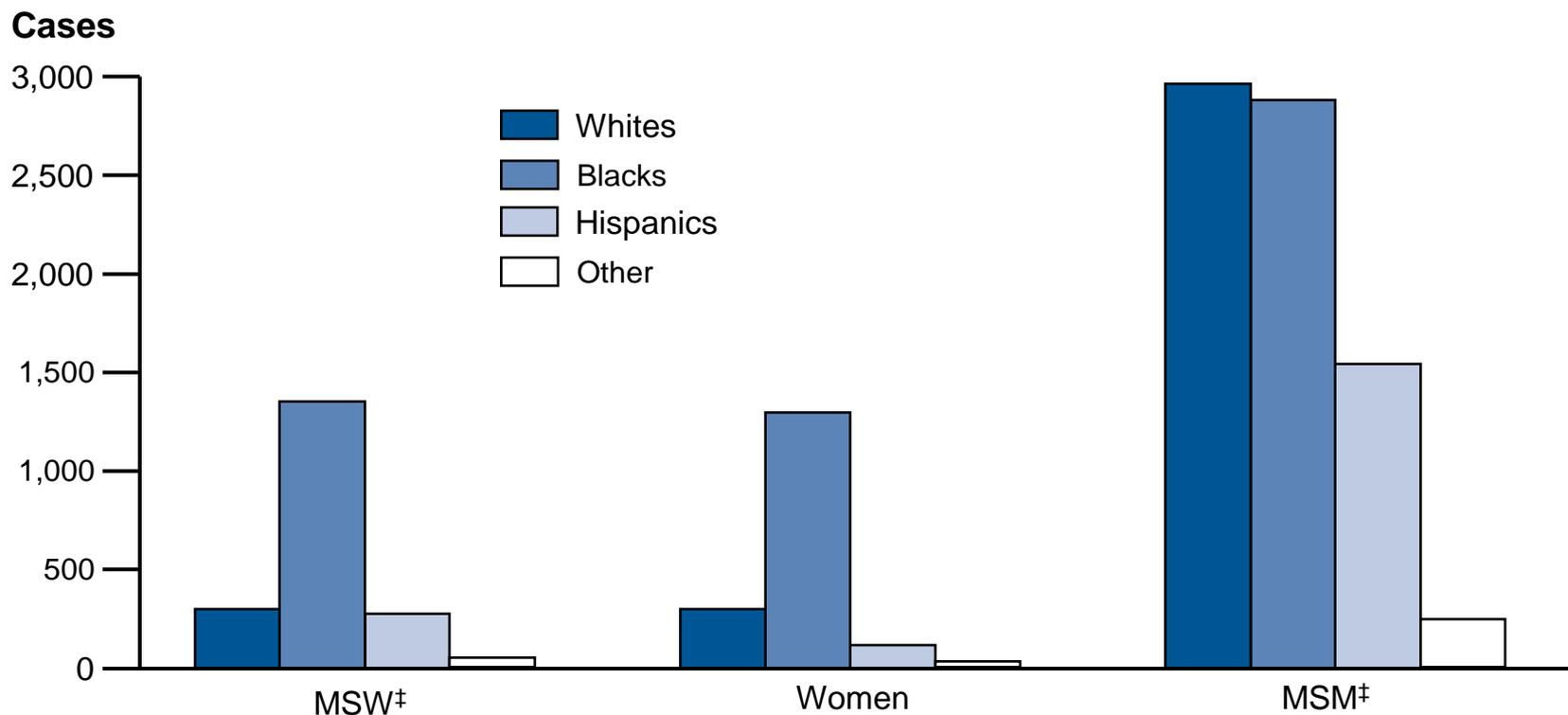


* Of the reported male cases of primary and secondary syphilis, 18.3% were missing sex of sex partner information.

† MSW = men who have sex with women only; MSM = men who have sex with men.



Primary and Secondary Syphilis—Reported Cases* by Sex, Sexual Behavior, and Race/Ethnicity,[†] United States, 2010



* Of the reported male cases of primary and secondary syphilis, 18.3% were missing sex of sex partner information; 2.0% of reported male cases with sex of sex partner data were missing race/ethnicity data.

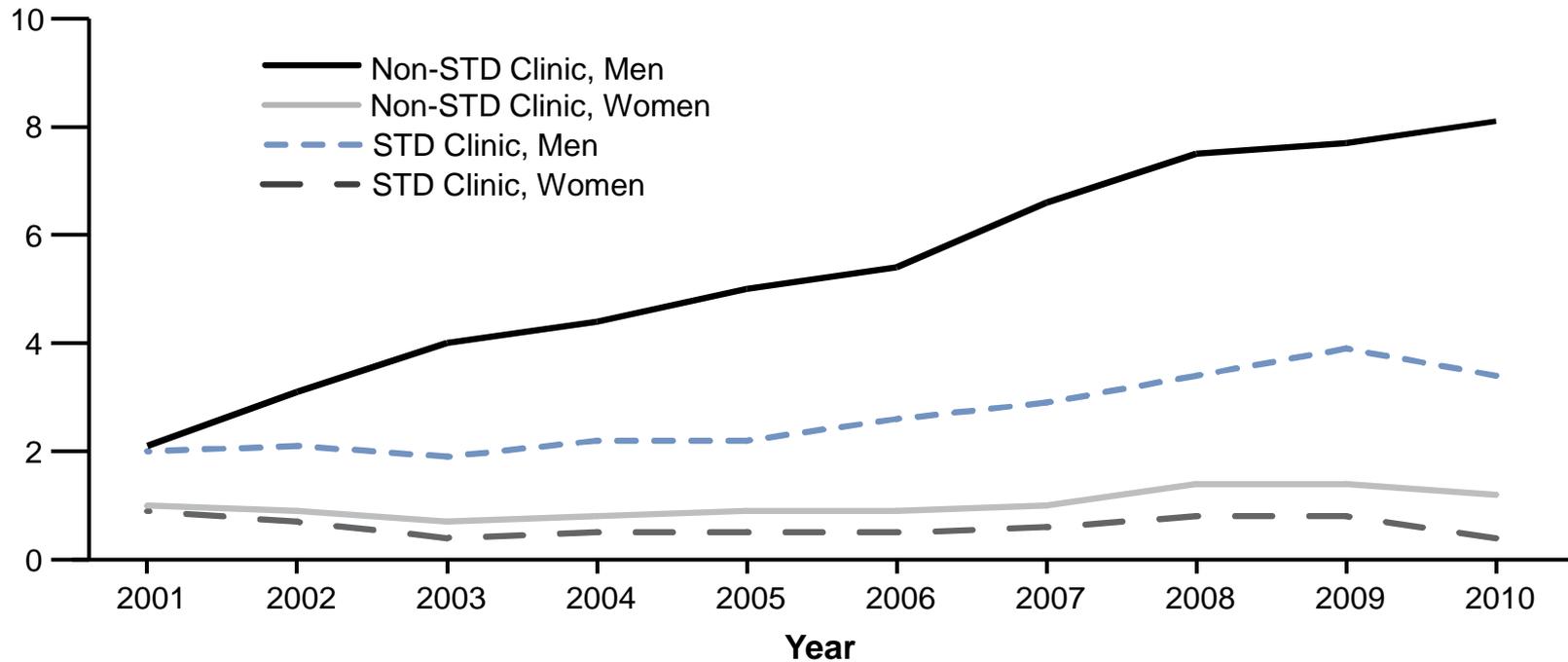
[†] No imputation was done for race/ethnicity.

[‡] MSW = men who have sex with women only; MSM = men who have sex with men.

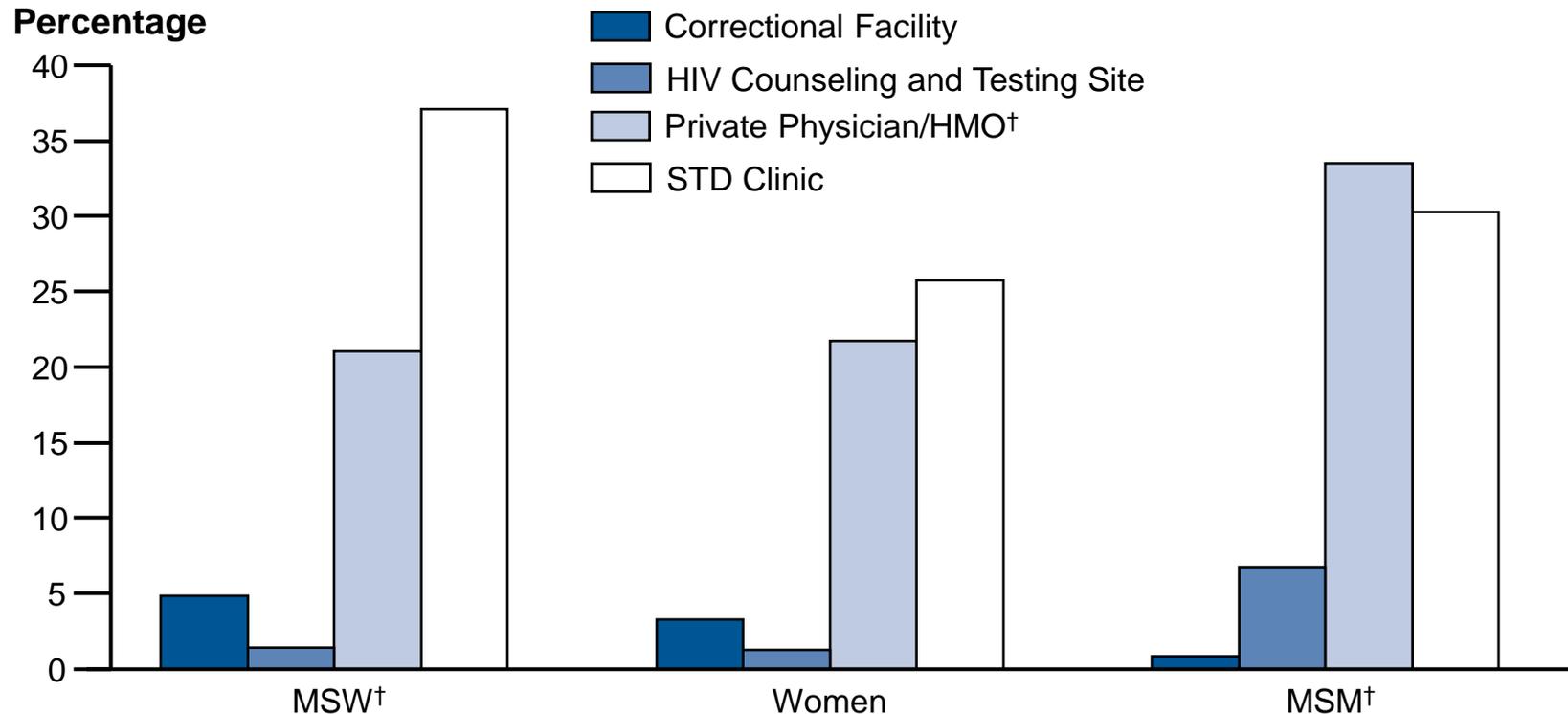


Primary and Secondary Syphilis—Reported Cases by Reporting Source and Sex, United States, 2001–2010

Cases (in thousands)



Primary and Secondary Syphilis—Percentage of Reported Cases* by Sex, Sexual Behavior, and Selected Reporting Sources, 2010

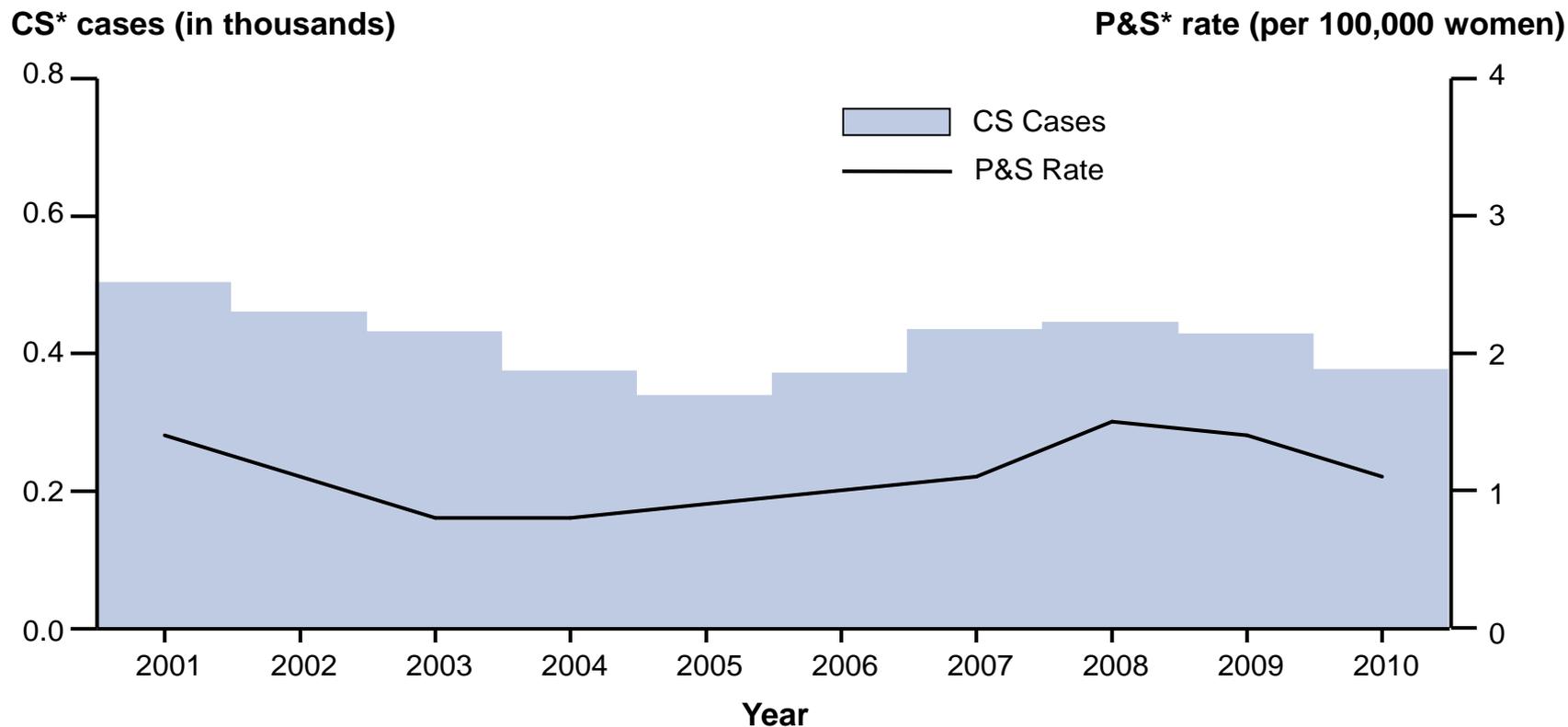


* Of the reported male cases of primary and secondary syphilis, 18.3% were missing sex of sex partner information, and 2.7% of reported male cases with sex of sex partner data were missing source of information data.

† HMO = health maintenance organization; MSW = men who have sex with women only; MSM = men who have sex with men.



Congenital Syphilis—Reported Cases Among Infants by Year of Birth and Rates of Primary and Secondary Syphilis Among Women, United States, 2001–2010



* CS = congenital syphilis; P&S = primary and secondary syphilis.

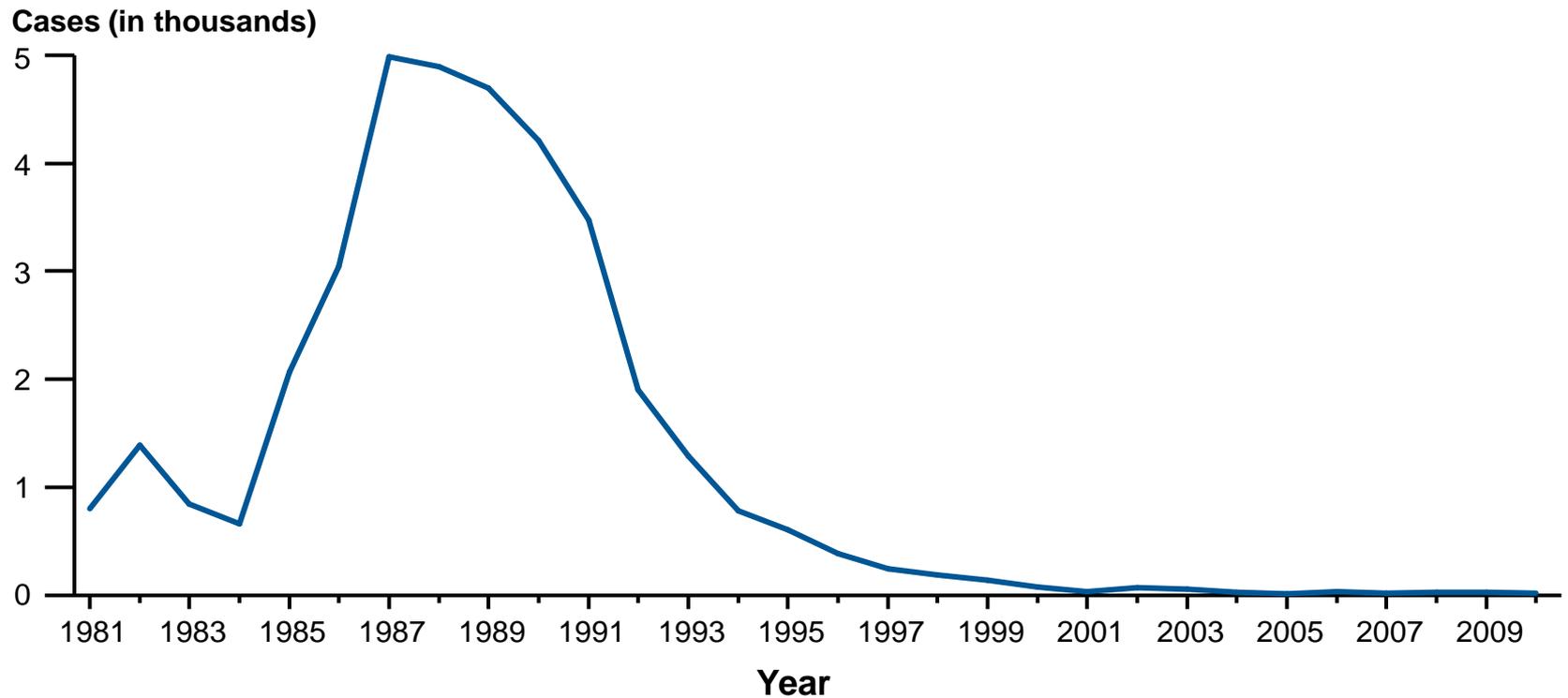


Other Sexually Transmitted Diseases

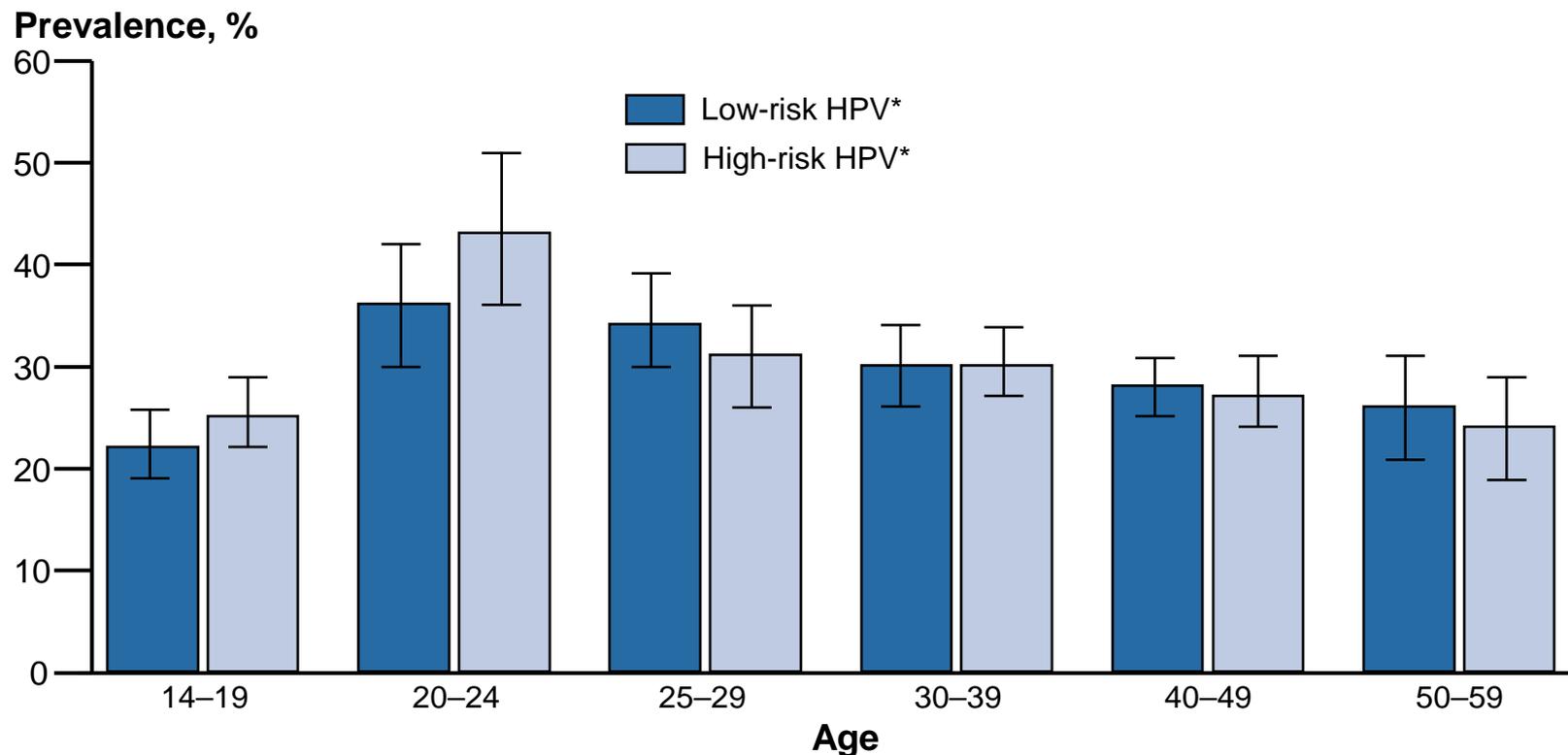
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Chancroid—Reported Cases, United States, 1981–2010



Human Papillomavirus—Prevalence of High-risk and Low-risk Types Among Females Aged 14–59 Years, National Health and Nutrition Examination Survey, 2003–2006



* HPV = human papillomavirus.

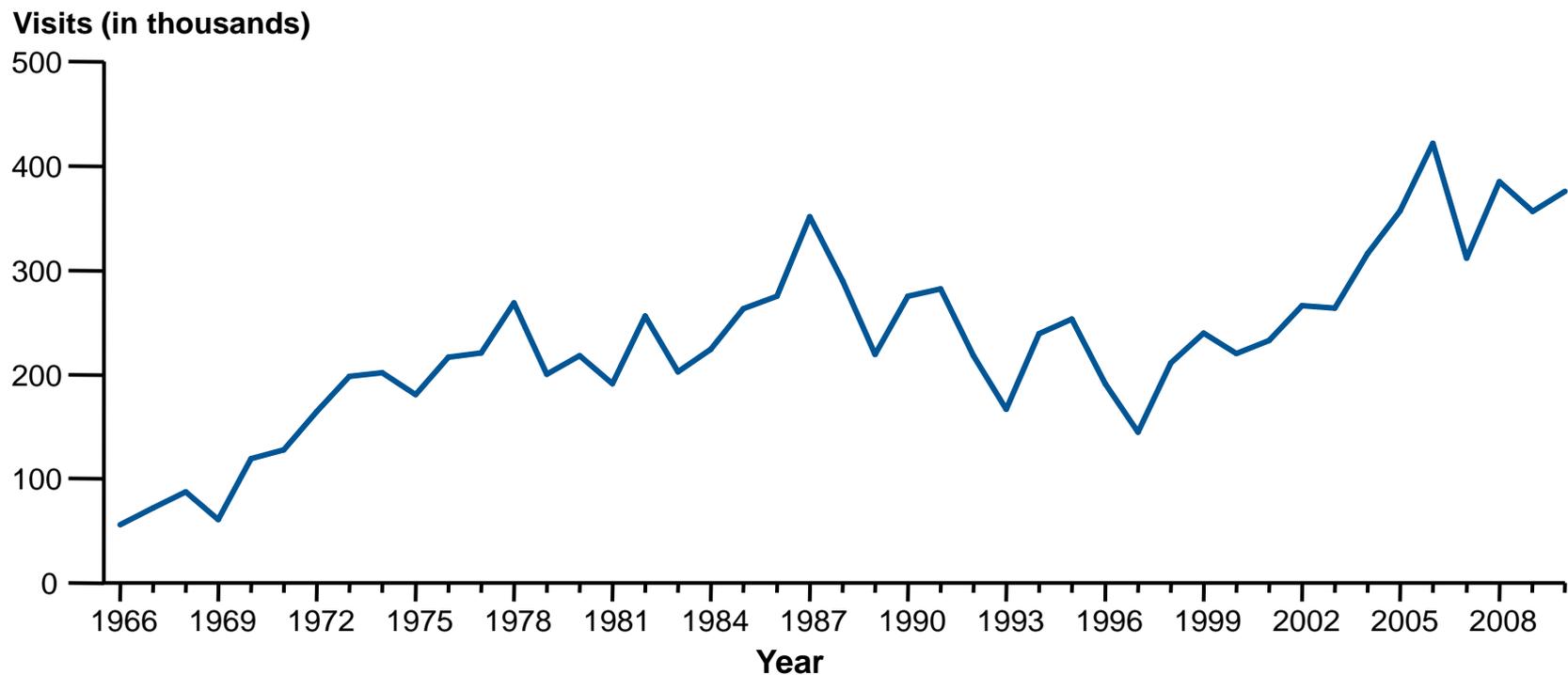
NOTE: Error bars indicate 95% confidence intervals. Both high-risk and low-risk HPV types were detected in some females.

SOURCE: Hariri S, Unger ER, Sternberg M, Dunne EF, Swan D, Patel S, et al. Prevalence of genital HPV among females in the United States, the National Health and Nutrition Examination Survey, 2003–2006.

J Infect Dis. 2011;204(4):566-73



Genital Warts—Initial Visits to Physicians' Offices, United States, 1966–2010



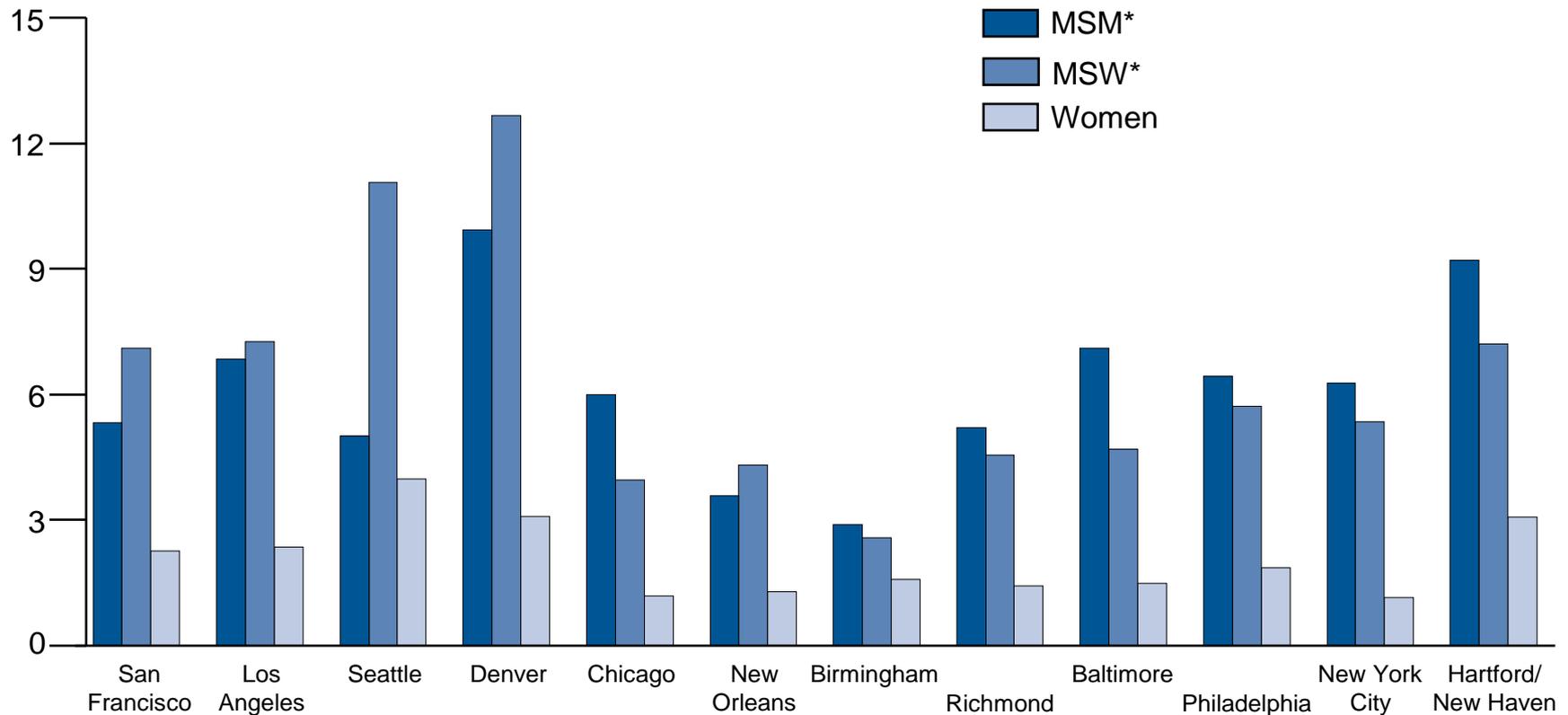
NOTE: The relative standard errors for genital warts estimates of more than 100,000 range from 18% to 30%.

SOURCE: IMS Health, Integrated Promotional Services™. IMS Health Report, 1966–2010.



STD Surveillance Network (SSuN)—Genital Warts— Prevalence Among Sexually Transmitted Disease (STD) Clinic Patients by Sex, Sex of Partners, and Site, 2010

Percentage

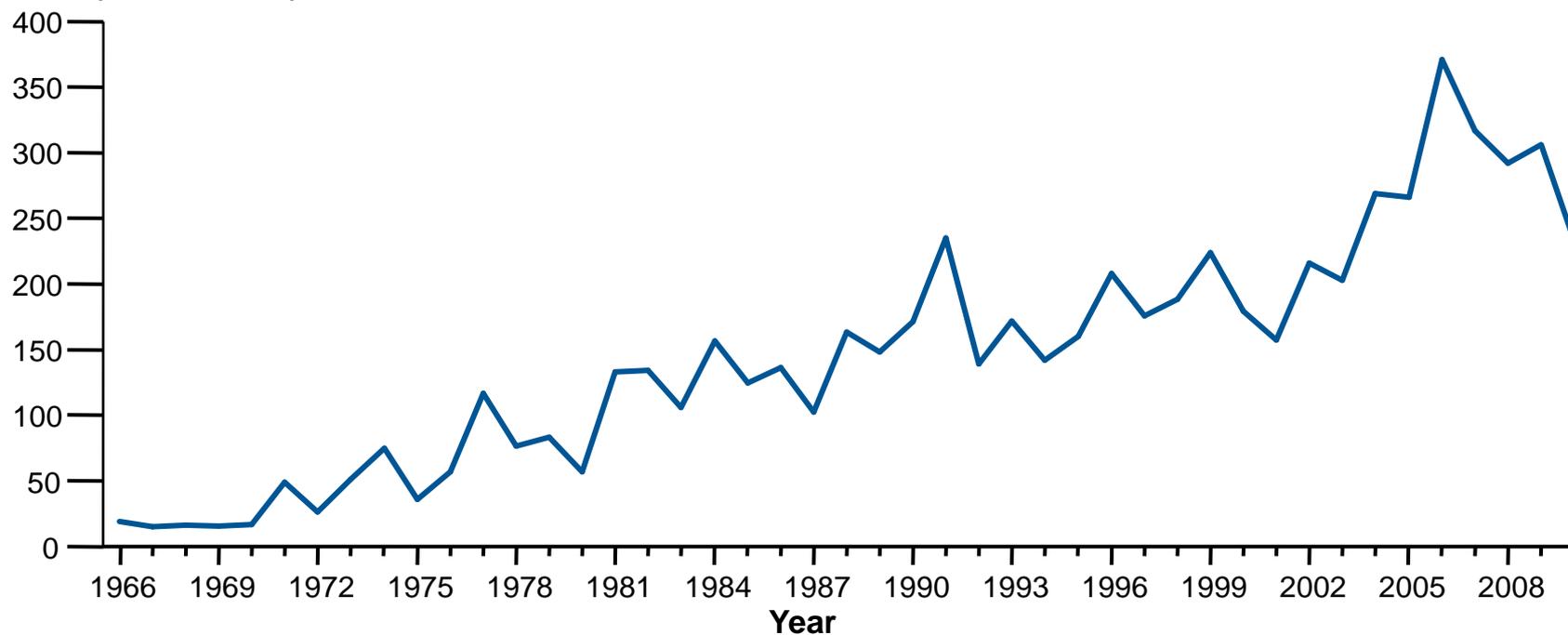


* MSM = men who have sex with men; MSW = men who have sex with women only.



Genital Herpes—Initial Visits to Physicians' Offices, United States, 1966–2010

Visits (in thousands)

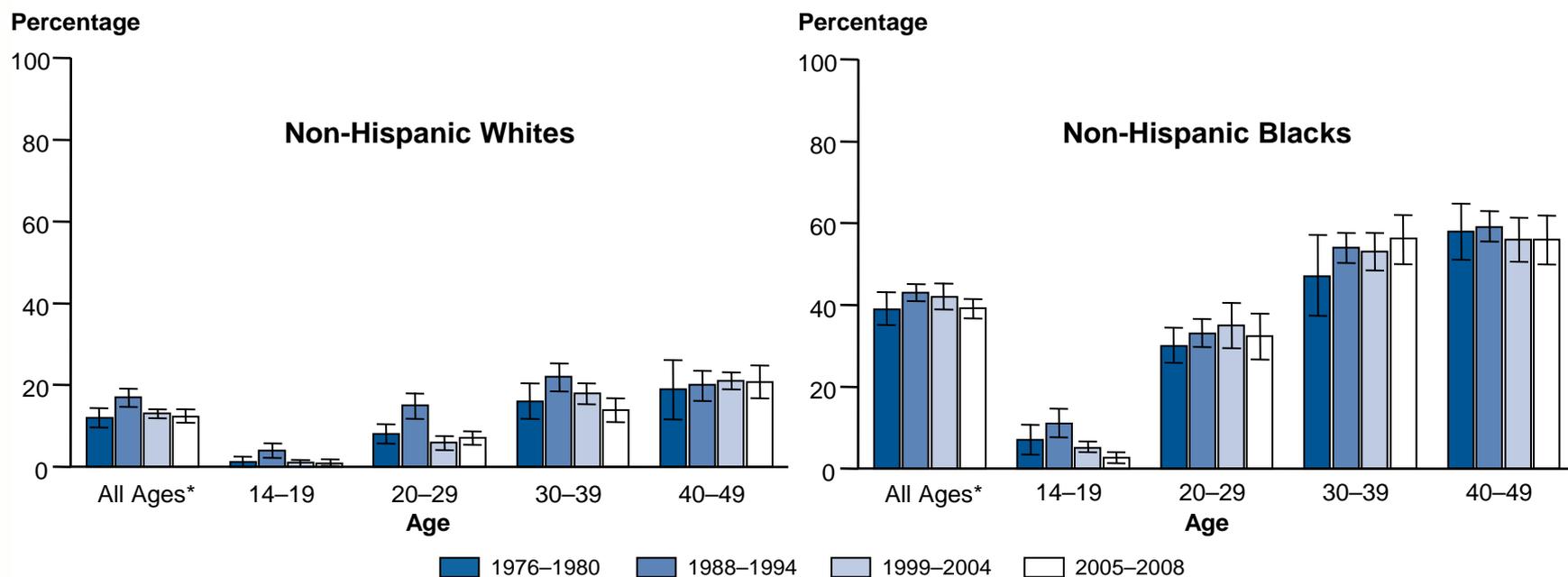


NOTE: The relative standard errors for genital herpes estimates of more than 100,000 range from 18% to 30%.

SOURCE: IMS Health, Integrated Promotional Services™. IMS Health Report, 1966–2010.



Herpes Simplex Virus Type 2—Seroprevalence in Non-Hispanic Whites and Non-Hispanic Blacks by Age Group, National Health and Nutrition Examination Survey, 1976–1980, 1988–1994, 1999–2004, 2005–2008

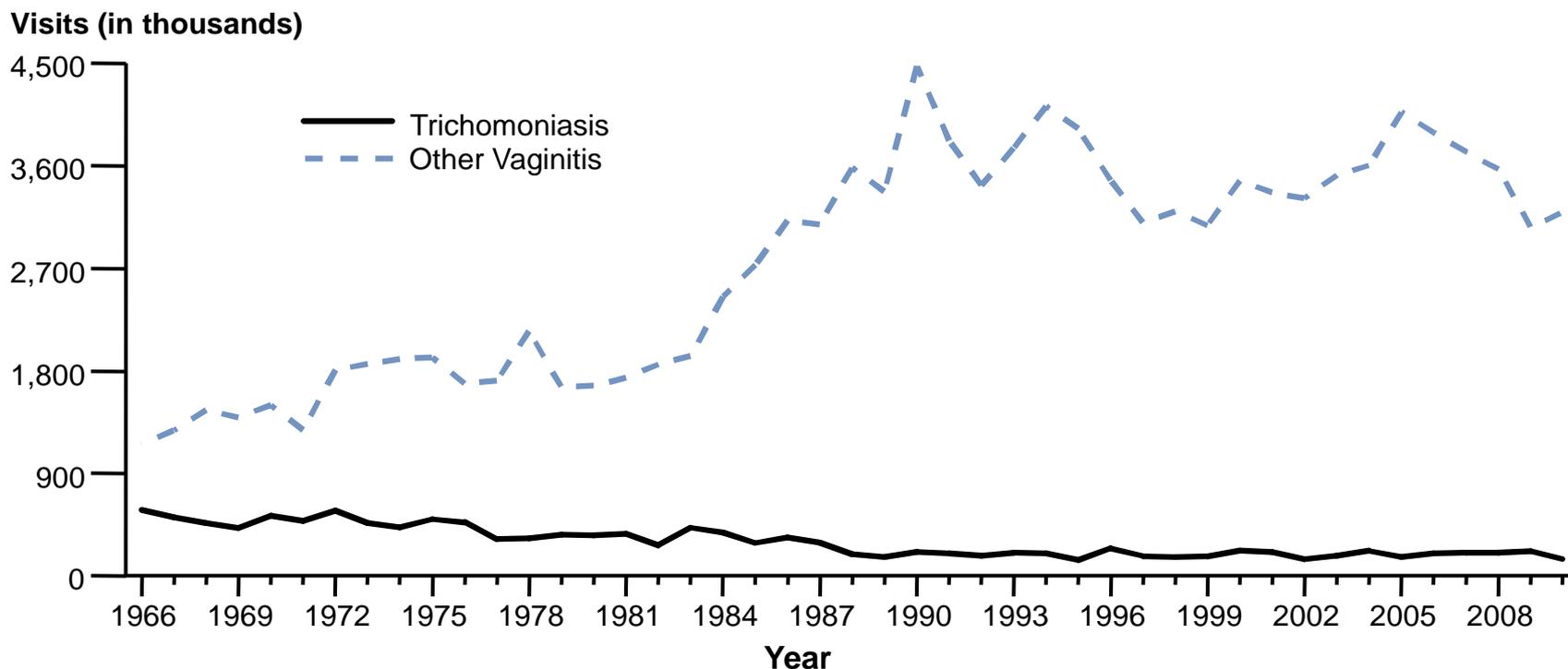


* Age-adjusted by using the 2000 U.S. Census civilian, non-institutionalized population aged 14–49 years as the standard.

NOTE: Error bars indicate 95% confidence intervals.



Trichomoniasis and Other Vaginal Infections—Women— Initial Visits to Physicians' Offices, United States, 1966–2010



NOTE: The relative standard errors for trichomoniasis estimates range from 16% to 27% and for other vaginitis estimates range from 8% to 13%.

SOURCE: IMS Health, Integrated Promotional Services™, IMS Health Report, 1966–2010.



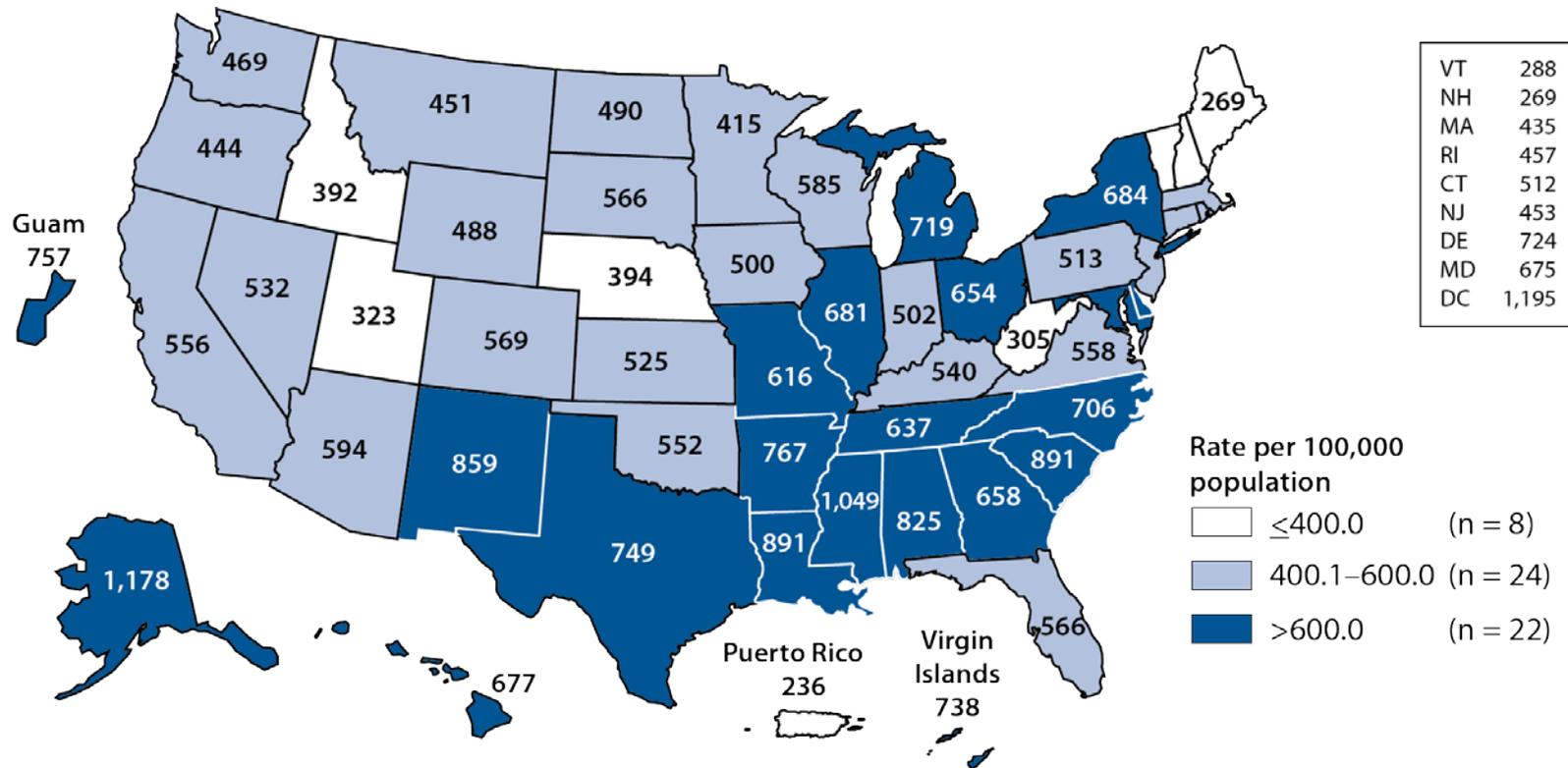
STDs in Women and Infants

Sexually Transmitted Disease Surveillance 2010

Division of STD Prevention



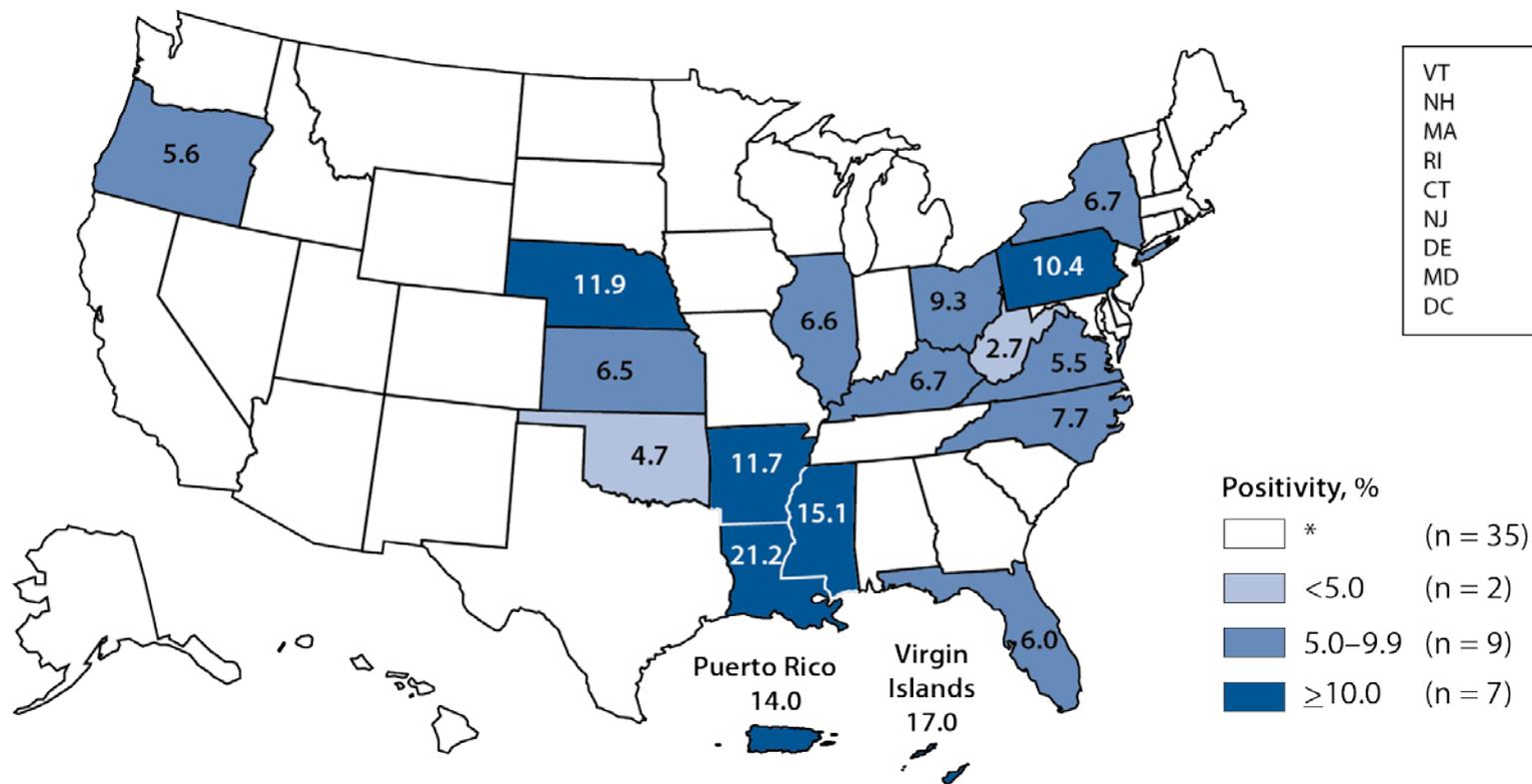
Chlamydia—Women—Rates by State, United States and Outlying Areas, 2010



NOTE: The total chlamydial infection rate among women in the United States and outlying areas (Guam, Puerto Rico, and Virgin Islands) was 605.8 per 100,000 female population.



Chlamydia—Positivity Among Women Aged 15–24 Years Tested in Prenatal Clinics, by State, Infertility Prevention Project, United States and Outlying Areas, 2010

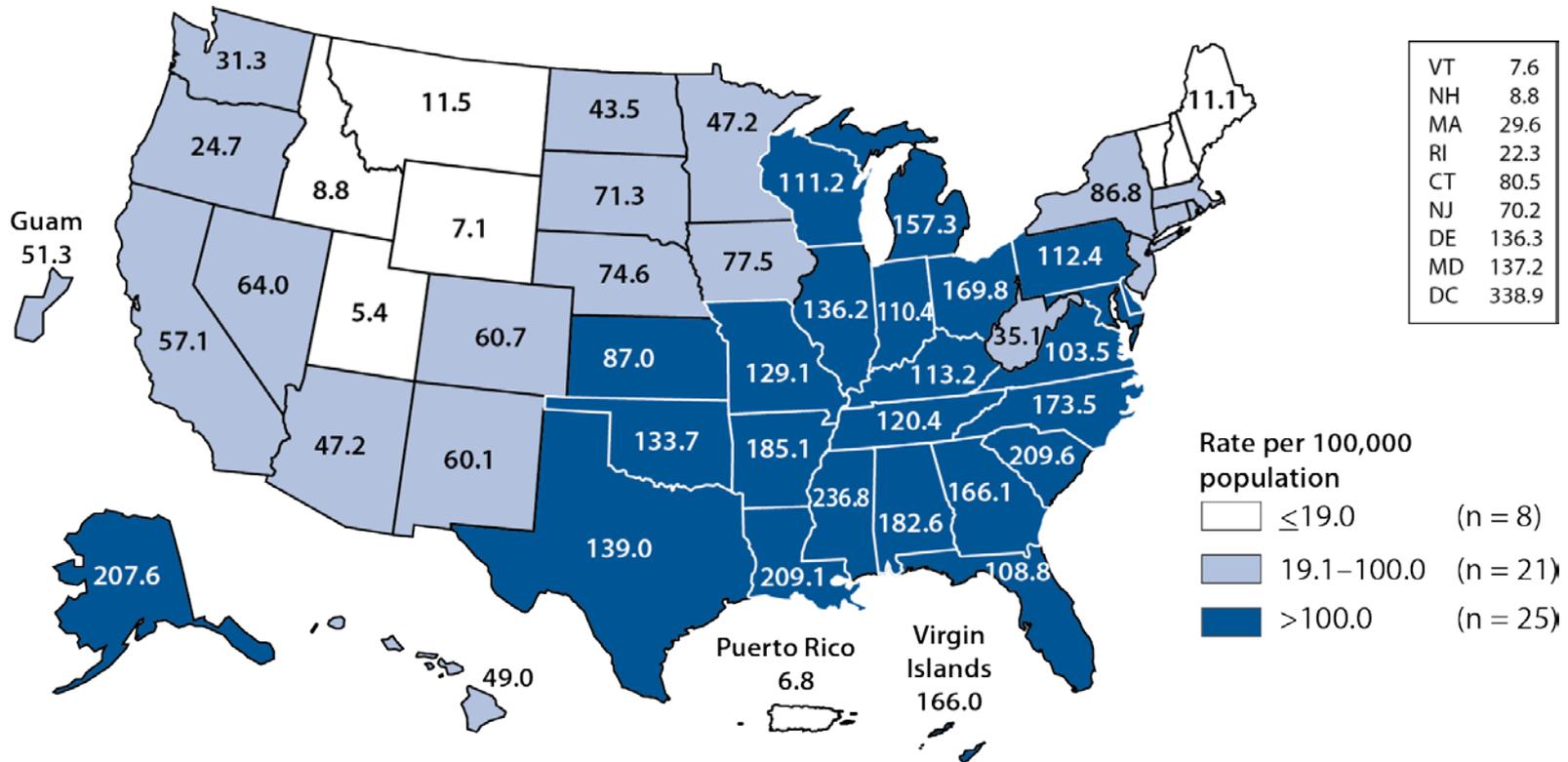


* States/areas not meeting minimum inclusion criteria in prenatal clinics.

NOTE: Includes states and outlying areas that reported chlamydia positivity data on at least 100 women aged 15–24 years during 2010.



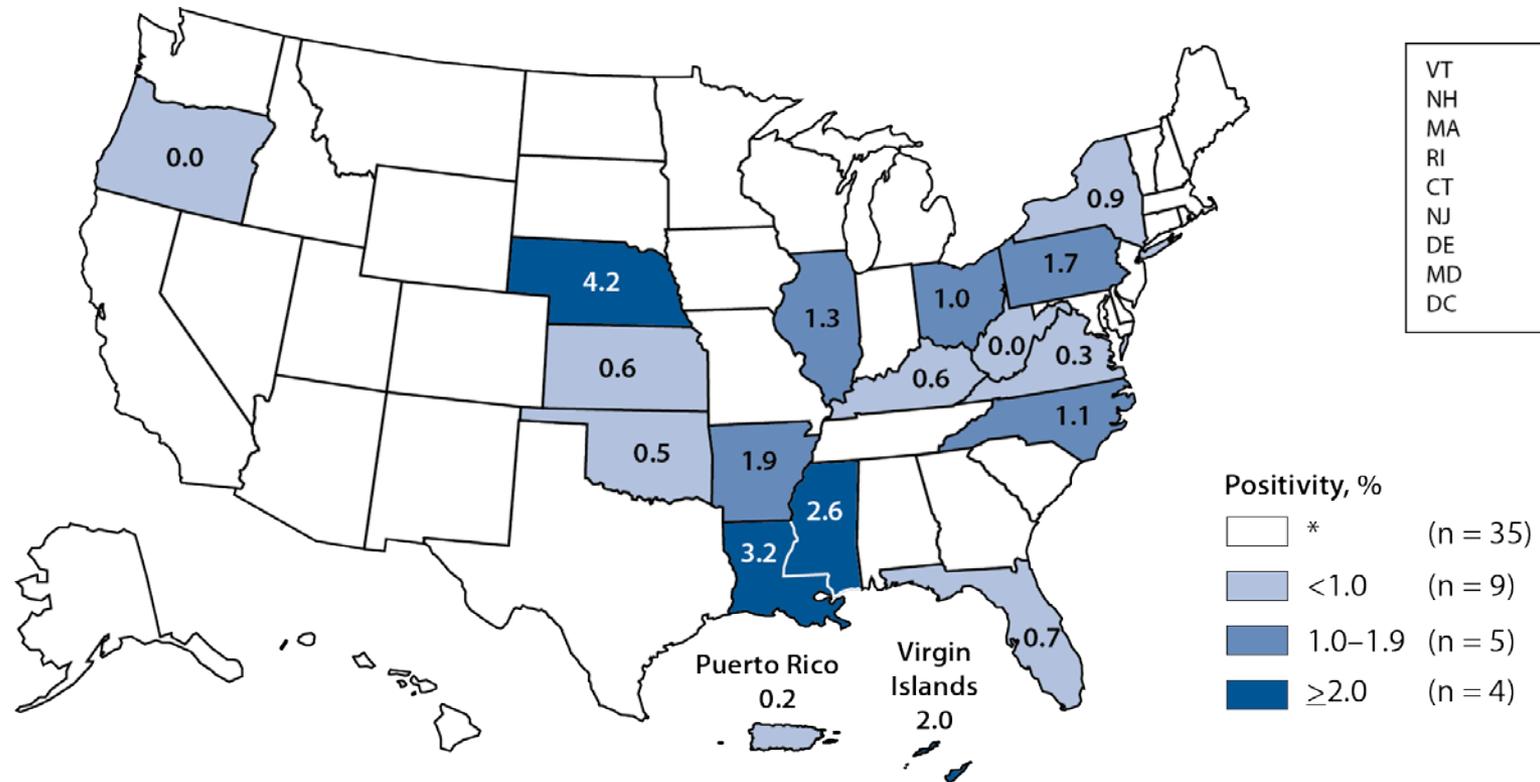
Gonorrhea—Women—Rates by State, United States and Outlying Areas, 2010



NOTE: The total gonorrhea infection rate among women in the United States and outlying areas (Guam, Puerto Rico, and Virgin Islands) was 105.2 per 100,000 female population.



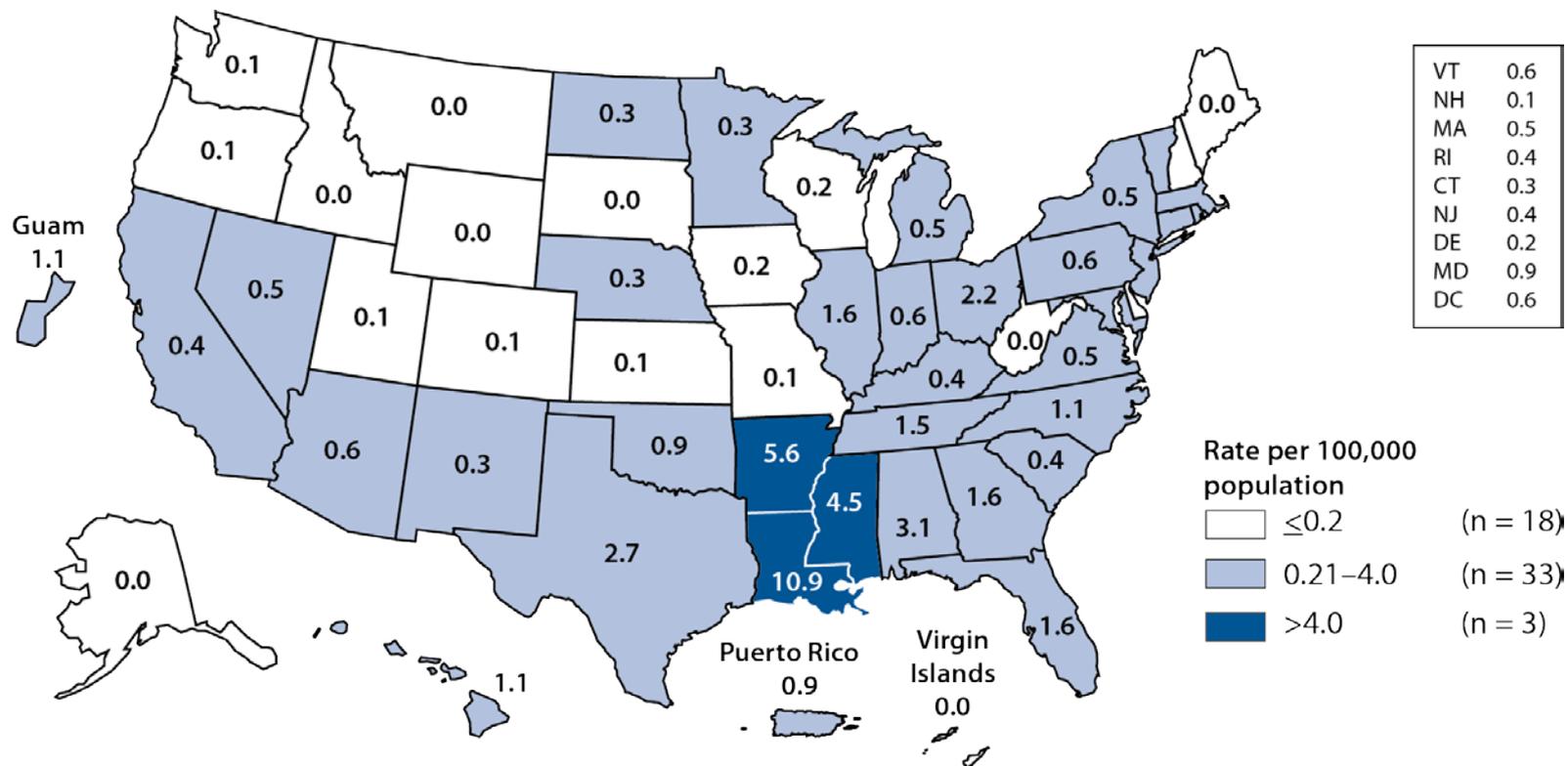
Gonorrhea—Positivity Among Women Aged 15–24 Years Tested in Prenatal Clinics, by State, Infertility Prevention Project, United States and Outlying Areas, 2010



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

NOTE: Includes states and outlying areas that reported gonorrhea positivity data on at least 100 women aged 15–24 years during 2010.

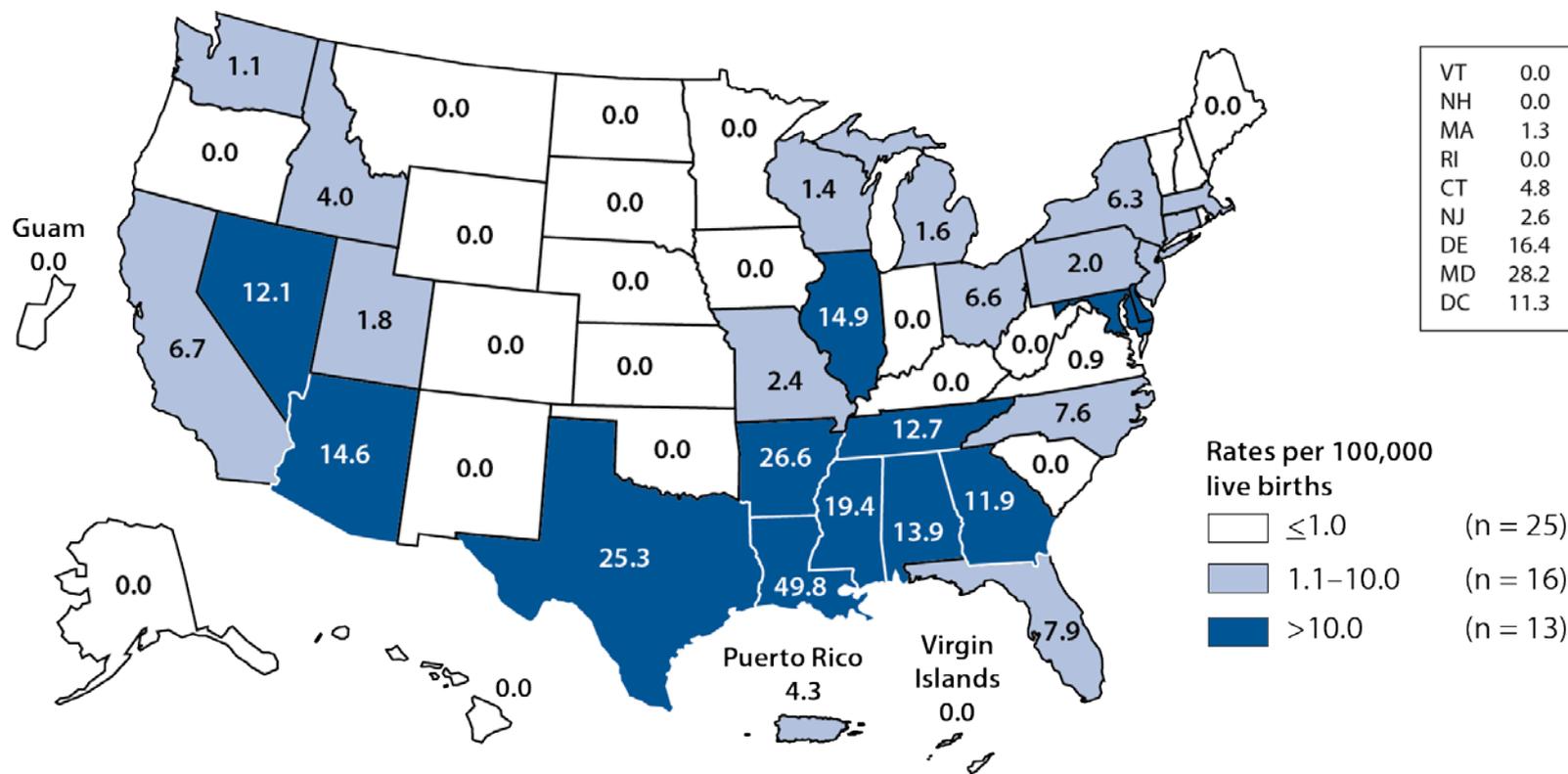
Primary and Secondary Syphilis—Women—Rates by State, United States and Outlying Areas, 2010



NOTE: The total rate of primary and secondary syphilis among women in the United States and outlying areas (Guam, Puerto Rico, and Virgin Islands) was 1.1 per 100,000 females.

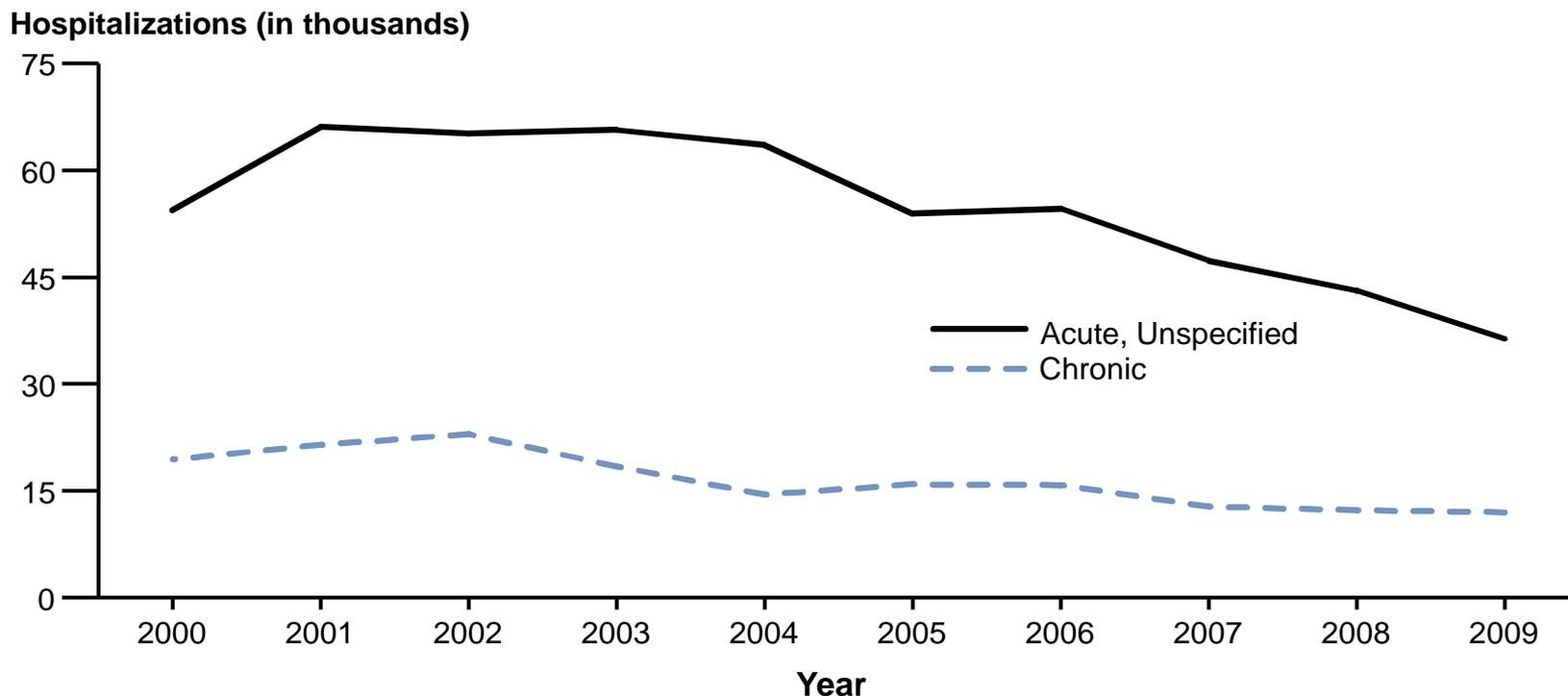


Congenital Syphilis—Infants—Rates by Year of Birth and State, United States and Outlying Areas, 2010



NOTE: The total rate of congenital syphilis for infants by year of birth for the United States and outlying areas (Guam, Puerto Rico, and Virgin Islands) was 8.7 per 100,000 live births.

Pelvic Inflammatory Disease—Hospitalizations of Women Aged 15–44 Years, United States, 2000–2009

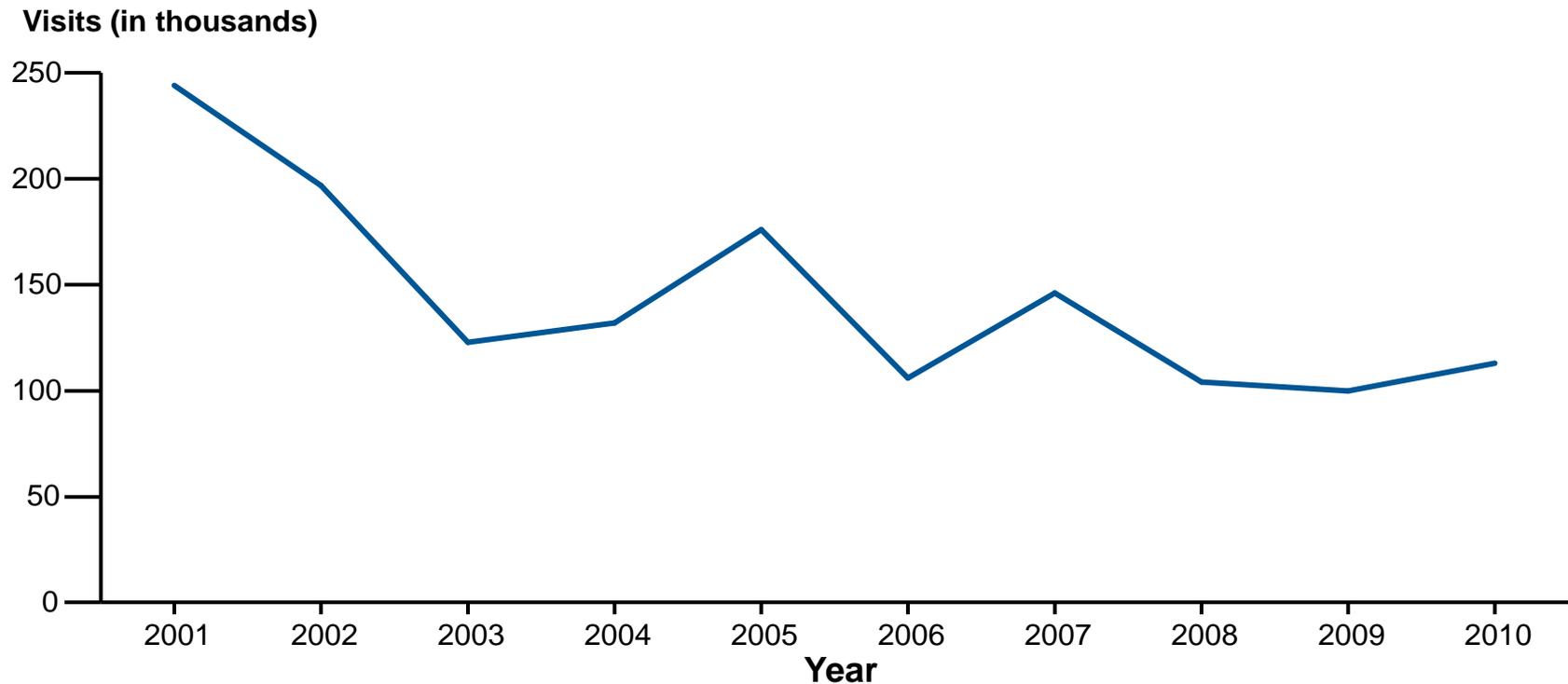


NOTE: The relative standard errors for acute and unspecified pelvic inflammatory disease (PID) cases ranges from 8%–18%. The relative standard error for chronic PID cases ranges from 12%–28%. Data only available through 2009.

SOURCE: 2009 National Hospital Discharge Survey [Internet]. Atlanta: Centers for Disease Control and Prevention. Available from: <http://www.cdc.gov/nchs/nhds/about/nhds.htm>.



Pelvic Inflammatory Disease—Initial Visits to Physicians' Offices by Women Aged 15–44 Years, United States, 2001–2010

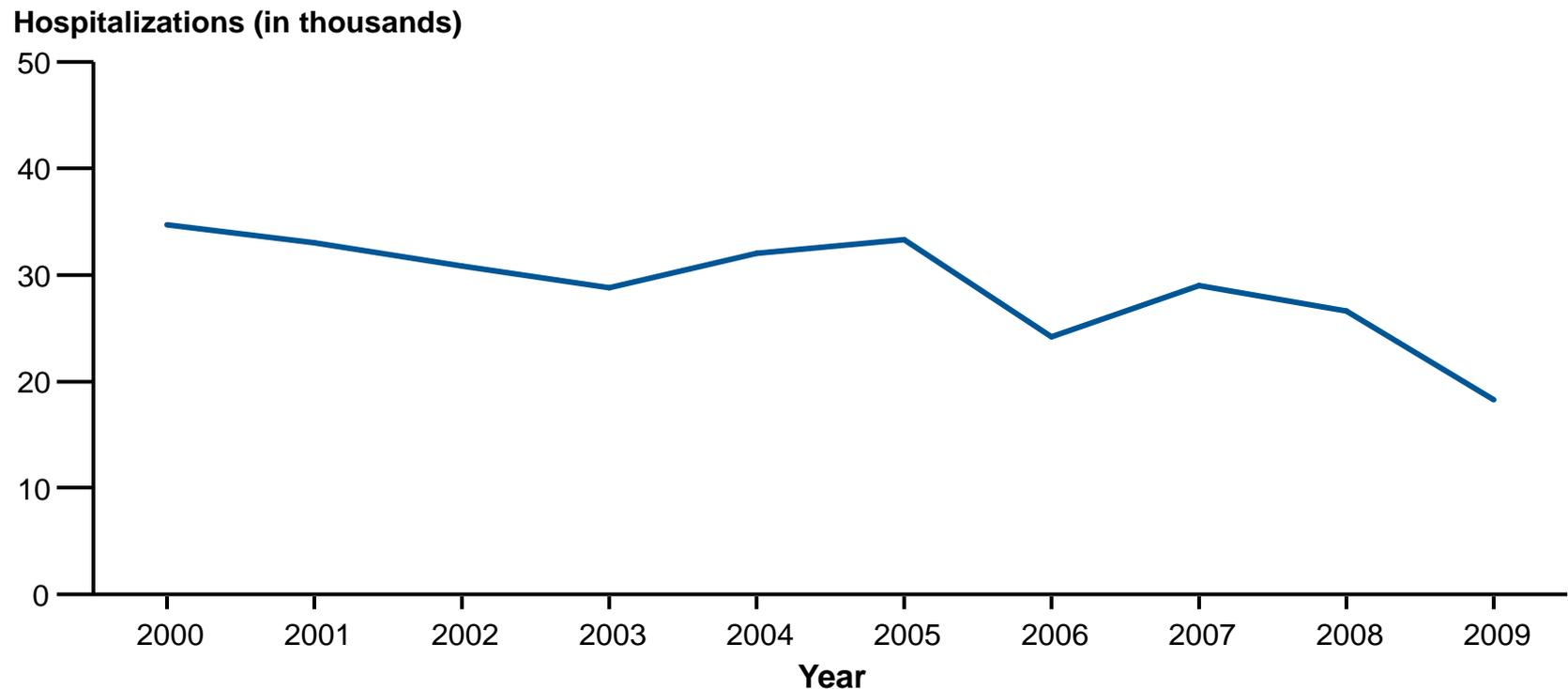


NOTE: The relative standard errors for these estimates are 21.6%–30%.

SOURCE: IMS Health, Integrated Promotional Services™. IMS Health Report, 1966–2010.



Ectopic Pregnancy—Hospitalizations of Women Aged 15–44 Years, United States, 2000–2009



NOTE: The relative standard errors for these estimates are 10%–23%. Data only available through 2009.

SOURCE: 2009 National Hospital Discharge Survey [Internet]. Atlanta: Centers for Disease Control and Prevention. Available from: <http://www.cdc.gov/nchs/nhds/about/nhds.htm>.

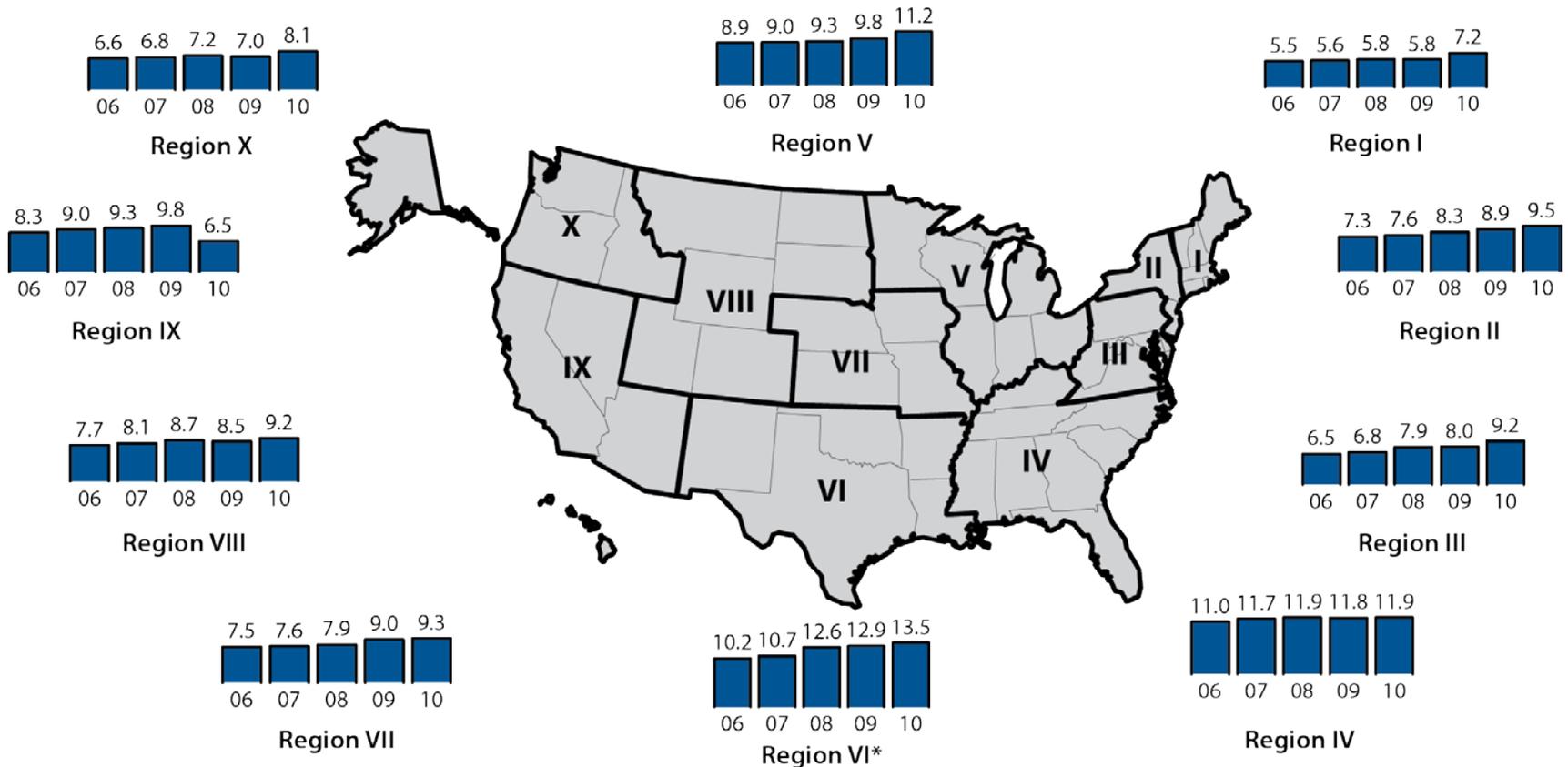


STDs in Adolescents and Young Adults

Sexually Transmitted Disease Surveillance 2010
Division of STD Prevention

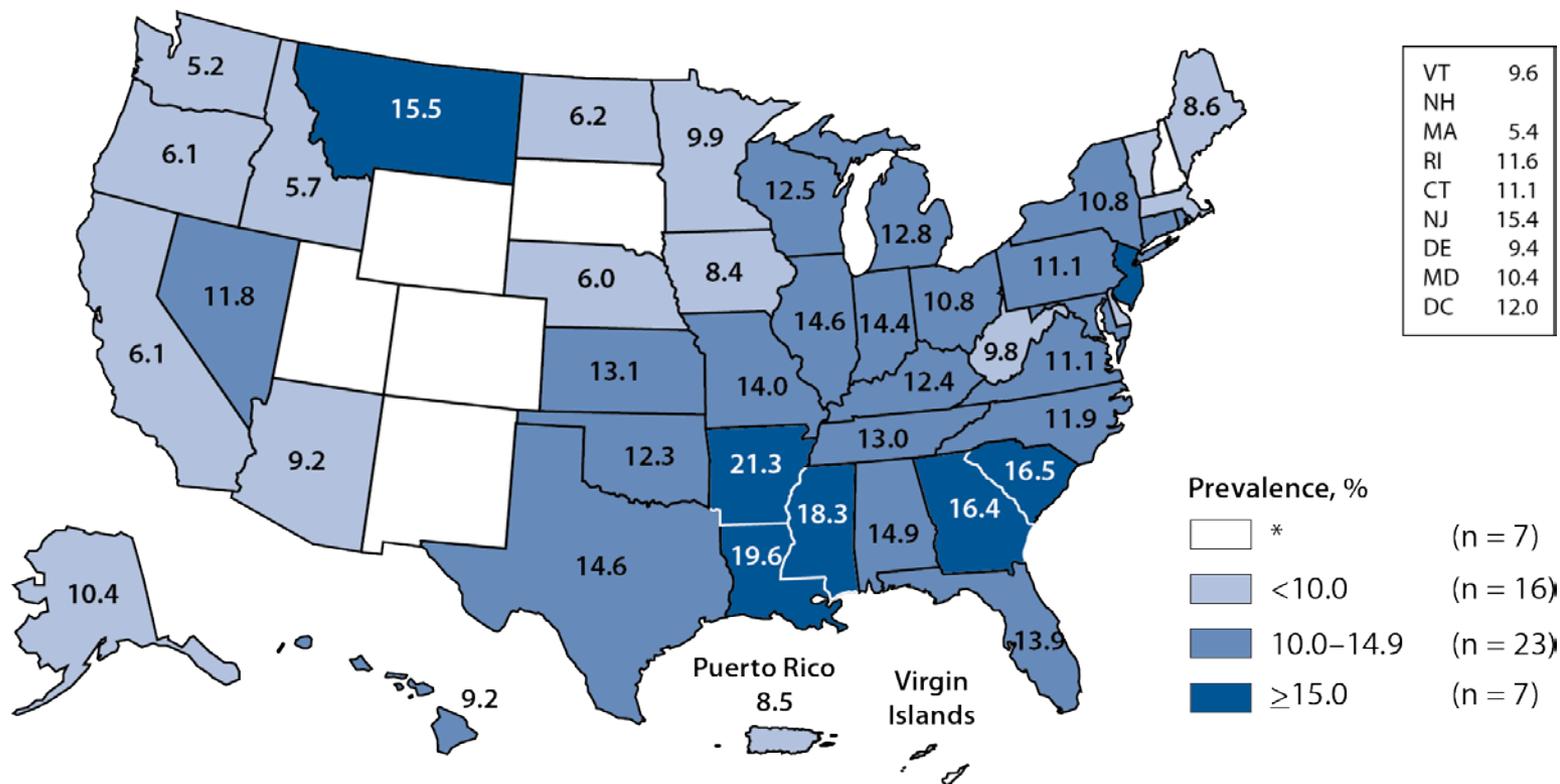


Chlamydia—Trends in Positivity Among Women Aged 15–19 Years Tested in Family Planning Clinics, by U.S. Department of Health and Human Services (HHS) Region, Infertility Prevention Project, 2006–2010



* 2009 percent positivity for Region VI previously published in the 2009 Surveillance report has been corrected.

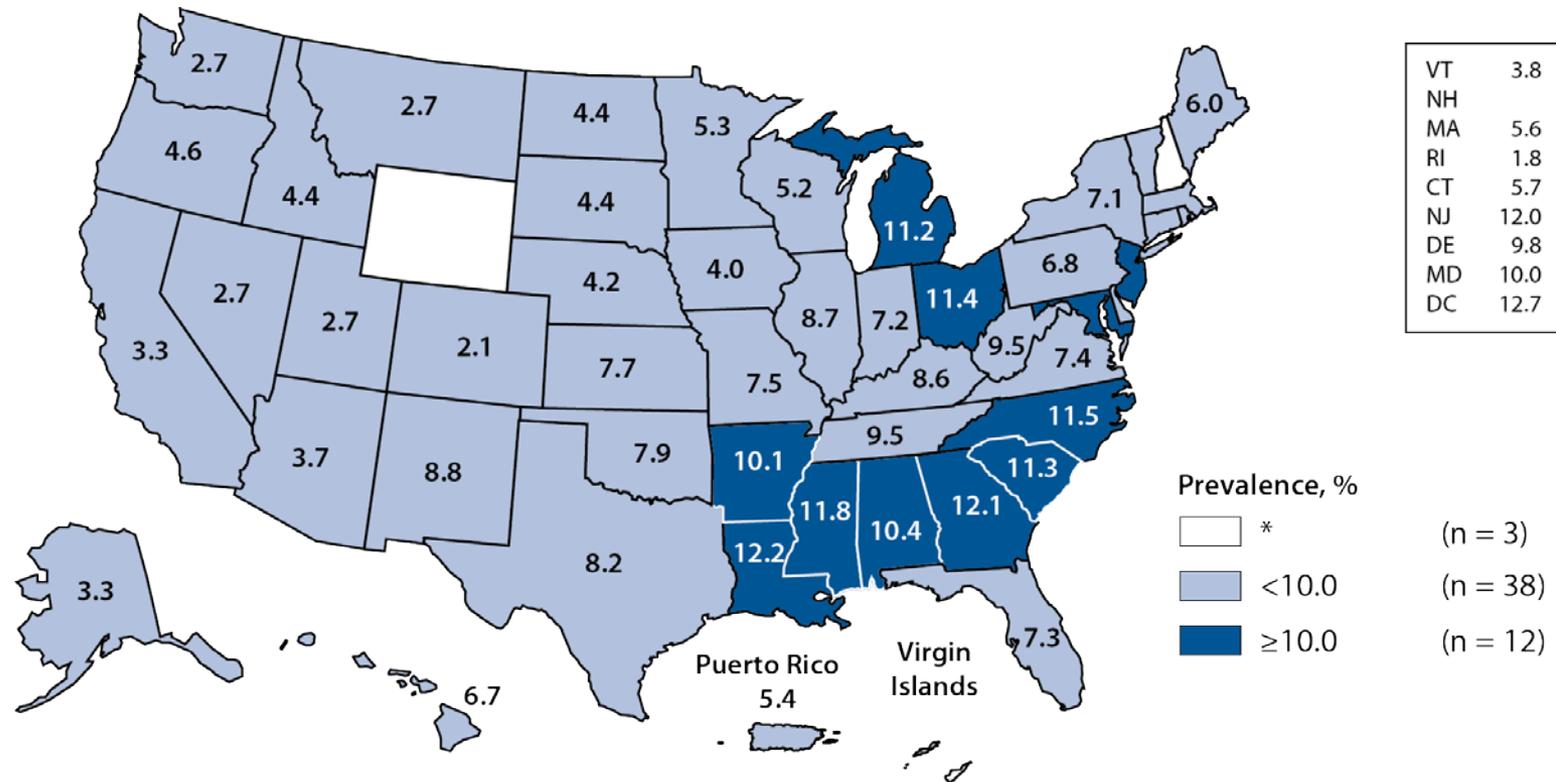
Chlamydia—Prevalence Among Women Aged 16–24 Years Entering the National Job Training Program, by State of Residence, United States and Outlying Areas, 2010



* Fewer than 100 women who resided in these states/areas and entered the National Job Training Program were screened for chlamydia in 2010.



Chlamydia—Prevalence Among Men Aged 16–24 Years Entering the National Job Training Program, by State of Residence, United States and Outlying Areas, 2010



* Fewer than 100 men who resided in these states/areas and entered the National Job Training Program were screened for chlamydia in 2010.

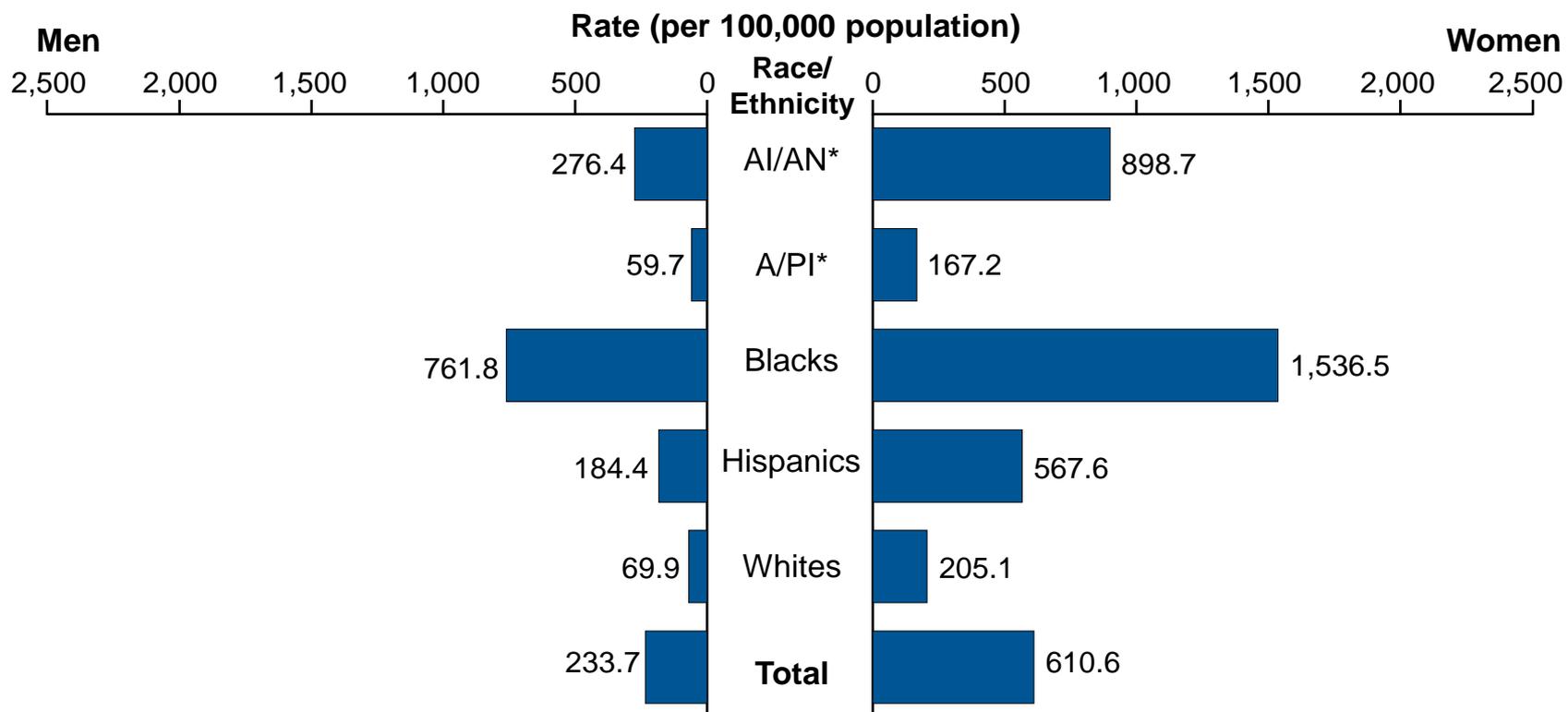


STDs in Racial and Ethnic Minorities

Sexually Transmitted Disease Surveillance 2010
Division of STD Prevention



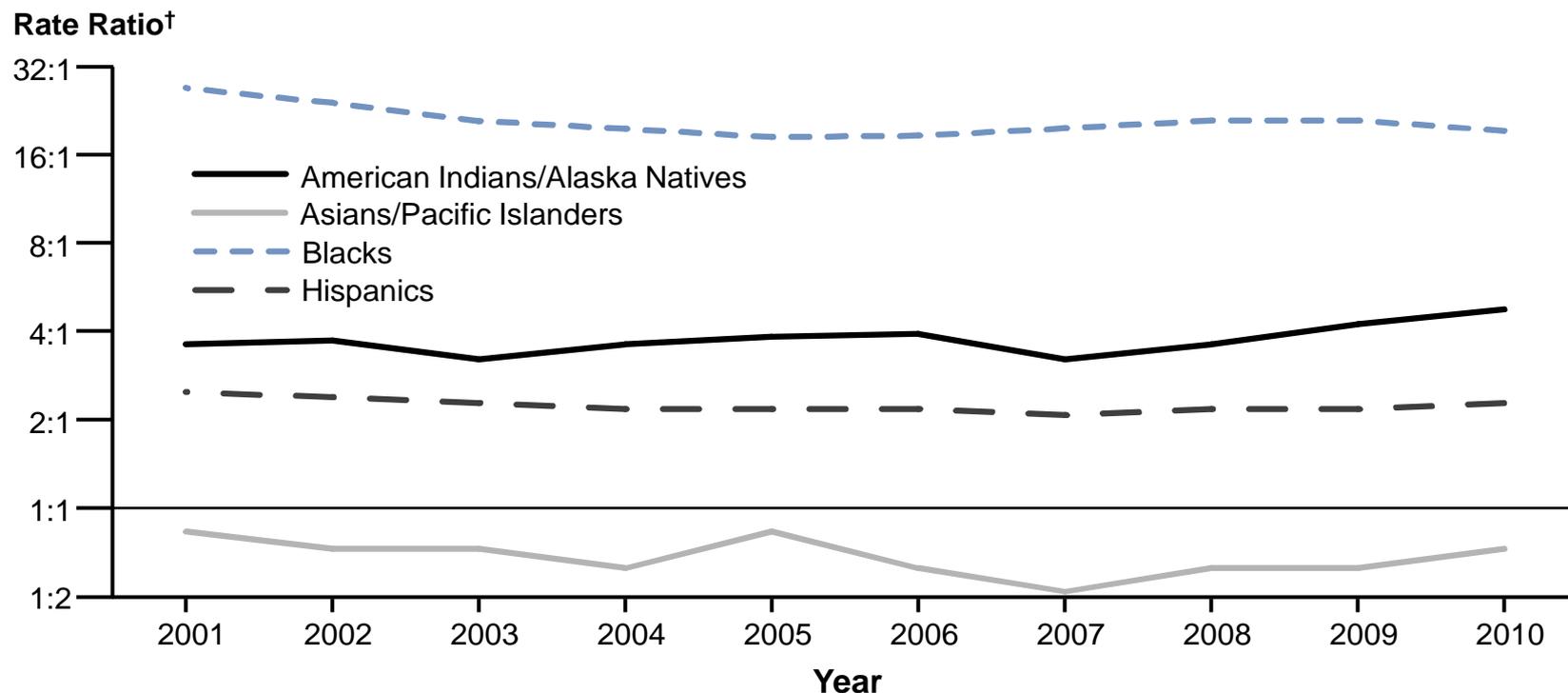
Chlamydia—Rates by Race/Ethnicity and Sex, United States, 2010



* AI/AN = American Indians/Alaska Natives; A/PI = Asians/Pacific Islanders.



Gonorrhea—Rate Ratios* by Race/Ethnicity, United States, 2001–2010

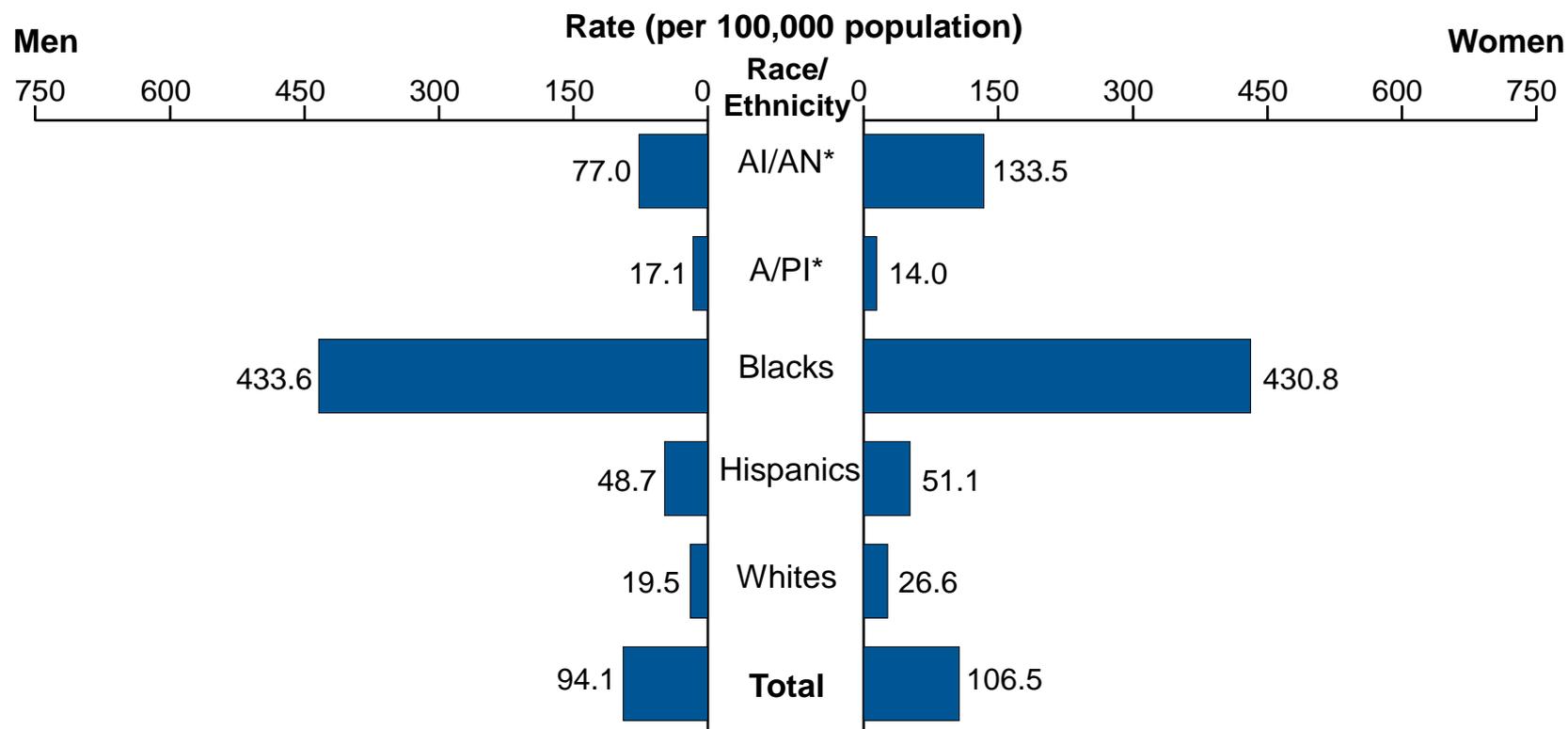


* Rate ratios are calculated as the gonorrhea rate per 100,000 population for a given racial or ethnic minority population divided by the gonorrhea rate per 100,000 population for non-Hispanic whites. Any population with a lower rate of gonorrhea than the non-Hispanic white population will have a rate ratio of less than 1:1.

† Y-axis is log scale.



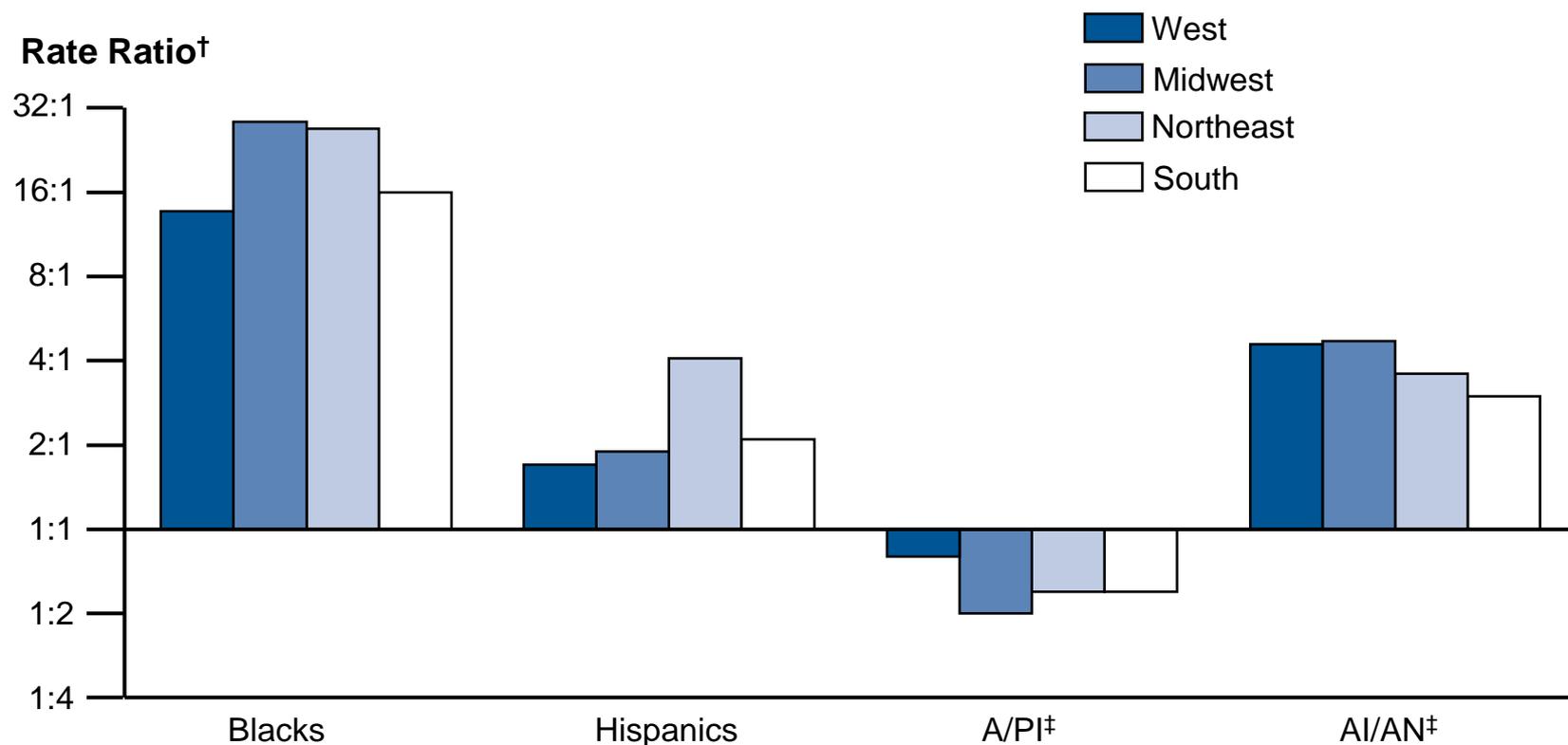
Gonorrhea—Rates by Race/Ethnicity and Sex, United States, 2010



* AI/AN = American Indians/Alaska Natives; A/PI = Asians/Pacific Islanders.



Gonorrhea—Rate Ratios* by Race/Ethnicity and Region, United States, 2010



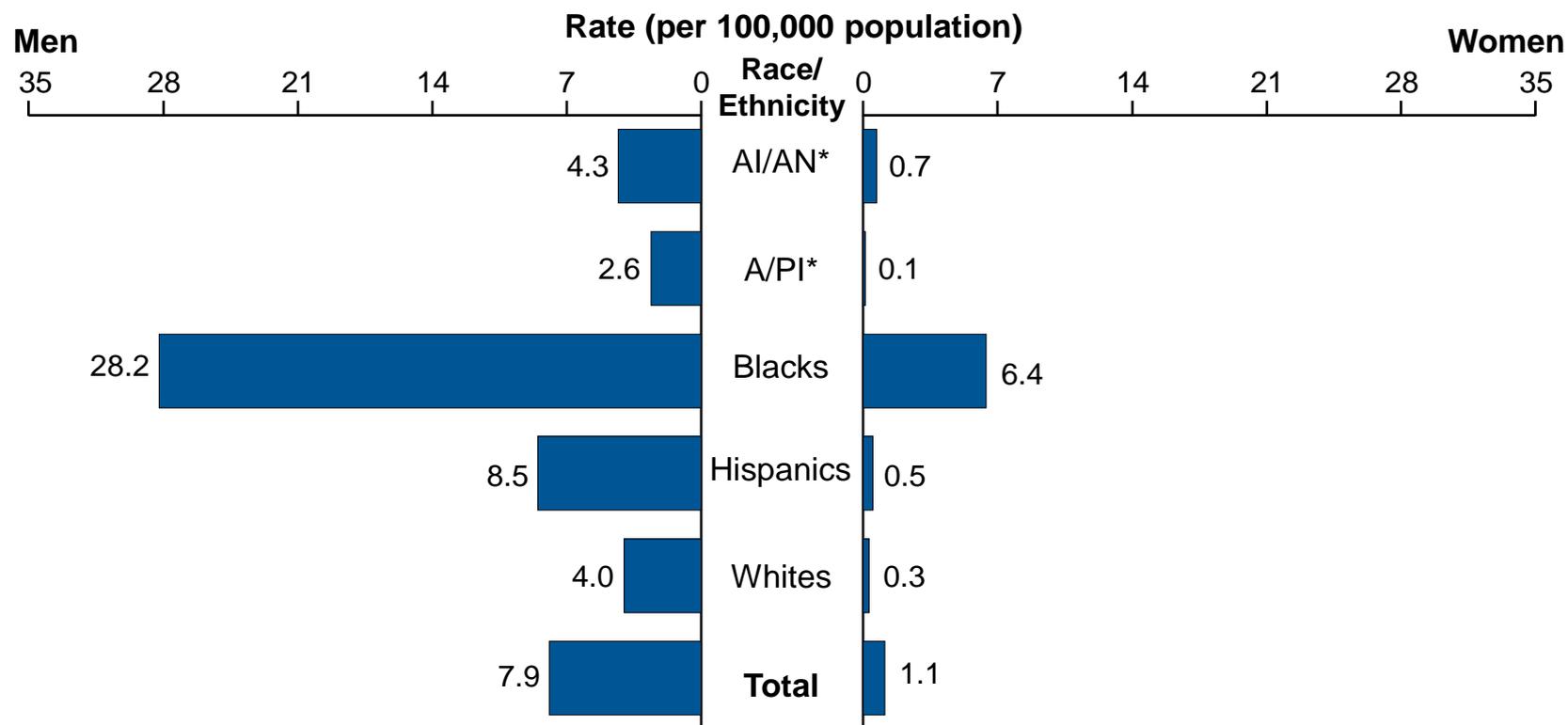
* Rate ratios are calculated as the gonorrhea rate per 100,000 population for a given racial or ethnic minority population divided by the gonorrhea rate per 100,000 population for non-Hispanic whites. Any population with a lower rate of gonorrhea than the non-Hispanic white population will have a rate ratio of less than 1:1.

† Y-axis is log scale.

‡ A/PI = Asians/Pacific Islanders; AI/AN = American Indians/Alaska Natives.



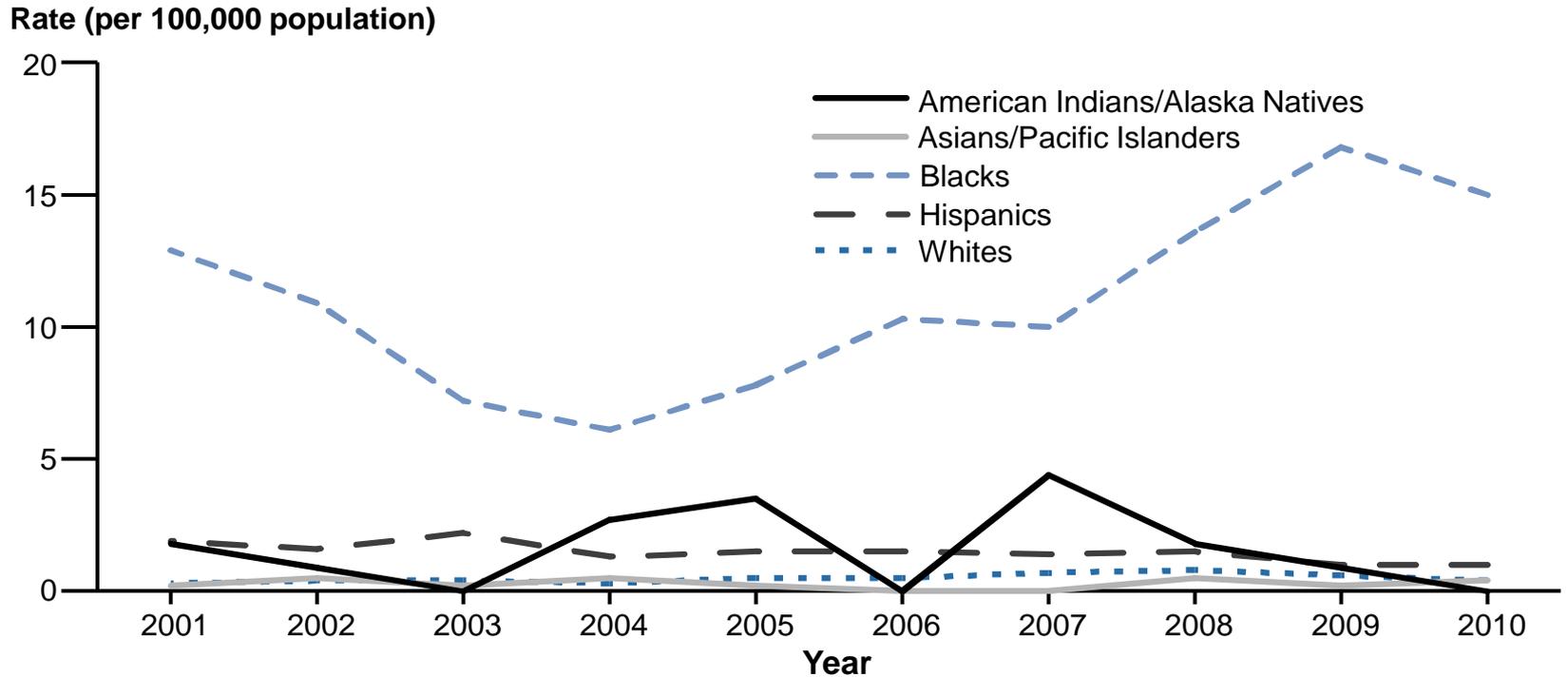
Primary and Secondary Syphilis—Rates by Race/Ethnicity and Sex, United States, 2010



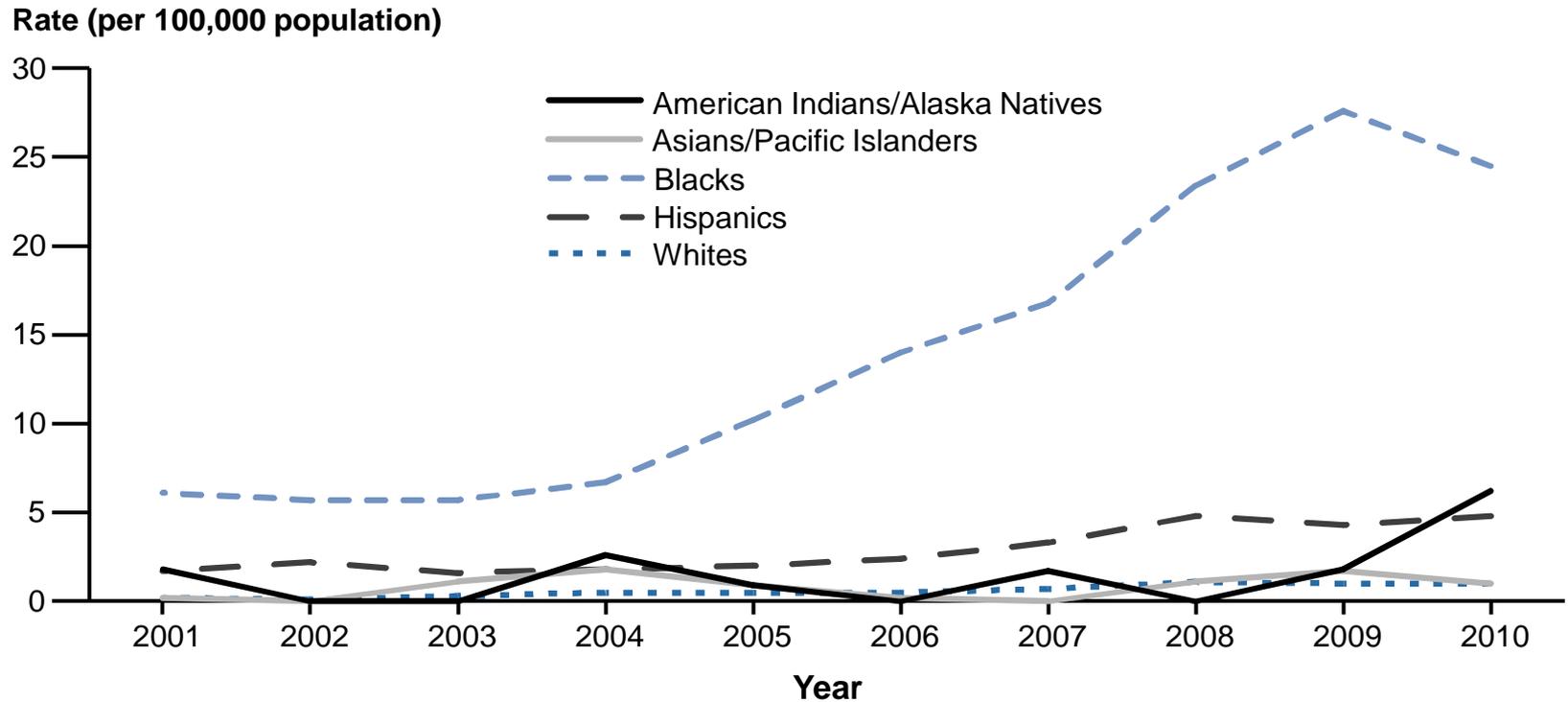
* AI/AN = American Indians/Alaska Natives; A/PI = Asians/Pacific Islanders.



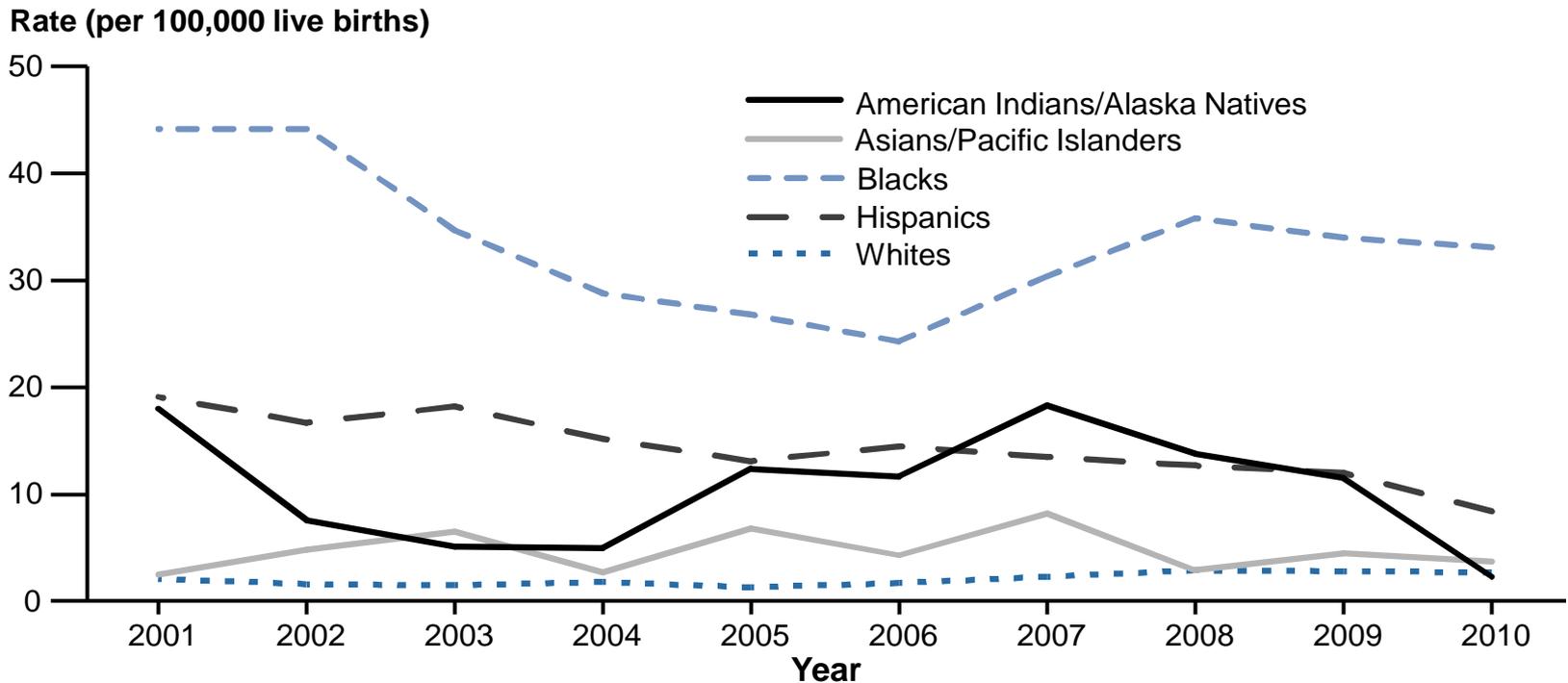
Primary and Secondary Syphilis—Rates Among Females Aged 15–19 Years by Race/Ethnicity, United States, 2001–2010



Primary and Secondary Syphilis—Rates Among Males Aged 15–19 Years by Race/Ethnicity, United States, 2001–2010



Congenital Syphilis—Infants—Rates by Year of Birth and Mother's Race/Ethnicity, United States, 2001–2010



NOTE: Less than 1% of cases had missing maternal race/ethnicity information and were excluded.

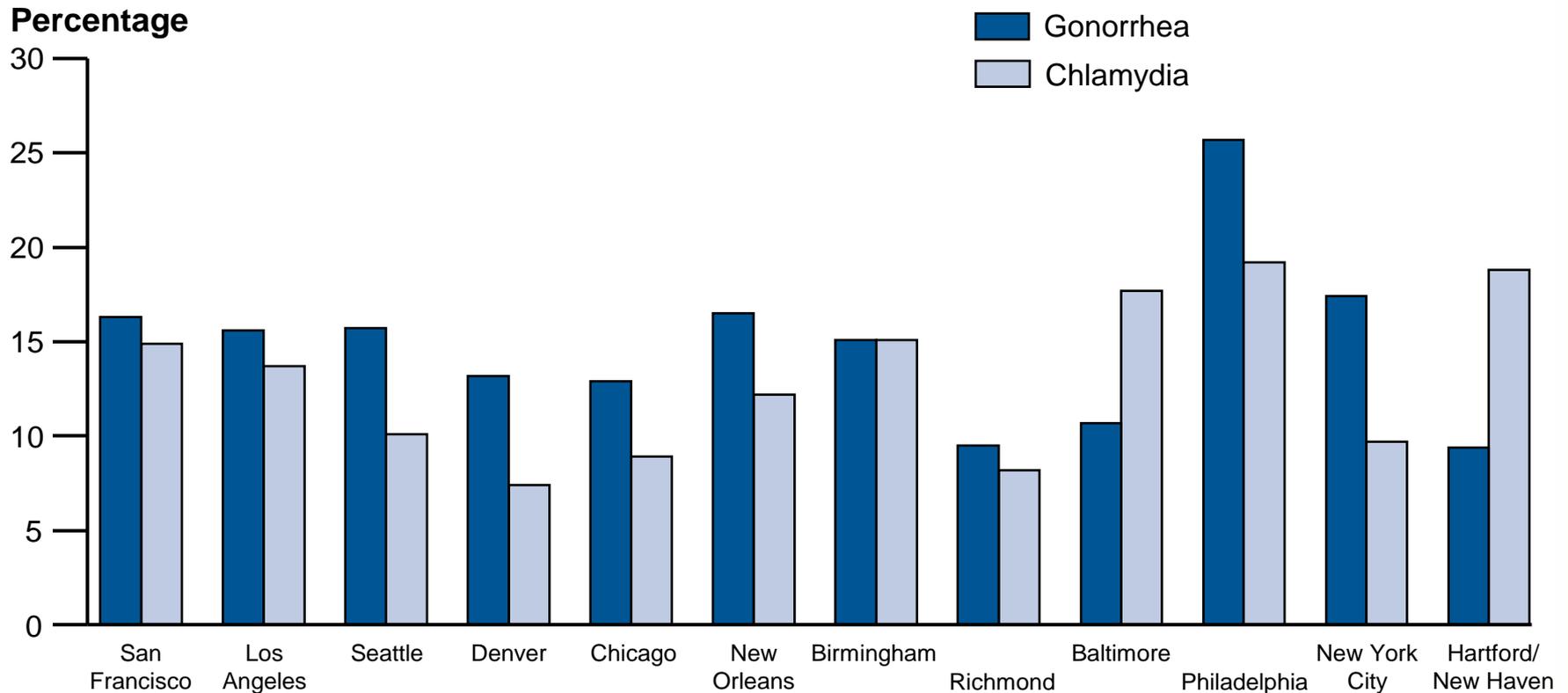


STDs in Men Who Have Sex with Men

Sexually Transmitted Disease Surveillance 2010
Division of STD Prevention



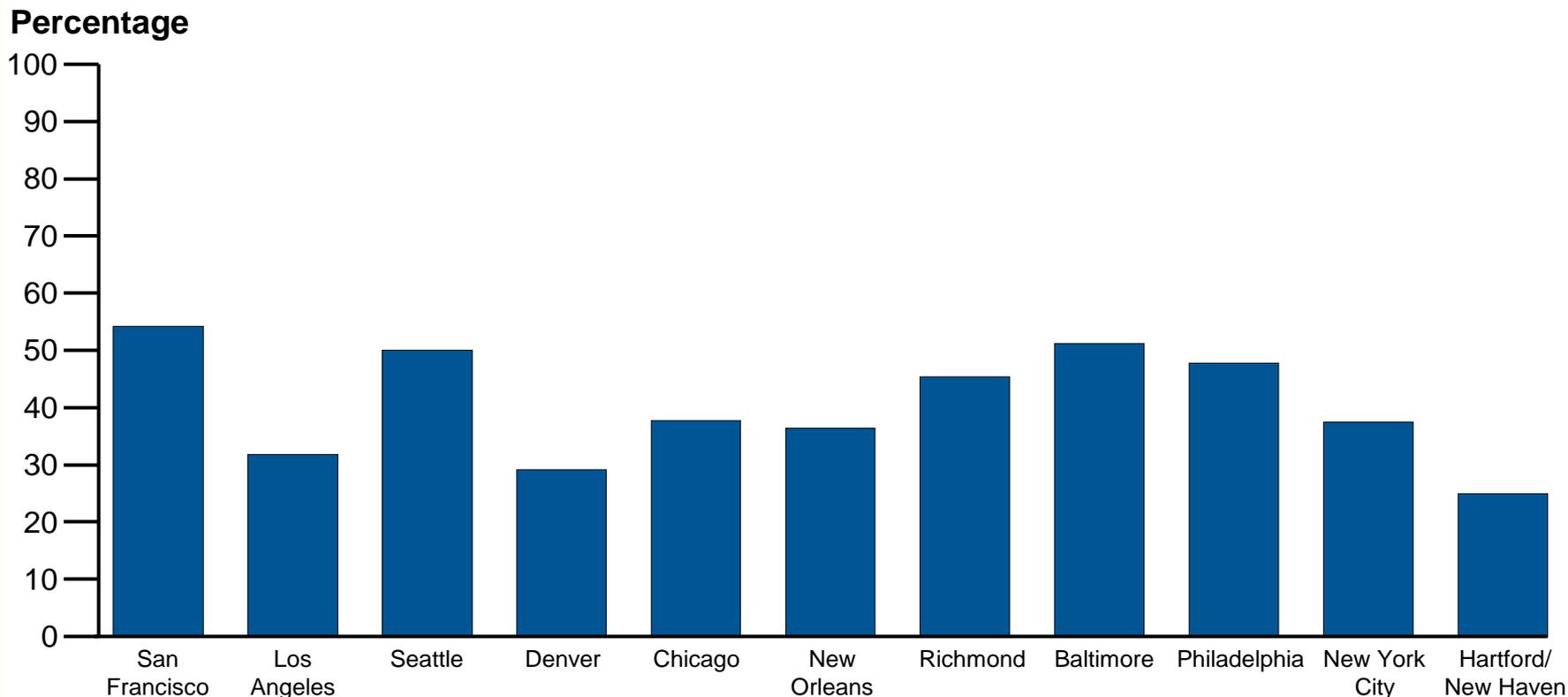
STD Surveillance Network (SSuN)—Gonorrhea and Chlamydia— Proportion of MSM* Testing Positive for Gonorrhea and Chlamydia, by Site, 2010



* MSM = men who have sex with men.



STD Surveillance Network (SSuN)—Primary and Secondary Syphilis and HIV—Proportion of MSM* with Primary and Secondary Syphilis Who Are Co-infected with HIV, 2010

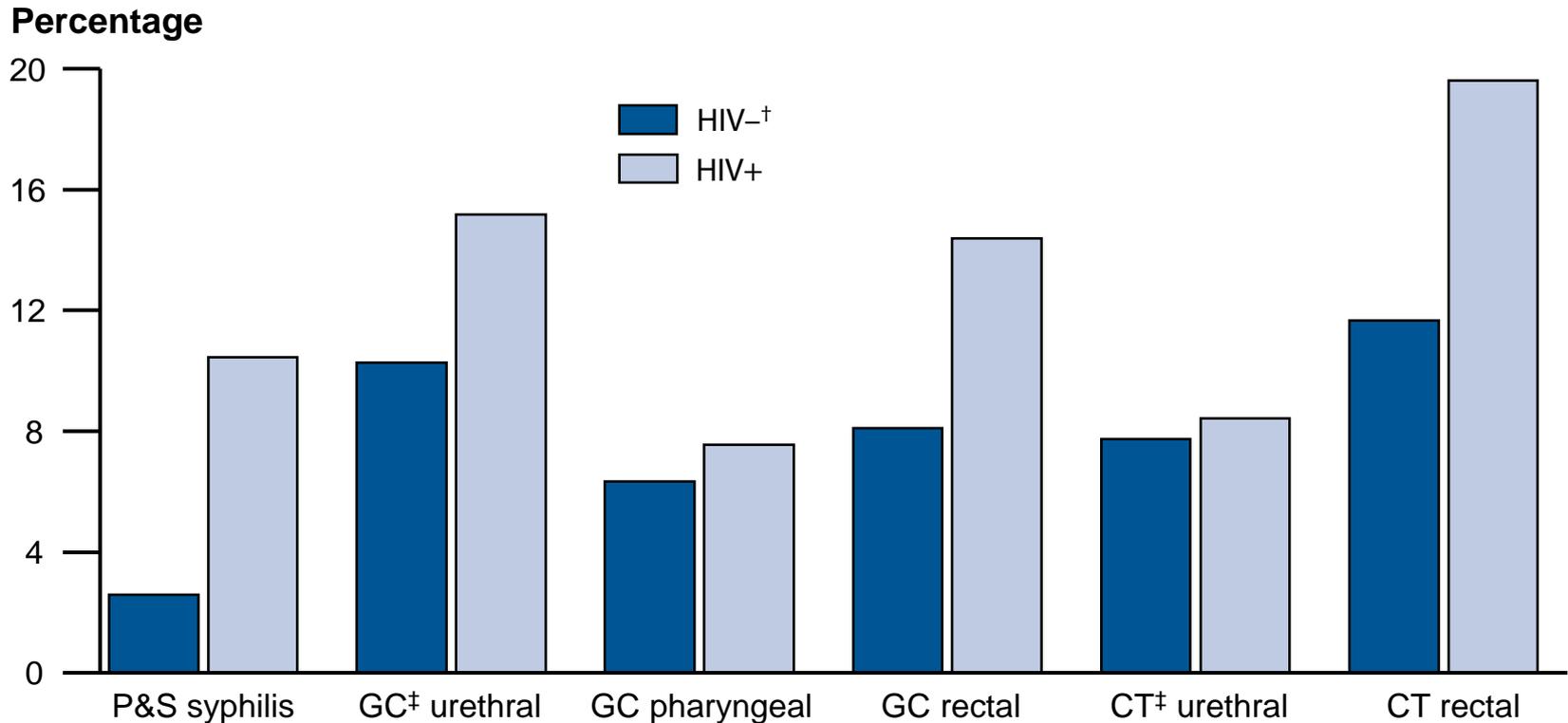


* MSM = men who have sex with men.

NOTE: Includes sites that reported data on at least 5 MSM with P&S syphilis in 2010.



STD Surveillance Network (SSuN)—Proportion of MSM* Attending STD Clinics with Primary and Secondary Syphilis, Gonorrhea or Chlamydia by HIV Status, 2010



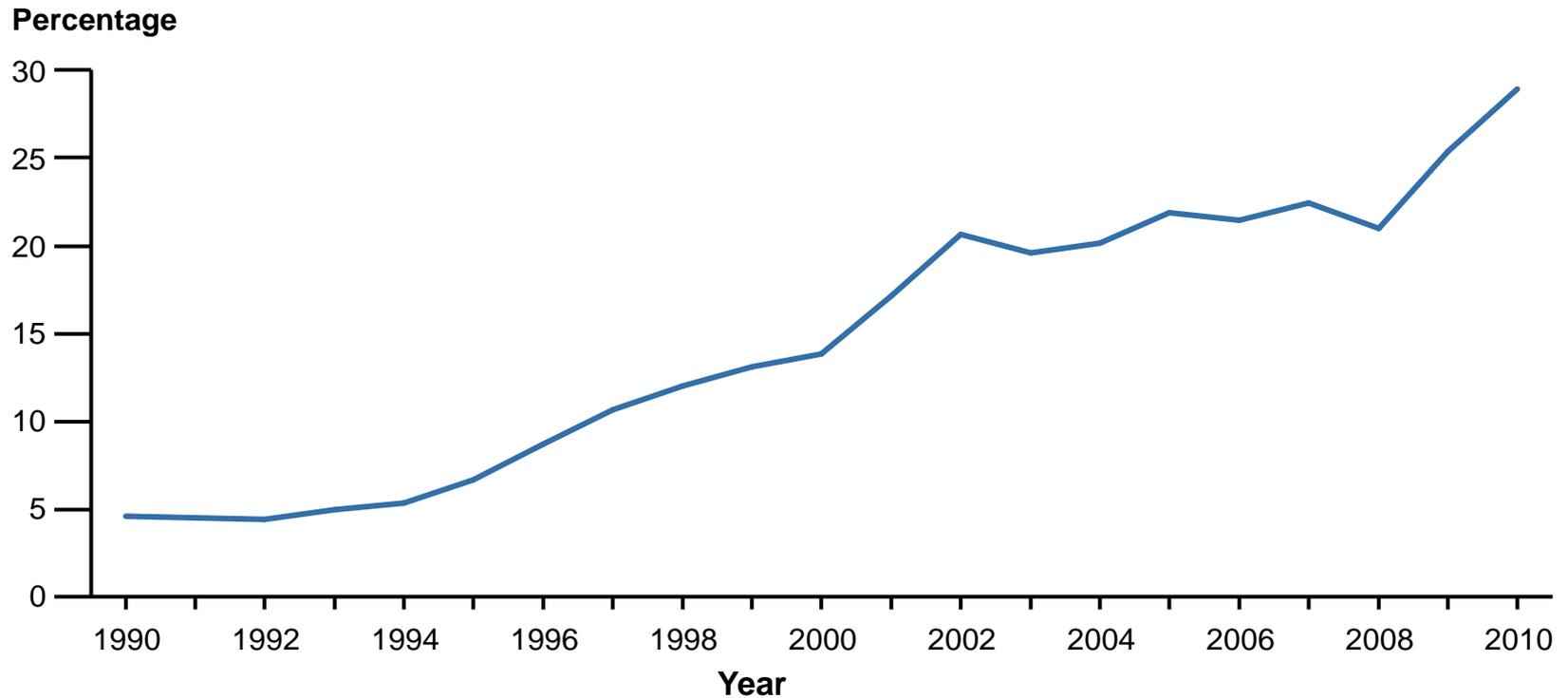
* MSM = men who have sex with men.

† HIV negative status includes persons of unknown status for this analysis.

‡ GC urethral and CT urethral include results from both urethral and urine specimens.



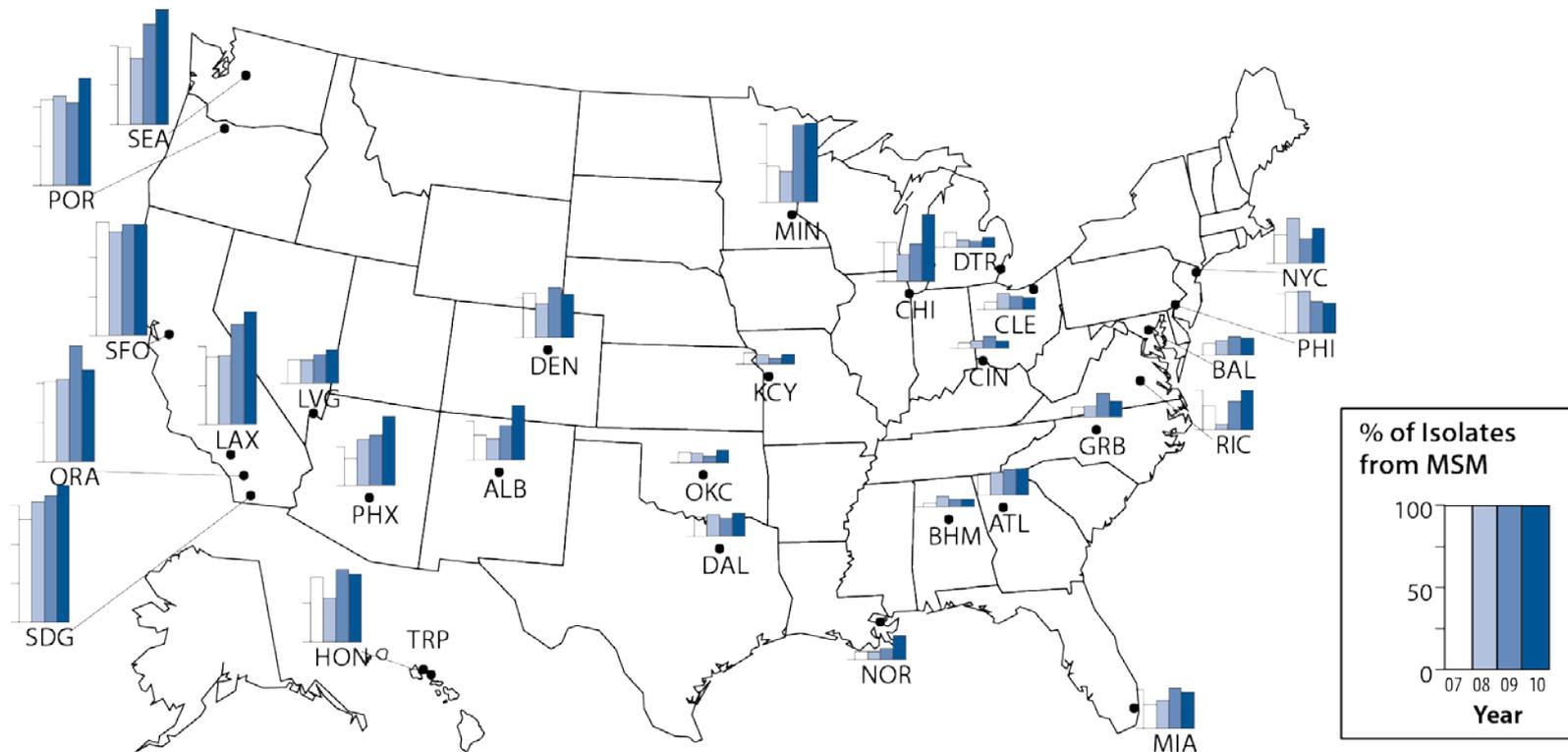
Gonococcal Isolate Surveillance Project (GISP)—Percentage of Urethral *Neisseria gonorrhoeae* Isolates Obtained from MSM* Attending STD Clinics, 1990–2010



* MSM = men who have sex with men.



Gonococcal Isolate Surveillance Project (GISP)—Percentage of Urethral *Neisseria gonorrhoeae* Isolates Obtained from MSM* Attending STD Clinics, by Site, 2007–2010



MSM = men who have sex with men.

NOTE: Participating sites include ALB = Albuquerque, NM; ATL = Atlanta, GA; BAL = Baltimore, MD; BHM = Birmingham, AL; CHI = Chicago, IL; CIN = Cincinnati, OH; CLE = Cleveland, OH; DAL = Dallas, TX; DEN = Denver, CO; DTR = Detroit, MI; GRB = Greensboro, NC; HON = Honolulu, HI; KCY = Kansas City, MO; LAX = Los Angeles, CA; LVG = Las Vegas, NV; MIA = Miami, FL; MIN = Minneapolis, MN; NOR = New Orleans, LA; NYC = New York City, NY; OKC = Oklahoma City, OK; ORA = Orange County, CA; PHI = Philadelphia, PA; PHX = Phoenix, AZ; POR = Portland, OR; RIC = Richmond, VA; SDG = San Diego, CA; SEA = Seattle, WA; SFO = San Francisco, CA; and TRP = Tripler Army Medical Center, HI (does not provide sexual risk behavior data).

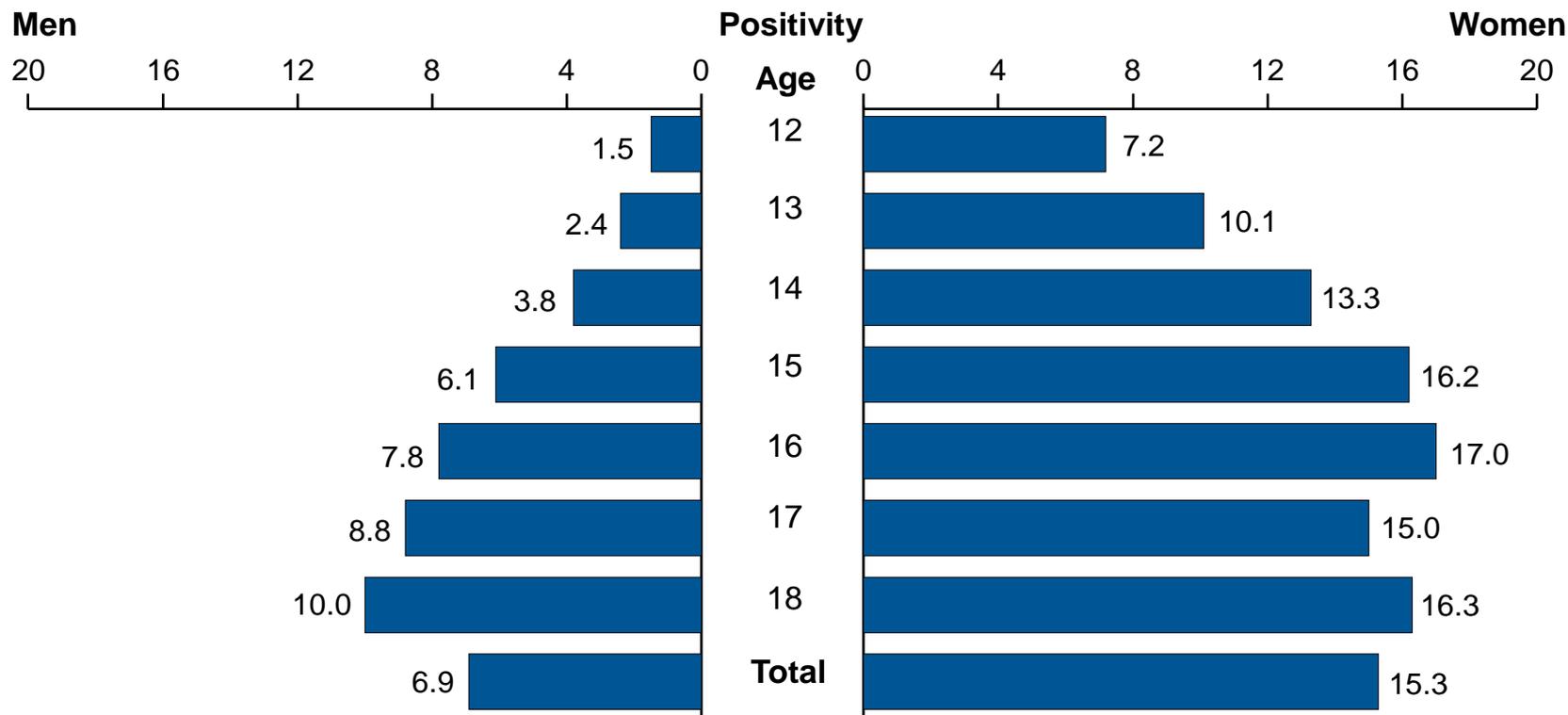


STDs in Persons Entering Corrections Facilities

Sexually Transmitted Disease Surveillance 2010
Division of STD Prevention



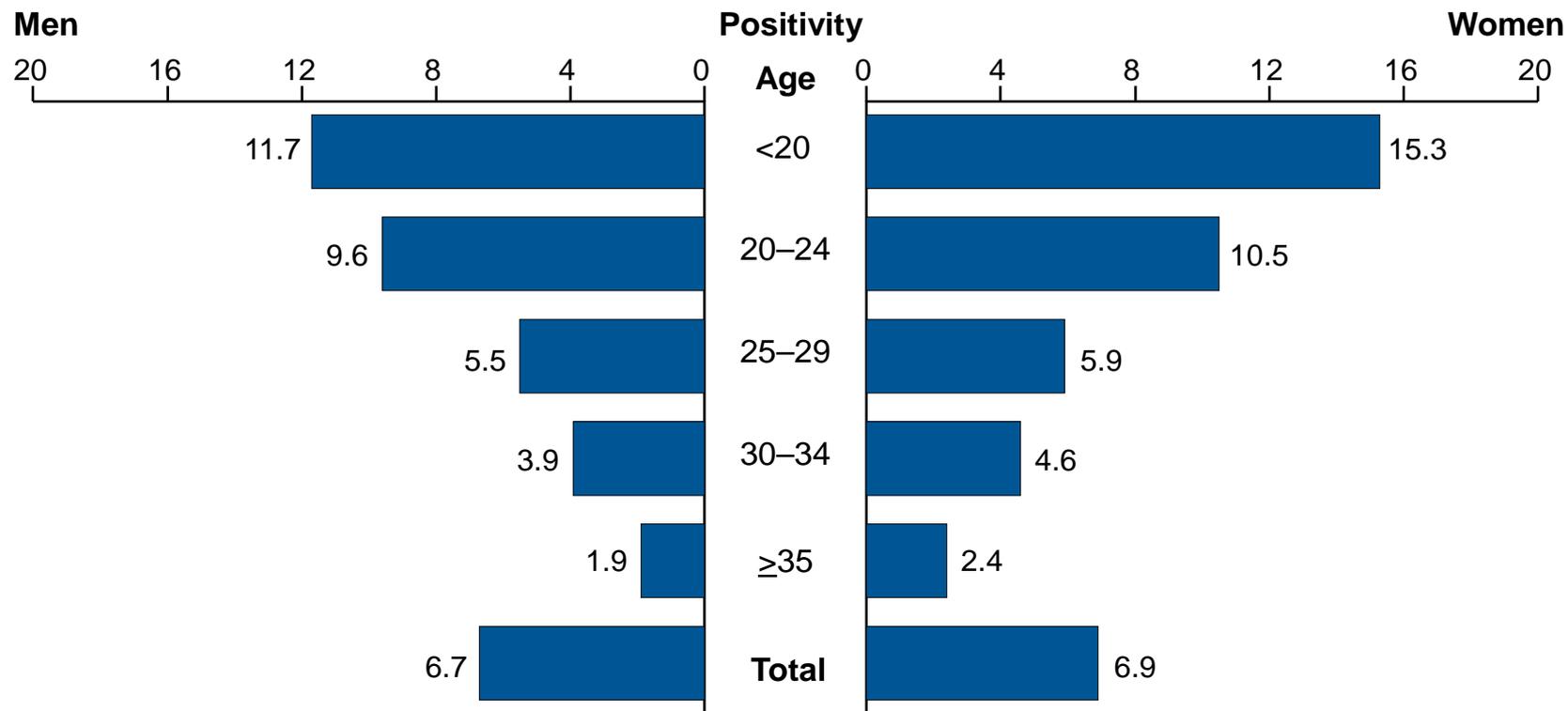
Chlamydia—Positivity by Age and Sex, Juvenile Corrections Facilities, 2010



NOTE: Positivity percentage is presented from facilities reporting more than 100 test results.



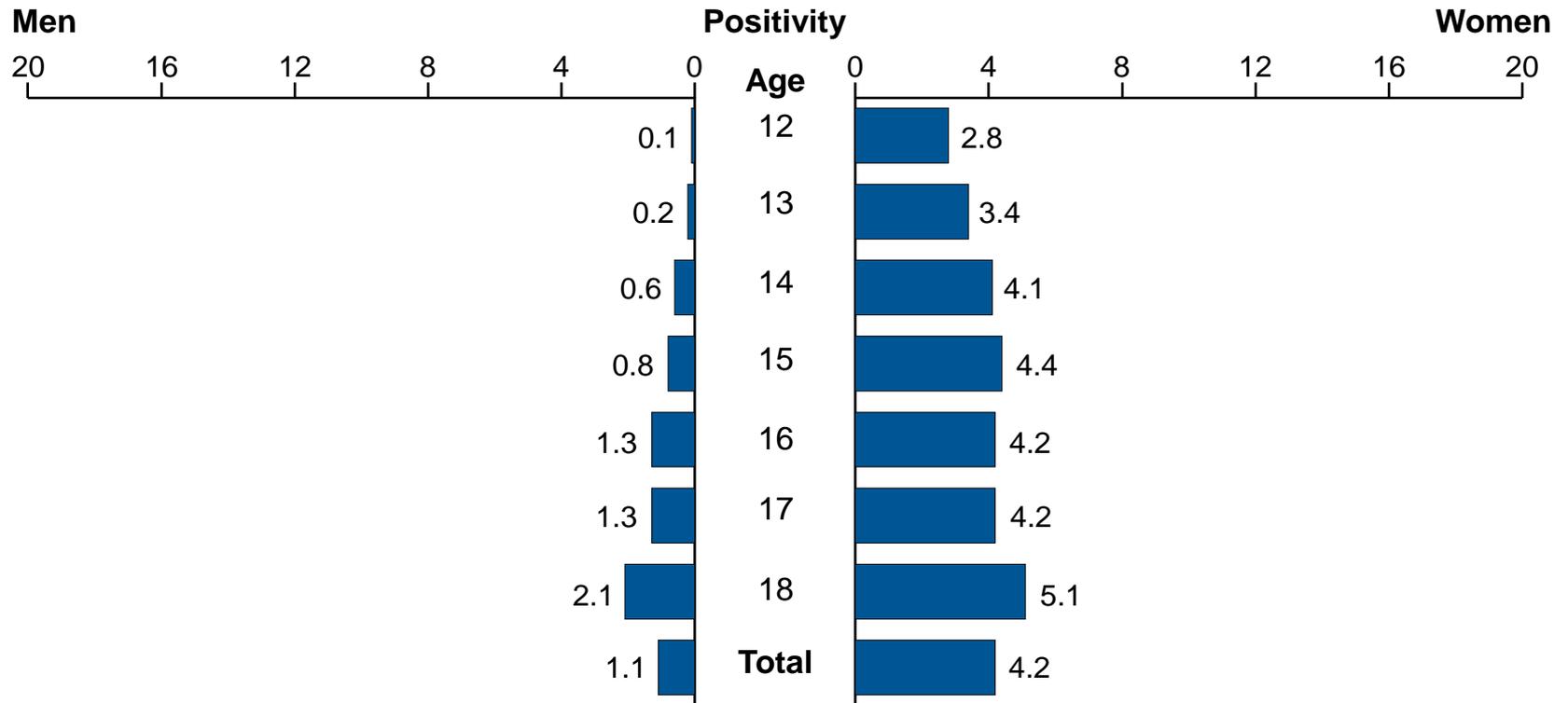
Chlamydia—Positivity by Age Group and Sex, Adult Corrections Facilities, 2010



NOTE: Positivity percentage is presented from facilities reporting more than 100 test results.



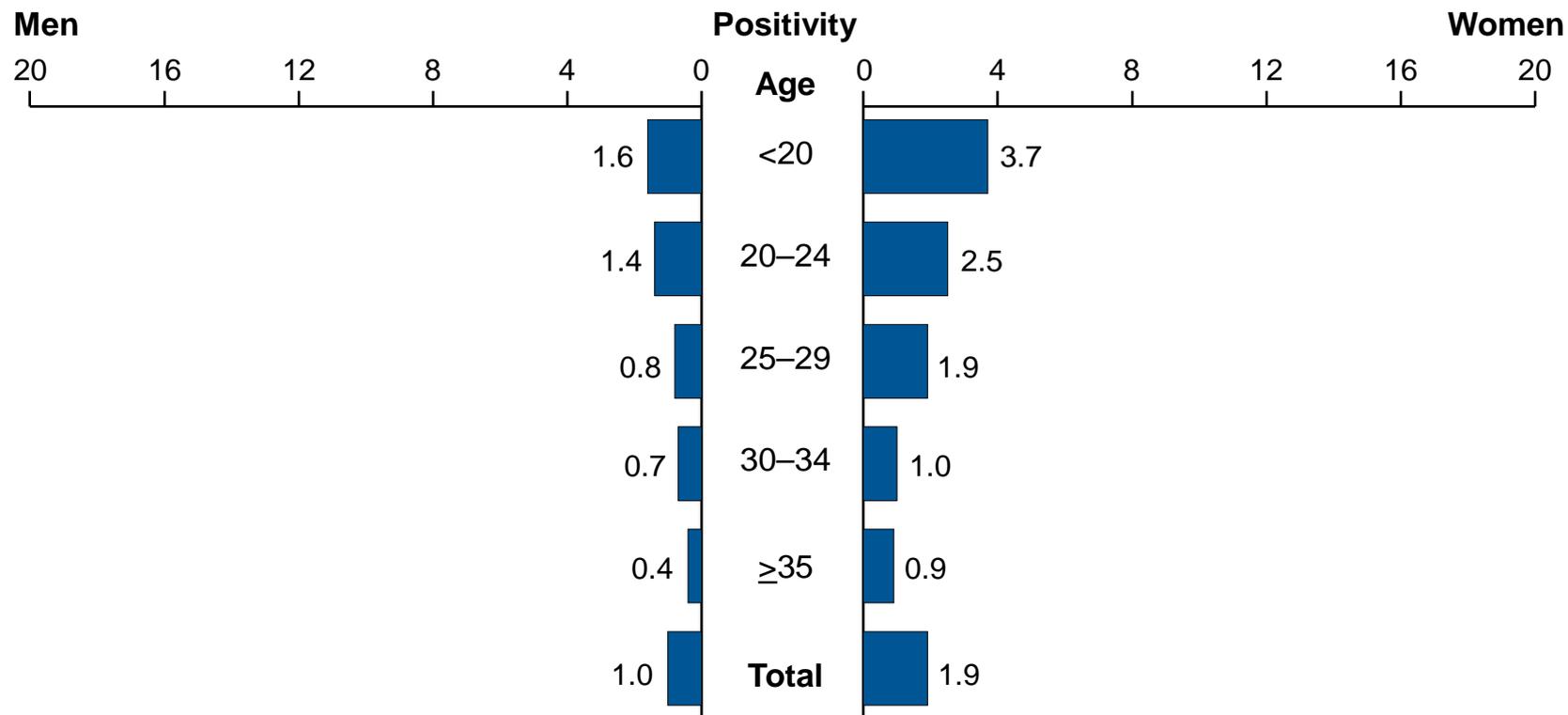
Gonorrhea—Positivity by Age and Sex, Juvenile Corrections Facilities, 2010



NOTE: Positivity percentage is presented from facilities reporting more than 100 test results.



Gonorrhea—Positivity by Age Group and Sex, Adult Corrections Facilities, 2010



NOTE: Positivity percentage is presented from facilities reporting more than 100 test results.



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E-mail: cdcinfo@cdc.gov Web: www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

