

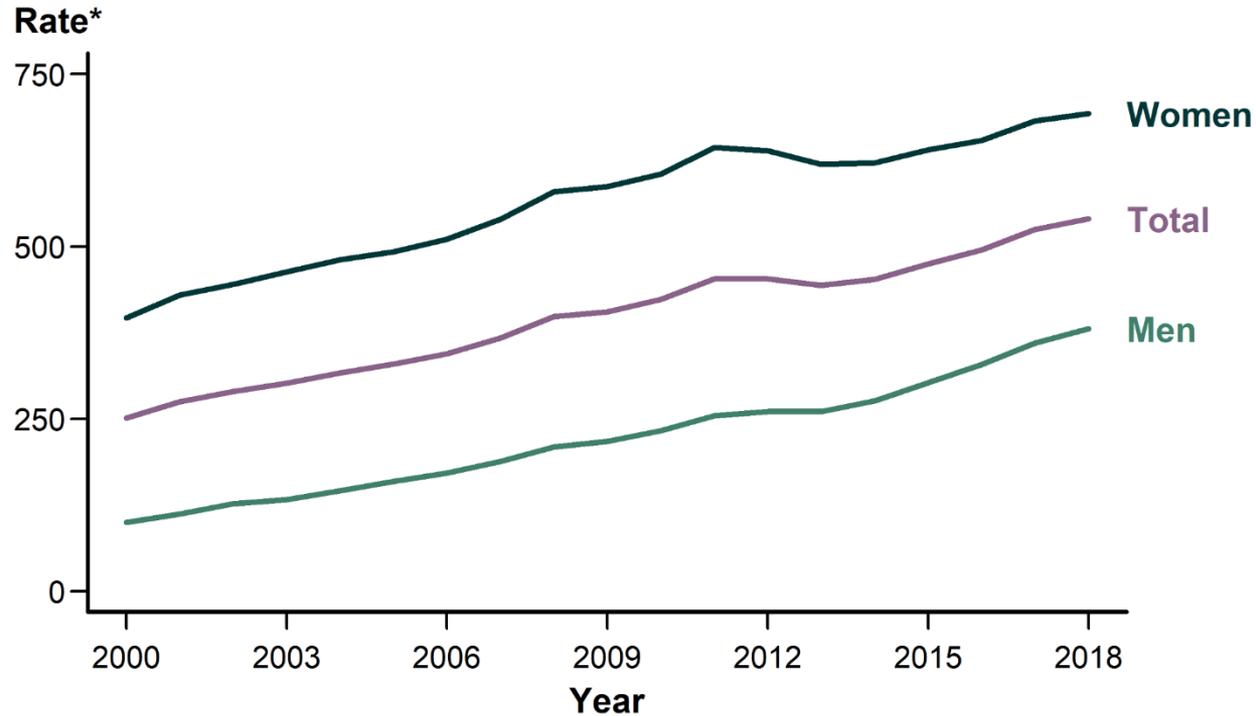


# Sexually Transmitted Disease Surveillance 2018

## Chlamydia



# Chlamydia — Rates of Reported Cases by Sex, United States, 2000–2018

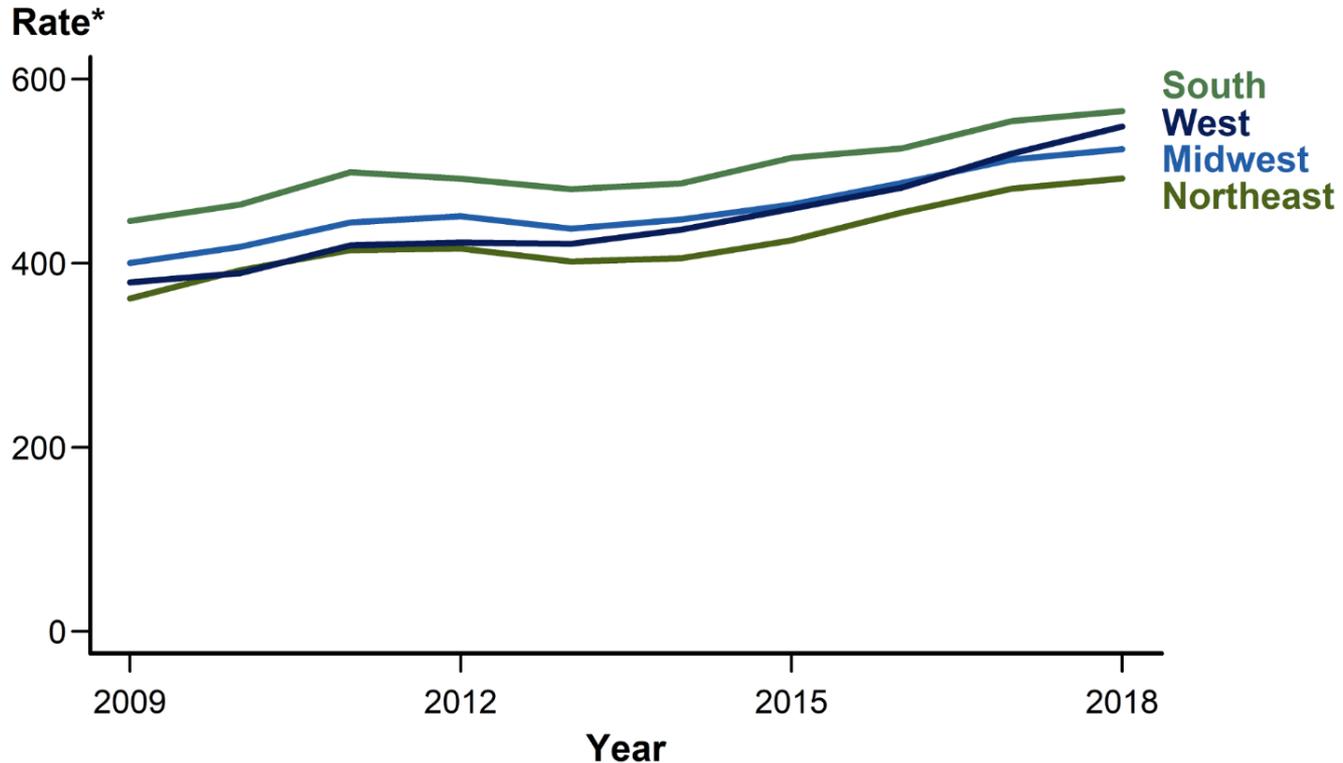


\* Per 100,000.

**NOTE:** See sections A1.3 and A1.8 in the Appendix for more information on chlamydia case reporting and interpreting trends in chlamydia case reports.



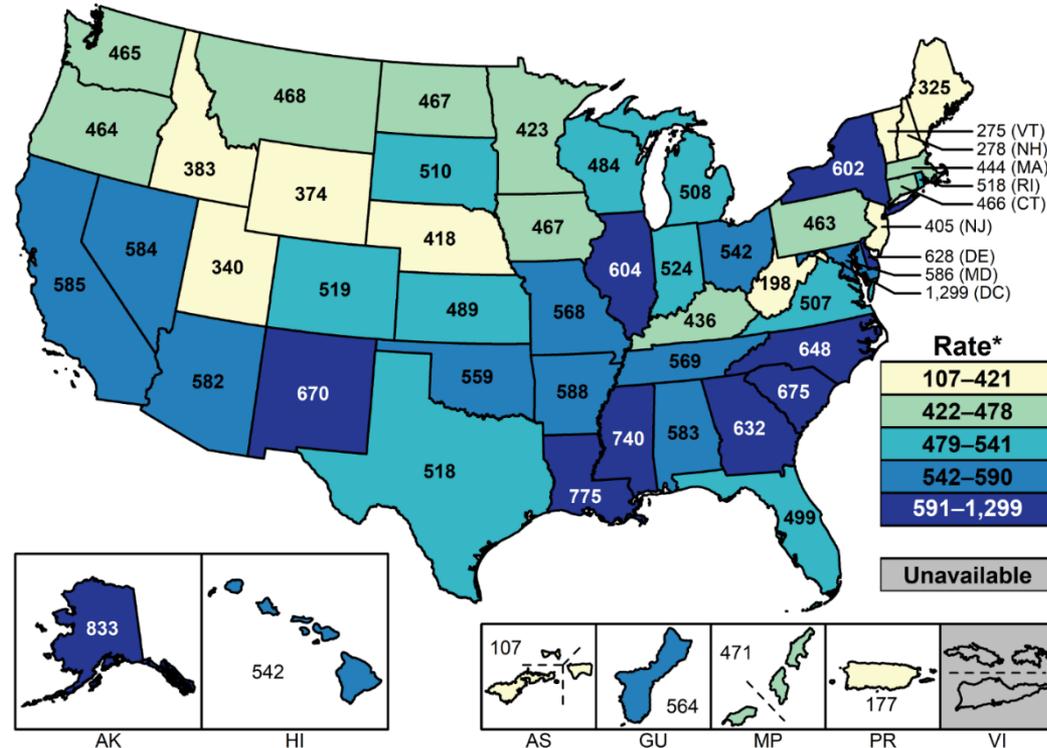
# Chlamydia — Rates of Reported Cases by Region, United States, 2009–2018



\* Per 100,000.



# Chlamydia — Rates of Reported Cases by State and Territory, United States, 2018

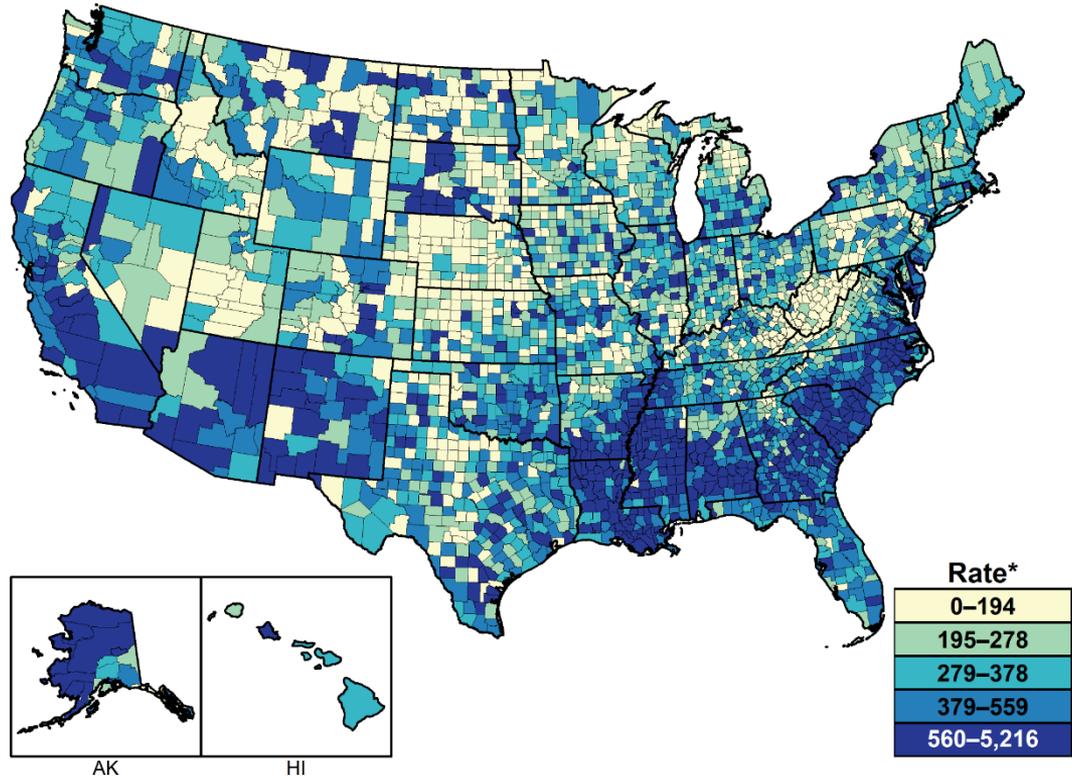


\* Per 100,000.

**NOTE:** See Section A1.11 in the Appendix for more information on interpreting reported rates in US territories.



# Chlamydia — Rates of Reported Cases by County, United States, 2018

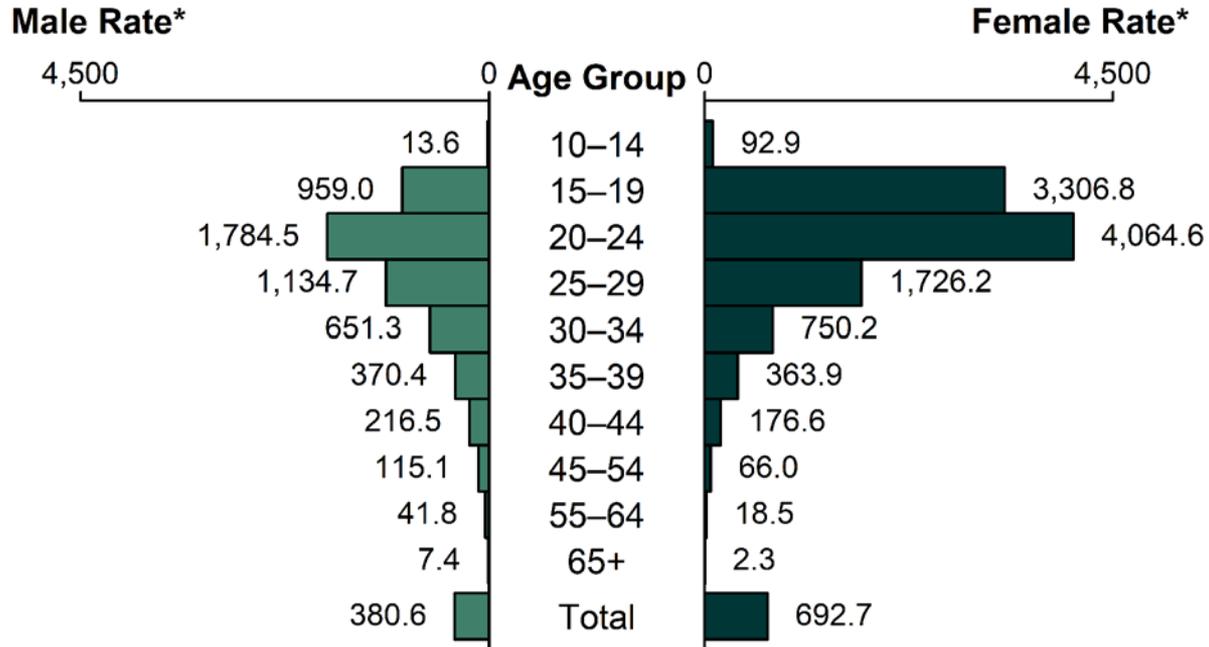


\* Per 100,000.

**NOTE:** See section A1.5 in the Appendix for more information on county-level rates.



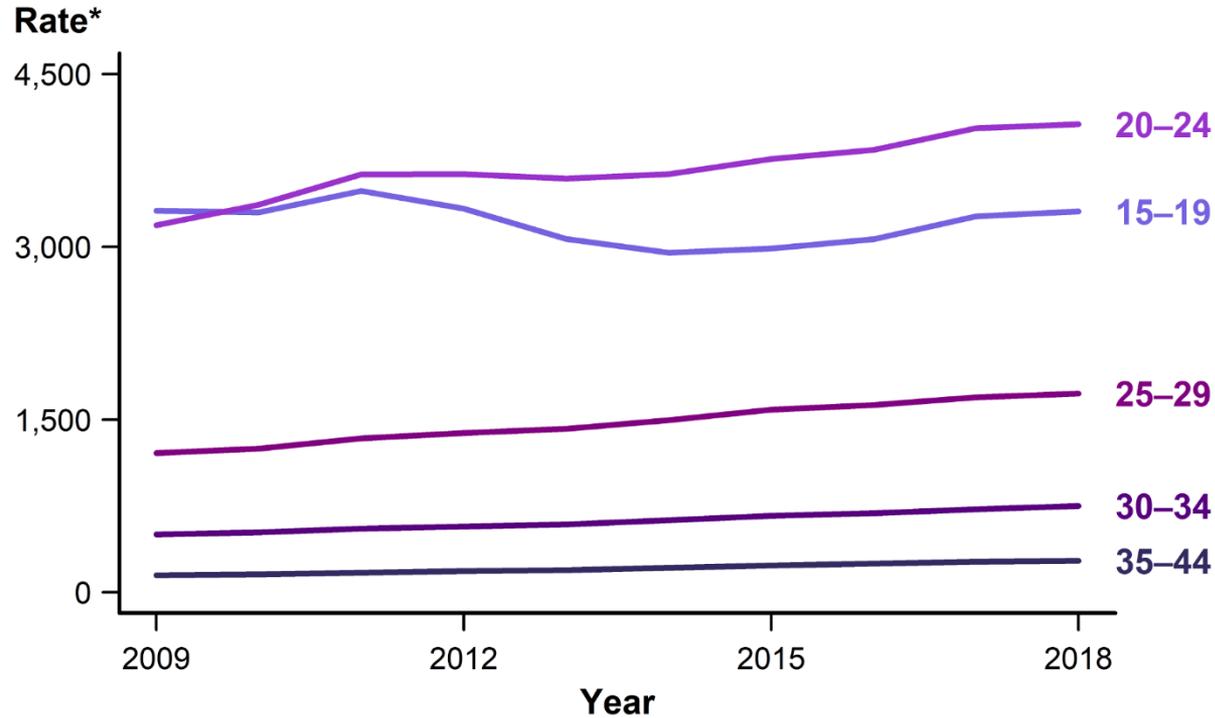
# Chlamydia — Rates of Reported Cases by Age Group and Sex, United States, 2018



\* Per 100,000.



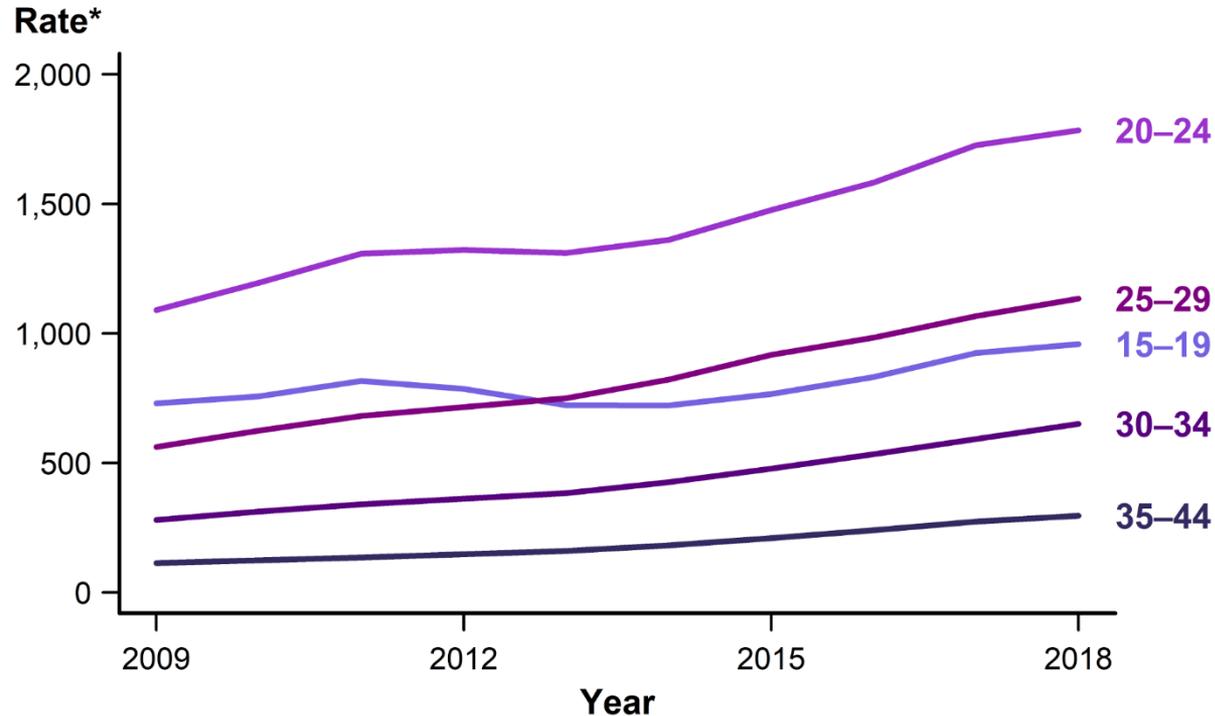
# Chlamydia — Rates of Reported Cases Among Females Aged 15–44 Years by Age Group, United States, 2009–2018



\* Per 100,000.



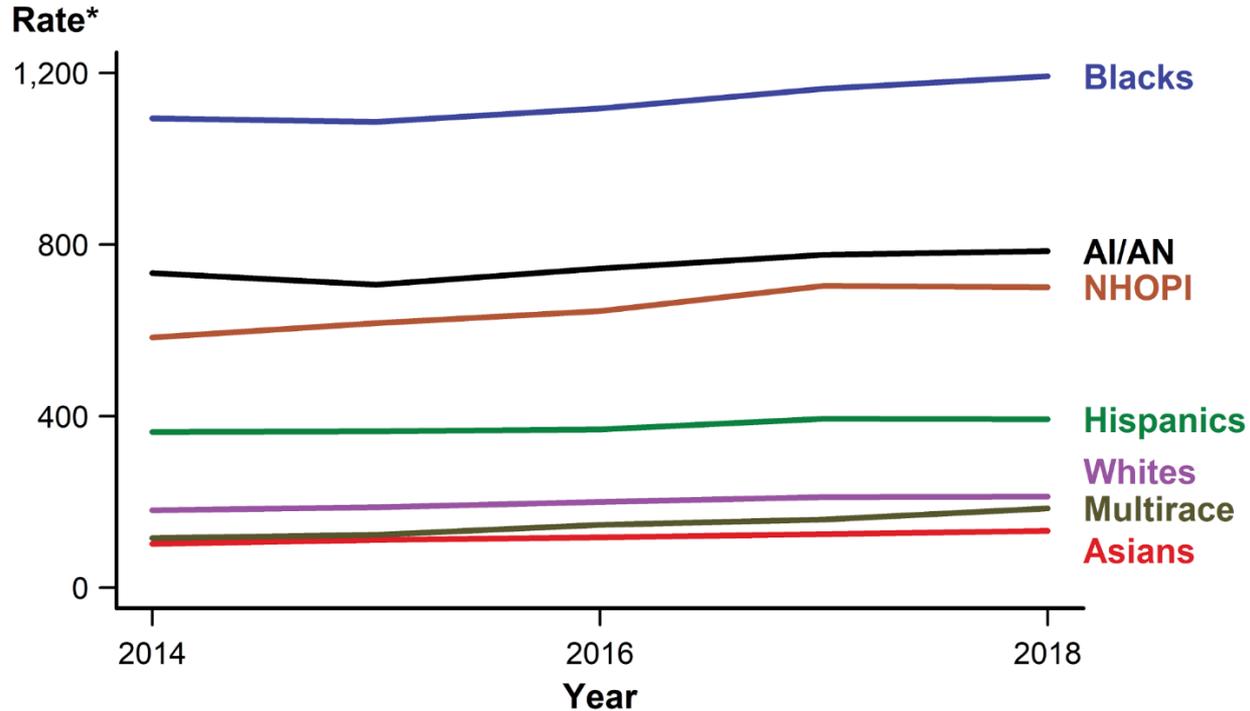
# Chlamydia — Rates of Reported Cases Among Males Aged 15–44 Years by Age Group, United States, 2009–2018



\* Per 100,000.



# Chlamydia — Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2014–2018



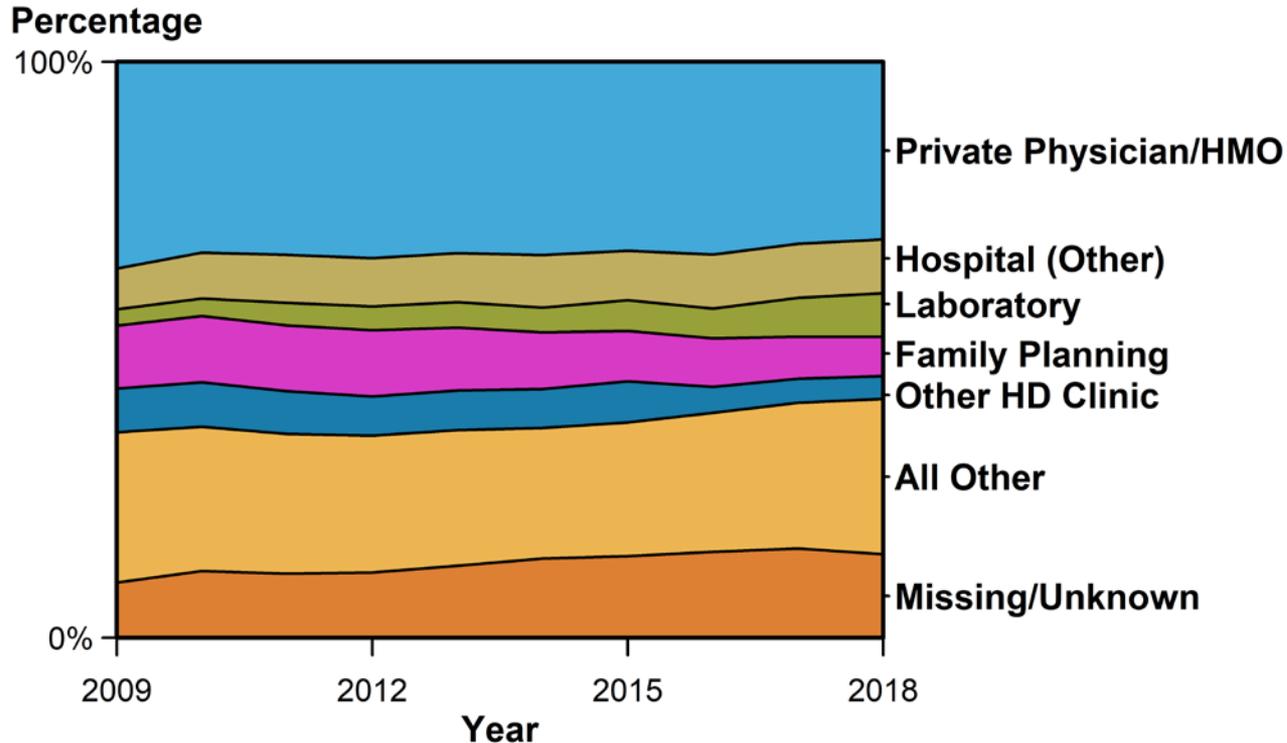
\* Per 100,000.

**NOTE:** See Section A1.5 in the Appendix for information on reporting STD case data for race/Hispanic ethnicity.

**ACRONYMS:** AI/AN = American Indians/Alaska Natives; NHOPI = Native Hawaiians/Other Pacific Islanders.



# Chlamydia — Percentage of Reported Cases Among Females by Reporting Source\*, United States, 2009–2018

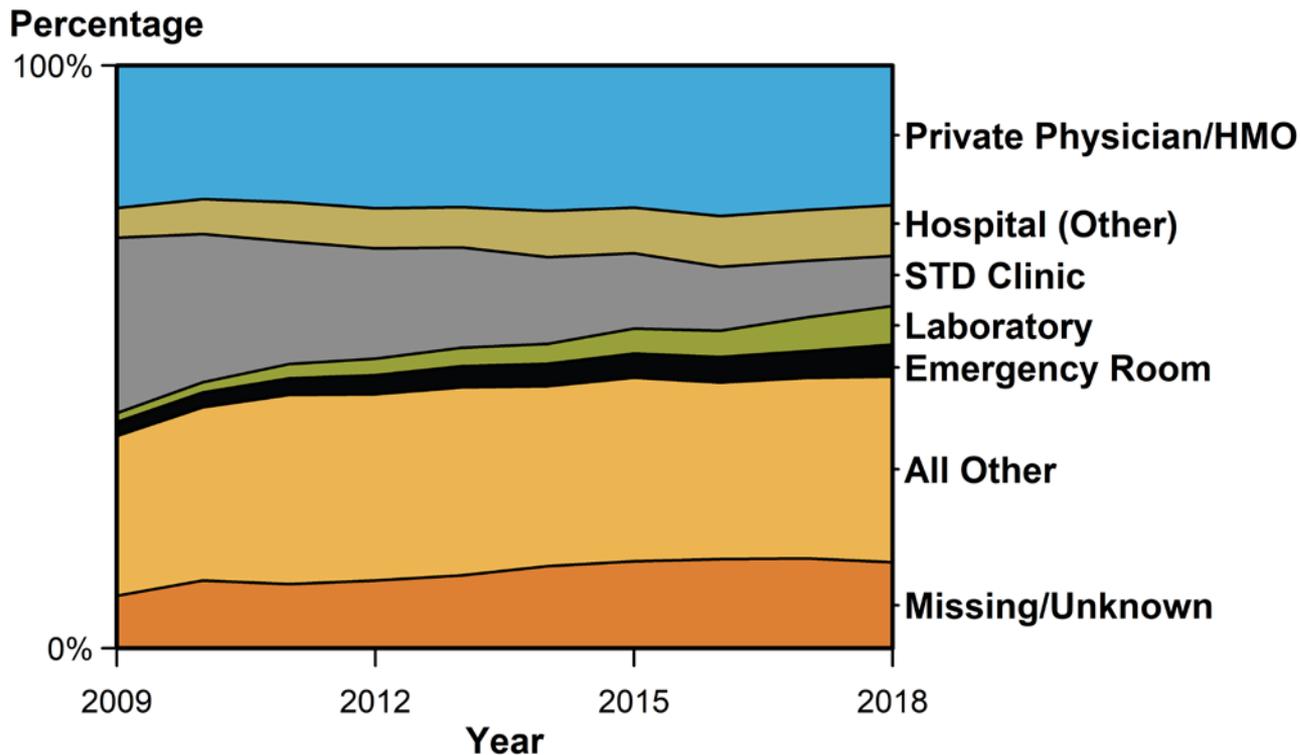


\* See section A1.7 in the Appendix for information on classification of reporting sources and a full list of reporting sources.

**ACRONYMS:** HMO = Health maintenance organization; HD = Health department.



# Chlamydia — Percentage of Reported Cases Among Males by Reporting Source\*, United States, 2009–2018



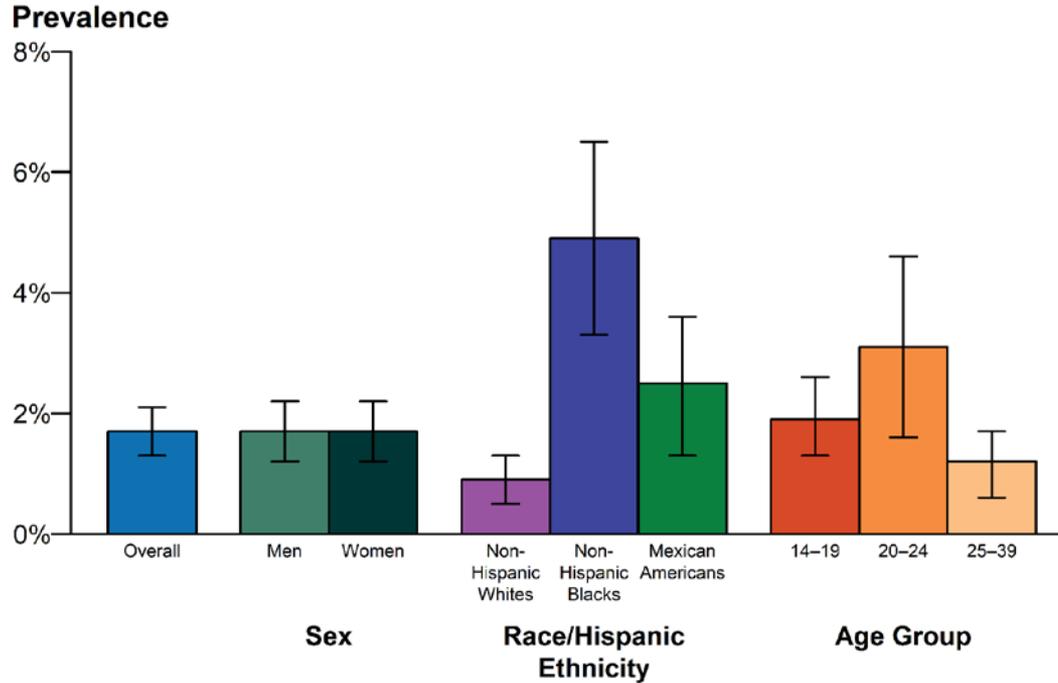
\* See section A1.7 in the Appendix for information on classification of reporting sources and a full list of reporting sources.

**ACRONYMS:** HMO = Health maintenance organization.





# Chlamydia — National Estimates of Prevalence Among Persons Aged 14–39 Years by Sex, Race/Hispanic Ethnicity, or Age Group, National Health and Nutrition Examination Survey (NHANES), 2013–2016



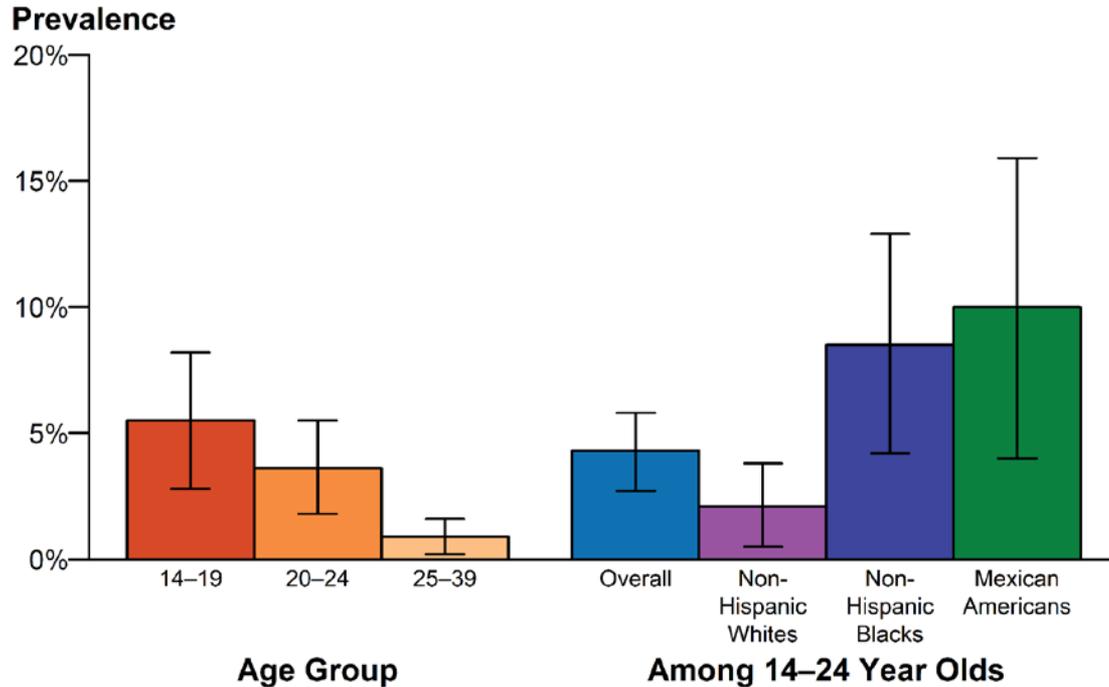
**NOTE:** Error bars indicate 95% confidence intervals. Overall prevalence estimates include all race/Hispanic ethnicity groups, including those not shown separately.

**ADAPTED FROM:** Torrone E, Papp J, Weinstock H. Prevalence of *Chlamydia trachomatis* genital infection among persons aged 14–39 years — United States, 2007–2012. *MMWR Morb Mortal Wkly Rep.* 2014;63(38):834–838.





# Chlamydia — National Estimates of Prevalence Among Sexually-Active Females Aged 14–39 Years by Race/Hispanic Ethnicity and Age Group, National Health and Nutrition Examination Survey (NHANES), 2013–2016



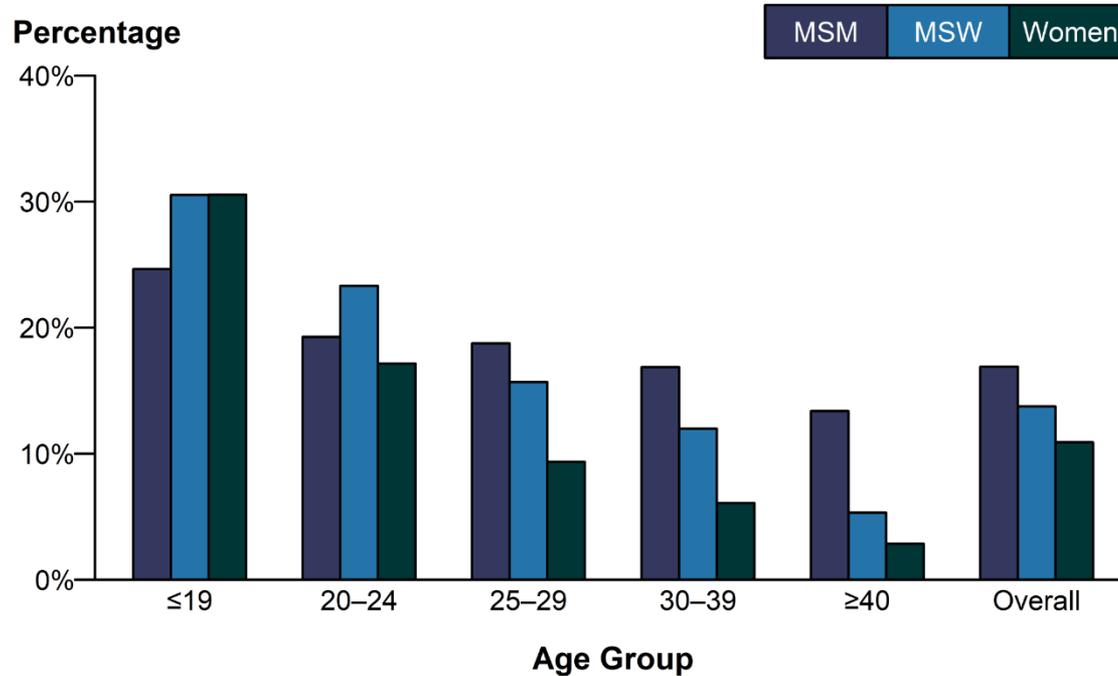
**NOTE:** Error bars indicate 95% confidence intervals. Overall prevalence estimates include all race/Hispanic ethnicity groups, including those not shown separately.

**ADAPTED FROM:** Torrone E, Papp J, Weinstock H. Prevalence of *Chlamydia trachomatis* genital infection among persons aged 14–39 years — United States, 2007–2012. *MMWR Morb Mortal Wkly Rep.* 2014;63(38):834–838.





# Chlamydia — Proportion of STD Clinic Patients Testing Positive\* by Age Group and Sex and Sex of Sex Partners, STD Surveillance Network (SSuN), 2018



\* Results are based on unique patients with known sex of sex partners (n=83,691) attending SSuN STD clinics who were tested  $\geq 1$  time for chlamydia in 2018.

**NOTE:** See Section A2.2 in the Appendix for SSuN methods.

**ACRONYMS:** MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only.



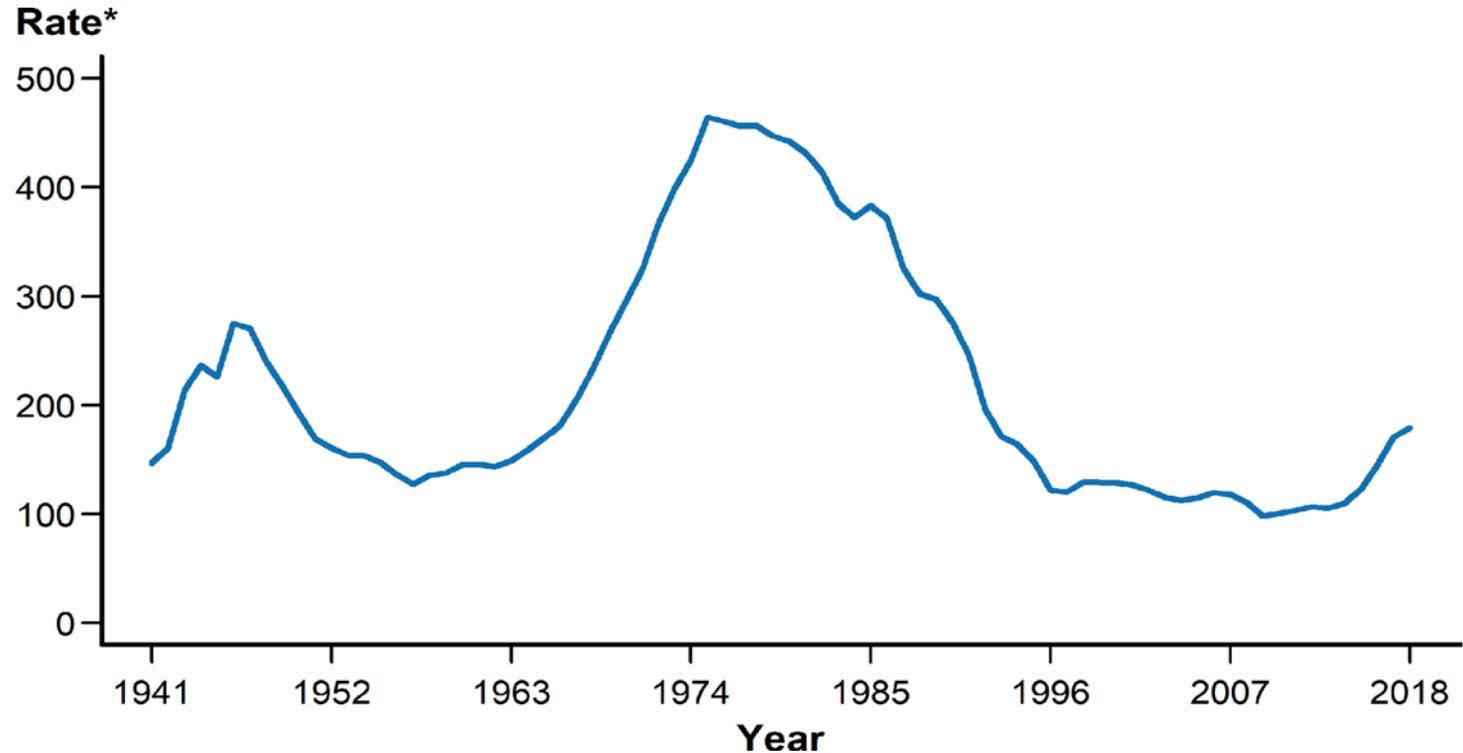


# Sexually Transmitted Disease Surveillance 2018

## Gonorrhea



# Gonorrhea — Rates of Reported Cases by Year, United States, 1941–2018

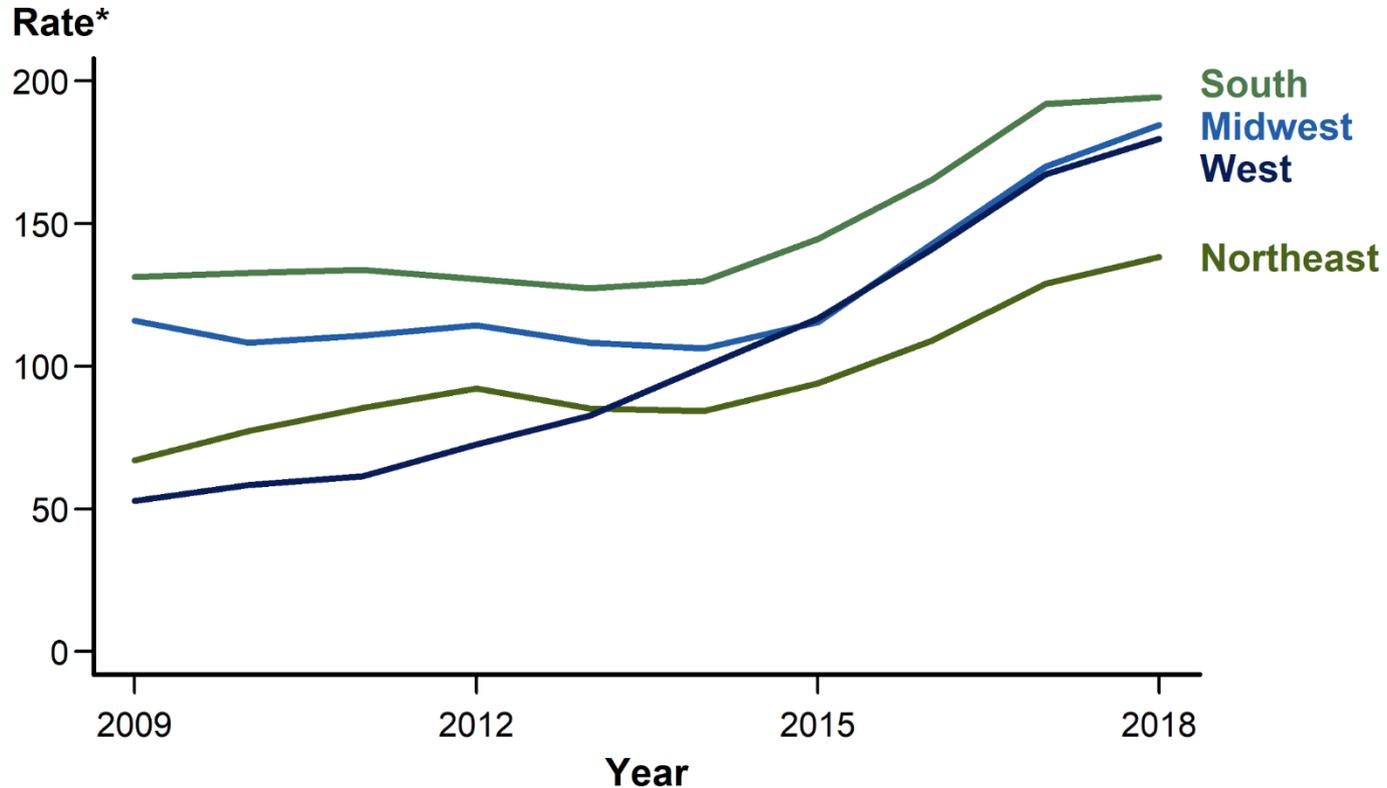


\* Per 100,000.

**NOTE:** See section A1.3 in the Appendix for more information on gonorrhea case reporting.



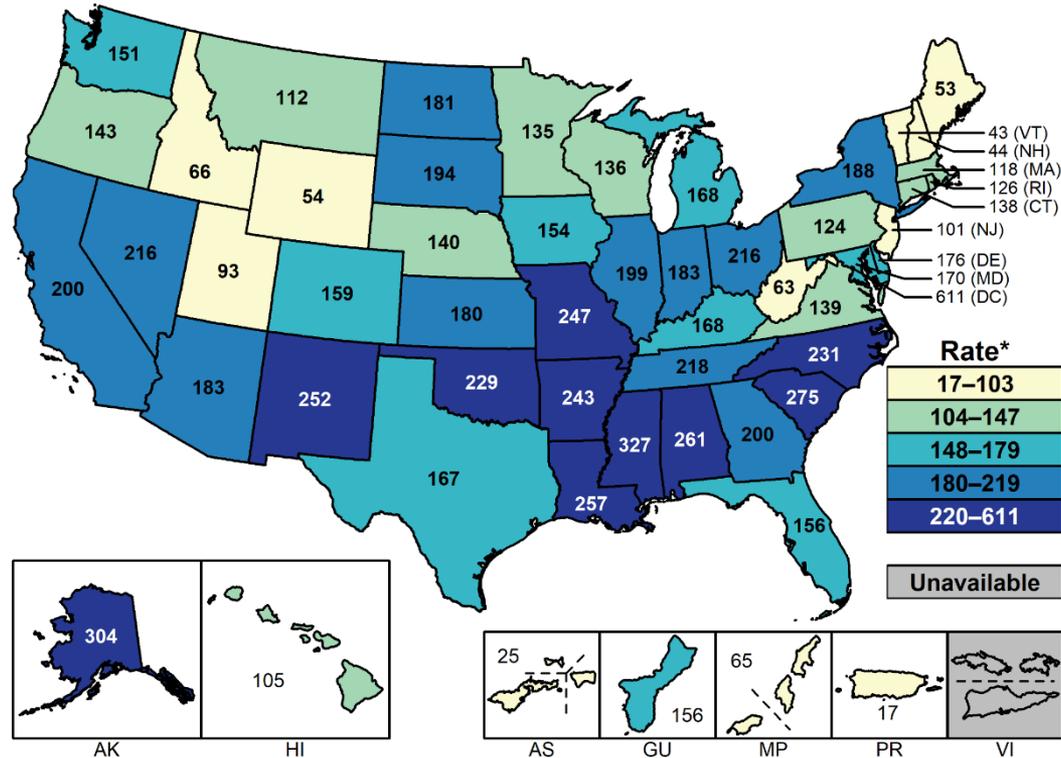
# Gonorrhea — Rates of Reported Cases by Region, United States, 2009–2018



\* Per 100,000.



# Gonorrhea — Rates of Reported Cases by State and Territory, United States, 2018

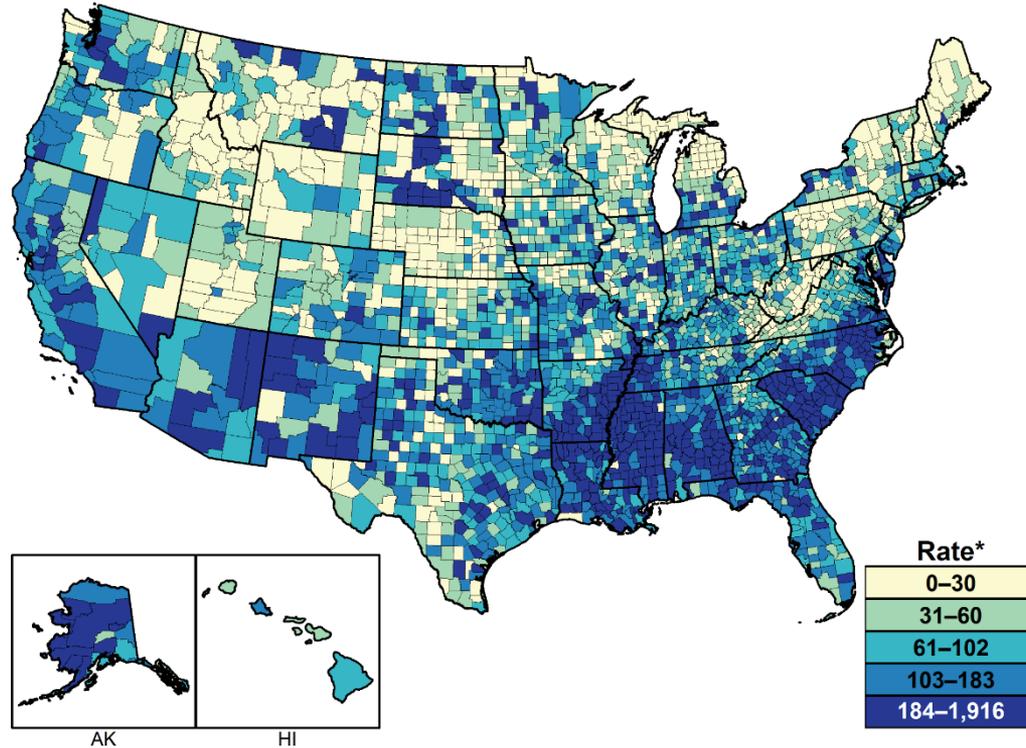


\* Per 100,000.

**NOTE:** See Section A1.11 in the Appendix for more information on interpreting reported rates in US territories.



# Gonorrhea — Rates of Reported Cases by County, United States, 2018

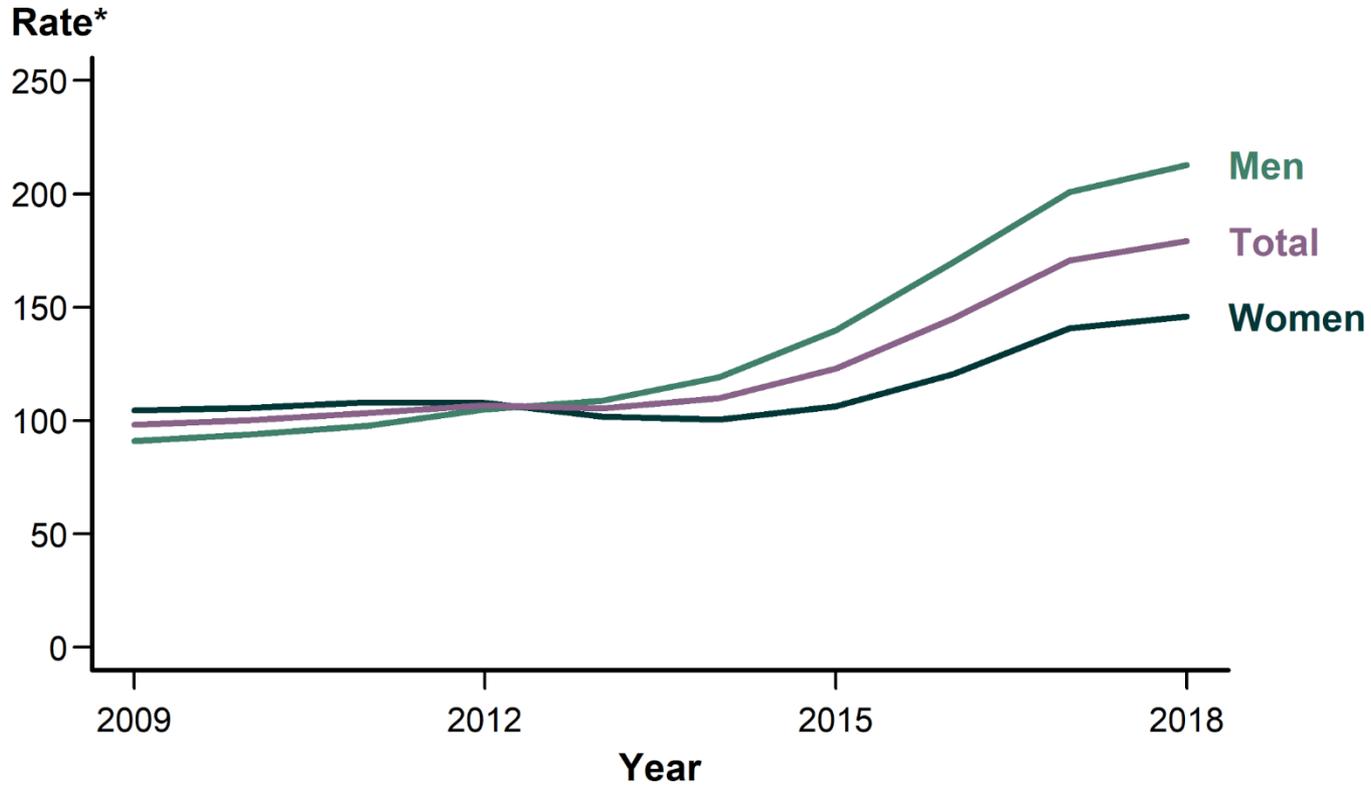


\* Per 100,000.

**NOTE:** See section A1.4 in the Appendix for more information on county-level rates.



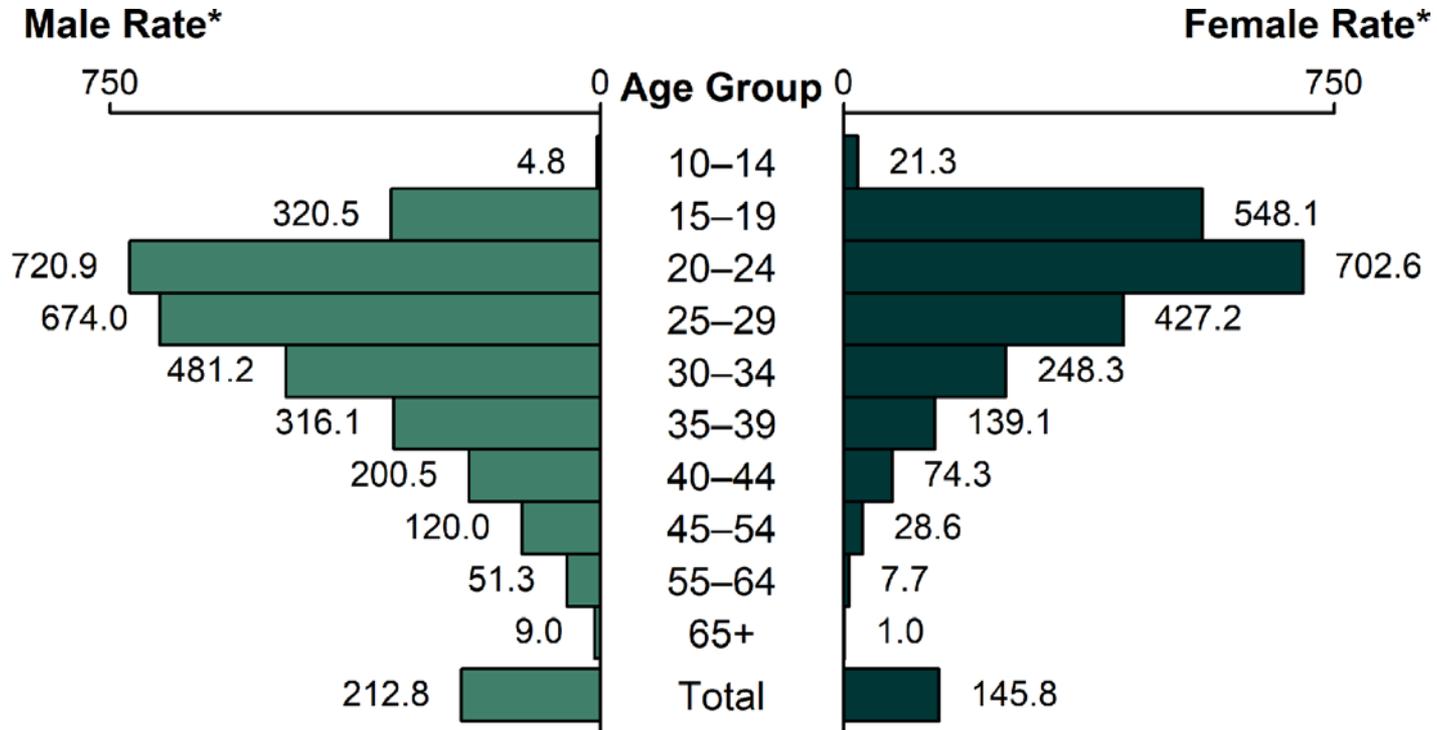
# Gonorrhea — Rates of Reported Cases by Sex, United States, 2009–2018



\* Per 100,000.



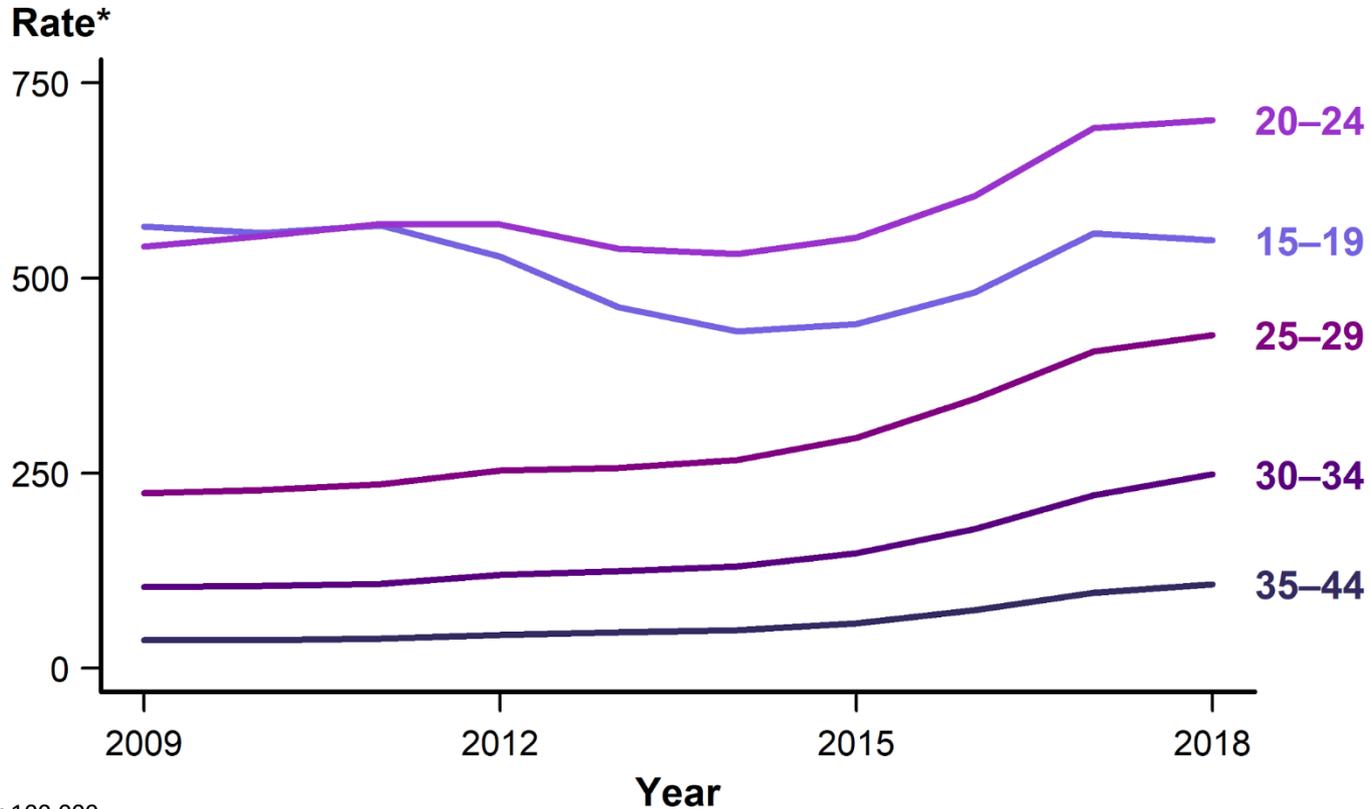
# Gonorrhea — Rates of Reported Cases by Age Group and Sex, United States, 2018



\* Per 100,000.



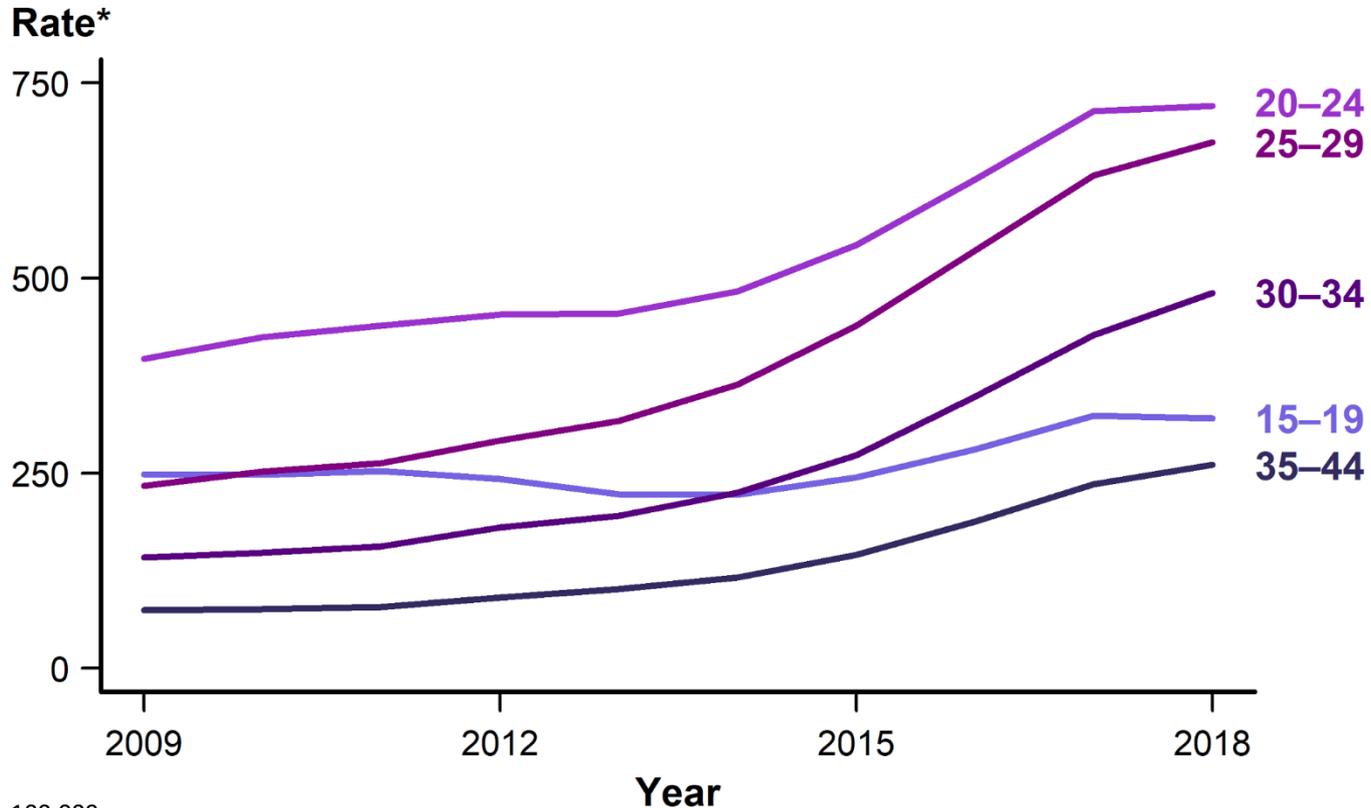
# Gonorrhea — Rates of Reported Cases Among Females Aged 15–44 Years by Age Group, United States, 2009–2018



\* Per 100,000.



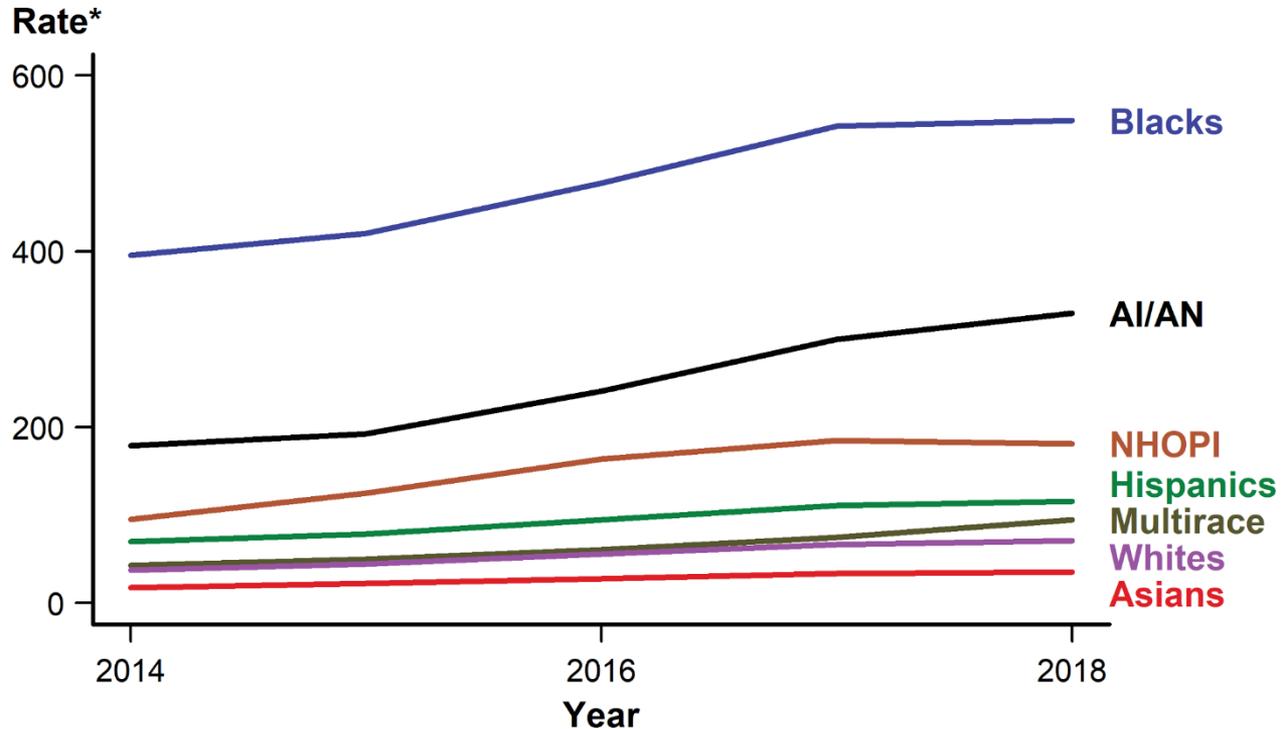
# Gonorrhea — Rates of Reported Cases Among Males Aged 15–44 Years by Age Group, United States, 2009–2018



\* Per 100,000.



# Gonorrhea — Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2014–2018



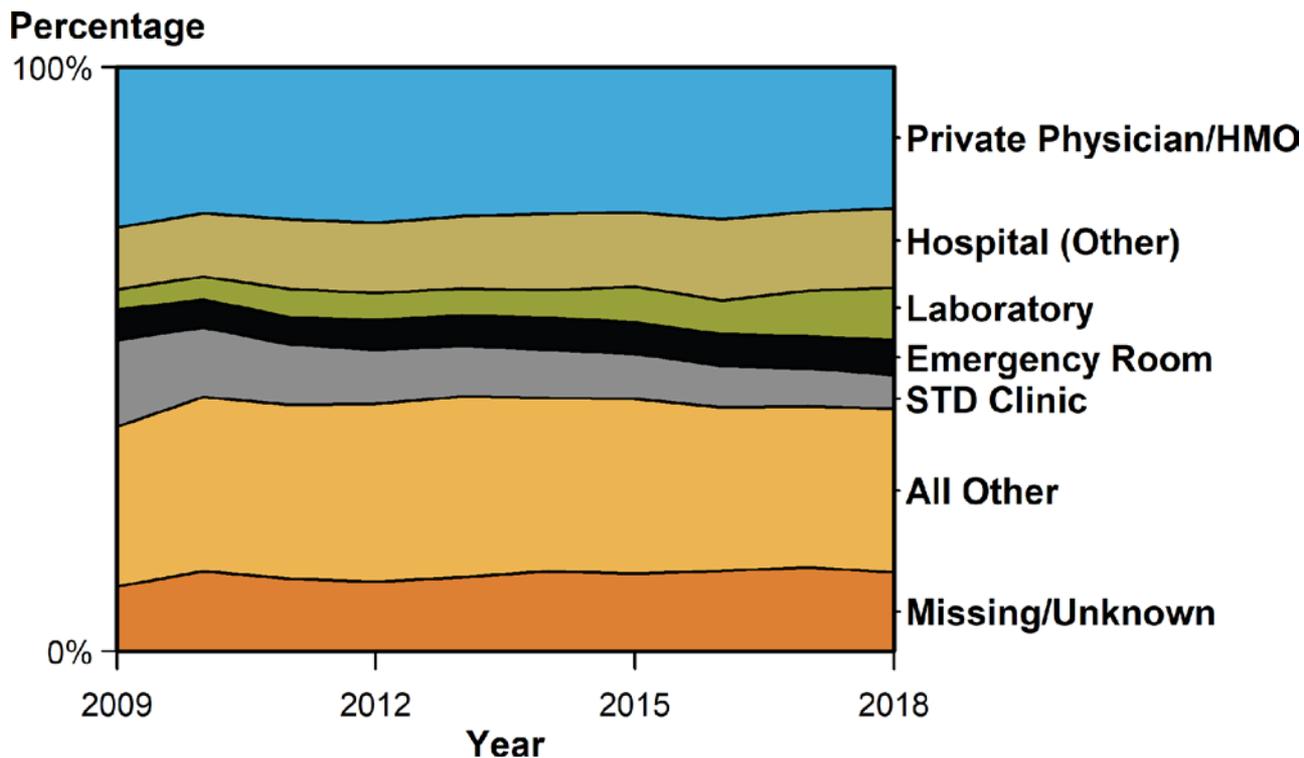
\* Per 100,000.

**NOTE:** See Section A1.5 in the Appendix for information on reporting STD case data for race/Hispanic ethnicity.

**ACRONYMS:** AI/AN = American Indians/Alaska Natives; NHOPI = Native Hawaiians/Other Pacific Islanders.



# Gonorrhea — Percentage of Reported Cases Among Females by Reporting Source\*, United States, 2009–2018

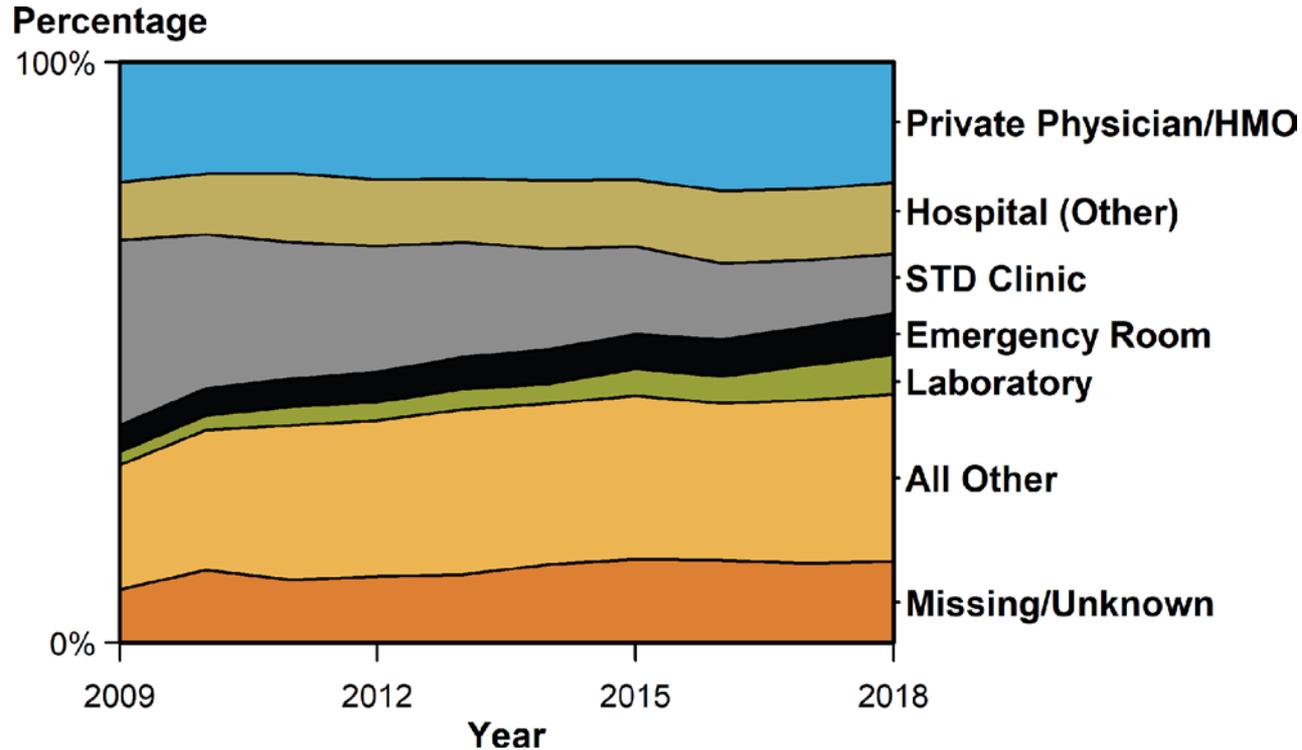


\* See section A1.7 in the Appendix for information on classification of reporting sources and a full list of reporting sources.

**ACRONYMS:** HMO = Health maintenance organization.



# Gonorrhea — Percentage of Reported Cases Among Males by Reporting Source\*, United States, 2009–2018

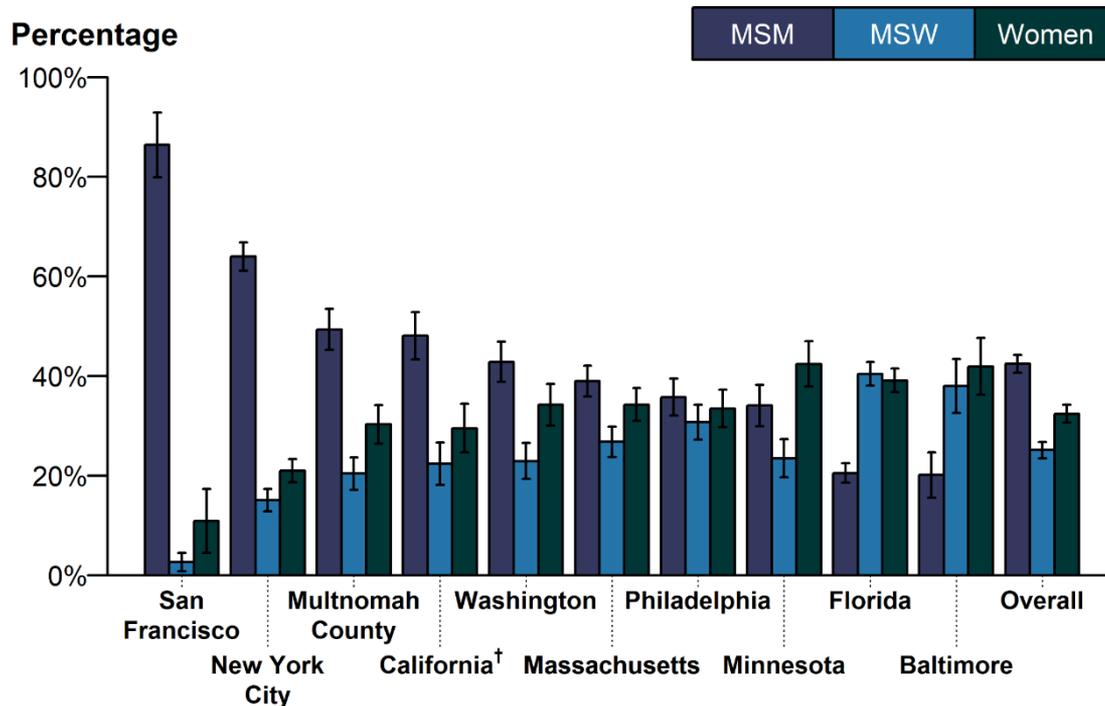


\* See section A1.7 in the Appendix for information on classification of reporting sources and a full list of reporting sources.

**ACRONYMS:** HMO = Health maintenance organization.



# Estimated Proportion\* of MSM, MSW, and Women Among Gonorrhea Cases by Jurisdiction, STD Surveillance Network (SSuN), 2018



\* Estimate based on weighted analysis of data obtained from interviews (n=6,842) conducted among a random sample of reported gonorrhea cases during January to December 2018.

† California data exclude San Francisco (shown separately).

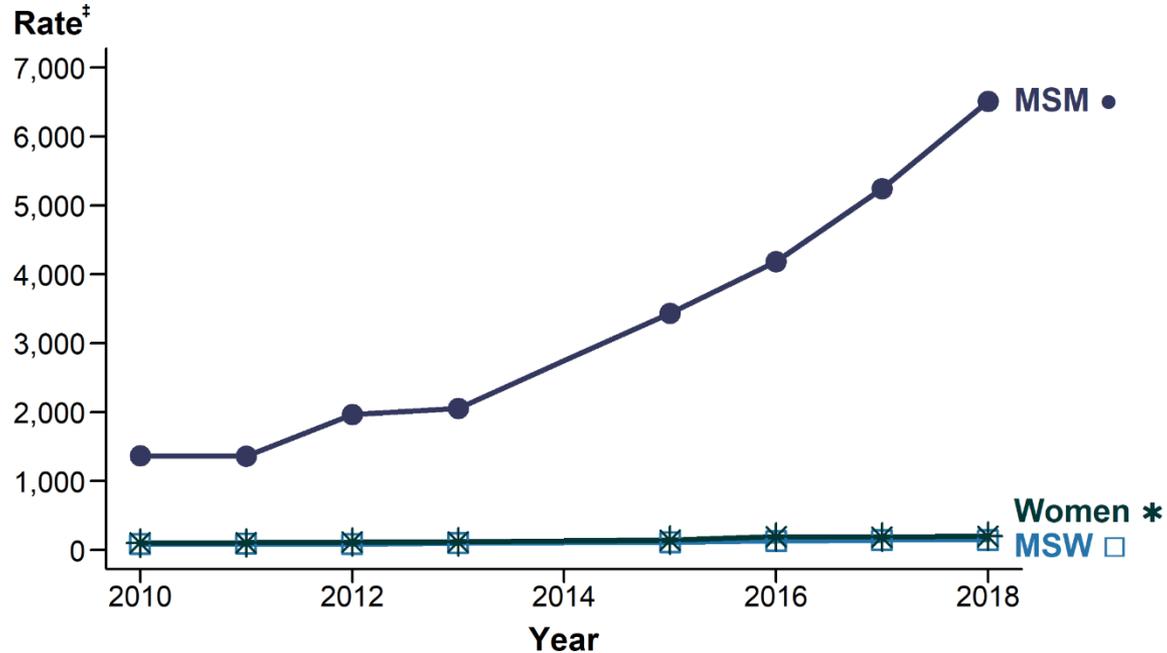
**NOTE:** See section A2.2 in the Appendix for SSuN methods.

**ACRONYMS:** MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only.





# Gonorrhea — Estimated\* Rates of Reported Gonorrhea Cases by MSM, MSW, and Women, STD Surveillance Network (SSuN)<sup>†</sup>, 2010–2018



\* Estimates based on interviews among a random sample of reported cases of gonorrhea (n=21,417); cases weighted for analysis. Data not available for 2014; 2013–2015 trend interpolated; trends lines overlap for MSW and women in this figure.

<sup>†</sup> Sites include Baltimore, Philadelphia, New York City, Washington State, San Francisco, and California (excluding San Francisco).

<sup>‡</sup> Per 100,000.

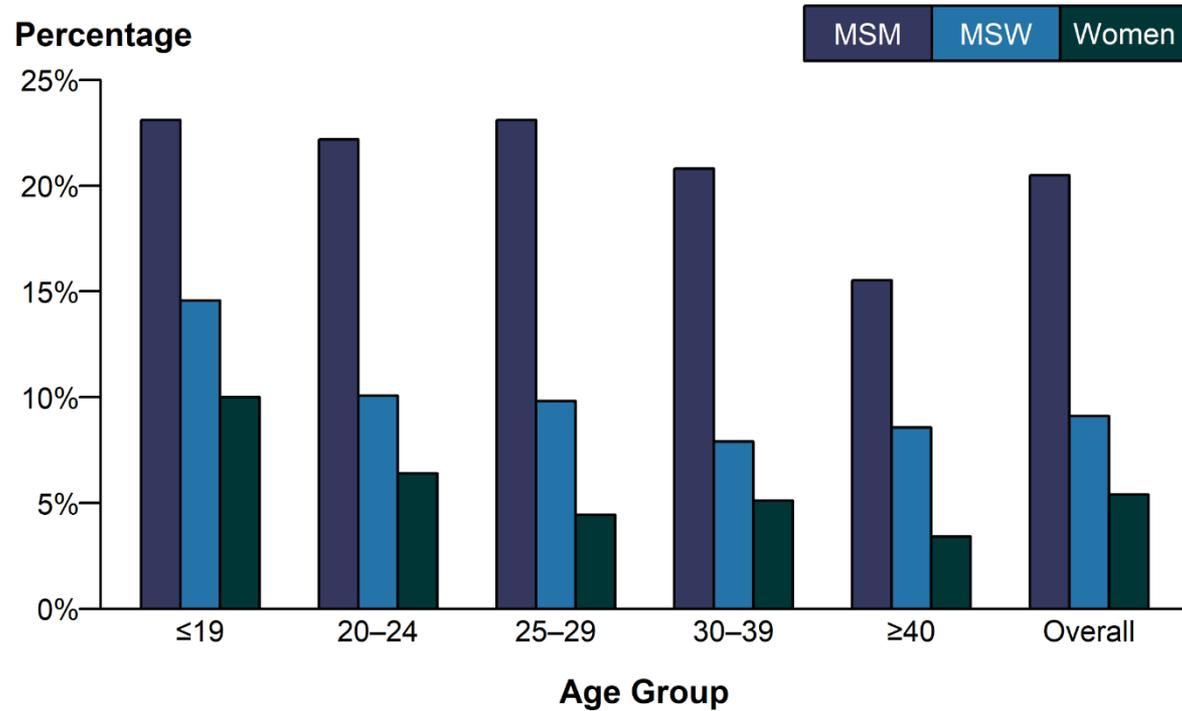
**ADAPTED FROM:** Stenger M, Pathela P, Anschuetz G, et al. Increases in the rate of *Neisseria gonorrhoeae* among gay, bisexual and other men who have sex with men (MSM) — findings from the STD Surveillance Network 2010–2015. *Sex Transm Dis.* 2017;44(7):393–397.

**ACRONYMS:** MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only.





# Gonorrhea — Proportion of STD Clinic Patients\* Testing Positive by Age Group and Sex and Sex of Sex Partners, STD Surveillance Network (SSuN), 2018



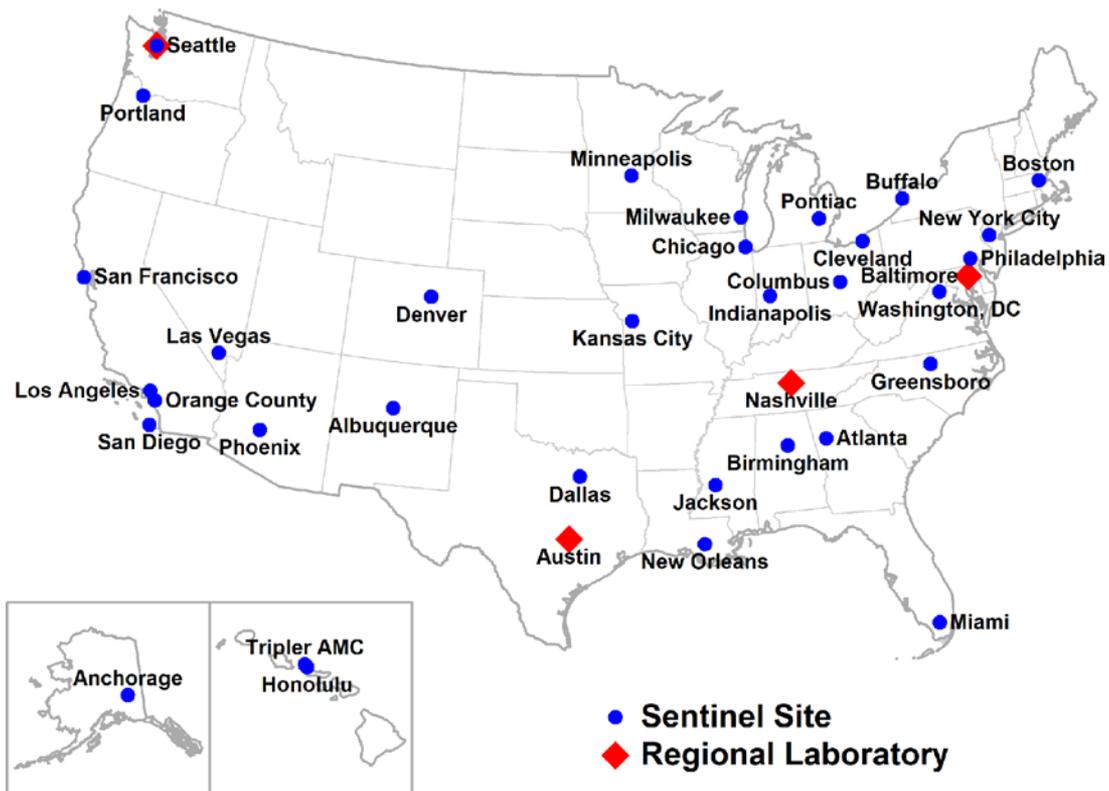
\* Results are based on data obtained from unique patients with known sex of sex partners (n=77,314) attending SSuN STD clinics who were tested  $\geq 1$  time for gonorrhea in 2018.

**NOTE:** See section A2.2 in the Appendix for SSuN methods.

**ACRONYMS:** MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only.



# Location of Participating Sentinel Sites and Regional Laboratories, Gonococcal Isolate Surveillance Project (GISP), United States, 2018

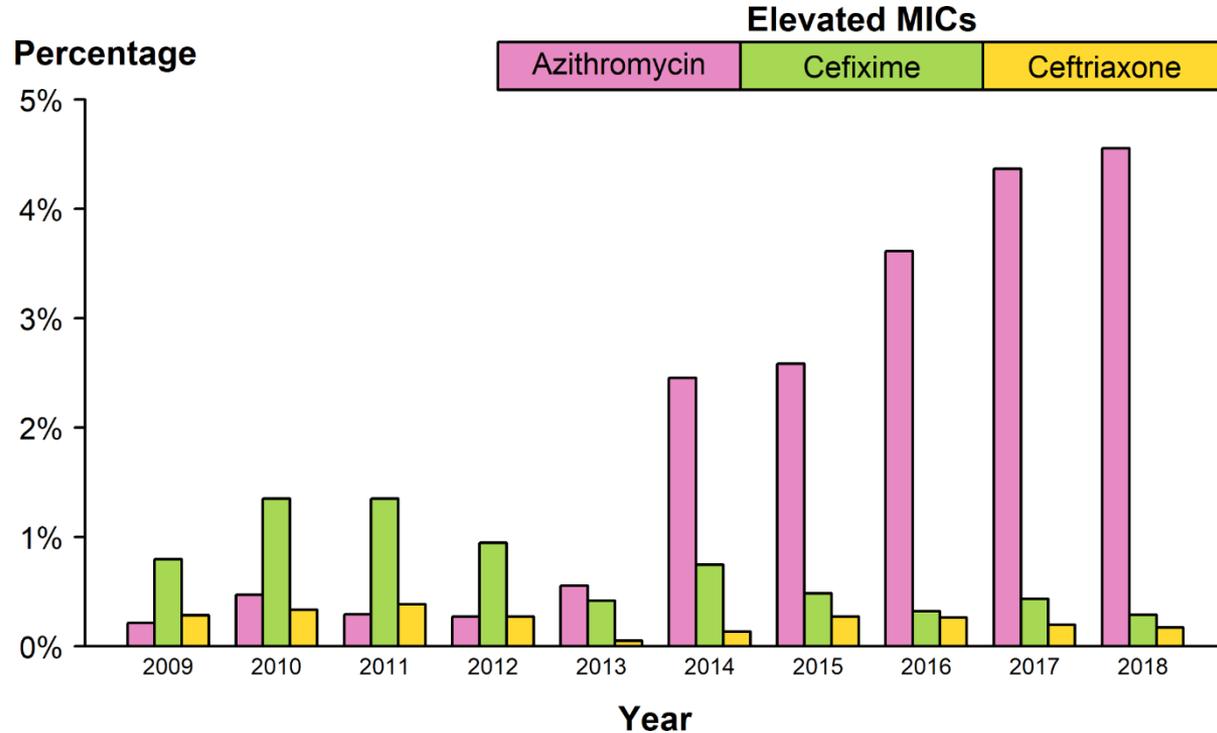


**NOTE:** Seattle is both a sentinel site and a regional laboratory.





# *Neisseria gonorrhoeae* — Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Cefixime, and Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), 2009–2018

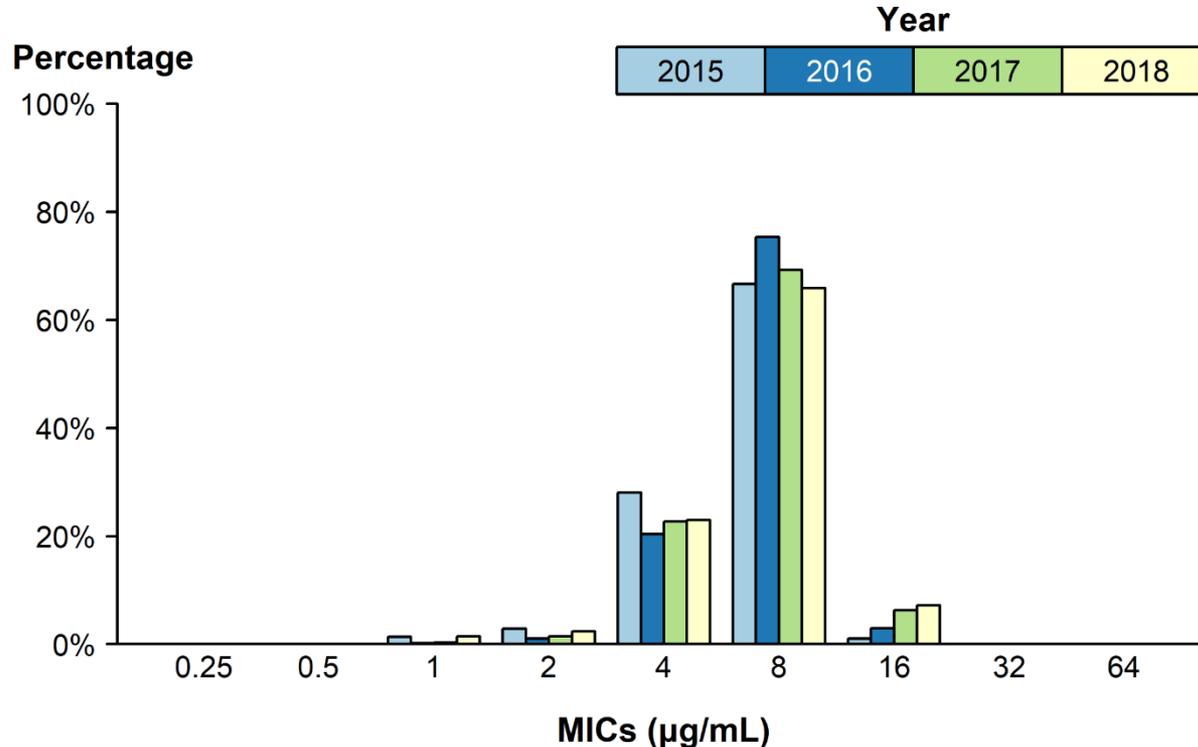


**NOTE:** Elevated MIC = Azithromycin:  $\geq 2.0$   $\mu\text{g}/\text{mL}$ ; Cefixime:  $\geq 0.25$   $\mu\text{g}/\text{mL}$ ; Ceftriaxone:  $\geq 0.125$   $\mu\text{g}/\text{mL}$ .





# *Neisseria gonorrhoeae* — Distribution of Gentamicin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), 2015–2018\*

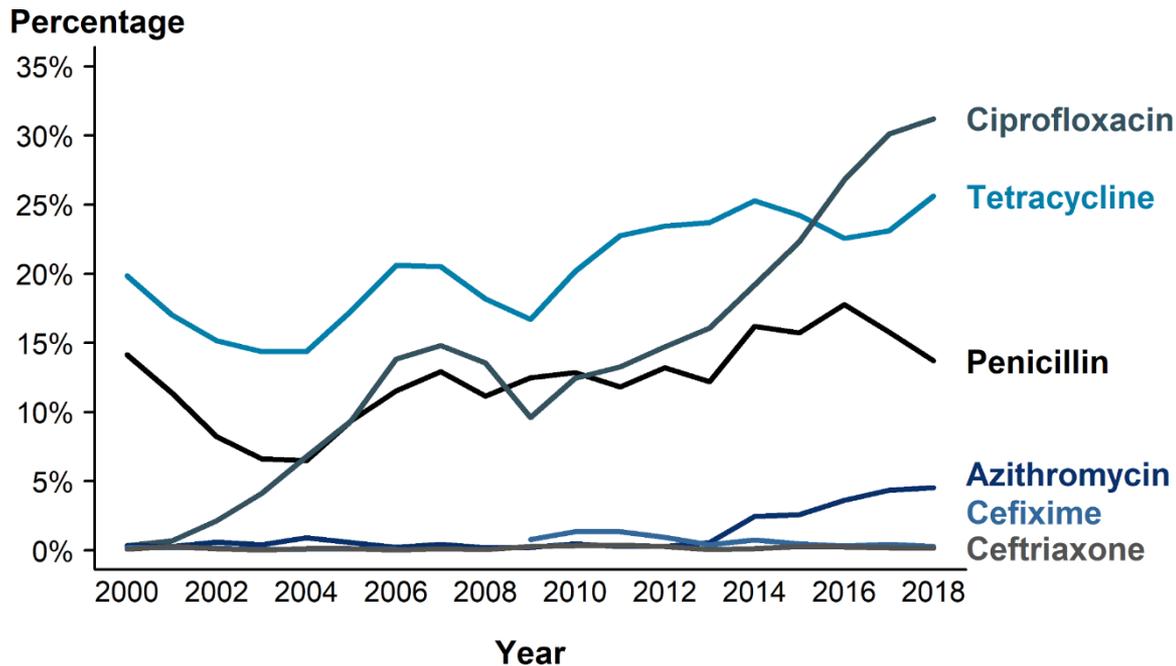


\* In 2018, the antibiotic susceptibility testing range for gentamicin was expanded from MICs of 1  $\mu\text{g/mL}$ –32  $\mu\text{g/mL}$  in previous years to 0.25  $\mu\text{g/mL}$ –64  $\mu\text{g/mL}$ .





# *Neisseria gonorrhoeae* — Prevalence of Tetracycline, Penicillin, or Fluoroquinolone Resistance\* or Elevated Cefixime, Ceftriaxone, or Azithromycin Minimum Inhibitory Concentrations (MICs)<sup>†</sup>, by Year — Gonococcal Isolate Surveillance Project (GISP), 2000–2018



\* Resistance = Fluoroquinolone (ciprofloxacin): MIC  $\geq 1.0$   $\mu\text{g}/\text{mL}$ ; Penicillin: MIC  $\geq 2.0$   $\mu\text{g}/\text{mL}$  or Beta-lactamase positive; Tetracycline: MIC  $\geq 2.0$   $\mu\text{g}/\text{mL}$ .

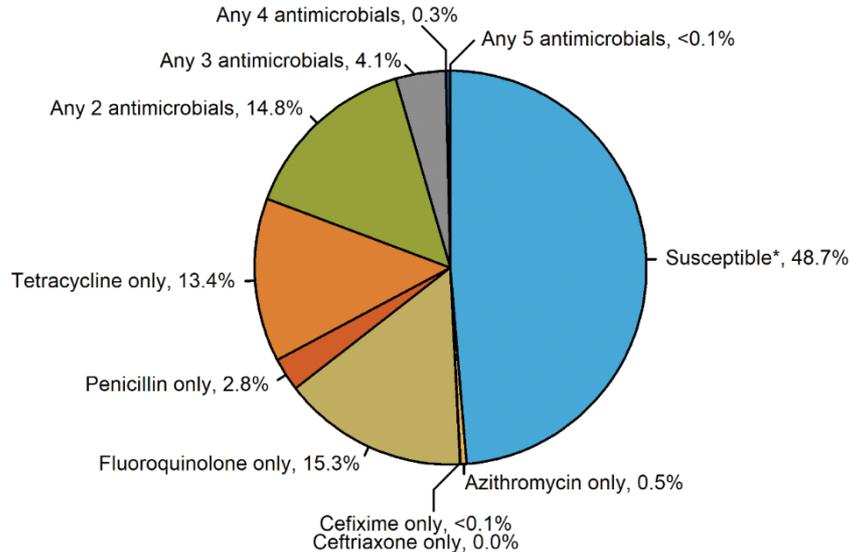
<sup>†</sup> Elevated MICs = Azithromycin: MIC  $\geq 1.0$   $\mu\text{g}/\text{mL}$  (2000–2004), MIC  $\geq 2.0$   $\mu\text{g}/\text{mL}$  (2005–2018); Ceftriaxone: MIC  $\geq 0.125$   $\mu\text{g}/\text{mL}$ ; Cefixime: MIC  $\geq 0.25$   $\mu\text{g}/\text{mL}$ .

**NOTE:** Cefixime susceptibility was not tested in 2007 and 2008.

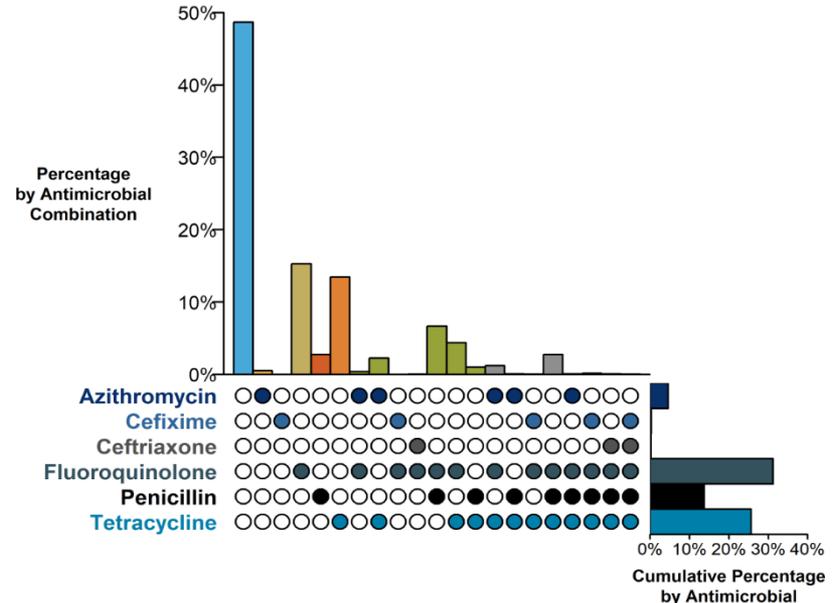


# Resistance or Elevated MIC Patterns of *Neisseria gonorrhoeae* Isolates to Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), 2018

## A. By Number of Antimicrobials



## B. By Specific Antimicrobial Combinations



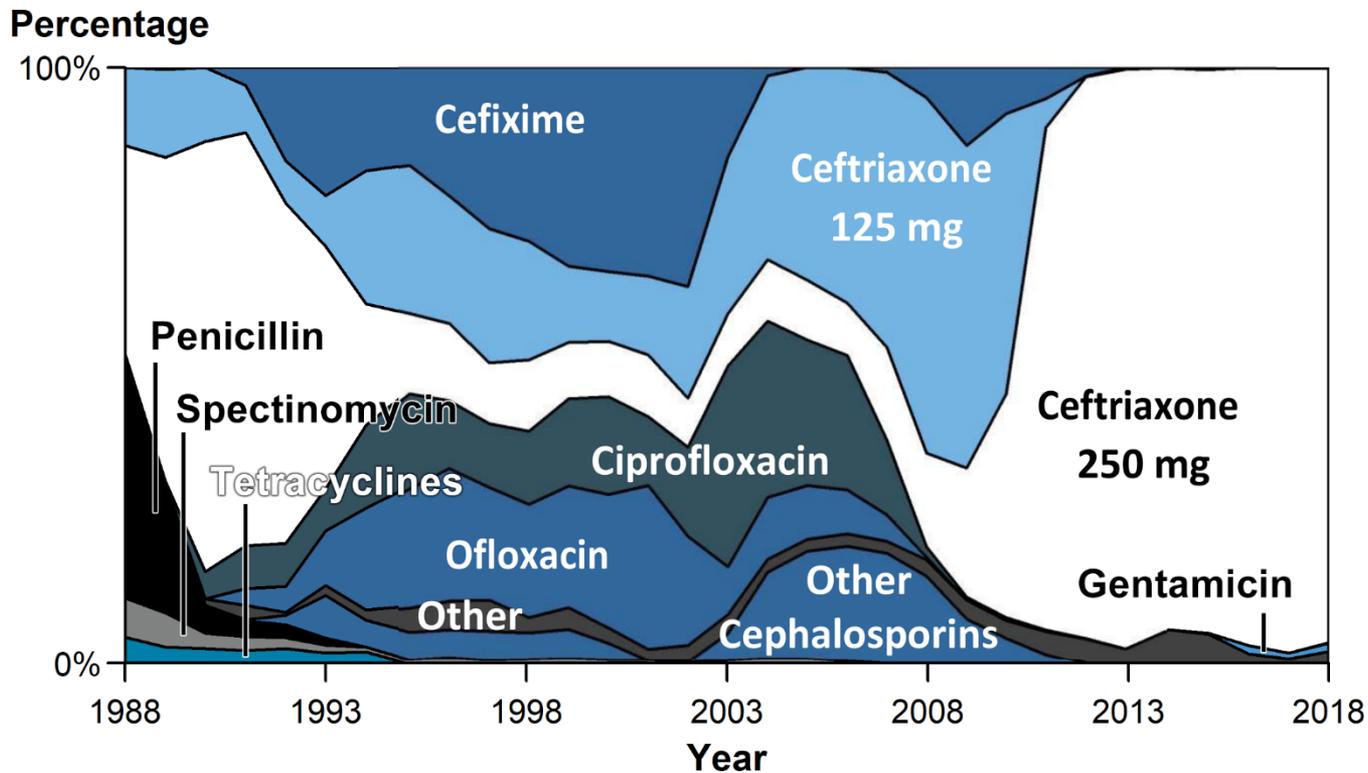
\* Susceptible category only includes isolates with penicillin, tetracycline, and fluoroquinolone MIC values that are considered susceptible and isolates with ceftriaxone, cefixime, and azithromycin MIC values that are not considered elevated.

**NOTE:** Elevated MIC = Ceftriaxone: MIC  $\geq$  0.125  $\mu\text{g/mL}$ ; Cefixime: MIC  $\geq$  0.25  $\mu\text{g/mL}$ ; Azithromycin: MIC  $\geq$  2.0  $\mu\text{g/mL}$ . Resistance = Tetracycline: MIC  $\geq$  2.0  $\mu\text{g/mL}$ ; Fluoroquinolone: MIC  $\geq$  1.0  $\mu\text{g/mL}$ ; Penicillin: MIC  $\geq$  2.0  $\mu\text{g/mL}$  or Beta-lactamase positive. In Panel B, a filled circle reflects resistance or elevated MIC to a specific antimicrobial; only antimicrobial combinations with non-zero percentages are shown.

**ACRONYMS:** MIC = Minimum Inhibitory Concentration.



# Distribution of Primary Antimicrobial Drug Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), 1988–2018

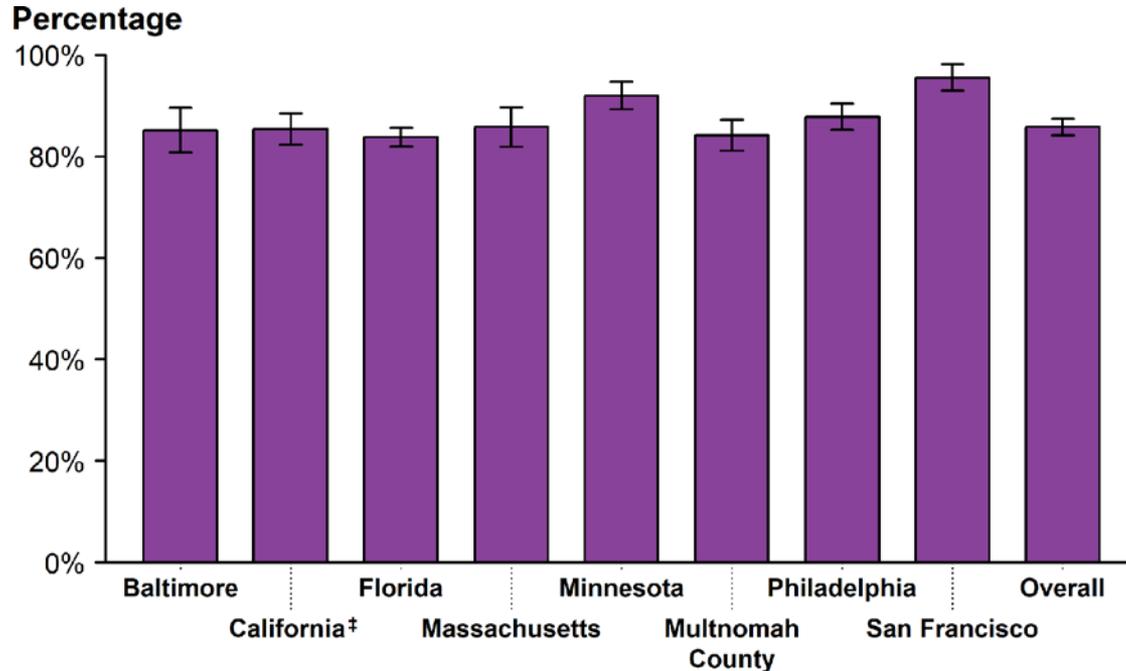


**NOTE:** For 2018, “Other” includes azithromycin 2 g (0.3%), no therapy documented (0.5%), and other less frequently used drugs (1.2%).





# Gonorrhea — Estimated Proportion of Cases Treated by Recommended Treatment Regimen\* and Jurisdiction†, STD Surveillance Network (SSuN), 2018



\* In 2018, the recommended treatment for uncomplicated gonorrhea was treatment with 250 mg dose of ceftriaxone plus 1 g dose of azithromycin.

† Includes SSuN jurisdictions with all treatment information documented for ≥80% of cases.

‡ California data exclude San Francisco.

**NOTE:** See section A2.2 in the Appendix for SSuN methods.

**ADAPTED FROM:** Weston EJ, Workowski K, Torrone E, et al. Adherence to CDC recommendations for the treatment of uncomplicated gonorrhea – STD Surveillance Network (SSuN), United States, 2016. *MMWR Morb Mortal Wkly Rep.* 2018;67:473–76.

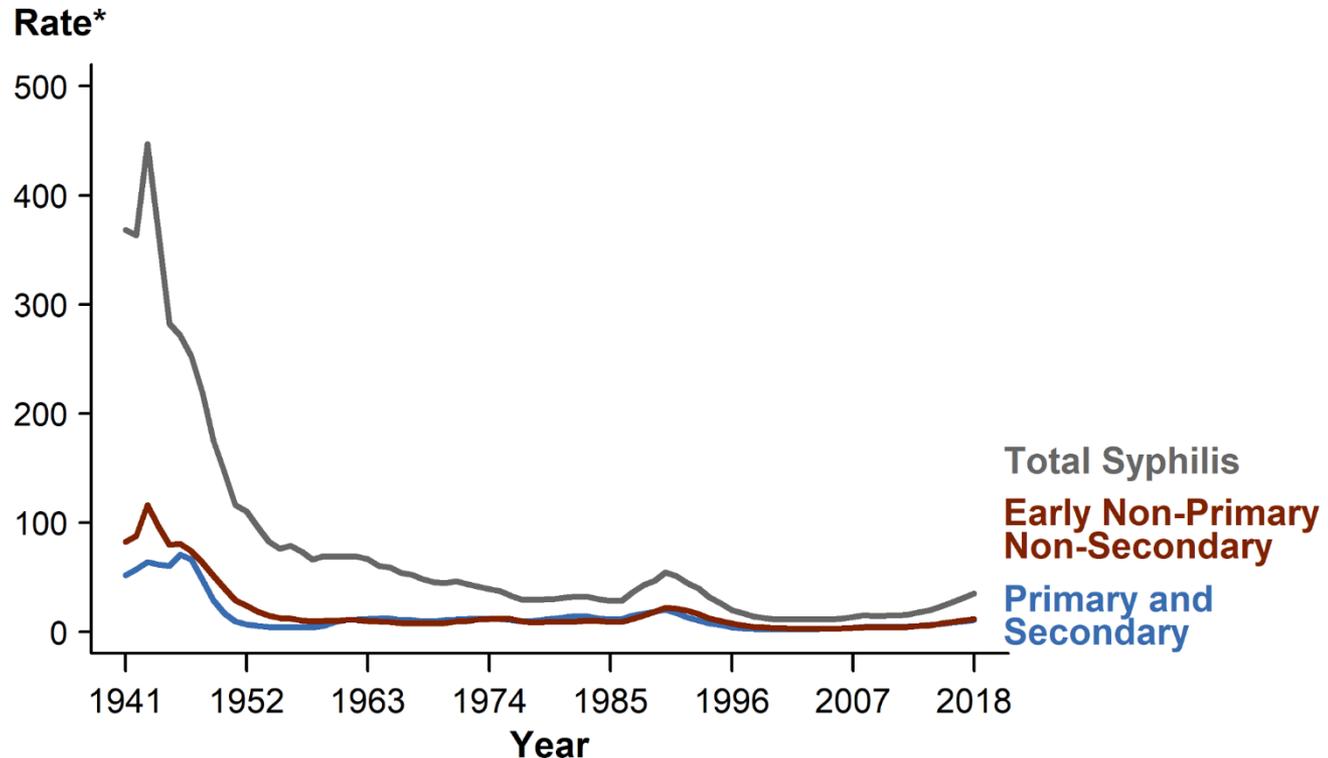




# Sexually Transmitted Disease Surveillance 2018

# SYPHILIS

# Syphilis — Rates of Reported Cases by Stage of Infection, United States, 1941–2018

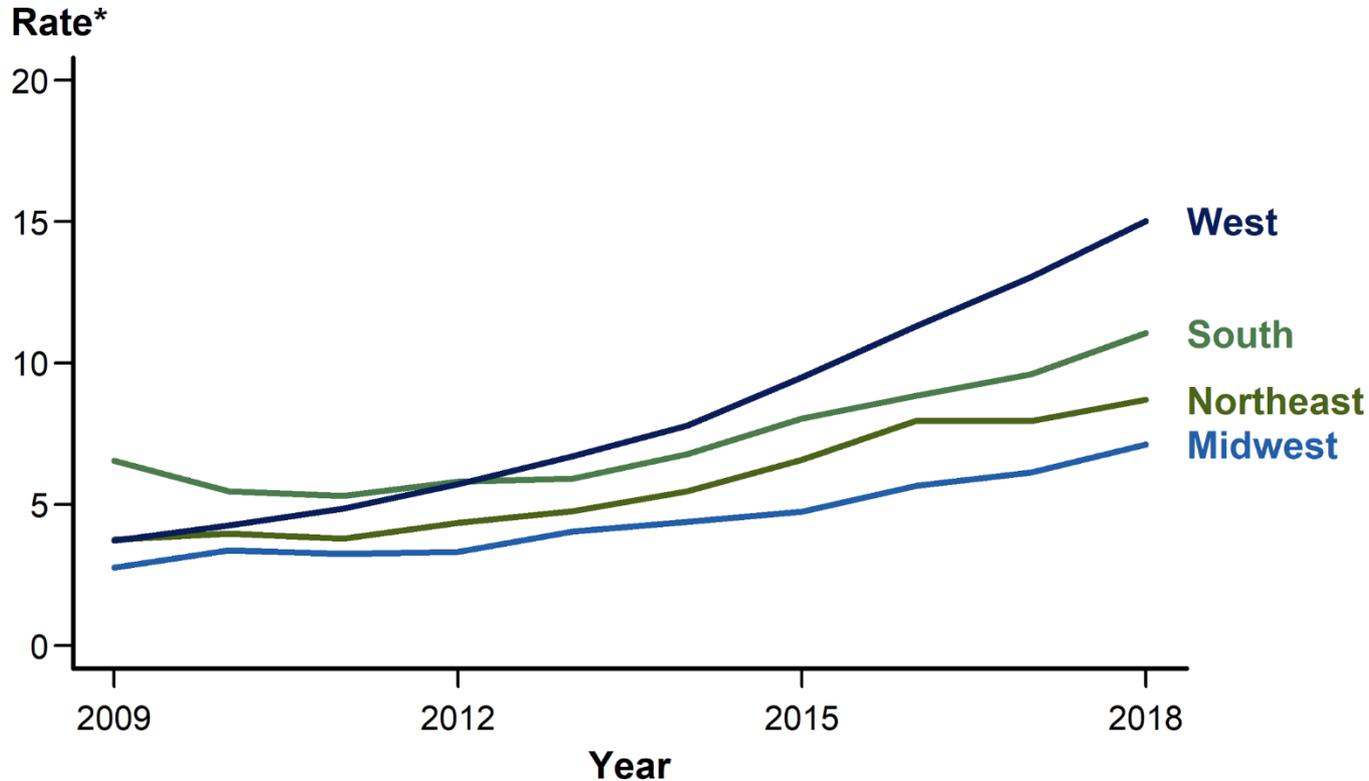


\* Per 100,000.

NOTE: See section A1.3 in the Appendix for more information on syphilis case reporting.



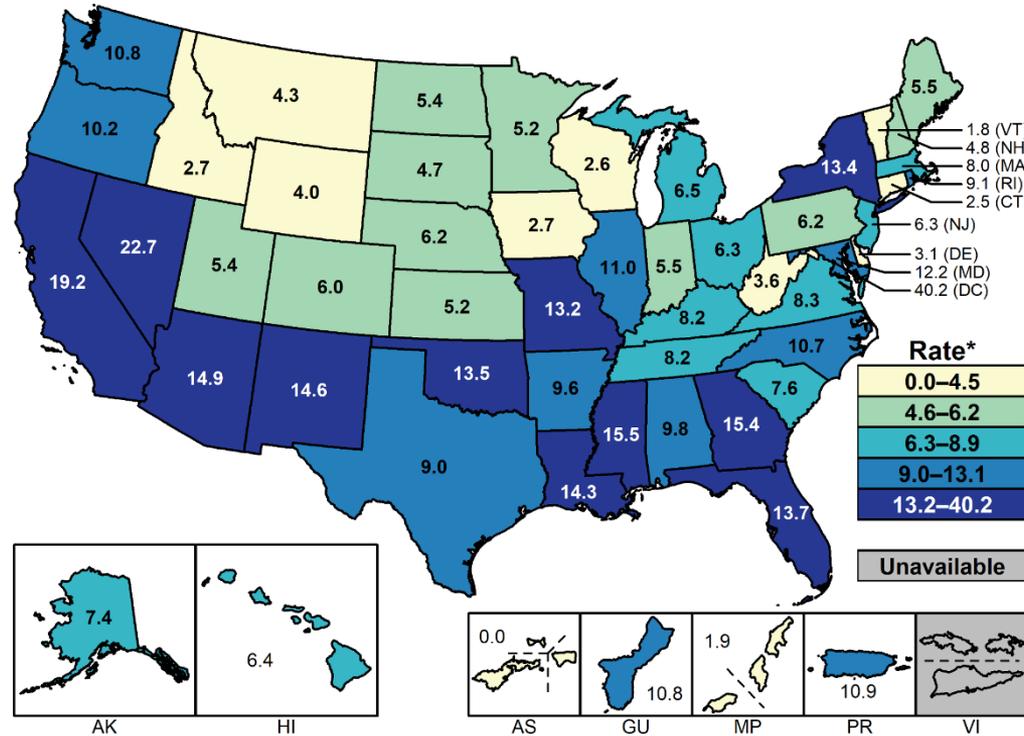
# Primary and Secondary Syphilis — Rates of Reported Cases by Region, United States, 2009–2018



\* Per 100,000.



# Primary and Secondary Syphilis — Rates of Reported Cases by State and Territory, United States, 2018

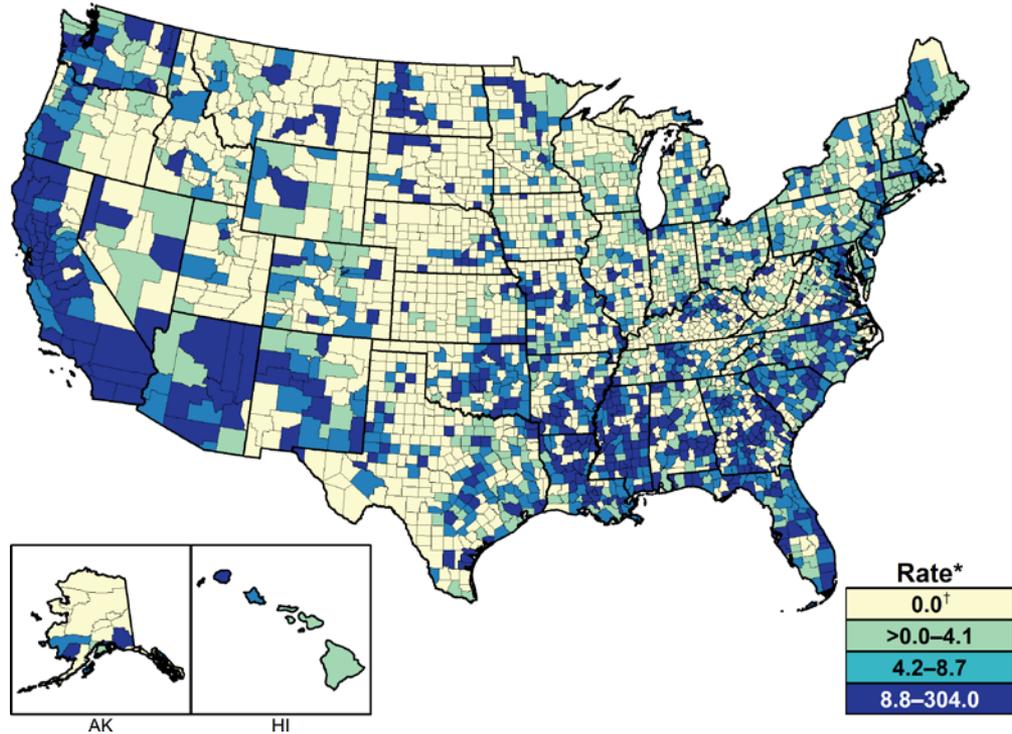


\* Per 100,000.

NOTE: Section A1.11 in the Appendix for more information on interpreting reported rates in US territories.



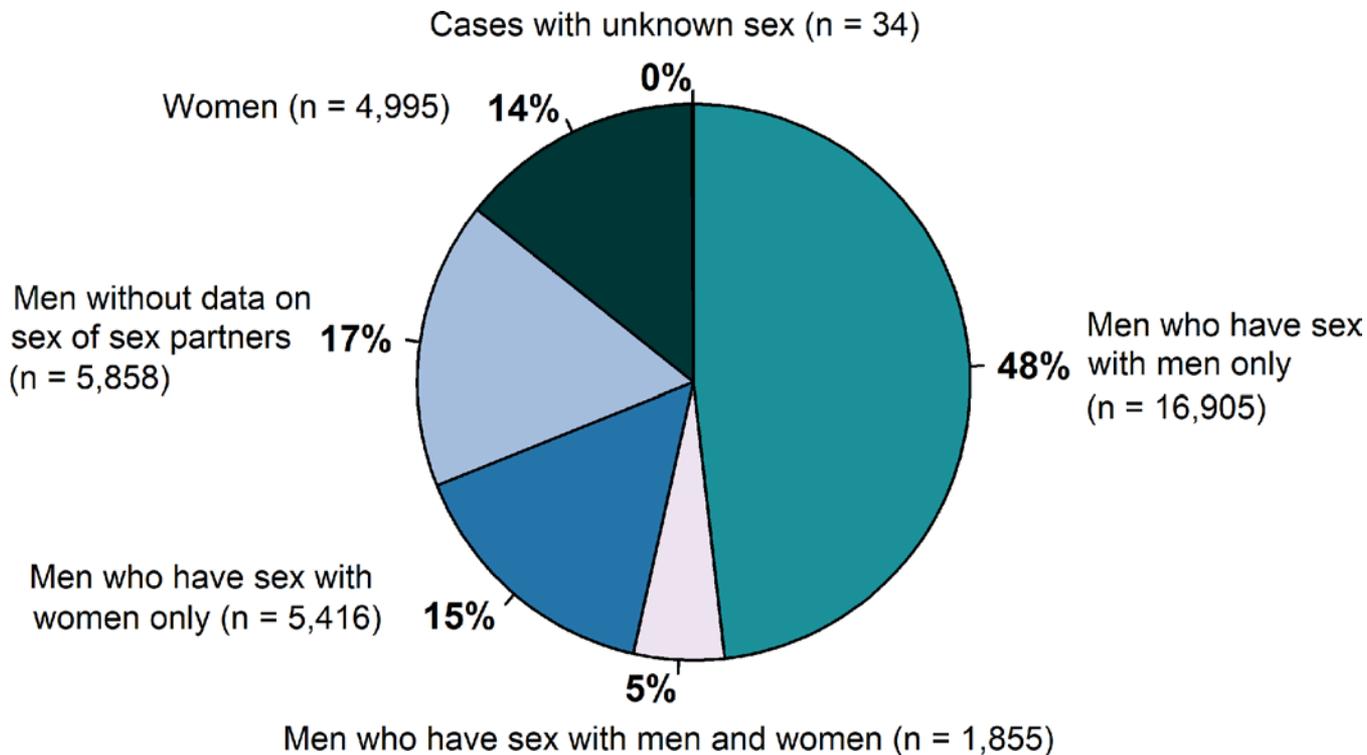
# Primary and Secondary Syphilis — Rates of Reported Cases by County, United States, 2018



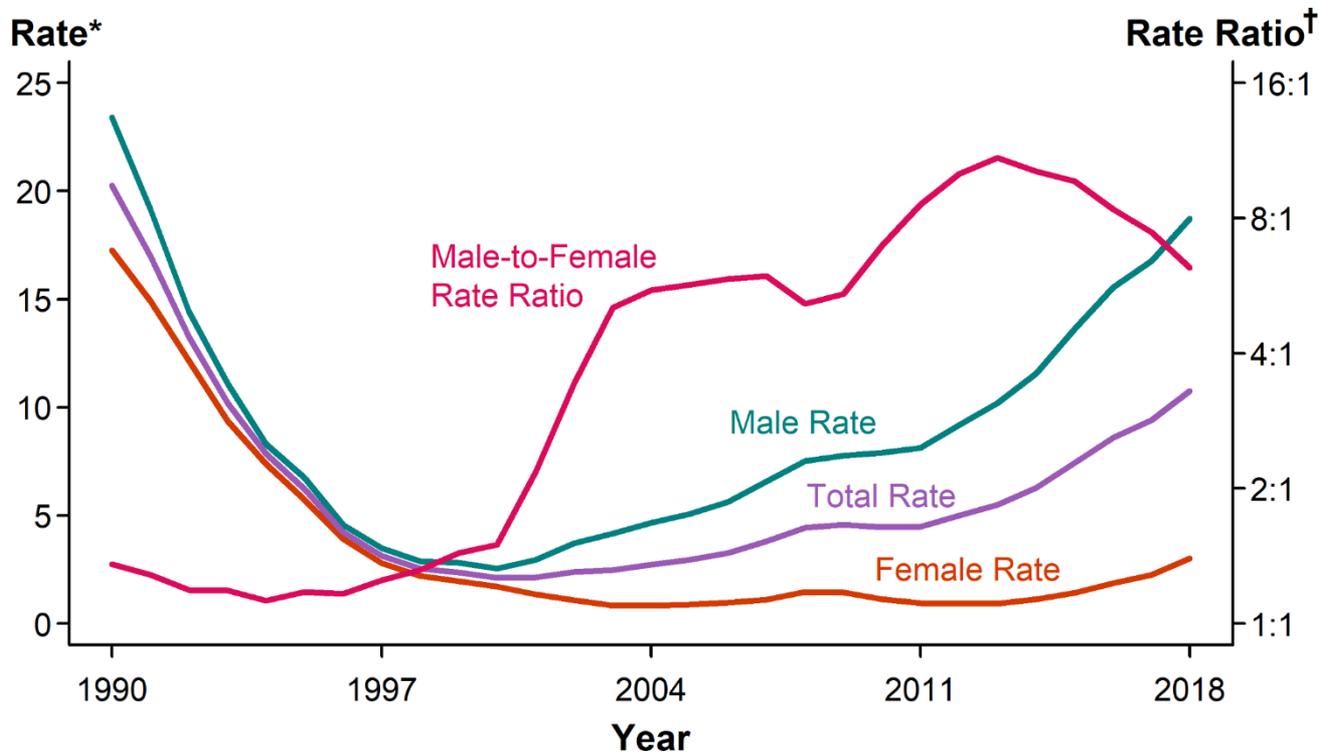
\* Per 100,000.

<sup>†</sup> In 2018, 1,498 (47.7%) of 3,142 counties in the United States reported no cases of primary and secondary syphilis. See section A1.4 in the Appendix for more information on county-level rates.

# Primary and Secondary Syphilis — Distribution of Cases by Sex and Sex of Sex Partners, United States, 2018



# Primary and Secondary Syphilis — Rates of Reported Cases by Sex and Male-to-Female Rate Ratios, United States, 1990–2018

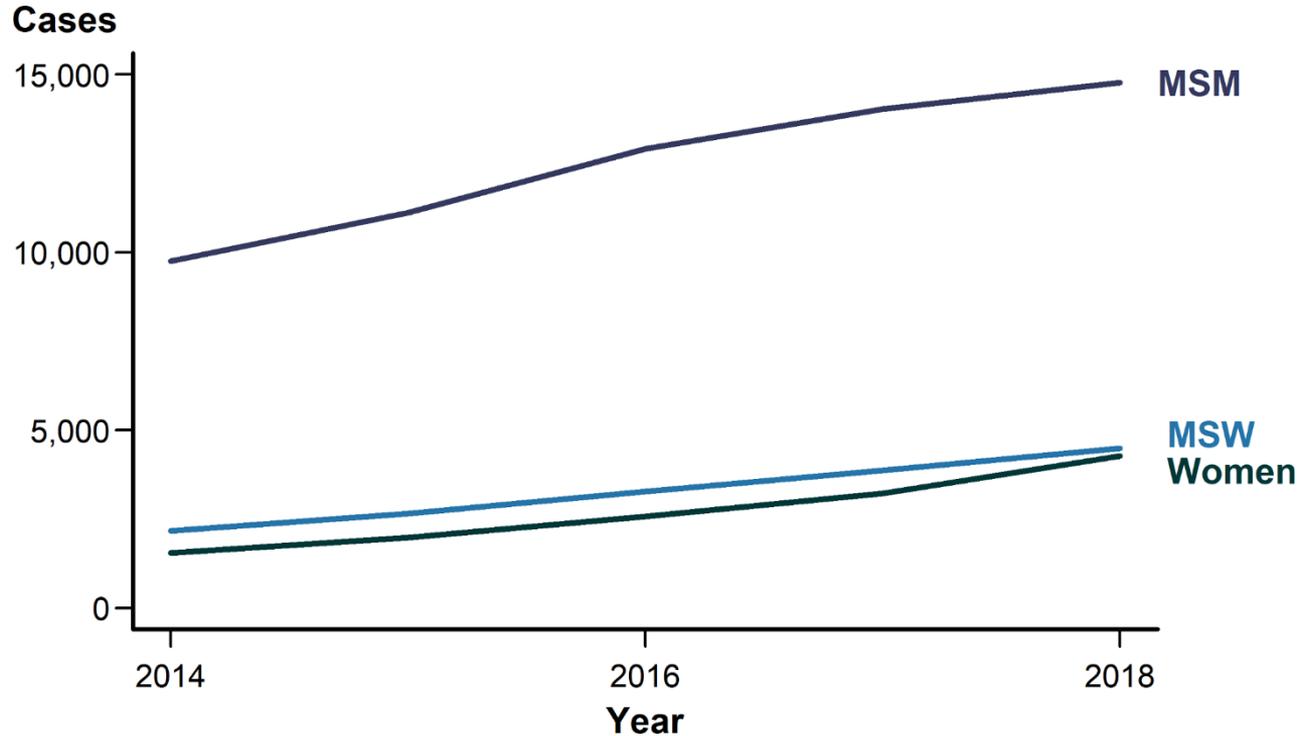


\* Per 100,000.

† Log scale.



# Primary and Secondary Syphilis — Reported Cases by Sex and Sex of Sex Partners, 36 States\*, 2014–2018

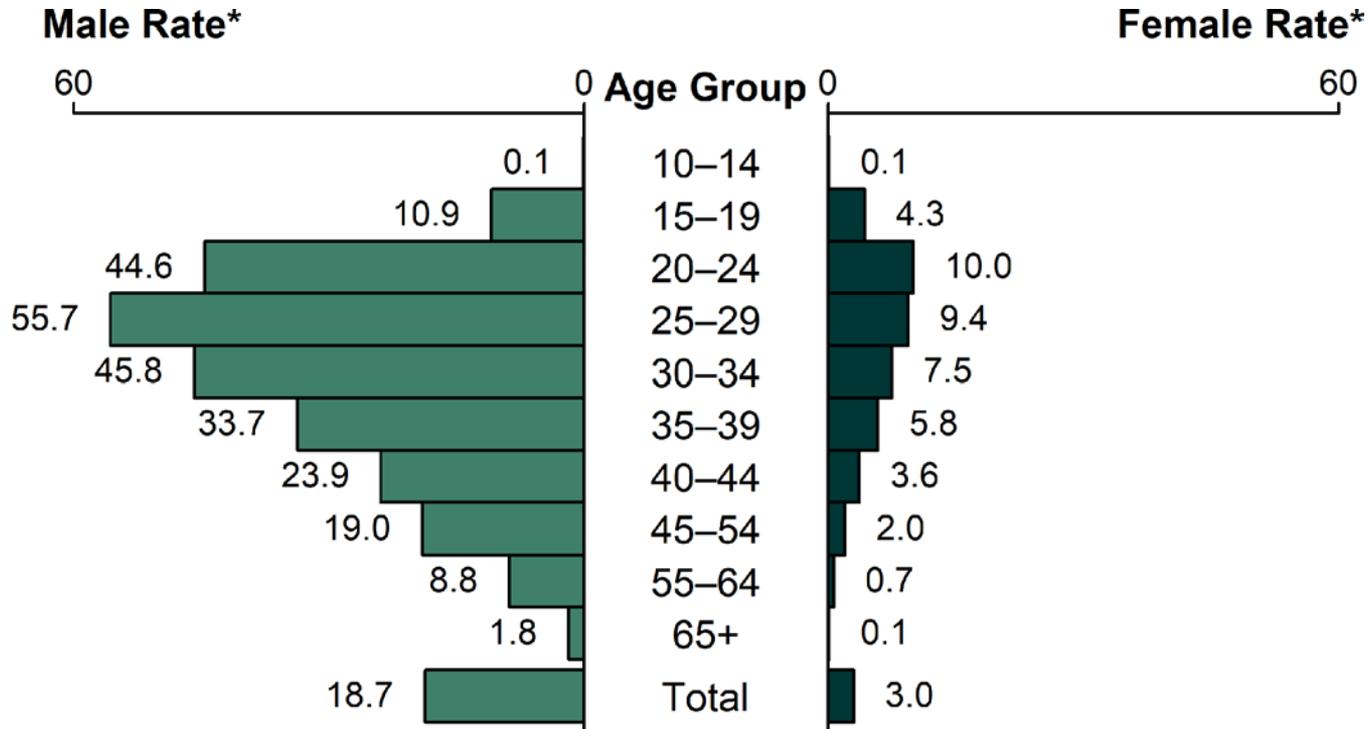


\* 36 states were able to classify  $\geq 70\%$  of reported cases of primary and secondary syphilis as either MSM, MSW, or women for each year during 2014–2018.

**ACRONYMS:** MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only.



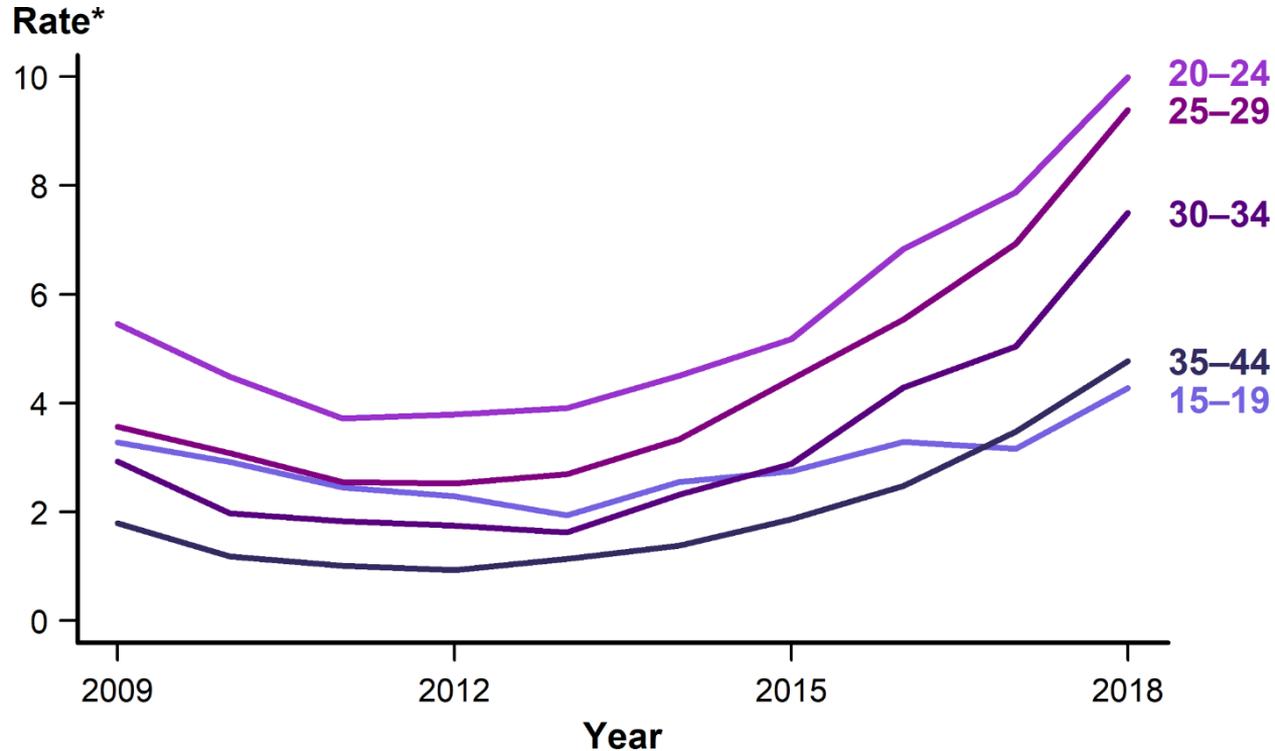
# Primary and Secondary Syphilis — Rates of Reported Cases by Age Group and Sex, United States, 2018



\* Per 100,000.



# Primary and Secondary Syphilis — Rates of Reported Cases Among Females Aged 15–44 Years by Age Group, United States, 2009–2018

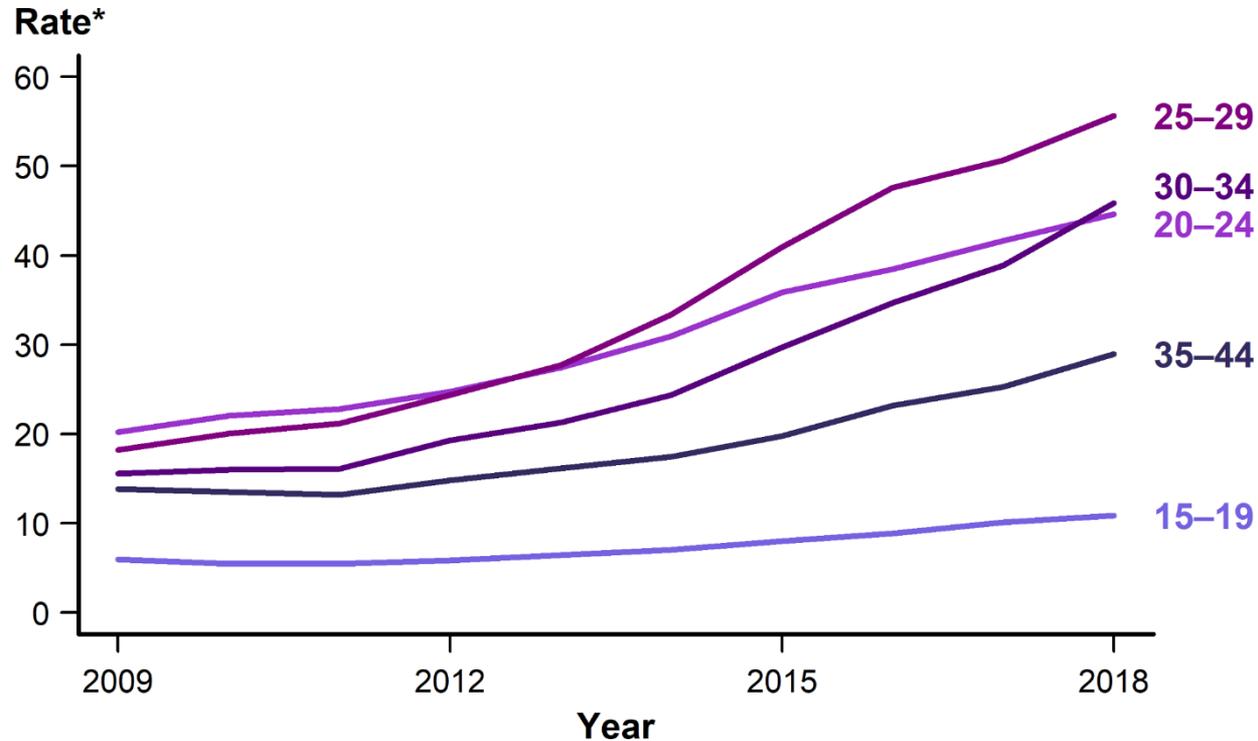


\* Per 100,000.





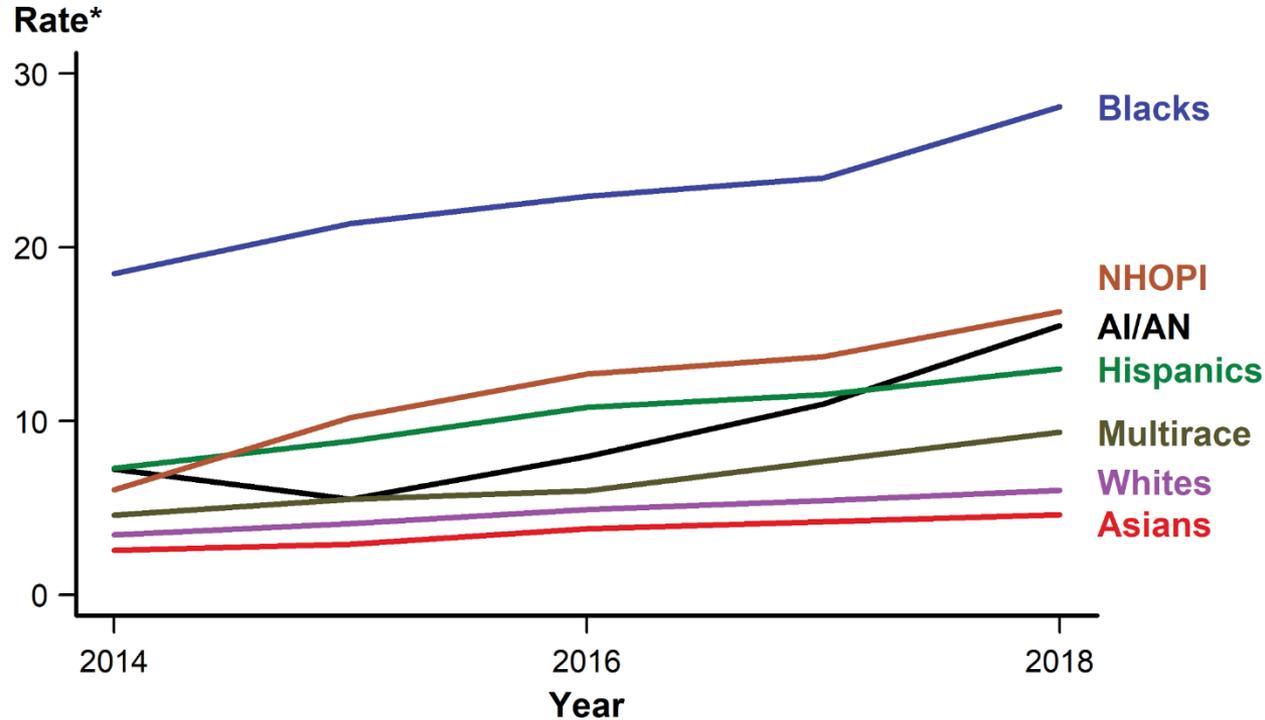
# Primary and Secondary Syphilis — Rates of Reported Cases Among Males Aged 15–44 Years by Age Group, United States, 2009–2018



\* Per 100,000.



# Primary and Secondary Syphilis — Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2014–2018



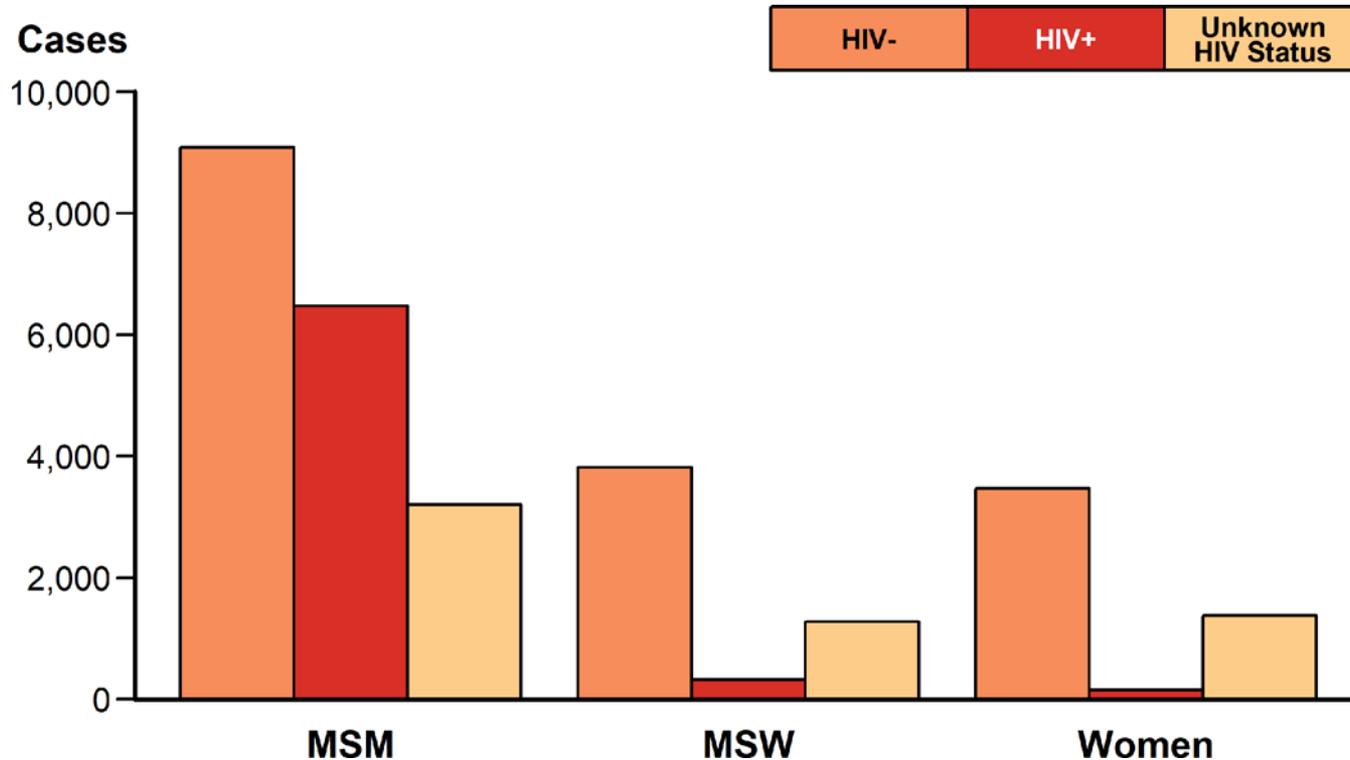
\* Per 100,000.

**NOTE:** See Section A1.5 in the Appendix for information on reporting STD case data for race/Hispanic ethnicity.

**ACRONYMS:** AI/AN = American Indians/Alaska Natives; NHOPI = Native Hawaiians/Other Pacific Islanders.



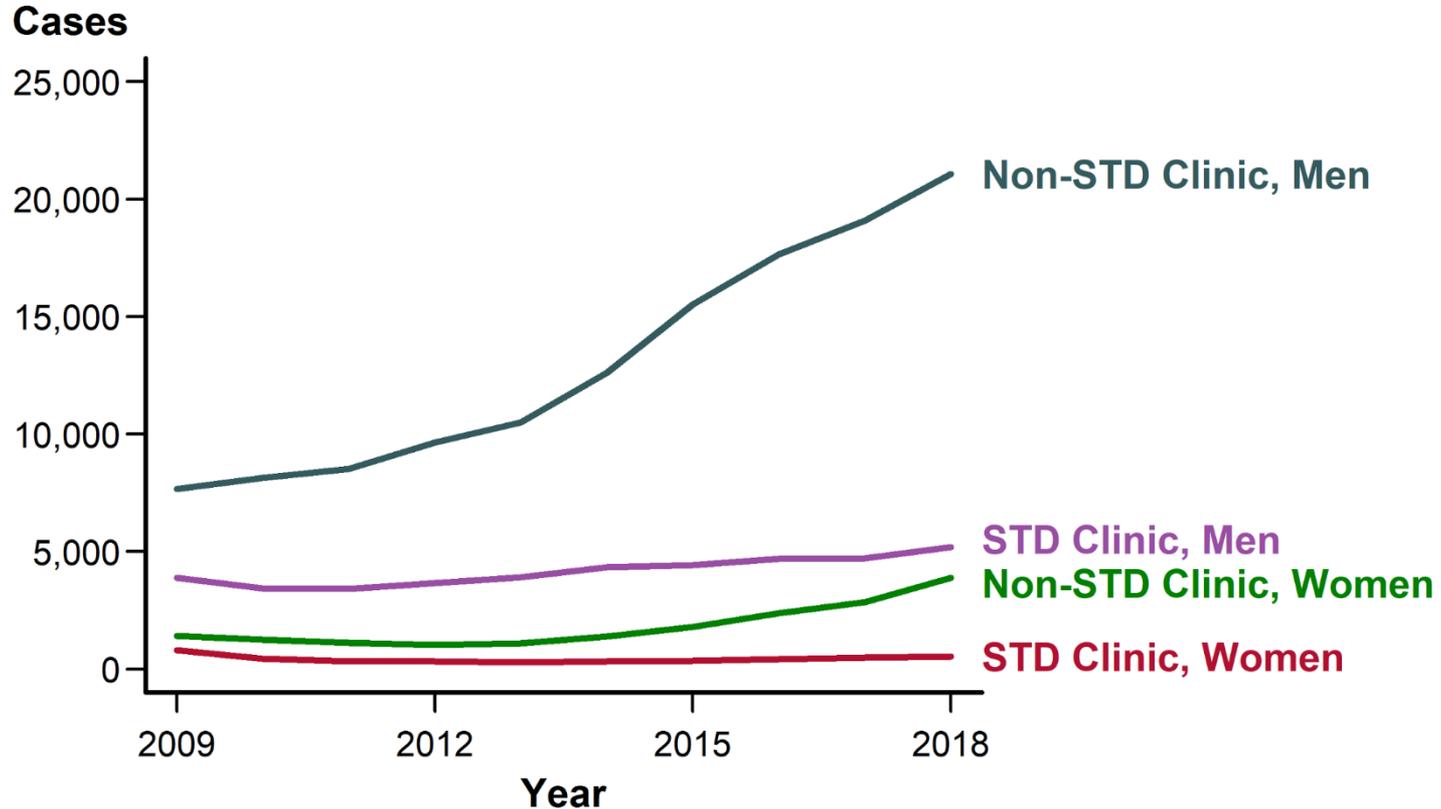
# Primary and Secondary Syphilis — Reported Cases by Sex and Sex of Sex Partners and HIV Status, United States, 2018



**ACRONYMS:** MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only.

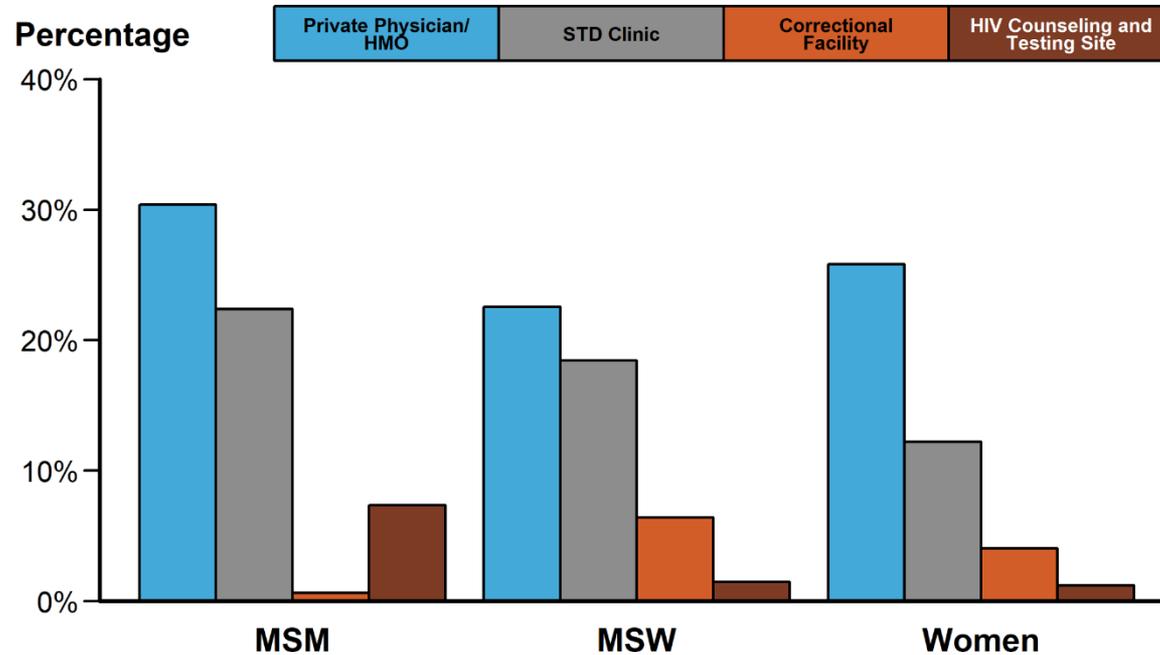


# Primary and Secondary Syphilis — Reported Cases by Reporting Source and Sex, United States, 2009–2018





# Primary and Secondary Syphilis — Percentage of Reported Cases\* by Sex and Sex of Sex Partners and Selected Reporting Sources, United States, 2018

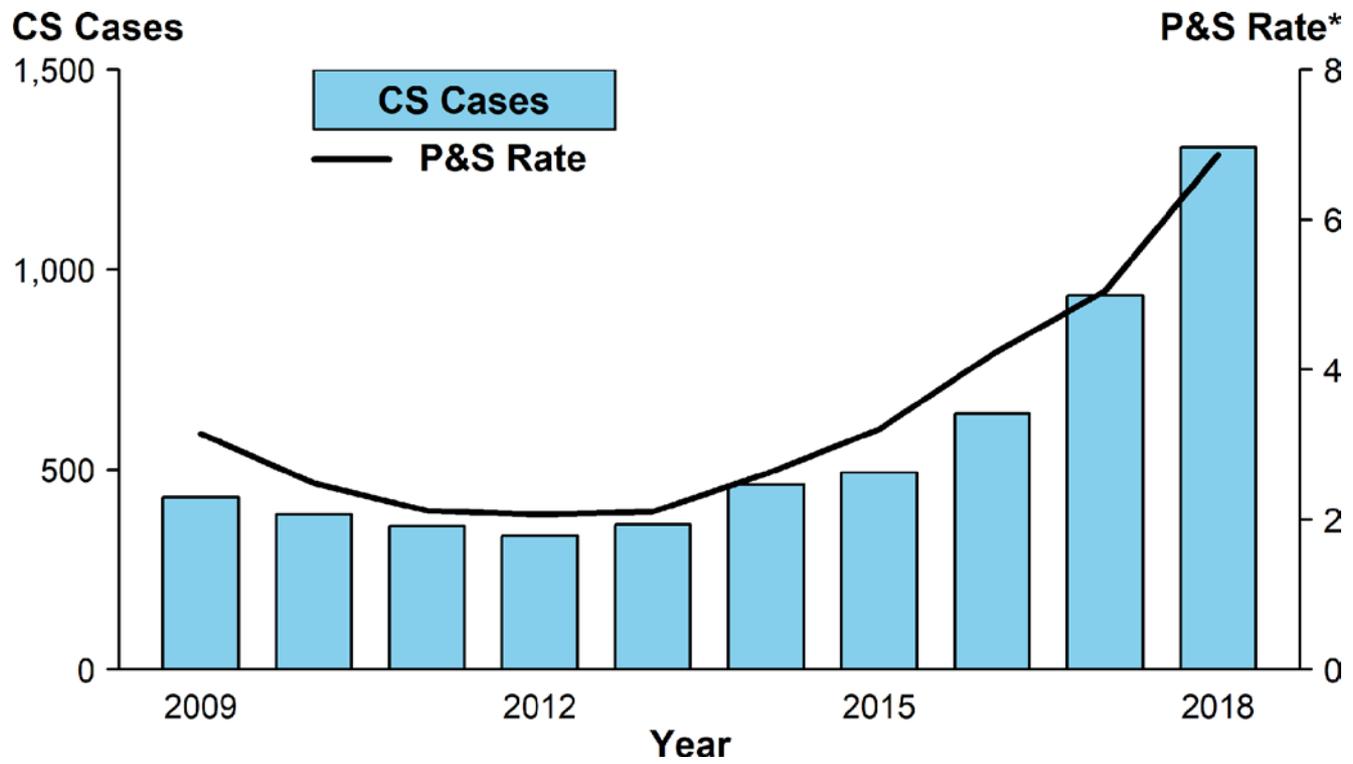


\* Of all primary and secondary syphilis cases, 12.5% had a missing or unknown reporting source. Among all cases with a known reporting source, the reporting source categories presented represent 55.4% of cases.

**ACRONYMS:** HMO = Health maintenance organization; MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only.



# Congenital Syphilis — Reported Cases by Year of Birth and Rates of Reported Cases of Primary and Secondary Syphilis Among Females Aged 15–44 Years, United States, 2009–2018



\* Per 100,000.

ACRONYMS: CS = Congenital syphilis; P&S = Primary and secondary syphilis.



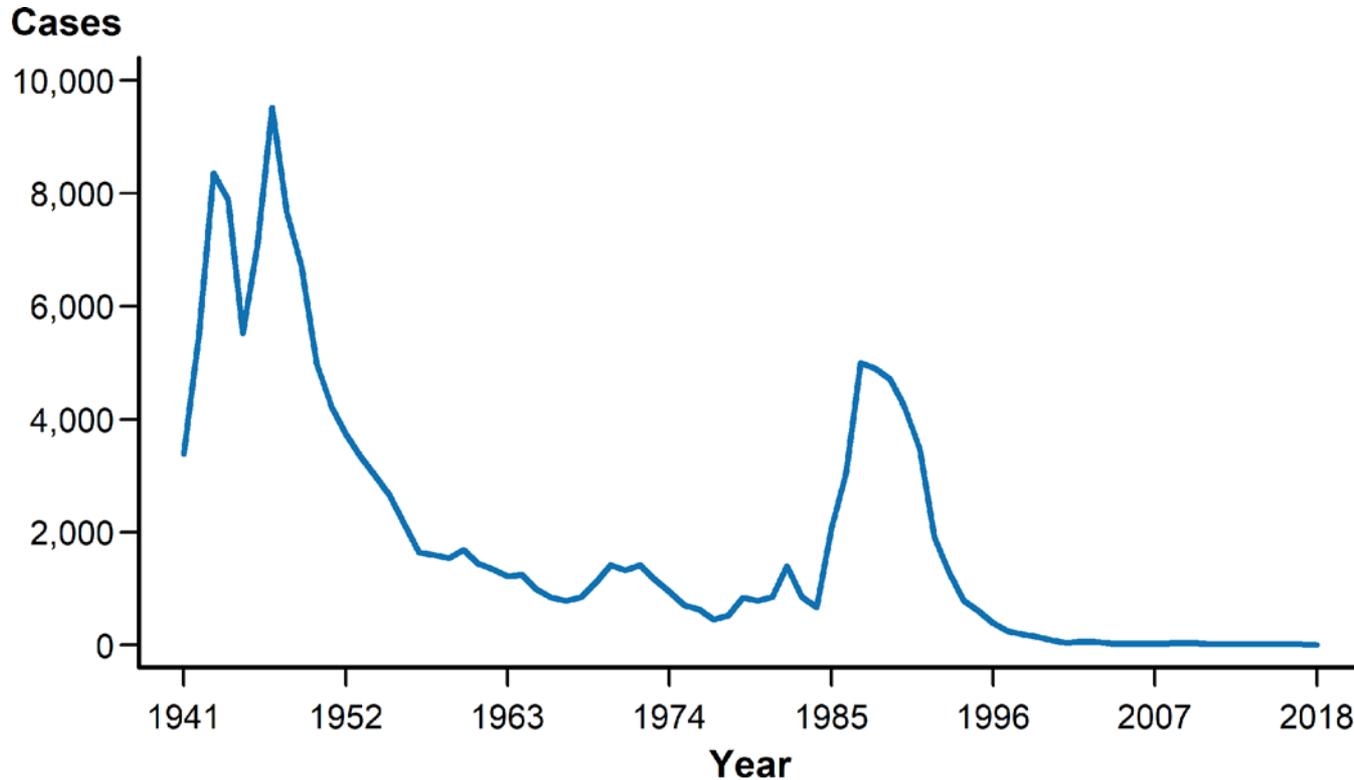


# Sexually Transmitted Disease Surveillance 2018

# Other Sexually Transmitted Diseases



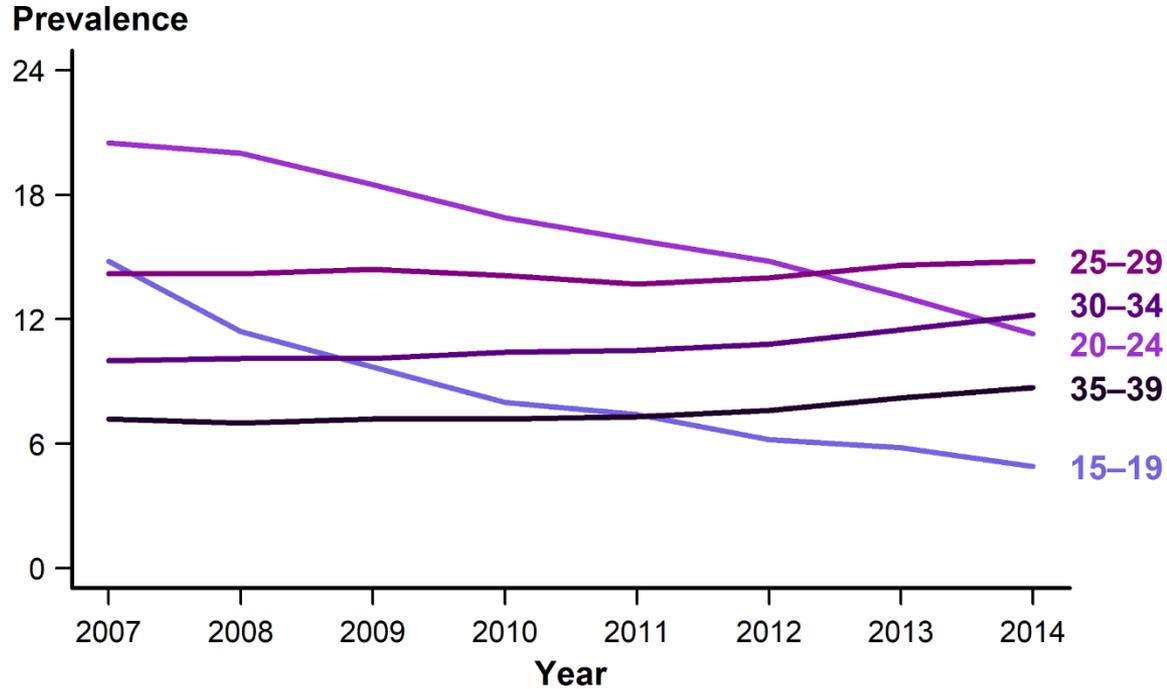
# Chancroid — Reported Cases by Year, United States, 1941–2018



**NOTE:** See section A1.3 in the Appendix for more information on chancroid case reporting.



# Cervical Intraepithelial Neoplasia Grades 2 and 3 — Prevalence per 1000 Person-Years Among Female Enrollees in Private Health Plans Aged 15–39 Years, by Age Group and Year, 2007–2014



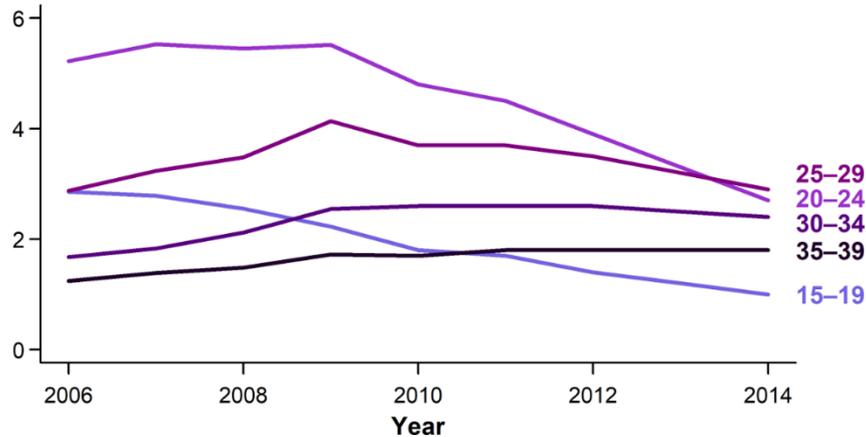
**SOURCE:** Flagg EW, Torrone EA, Weinstock H. Ecological association of human papillomavirus vaccination with cervical dysplasia prevalence in the United States, 2007–2014. *Am J Public Health.* 2016;106(12):2211–2218.



# Anogenital Warts — Prevalence per 1000 Person-Years Among Enrollees in Private Health Plans Aged 15–39 Years by Sex, Age Group, and Year, 2006–2014

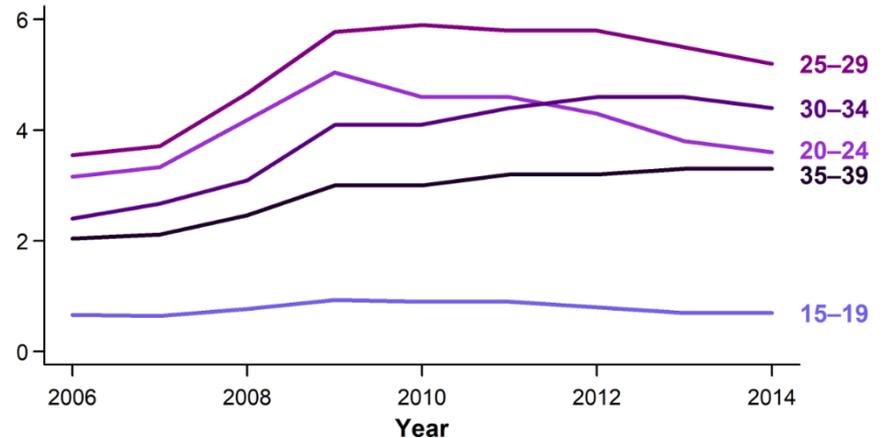
A. Females

Prevalence



B. Males

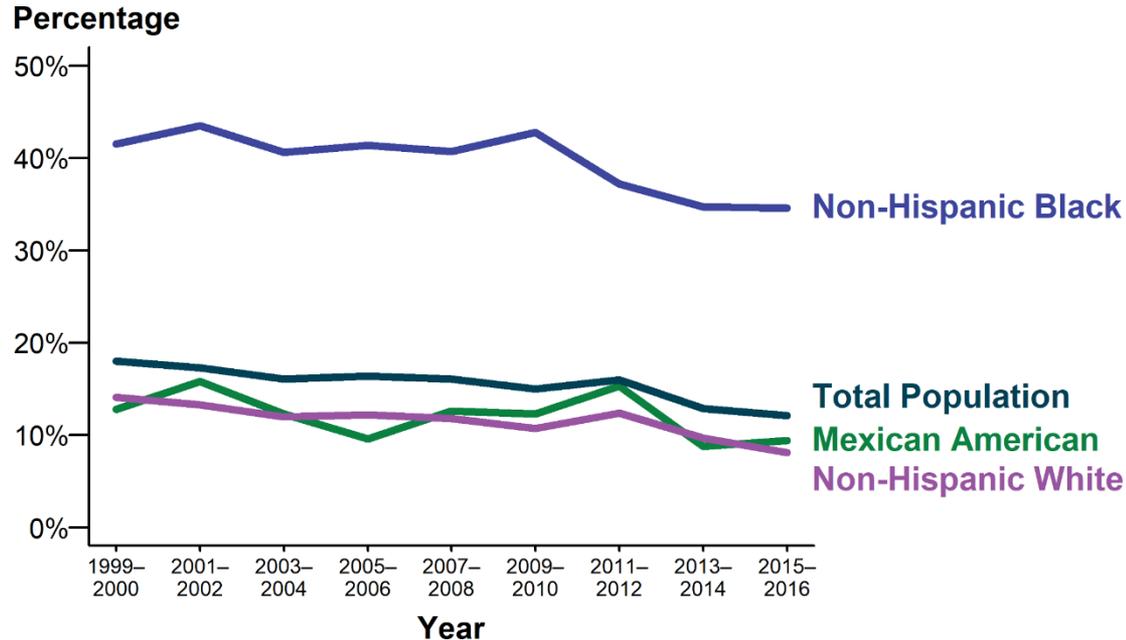
Prevalence



**SOURCE:** Flagg EW, Torrone EA. Declines in anogenital warts among age groups most likely to be impacted by human papillomavirus vaccination, United States, 2006–2014. *Am J Public Health.* 2018;108(1):112–119.



# Herpes Simplex Virus Type 2 — National Estimates of Trends in Age-Adjusted Seroprevalence Among Persons Aged 14–49 Years by Race/Hispanic Ethnicity, National Health and Nutrition Examination Survey (NHANES), 1999–2000 through 2015–2016



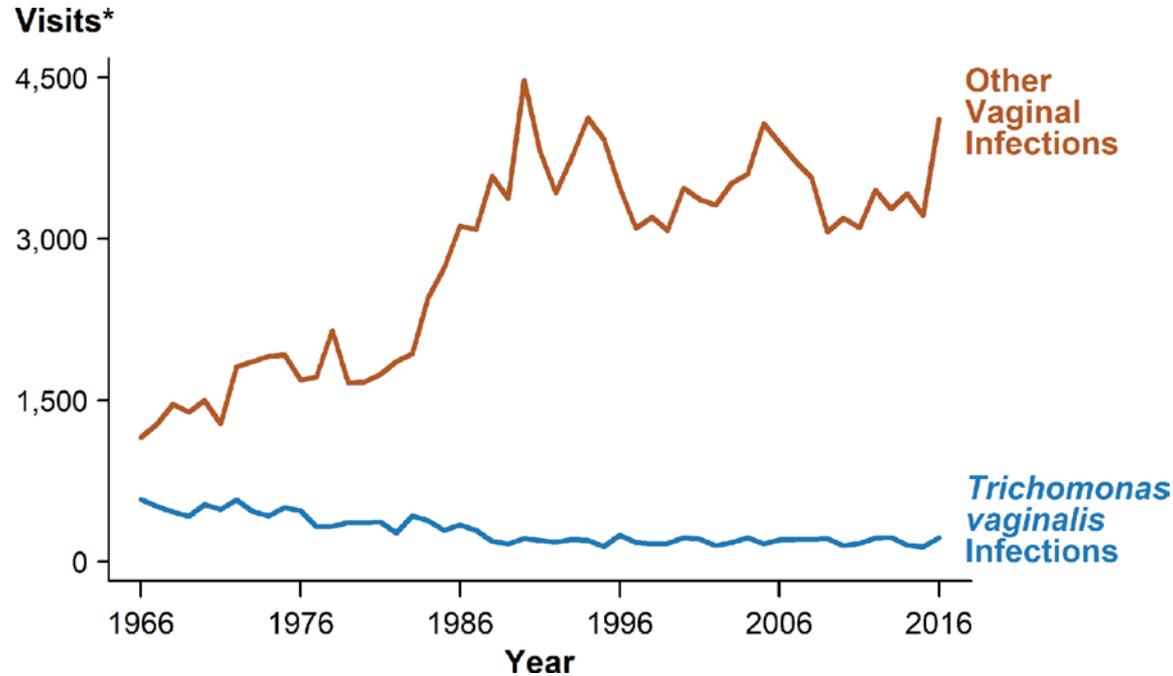
**NOTE:** Age-adjusted by the direct method to the 2000 US Census population, using age groups 14–19, 20–29, 30–39, and 40–49 years. Total population includes all race/Hispanic ethnicity groups, including those not shown separately.

**SOURCE:** McQuillan G, Kruszon-Moran D, Flagg EW, et al. Prevalence of herpes simplex virus type 1 and type 2 in persons aged 14–49: United States, 2015–2016. NCHS data brief, no 304. Hyattsville, MD: National Center for Health Statistics. 2018.





# *Trichomonas vaginalis* and Other Vaginal Infections Among Females — Initial Visits to Physicians' Offices, United States, 1966–2016



\* In thousands.

**NOTE:** The relative standard errors for *Trichomonas vaginalis* infection estimates range from 23% to 17% and for other vaginal infection estimates range from 13% to 8%. See Section A2.5 in the Appendix and Table 44.

**SOURCE:** National Disease and Therapeutic Index, IMS Health, Integrated Promotional Services™, IMS Health Report, 1966–2016.

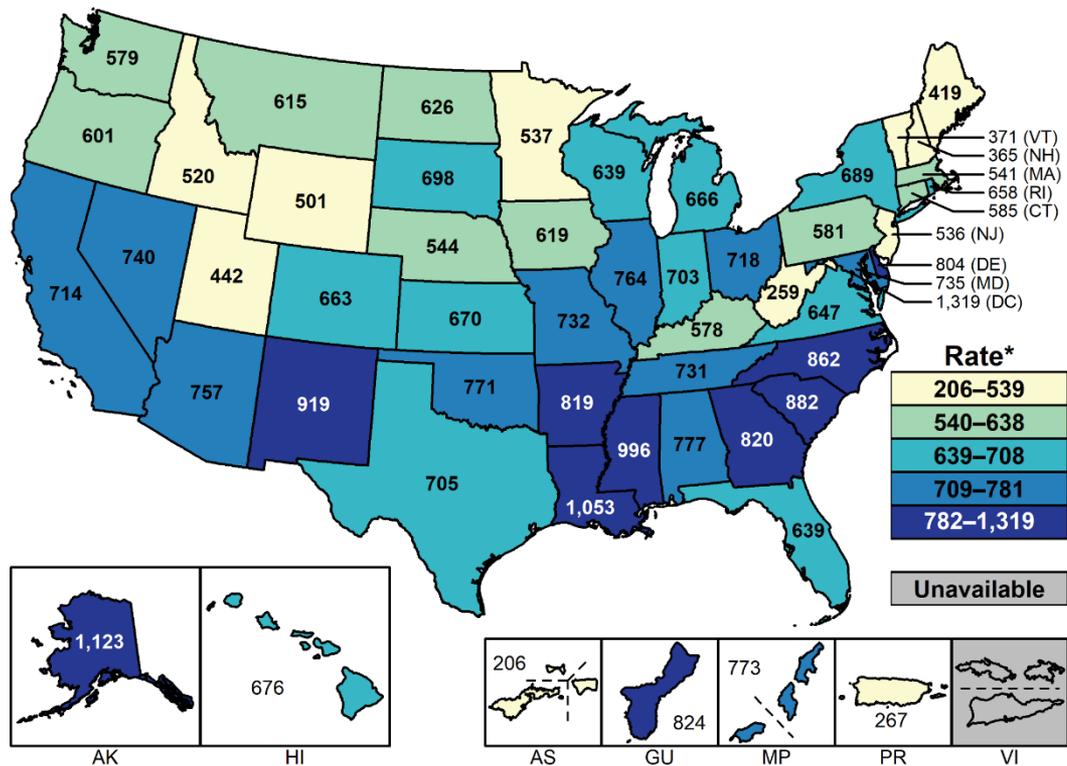




# Sexually Transmitted Disease Surveillance 2018

## STDs in Women and Infants

# Chlamydia — Rates of Reported Cases Among Females by State and Territory, United States, 2018



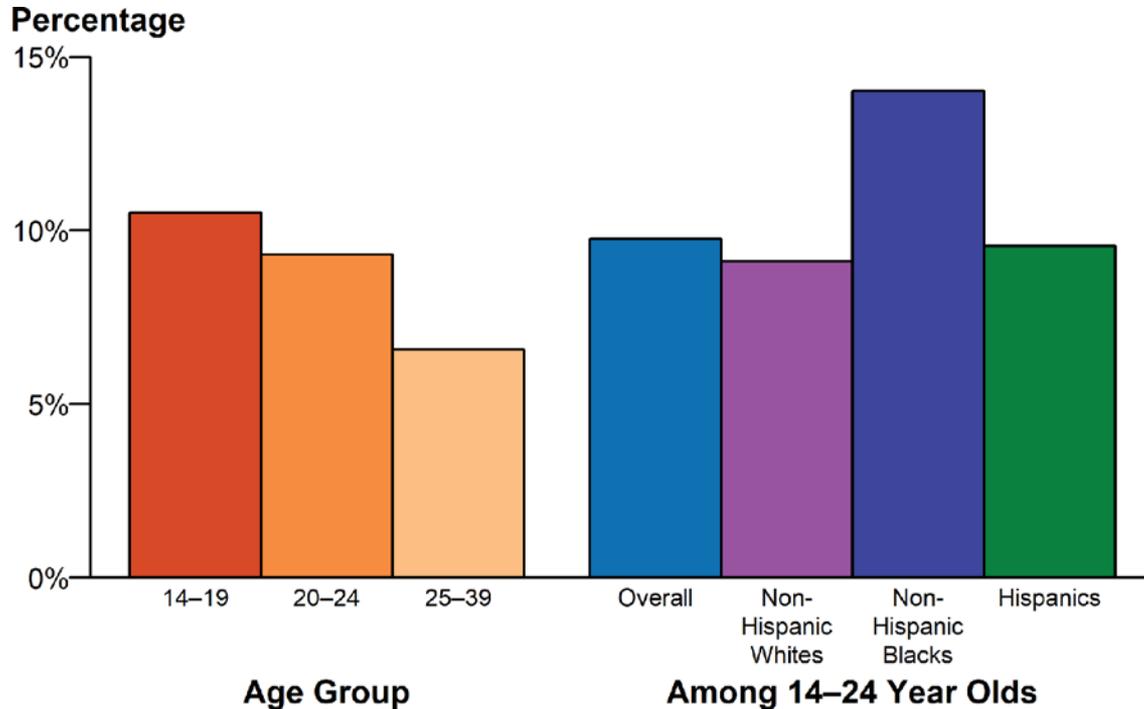
\* Per 100,000.

**NOTE:** See Sections A1.11 in the Appendix for more information on interpreting reported rates in US territories.





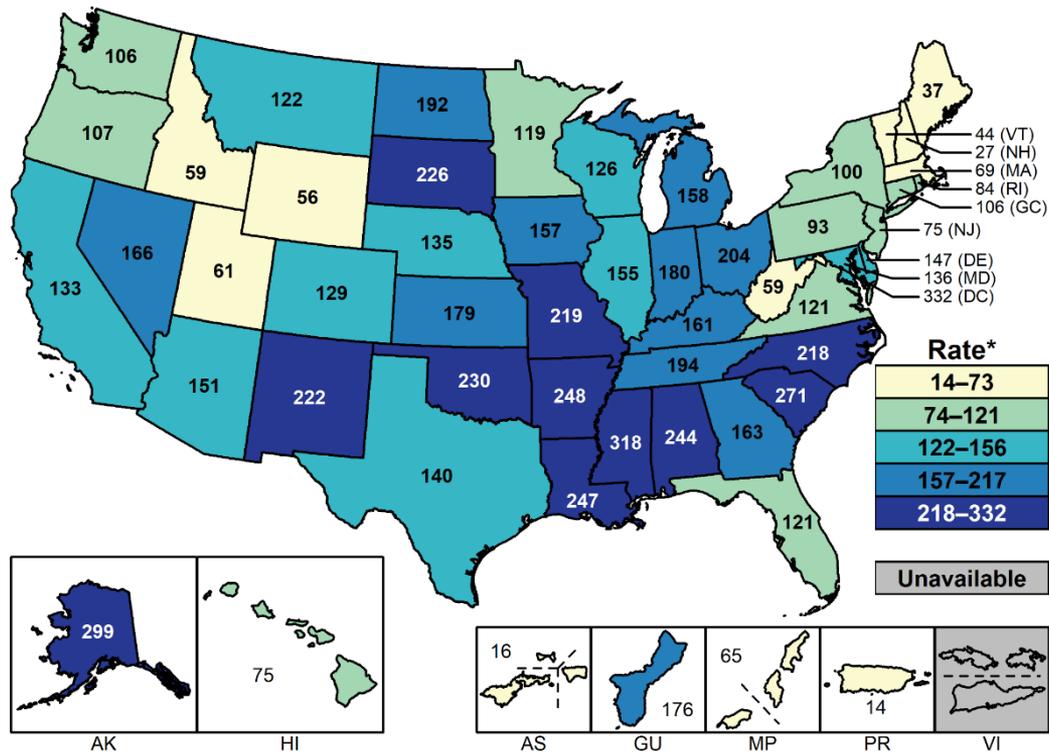
# Chlamydia — Positivity Among Females Aged 14–39 Years by Race/Hispanic Ethnicity and Age Group in Clinics\* Providing Family Planning and Reproductive Health Services, STD Surveillance Network (SSuN), 2018



\* Includes clinics (n=26) that tested >100 females for chlamydia in 2018 and testing coverage was >60%.

**NOTE:** See section A2.2 in the Appendix for SSuN methods.

# Gonorrhea — Rates of Reported Cases Among Females by State and Territory, United States, 2018



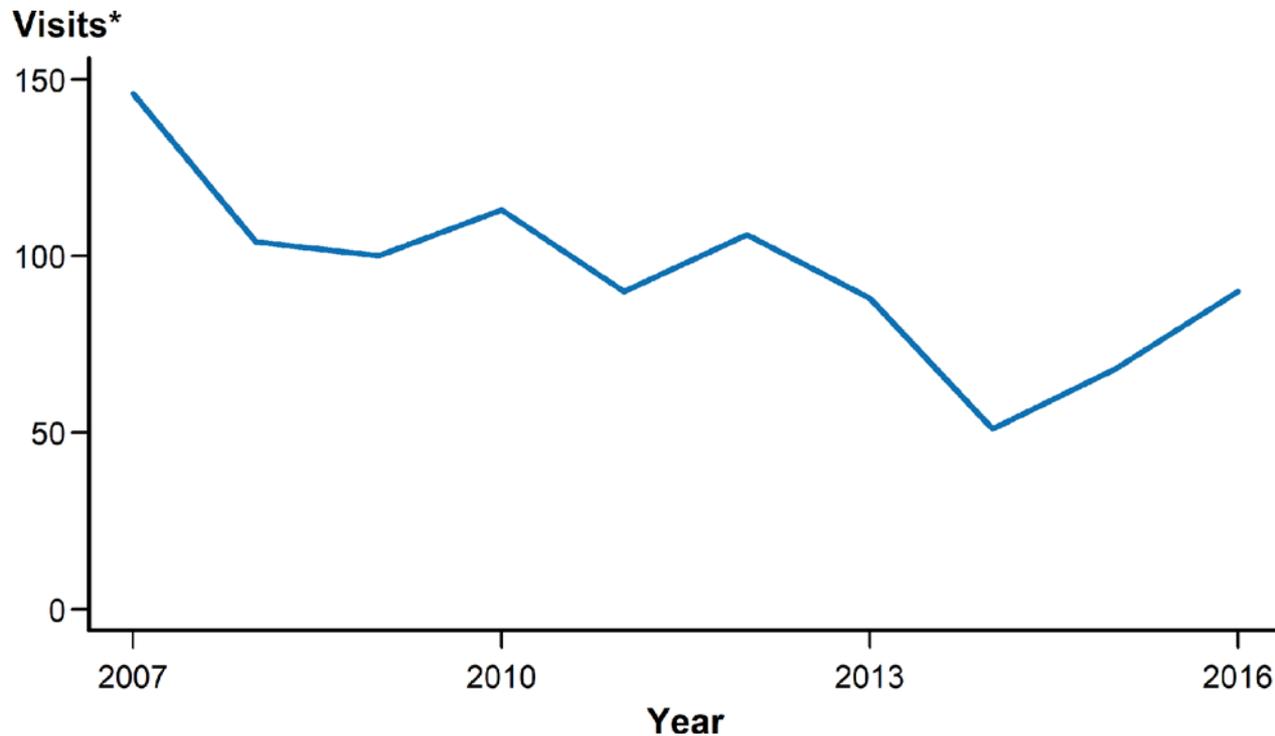
\* Per 100,000.

**NOTE:** See Sections A1.11 in the Appendix for more information on interpreting reported rates in US territories.





# Pelvic Inflammatory Disease — Initial Visits to Physicians' Offices Among Females Aged 15–44 Years, United States, 2007–2016



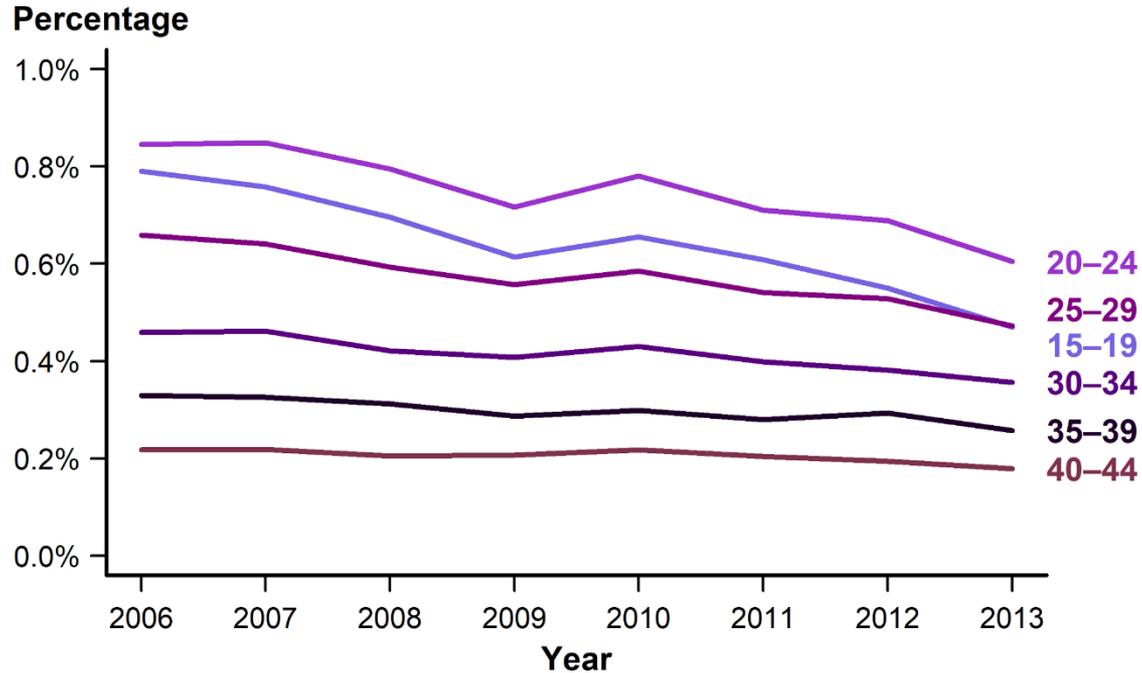
\* In thousands.

**NOTE:** The relative standard errors for these estimates are 23%–16%. See section A2.5 in the Appendix and Table 44.

**SOURCE:** National Disease and Therapeutic Index, IMS Health, Integrated Promotional Services™, IMS Health Report, 1966–2016.



# Estimated Percentage of Acute Pelvic Inflammatory Disease Emergency Department Visits Among Females Aged 15–44 Years by Age Group and Year, United States, 2006–2013

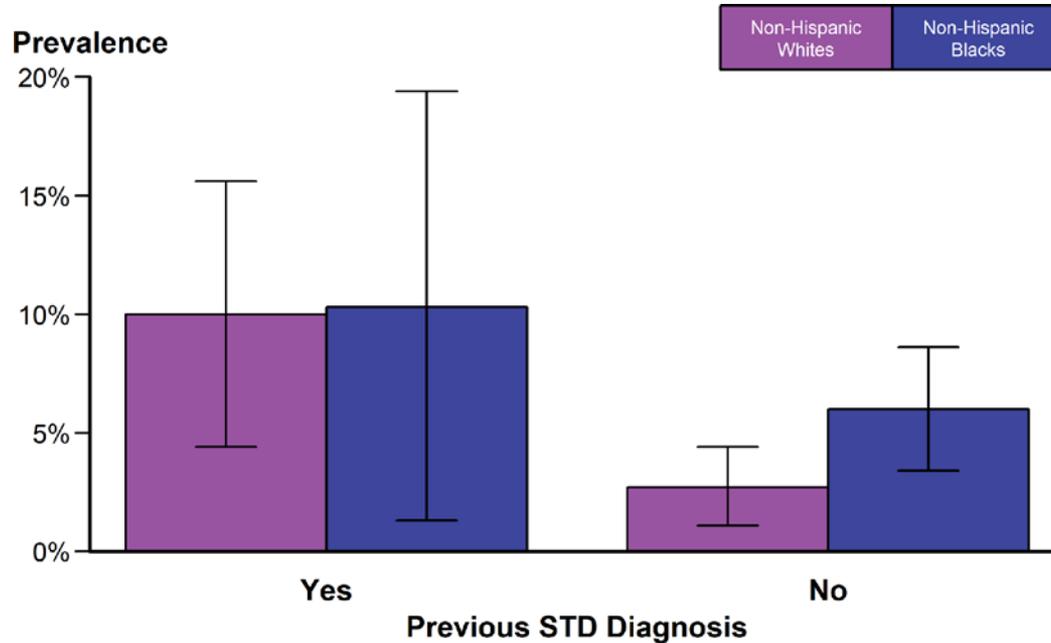


**SOURCE:** Kreisel, K, Flagg, EW, Torrone E. Trends in pelvic inflammatory disease emergency department visits, United States, 2006–2013. *Am J Obstet Gynecol.* 2018;218(1):117.e1–117.e10.





# Pelvic Inflammatory Disease — National Estimates of Lifetime Prevalence Among Sexually-Experienced Women Aged 18–44 Years by Race/Hispanic Ethnicity and Previous STD Diagnosis, National Health and Nutrition Examination Survey (NHANES), 2013–2014



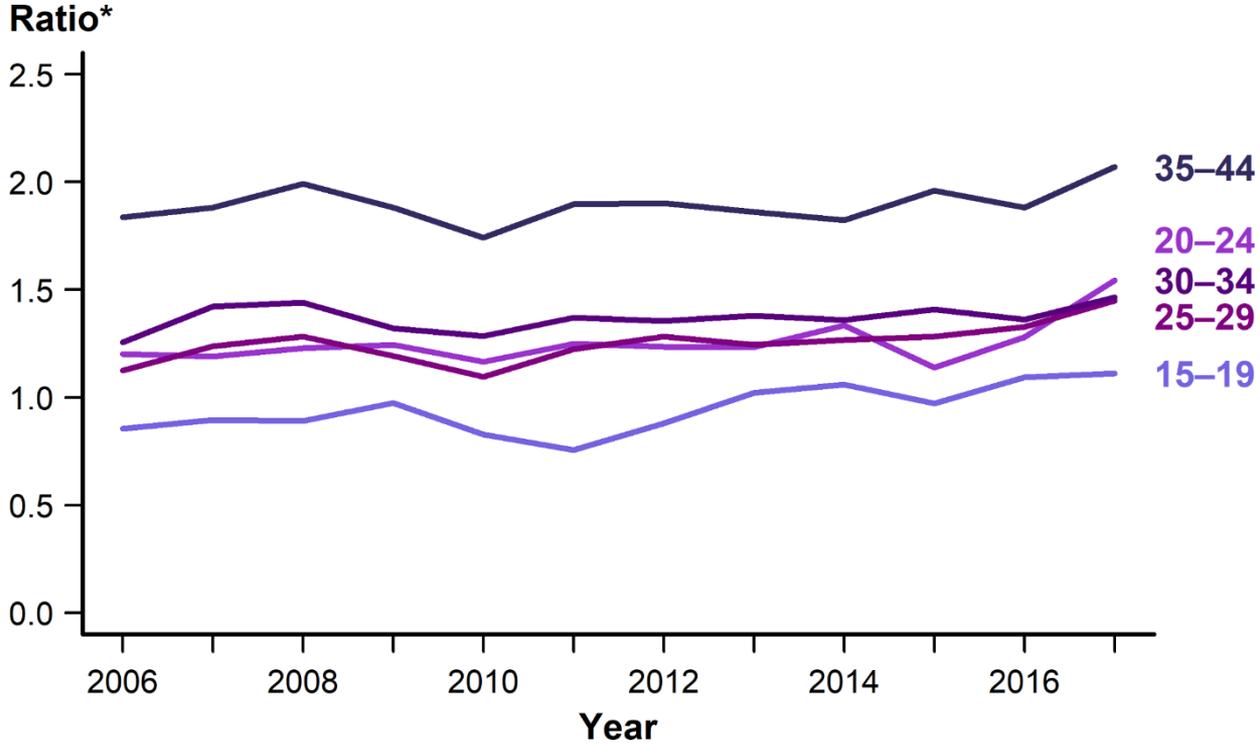
**NOTE:** Error bars indicate 95% confidence intervals. Prevalence estimates among non-Hispanic Black women with a previous STD diagnosis have a relative standard error >40% but <50%.

**SOURCE:** Kreisel, K, Torrone, E, Bernstein, K, et al. Prevalence of pelvic inflammatory disease in sexually experienced women of reproductive age — United States, 2013–2014. *MMWR Morb Mortal Wkly Rep.* 2017;66(3):80–83.





# Ectopic Pregnancy — Ratio\* Among Commercially Insured Females with Live Births Aged 15–44 Years by Age Group, 2006–2017

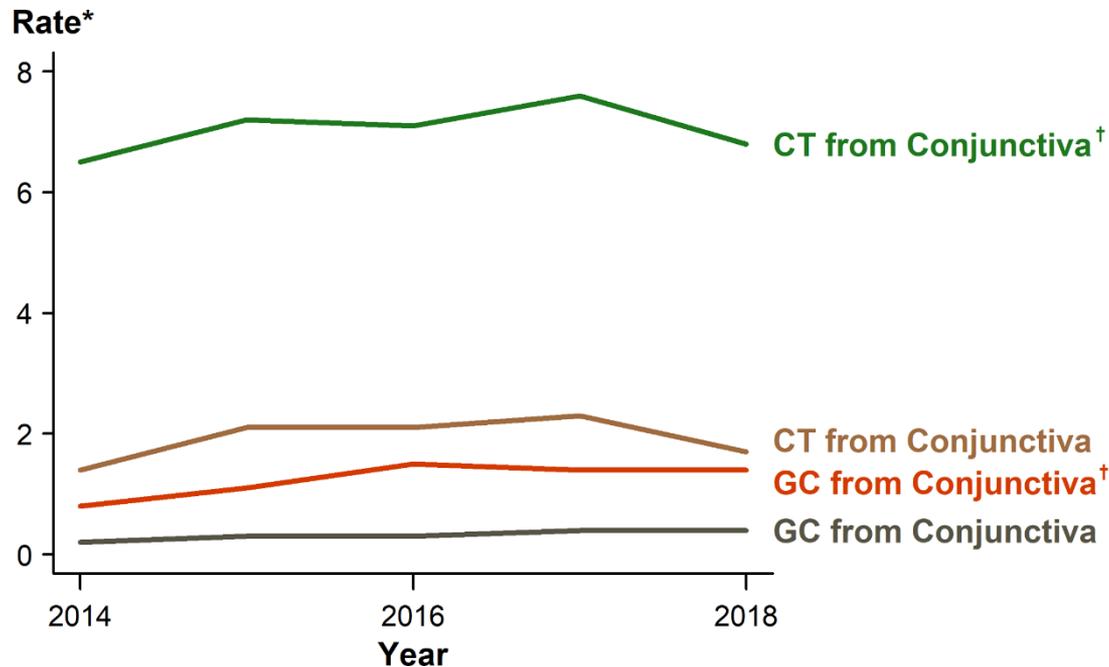


\* Ratios represent the number of ectopic pregnancy diagnoses per 100,000 live births.

SOURCE: MarketScan Commercial Claims and Encounters Database, Truven Health Analytics, Ann Arbor, MI, 2006–2017.



# Chlamydia and Gonorrhea — Rates of Reported Cases Among Infants <1 Year of Age by Year and Specimen Source, United States, 2014–2018



\* Per 100,000 live births.

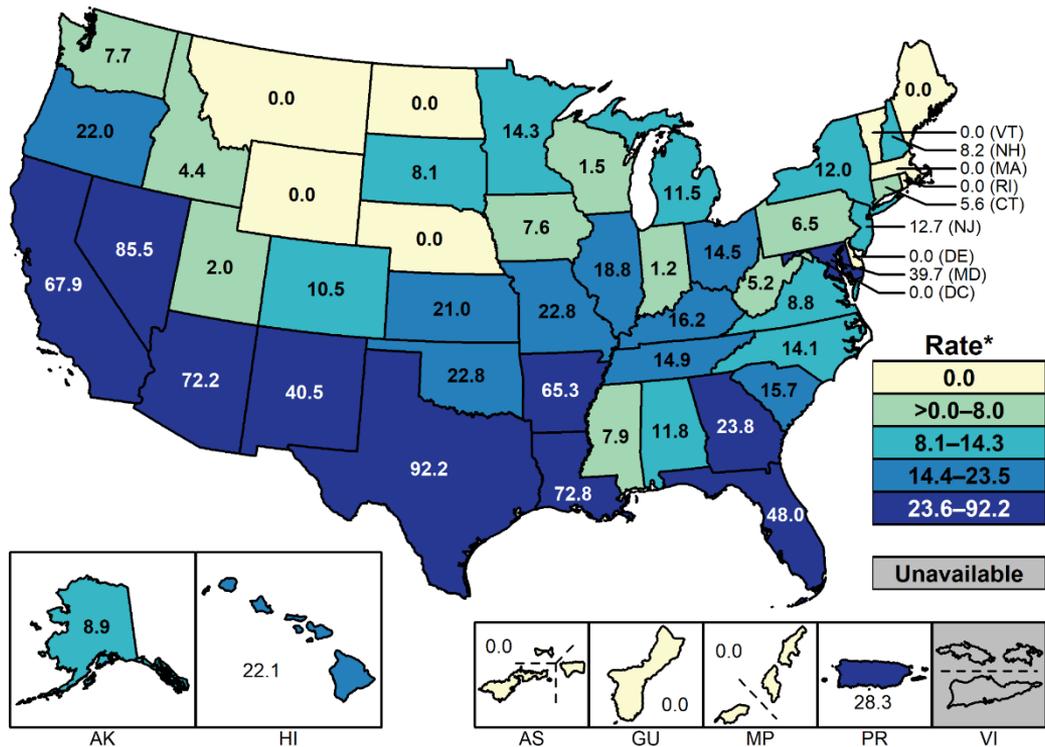
<sup>†</sup> Includes cases with specimen source reported as missing, unknown, or other.

**ADAPTED FROM:** Kreisel K, Weston E, Braxton J, et al. Keeping an eye on chlamydia and gonorrhea conjunctivitis in infants in the United States, 2010–2015. *Sex Transm Dis.* 2017;44(6):356–358.

**ACRONYMS:** CT = Chlamydia; GC = Gonorrhea.



# Congenital Syphilis — Rates of Reported Cases by State and Territory, United States, 2018

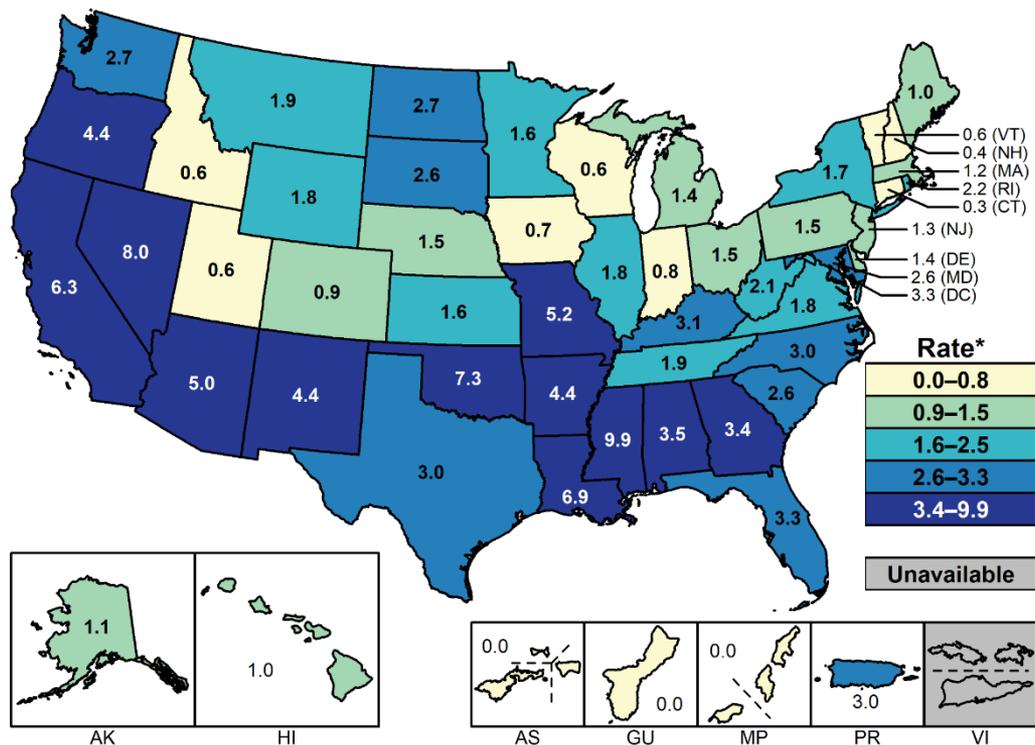


\* Per 100,000 live births.

**NOTE:** See Section A1.11 in the Appendix for more information on interpreting rates for US territories.



# Primary and Secondary Syphilis — Rates of Reported Cases Among Females by State and Territory, United States, 2018



\* Per 100,000.

**NOTE:** See Sections A1.11 in the Appendix for more information on interpreting reported rates in US territories.

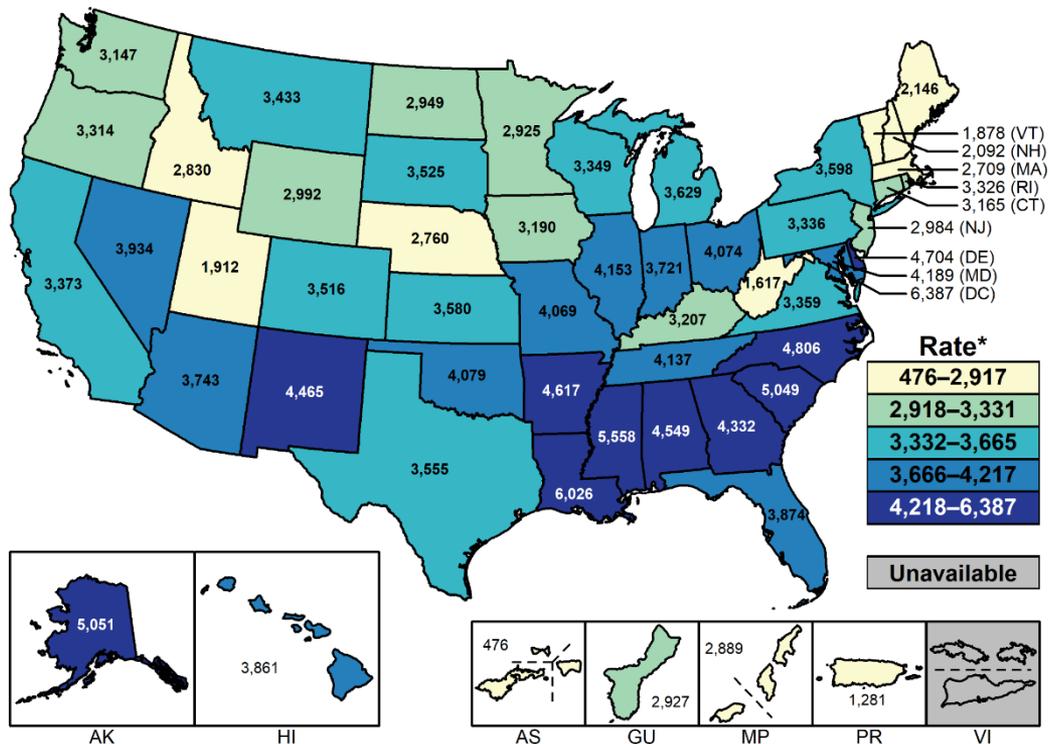




# Sexually Transmitted Disease Surveillance 2018

# STDs in Adolescents and Young Adults

# Chlamydia — Rates of Reported Cases Among Females Aged 15–24 Years by State and Territory, United States, 2018

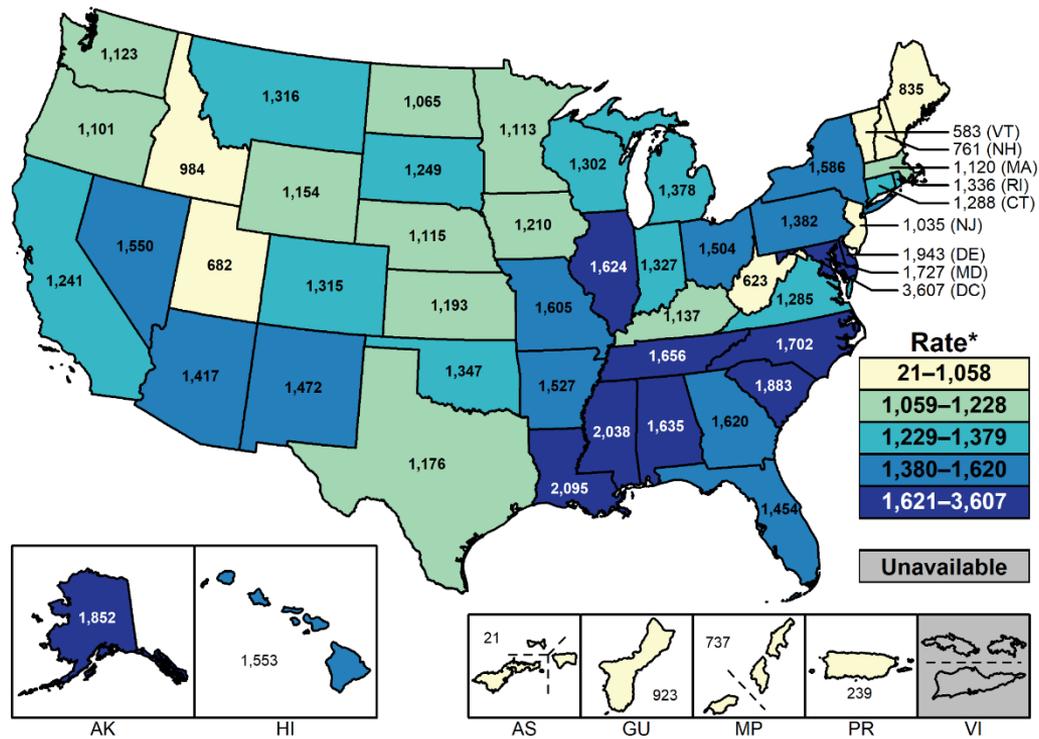


\* Per 100,000.

**NOTE:** See Sections A1.2 and A1.11 in the Appendix for more information on interpreting and estimating reported rates in US territories.



# Chlamydia — Rates of Reported Cases Among Males Aged 15–24 Years by State and Territory, United States, 2018

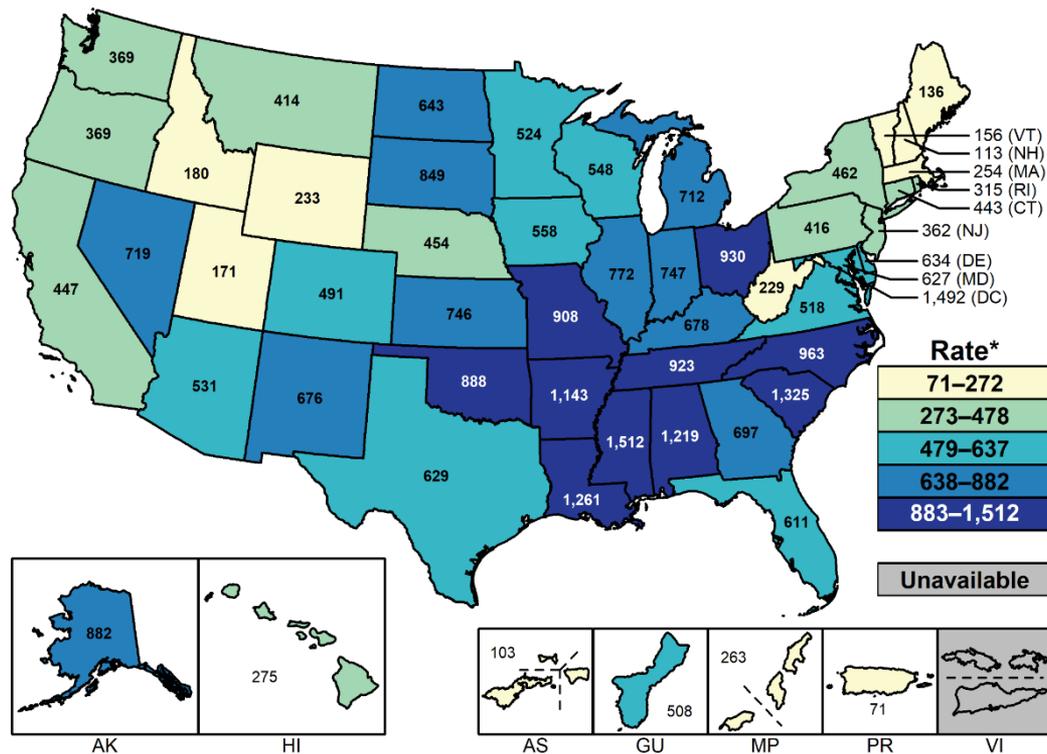


\* Per 100,000.

**NOTE:** See Sections A1.2 and A1.11 in the Appendix for more information on interpreting and estimating reported rates in US territories.



# Gonorrhea — Rates of Reported Cases Among Females Aged 15–24 Years by State and Territory, United States, 2018

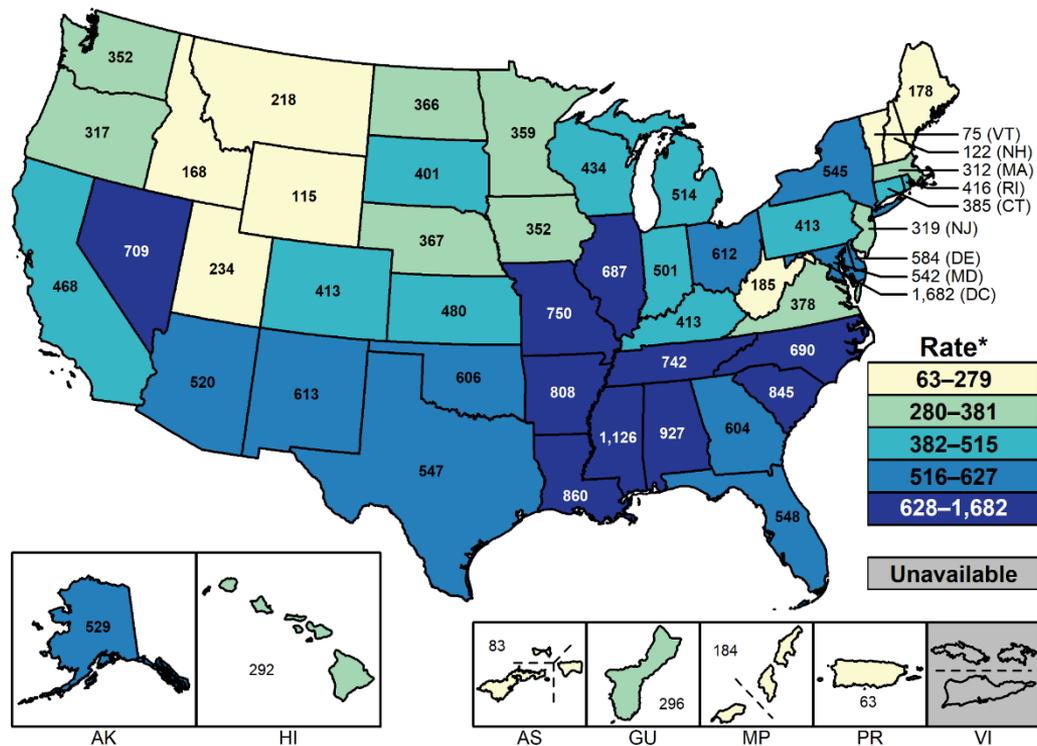


\* Per 100,000.

**NOTE:** See Sections A1.2 and A1.11 in the Appendix for more information on interpreting and estimating reported rates in US territories.



# Gonorrhea — Rates of Reported Cases Among Males Aged 15–24 Years by State and Territory, United States, 2018

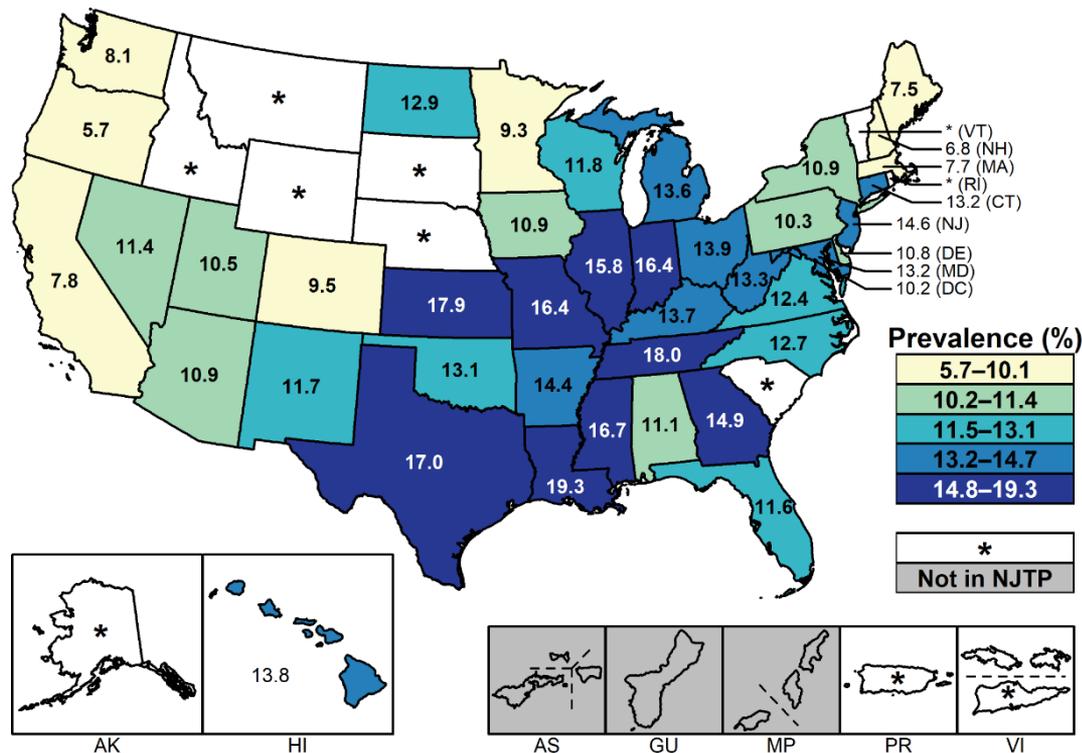


\* Per 100,000.

**NOTE:** See Sections A1.2 and A1.11 in the Appendix for more information on interpreting and estimating reported rates in US territories.



# Chlamydia — Prevalence Among Females Aged 16–24 Years Entering the National Job Training Program (NJTP) by State and Territory of Residence, United States, 2018

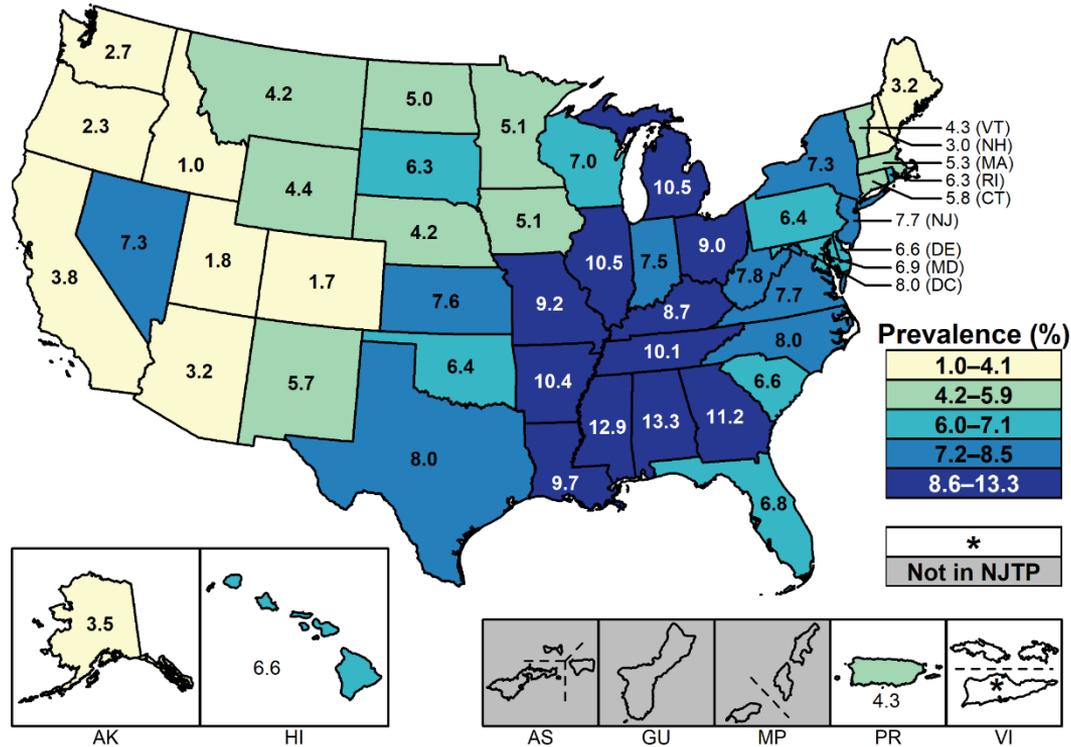


\* Fewer than 100 females who resided in these states/territories and entered the NJTP were screened for chlamydia in 2018.

**NOTE:** See Section A2.1 in the Appendix for more information regarding NJTP methods.



# Chlamydia — Prevalence Among Males Aged 16–24 Years Entering the National Job Training Program (NJTP) by State and Territory of Residence, United States, 2018

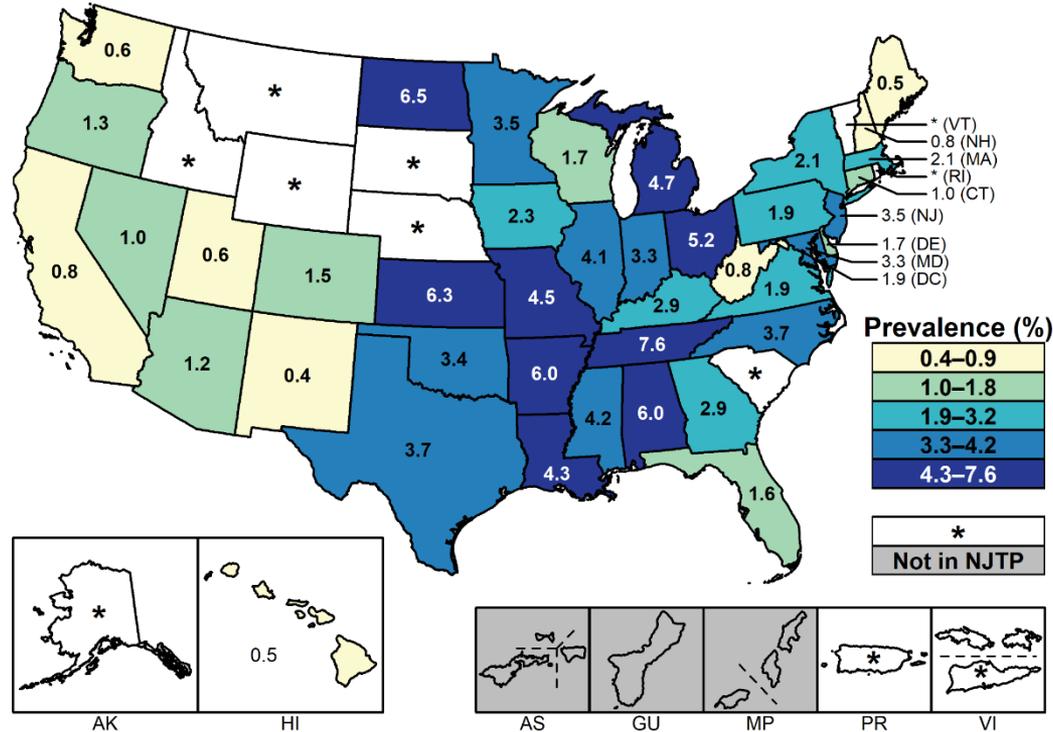


\* Fewer than 100 males who resided in these states/territories and entered the NJTP were screened for chlamydia in 2018.

**NOTE:** See Section A2.1 in the Appendix for more information regarding NJTP methods.



# Gonorrhea — Prevalence Among Females Aged 16–24 Years Entering the National Job Training Program (NJTP) by State and Territory of Residence, United States, 2018



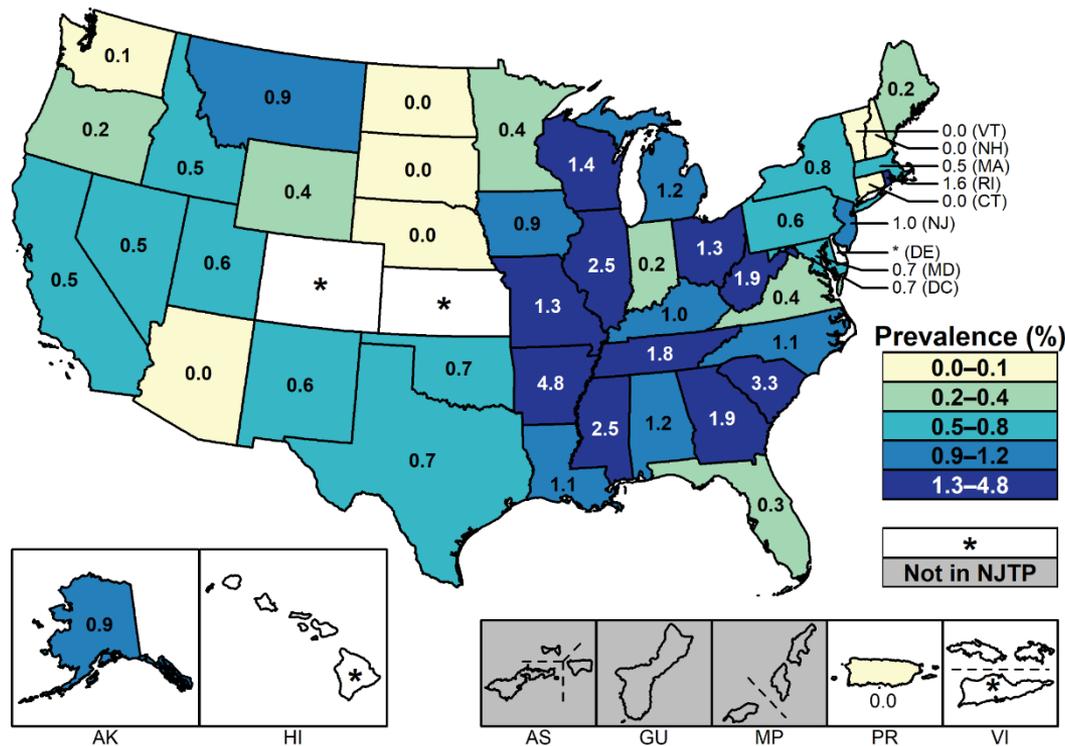
\* Fewer than 100 females who resided in these states/territories and entered the NJTP were screened for gonorrhea in 2018.

**NOTE:** See Section A2.1 in the Appendix for more information regarding NJTP methods.





# Gonorrhea — Prevalence Among Males Aged 16–24 Years Entering the National Job Training Program (NJTP) by State and Territory of Residence, United States, 2018



\* Fewer than 100 males who resided in these states/territories and entered the NJTP were screened for gonorrhea in 2018.

**NOTE:** See Section A2.1 in the Appendix for more information regarding NJTP methods.

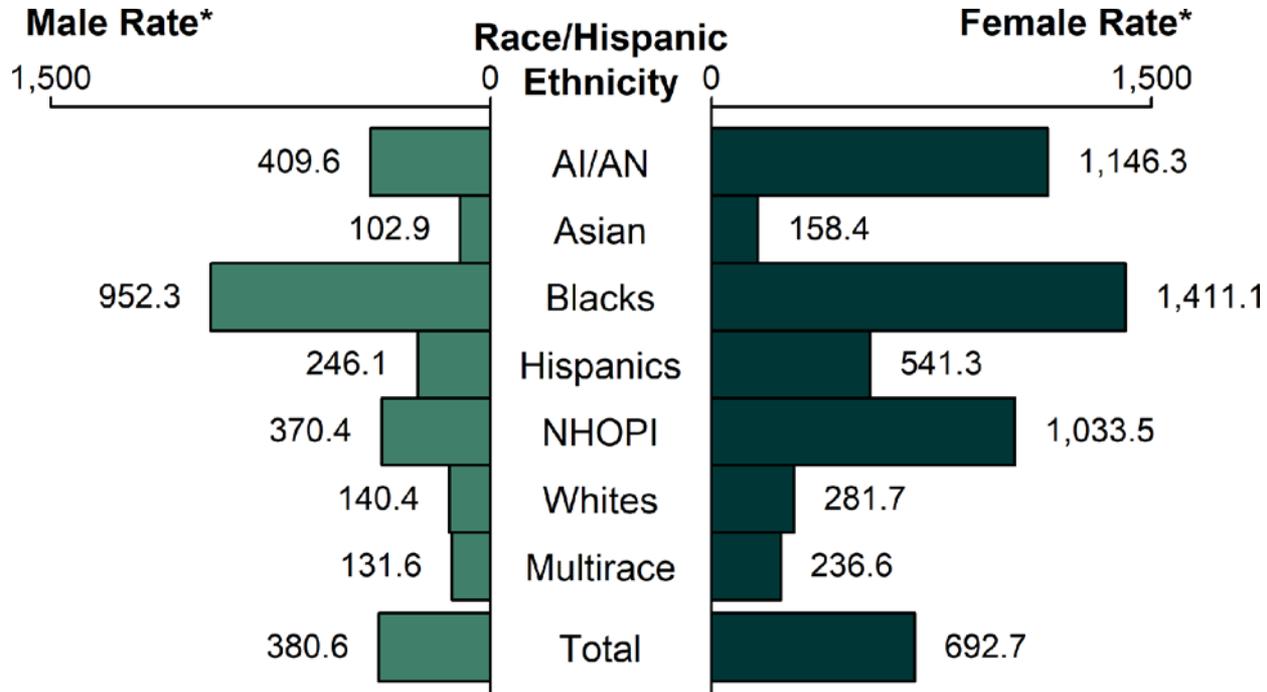




# Sexually Transmitted Disease Surveillance 2018

# STDs in Racial and Ethnic Minorities

# Chlamydia — Rates of Reported Cases by Race/Hispanic Ethnicity and Sex, United States, 2018



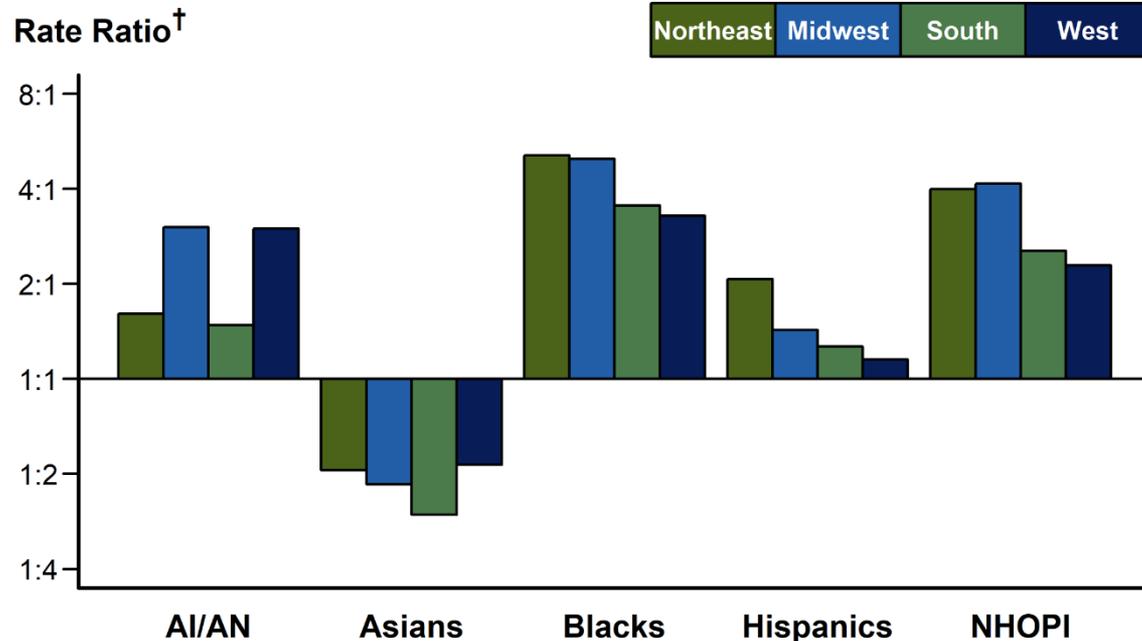
\* Per 100,000.

**NOTE:** See Section A1.5 in the Appendix for information on race/Hispanic ethnicity in STD case reporting.

**ACRONYMS:** AI/AN = American Indians/Alaska Natives; NHOPI = Native Hawaiians/Other Pacific Islanders.



# Chlamydia — Rate Ratios\* Among Females Aged 15–24 Years by Race/Hispanic Ethnicity and Region, United States, 2018



\* For the rate ratios, Whites are the reference population.

<sup>†</sup> Y-axis is log scale.

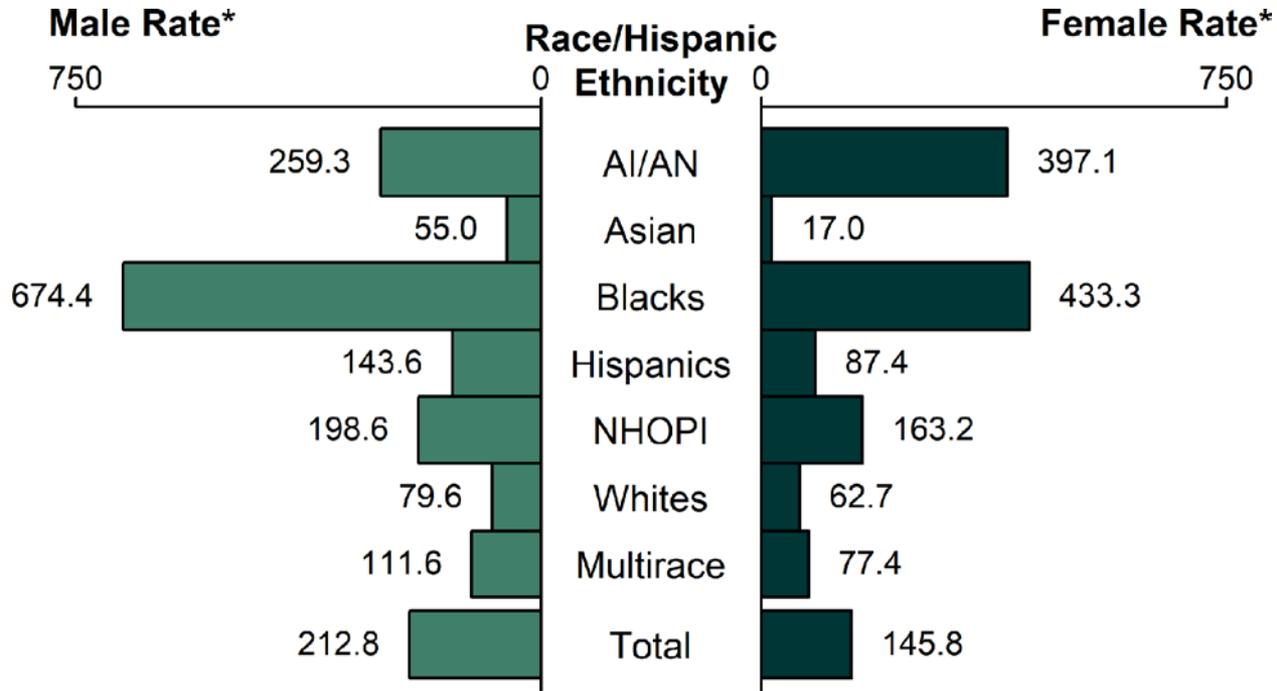
**NOTE:** See Section A1.5 in the Appendix for information on reporting STD case data for race/Hispanic ethnicity.

**ACRONYMS:** AI/AN = American Indians/Alaska Natives; NHOPI = Native Hawaiians/Other Pacific Islanders.





# Gonorrhea — Rates of Reported Cases by Race/Hispanic Ethnicity and Sex, United States, 2018



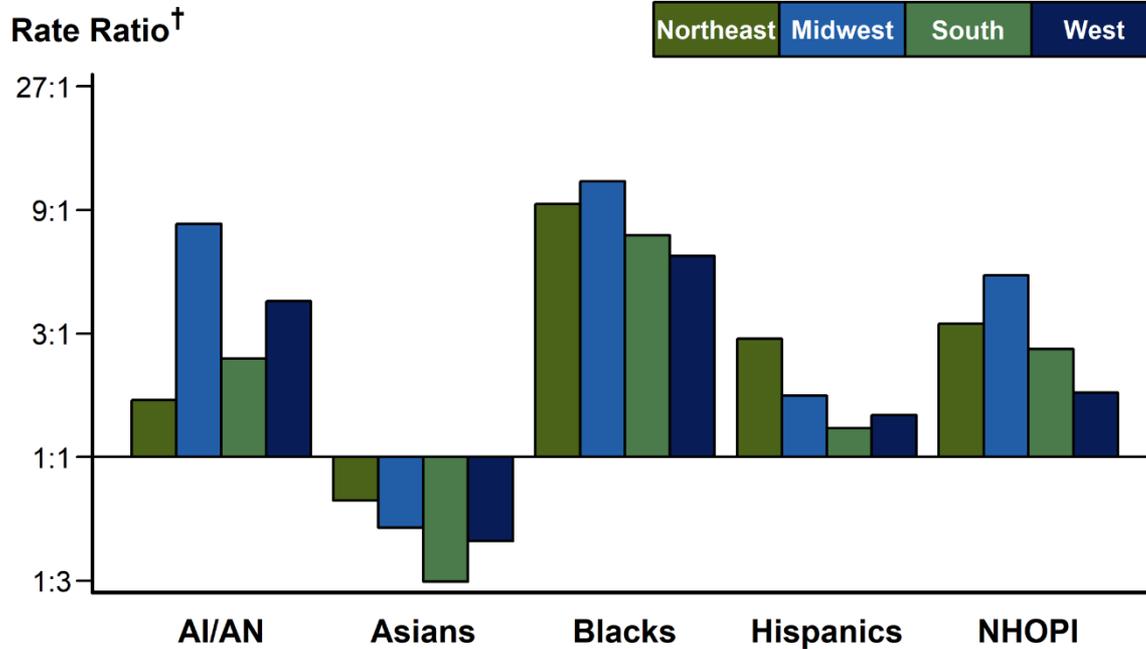
\* Per 100,000.

**NOTE:** See Section A1.5 in the Appendix for information on race/Hispanic ethnicity in STD case reporting.

**ACRONYMS:** AI/AN = American Indians/Alaska Natives; NHOPI = Native Hawaiians/Other Pacific Islanders.



# Gonorrhea — Rate Ratios\* by Race/Hispanic Ethnicity and Region, United States, 2018



\* For the rate ratios, Whites are the reference population.

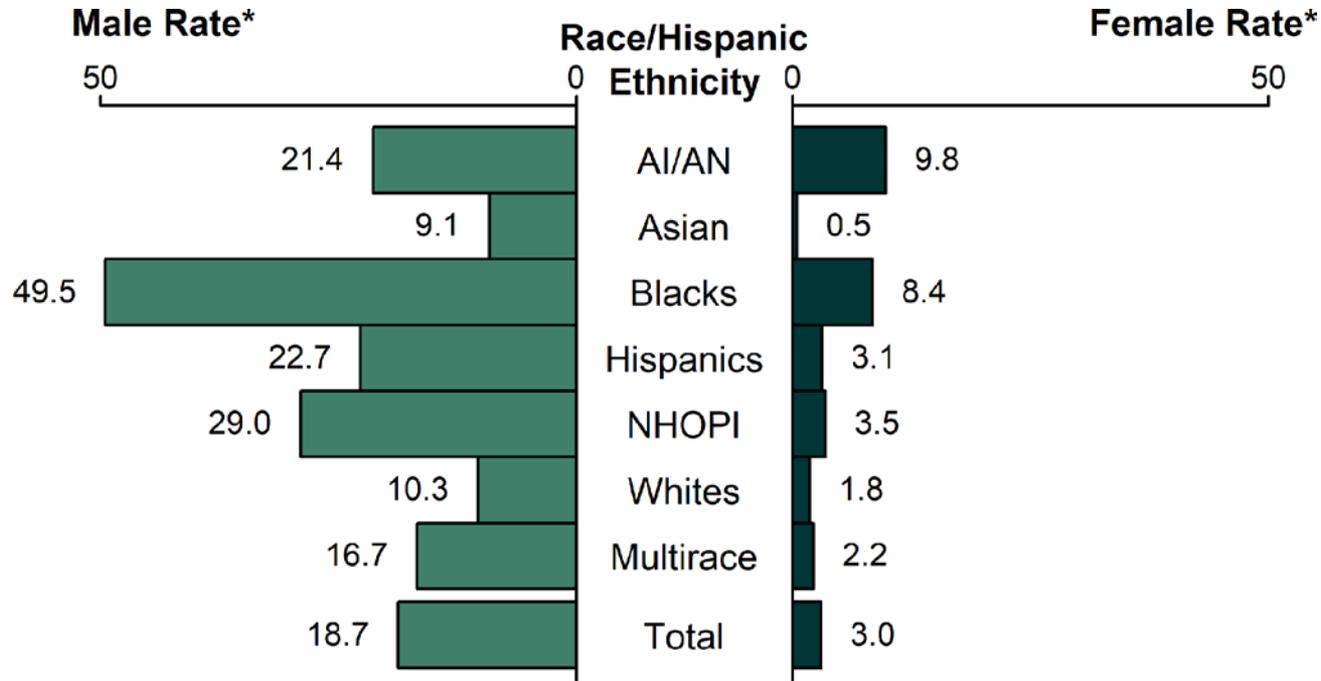
<sup>†</sup> Y-axis is log scale.

**NOTE:** See Section A1.5 in the Appendix for information on race/Hispanic ethnicity in STD case reporting.

**ACRONYMS:** AI/AN = American Indians/Alaska Natives; NHOPI = Native Hawaiians/Other Pacific Islanders.



# Primary and Secondary Syphilis — Rates of Reported Cases by Race/Hispanic Ethnicity and Sex, United States, 2018



\* Per 100,000.

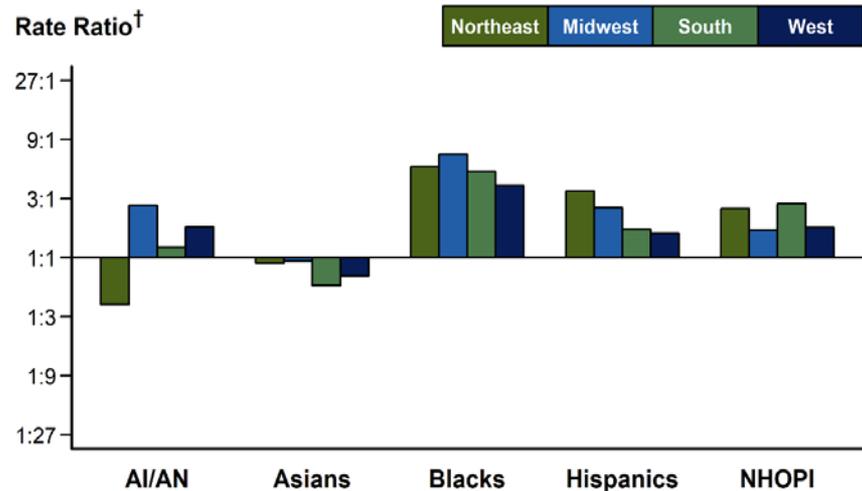
**NOTE:** See Section A1.5 in the Appendix for information on reporting STD case data for race/Hispanic ethnicity.

**ACRONYMS:** AI/AN = American Indians/Alaska Natives; NHOPI = Native Hawaiians/Other Pacific Islanders.

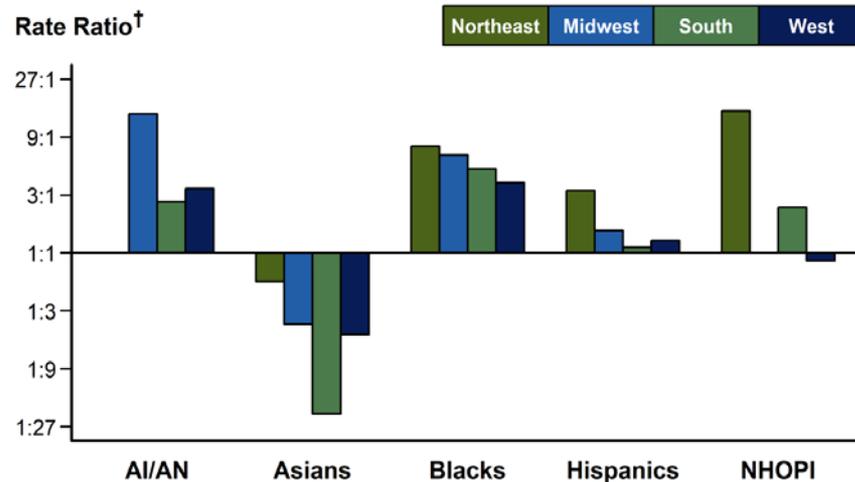


# Primary and Secondary Syphilis — Rate Ratios\* by Sex, Race/Hispanic Ethnicity, and Region, United States, 2018

A. Male



B. Female



\* For the rate ratios, Whites are the reference population.

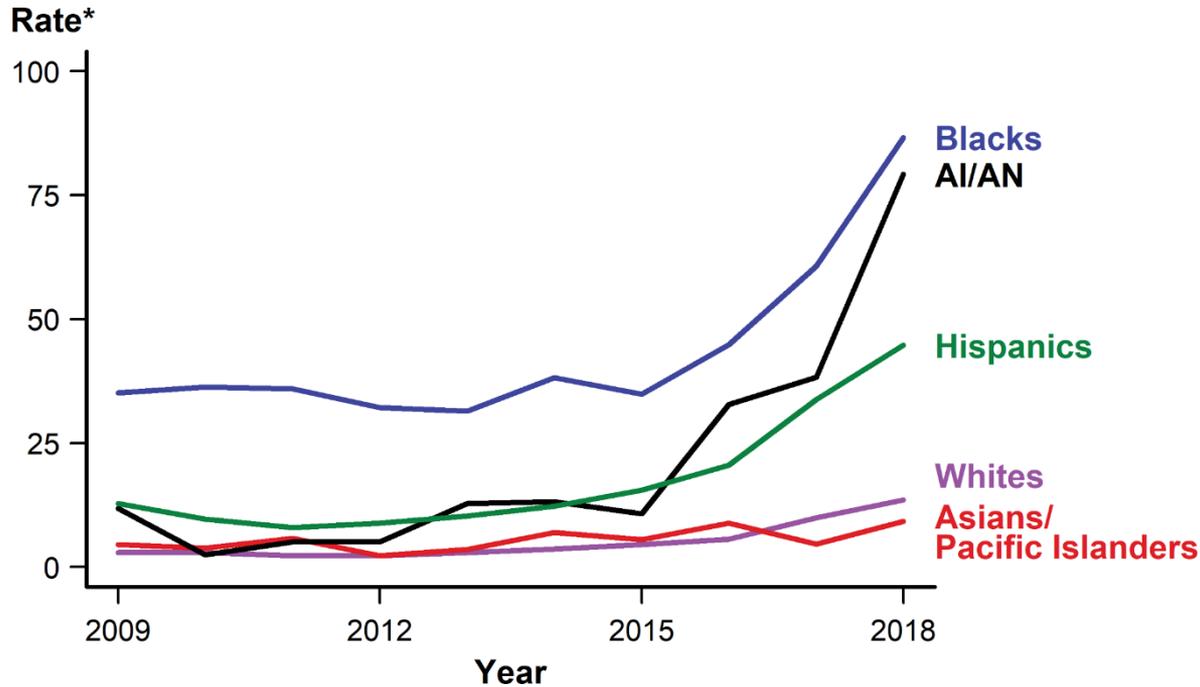
† Y-axis is log scale.

**NOTE:** See Section A1.5 in the Appendix for information on reporting STD case data for race/Hispanic ethnicity.

**ACRONYMS:** AI/AN = American Indians/Alaska Natives; NHOPI = Native Hawaiians/Other Pacific Islanders.



# Congenital Syphilis — Rates of Reported Cases by Year of Birth and Race/Hispanic Ethnicity of Mother, United States, 2009–2018



\* Per 100,000 live births.

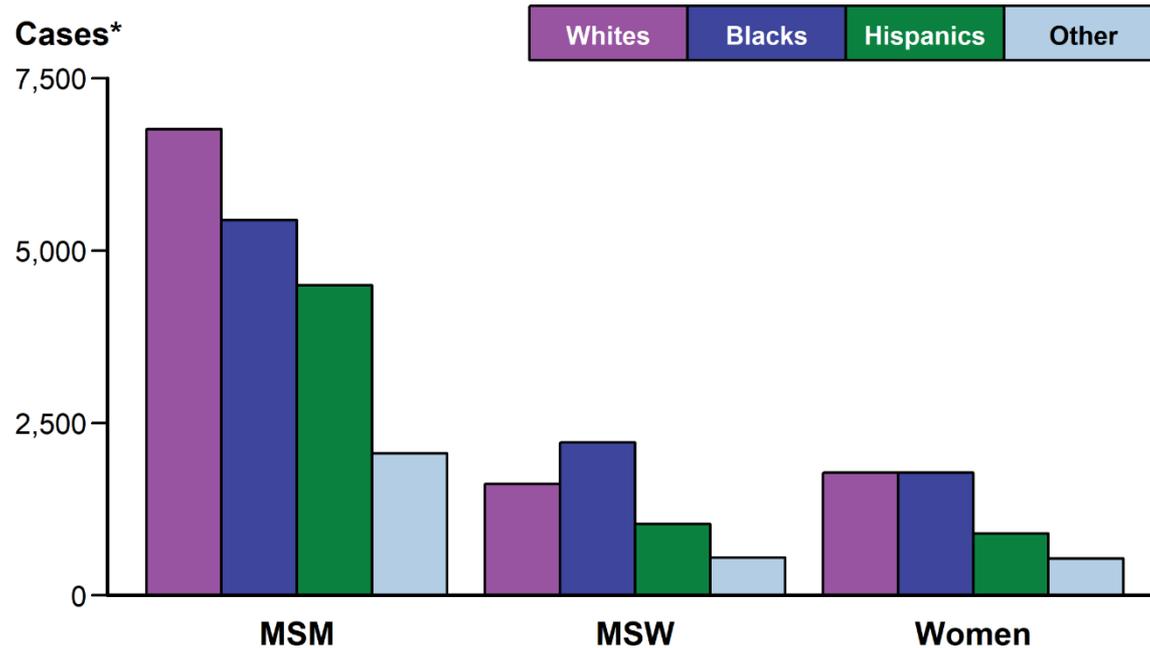
**NOTE:** National Center for Health Statistics bridged race categories are presented to allow the display of data across several years. See Section A1.5 in the Appendix for information on reporting STD case data for race/Hispanic ethnicity.

**ACRONYMS:** AI/AN = American Indians/Alaska Natives.





# Primary and Secondary Syphilis — Reported Cases\* by Sex and Sex of Sex Partners and Race/Hispanic Ethnicity, United States, 2018



\* Of all reported cases of primary and secondary syphilis, 16.7% were among men without data on sex of sex partners, and <0.1% were cases with unknown sex; 6.1% of all cases had missing or unknown race/Hispanic ethnicity. Cases with missing or unknown race/Hispanic ethnicity are included in the “Other” category.

**NOTE:** See Section A1.5 in the Appendix for information on reporting STD case data for race/Hispanic ethnicity.

**ACRONYMS:** MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only.





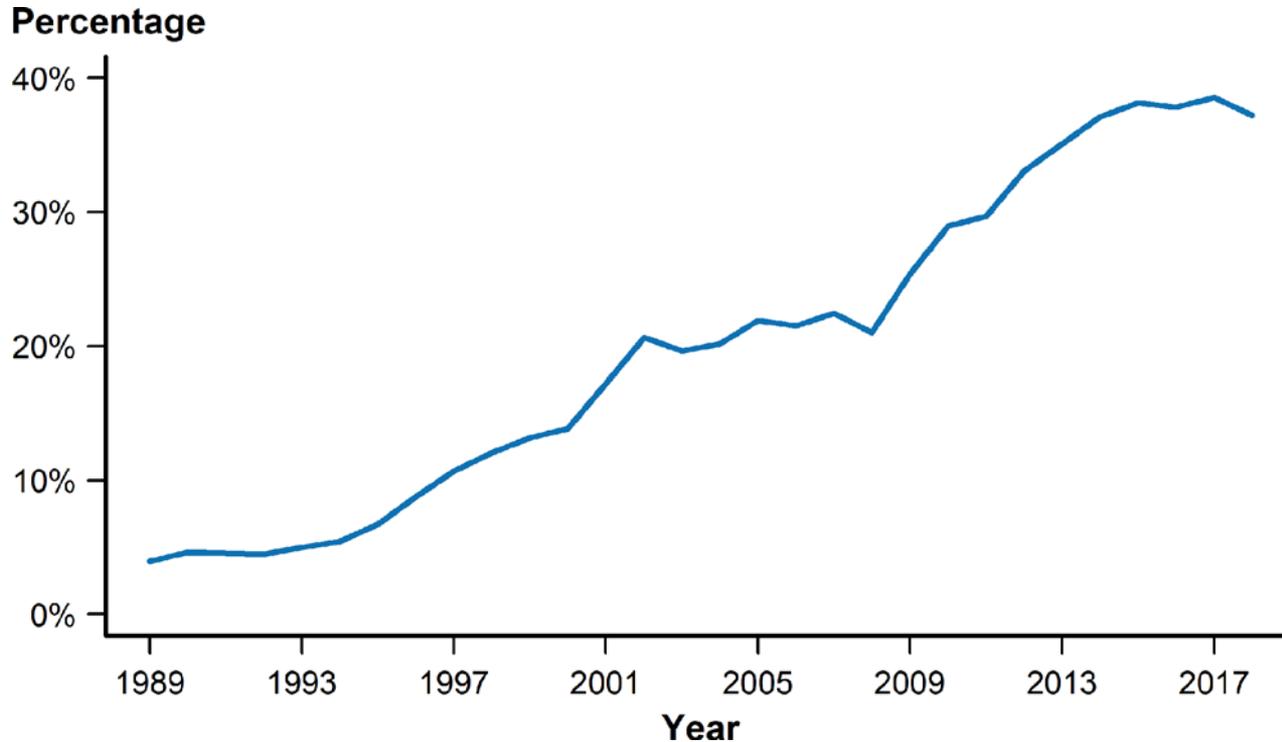
# Sexually Transmitted Disease Surveillance 2018

## STDs in Men Who Have Sex With Men





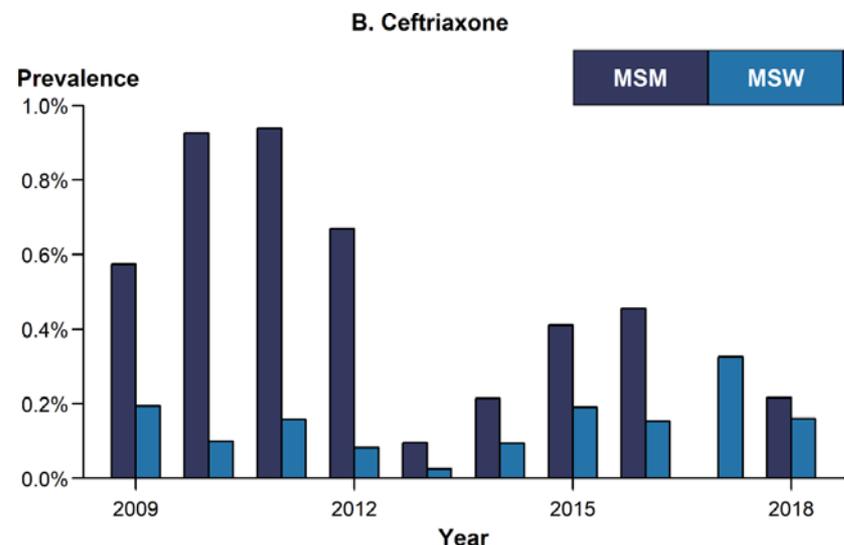
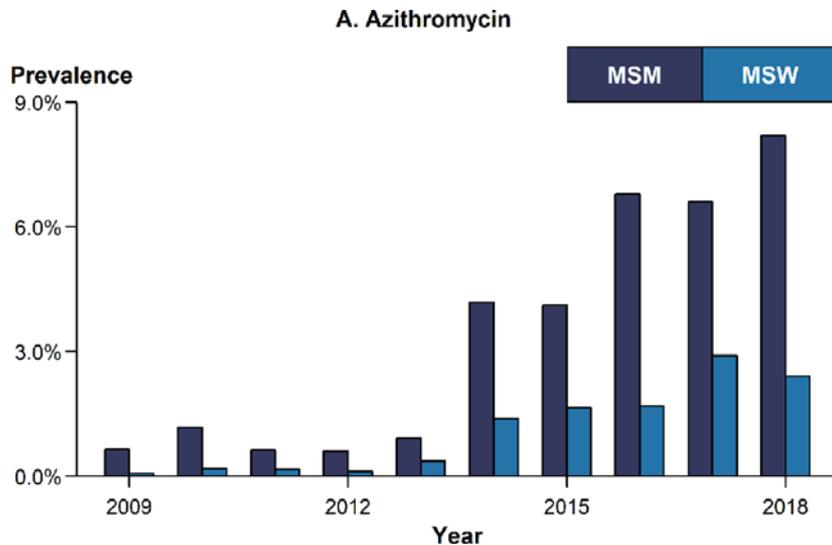
# *Neisseria gonorrhoeae* — Percentage of Urethral Isolates Obtained from MSM Attending STD Clinics, Gonococcal Isolate Surveillance Project (GISP), 1989–2018



**ACRONYMS:** MSM = Gay, bisexual, and other men who have sex with men.



# *Neisseria gonorrhoeae* — Percentage of Urethral Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin\* and Ceftriaxone† by Sex and Sex of Sex Partners, Gonococcal Isolate Surveillance Project (GISP), 2009–2018



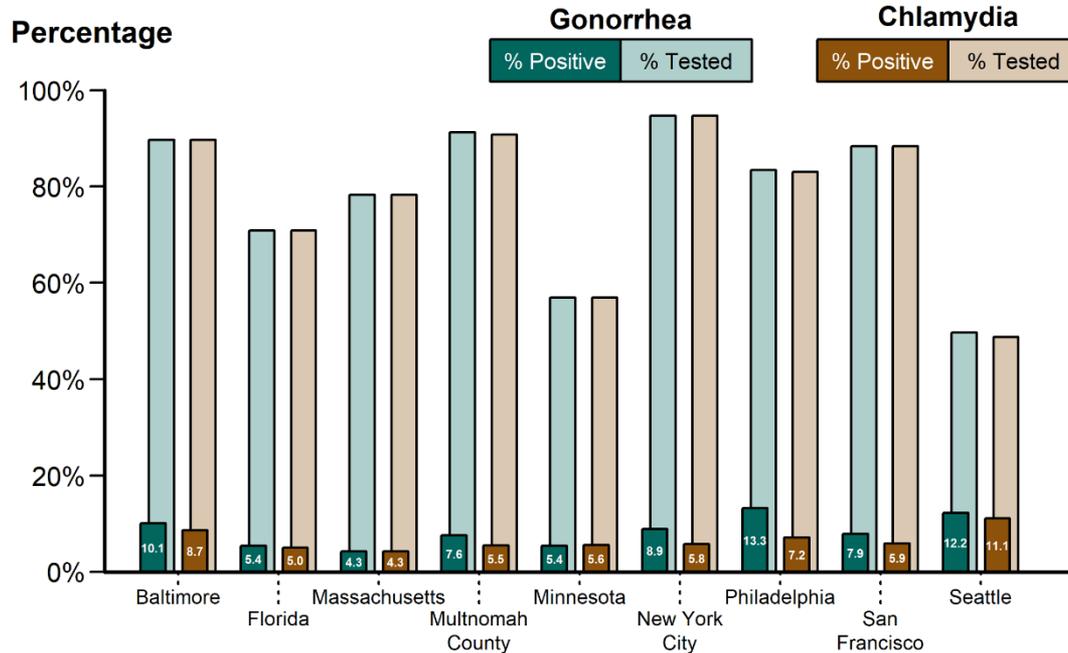
\* Elevated Azithromycin MIC:  $\geq 2.0$   $\mu\text{g}/\text{mL}$ .

† Elevated Ceftriaxone MIC:  $\geq 0.125$   $\mu\text{g}/\text{mL}$ .

**ACRONYMS:** MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only.



# Gonorrhea and Chlamydia — Proportion\* of MSM STD Clinic Patients Tested and Testing Positive† for Urogenital Gonorrhea and Chlamydia by Jurisdiction, STD Surveillance Network (SSuN), 2018



\* Results based on data obtained from unique patients with known sex of sex partners tested for urogenital gonorrhea (n=26,151) and for urogenital chlamydia (n=26,087) ≥1 time in 2018.

† Percent positive among those tested for urogenital gonorrhea or chlamydia.

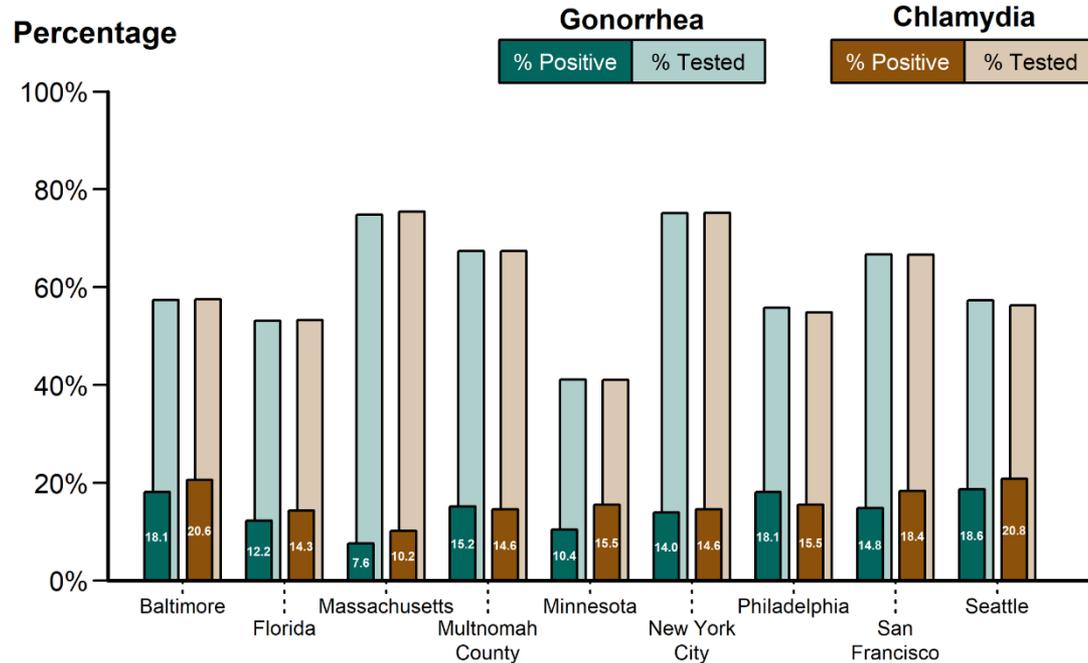
**NOTE:** See section A2.2 in the Appendix for SSuN methods.

**ACRONYMS:** MSM = Gay, bisexual, and other men who have sex with men.





# Gonorrhea and Chlamydia — Proportion\* of MSM STD Clinic Patients Tested and Testing Positive† for Rectal Gonorrhea and Chlamydia by Jurisdiction, STD Surveillance Network (SSuN), 2018



\* Results based on data obtained from unique patients with known sex of sex partners tested for rectal gonorrhea (n=20,798) and for rectal chlamydia (n=20,755) ≥1 time in 2018.

† Percent positive among those tested for rectal gonorrhea or chlamydia.

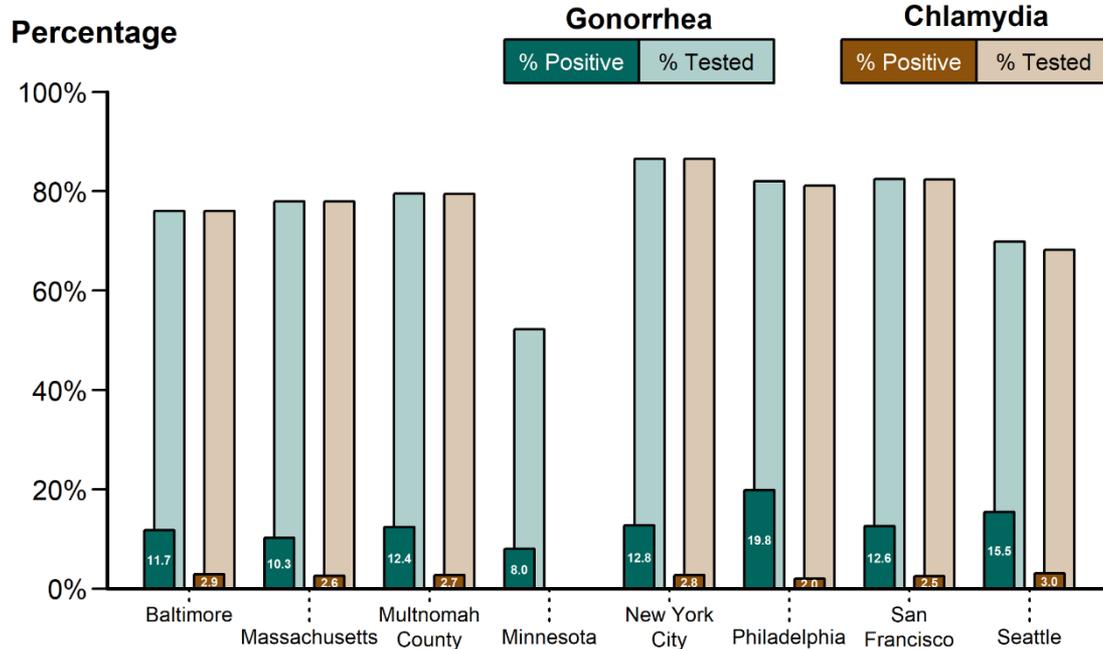
**NOTE:** See section A2.2 in the Appendix for SSuN methods.

**ACRONYMS:** MSM = Gay, bisexual, and other men who have sex with men.





# Gonorrhea and Chlamydia — Proportion\* of MSM STD Clinic Patients Tested and Testing Positive† for Pharyngeal Gonorrhea and Chlamydia by Jurisdiction, STD Surveillance Network (SSuN), 2018



\* Results based on data obtained from unique patients with known sex of sex partners tested for pharyngeal gonorrhea (n=23,695) and for pharyngeal chlamydia (n=21,767) ≥1 time in 2018.

† Percent positive among those tested for pharyngeal gonorrhea or chlamydia.

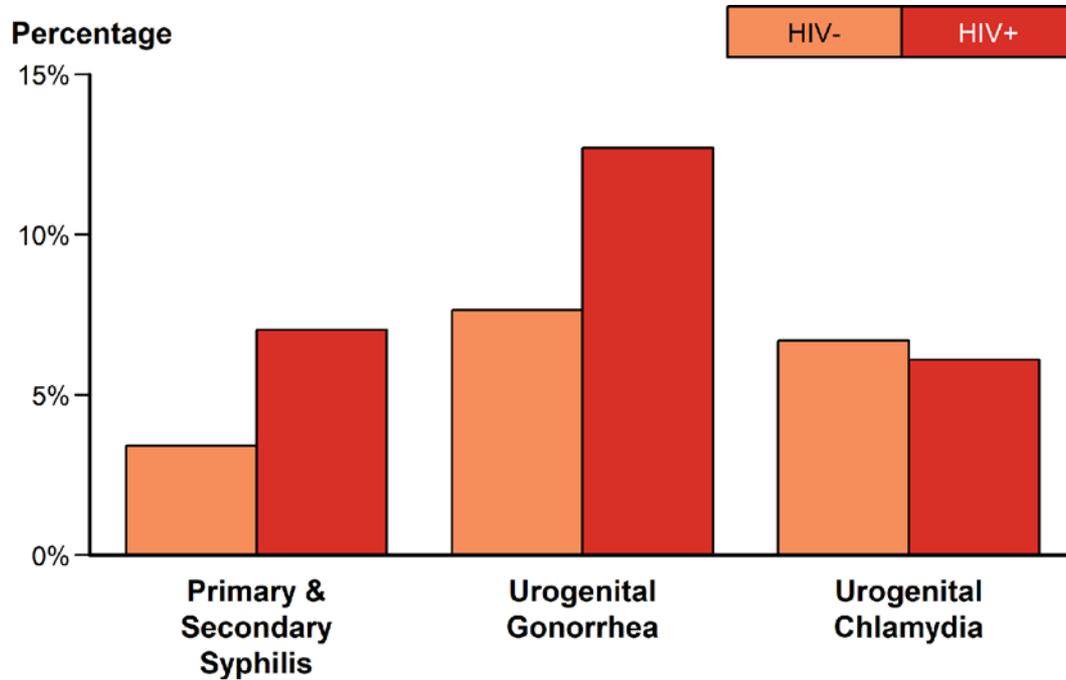
**NOTE:** See section A2.2 in the Appendix for SSuN methods.

**ACRONYMS:** MSM = Gay, bisexual, and other men who have sex with men.





# Proportion of MSM Attending STD Clinics with Primary and Secondary Syphilis\*, Urogenital Gonorrhea, or Urogenital Chlamydia by Known HIV Status, STD Surveillance Network (SSuN), 2018



\* Includes SSuN jurisdictions that reported data on at least 20 patients with a diagnosis of primary and secondary syphilis in 2018.

**NOTE:** See section A2.2 in the Appendix for SSuN methods.

**ACRONYMS:** MSM = Gay, bisexual, and other men who have sex with men.



For more information, contact CDC  
1-800-CDC-INFO (232-4636)  
TTY: 1-888-232-6348 [www.cdc.gov](http://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.

