



National Trends in Sexually Transmitted Infections (STIs) & Treatment Challenges

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Disclosures

Presenter has no financial interest to disclose

This continuing education activity is managed by The St. Louis STI/HIV Prevention Training Center and accredited by Missouri State Medical Association (MSMA) in cooperation with the Chicago Department of Public Health.

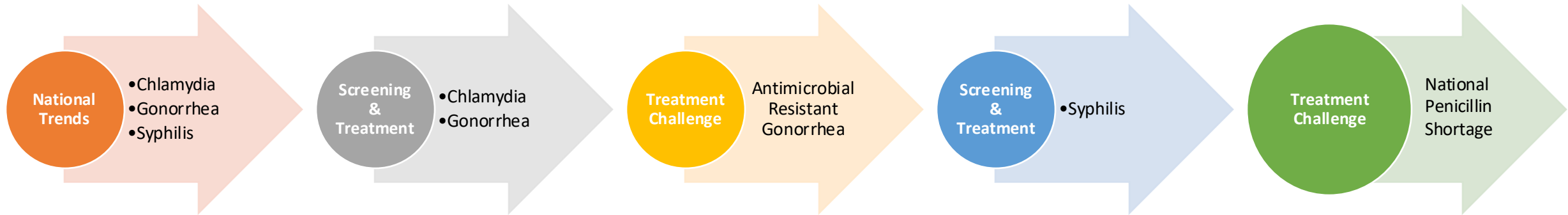
Language Use Disclaimer

Any **cisgender-centric language** in this presentation reflects wording used in referenced works or for clarification purposes and is **not intended as an erasure or minimization of important demographics** (e.g. trans men, trans women, nonbinary and intersex persons) who may also be affected by STIs.

Pregnant person and birthing parent are used to denote persons who are or have been pregnant. This language is **agnostic to gender and gender identity**.

Any differences due to **race and ethnicity** described here **should NOT be interpreted as due to a biological cause**, but rather are **a result of systemic inequities and disparities** linked to race and ethnicity.

Today's Outline



THE
STATE OF STIs
IN THE
UNITED STATES,
2022

CDC's 2022 STI Surveillance Report underscores that STIs must be a public health priority



1.6 million
CASES OF CHLAMYDIA
6.2% decrease since 2018



648,056
CASES OF GONORRHEA
11% increase since 2018



207,255
CASES OF SYPHILIS
80% increase since 2018



3,755
CASES OF SYPHILIS
AMONG NEWBORNS
183% increase since 2018

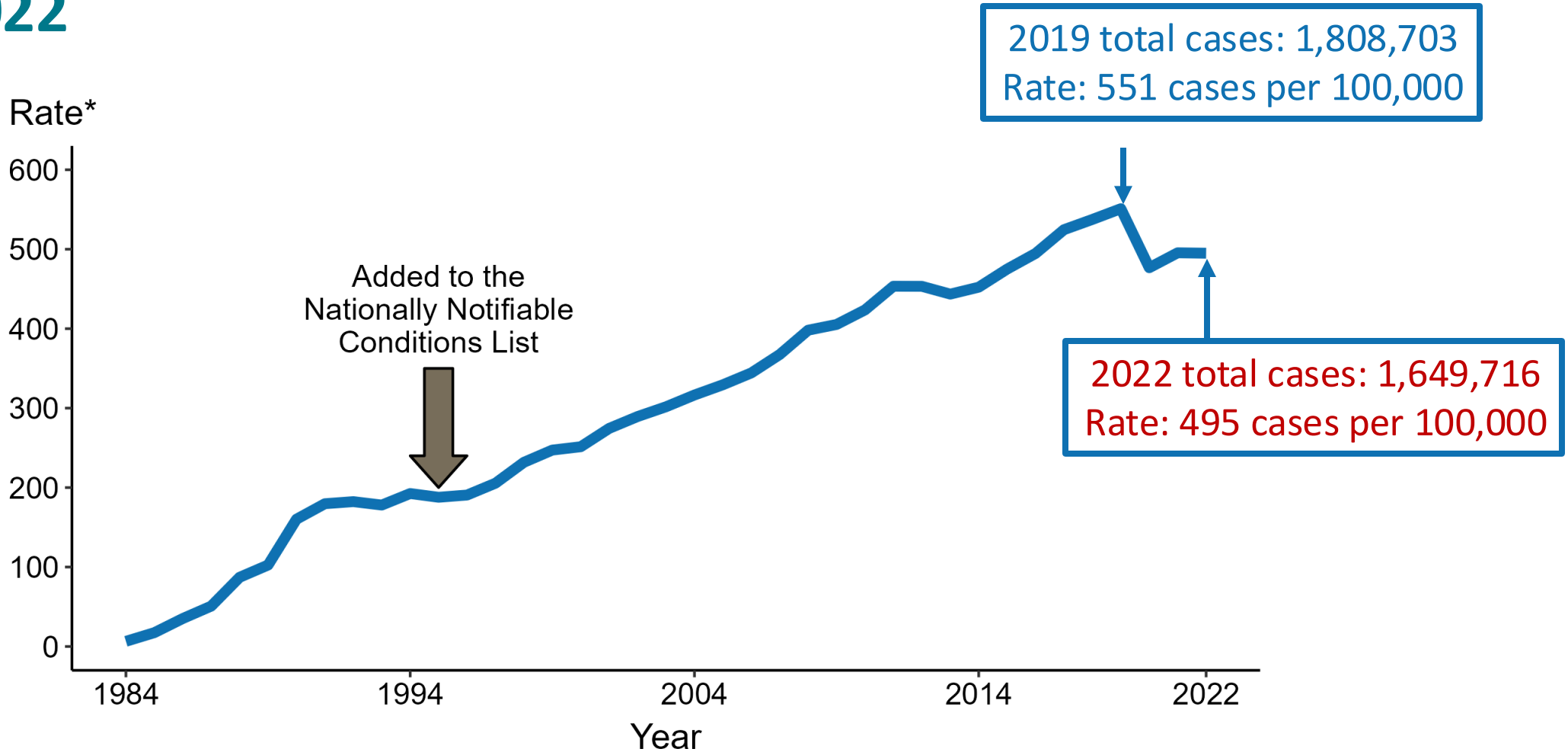
LEARN MORE AT: www.cdc.gov/std/

ANYONE WHO HAS SEX COULD
GET AN STI, BUT SOME GROUPS
ARE MORE AFFECTED

- YOUNG PEOPLE AGED 15-24
- GAY & BISEXUAL MEN
- PREGNANT PEOPLE
- RACIAL & ETHNIC MINORITY GROUPS

Chlamydia

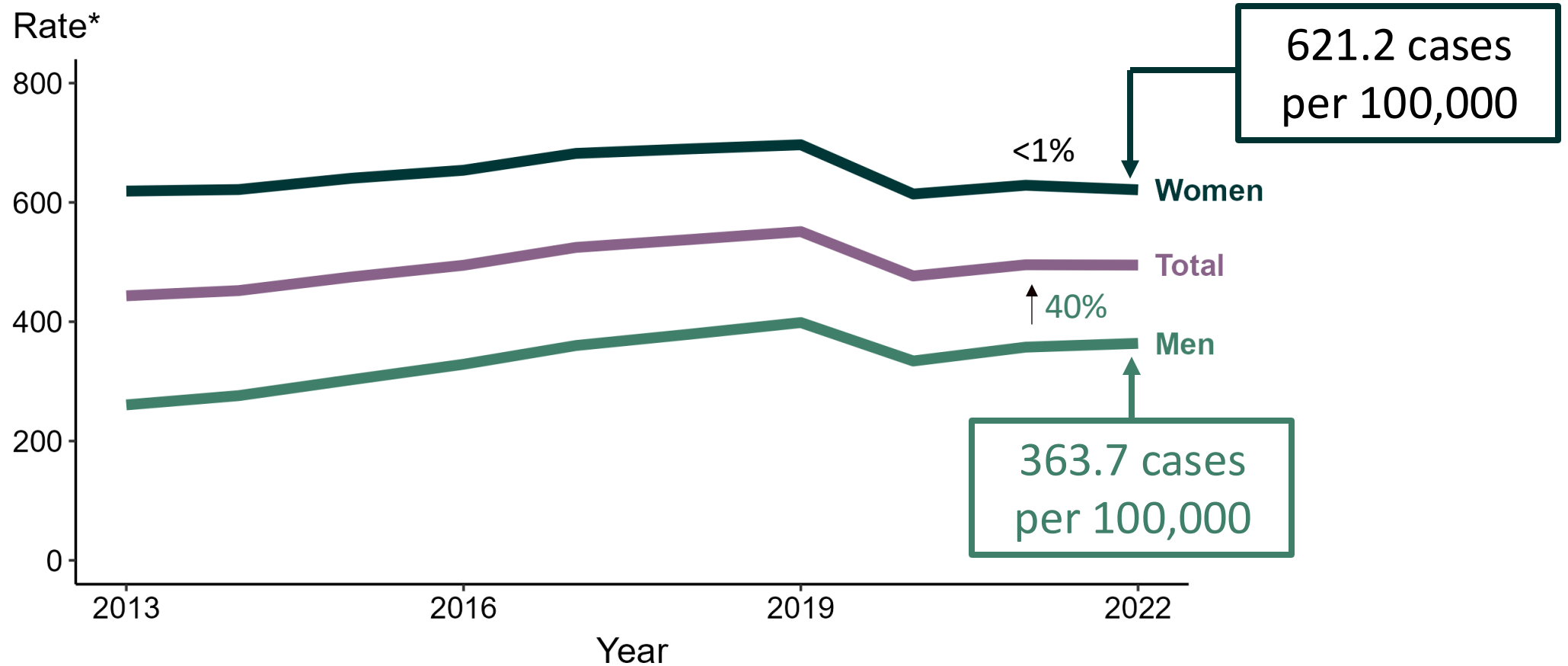
Chlamydia — Rates of Reported Cases by Year, United States, 1984–2022



* Per 100,000



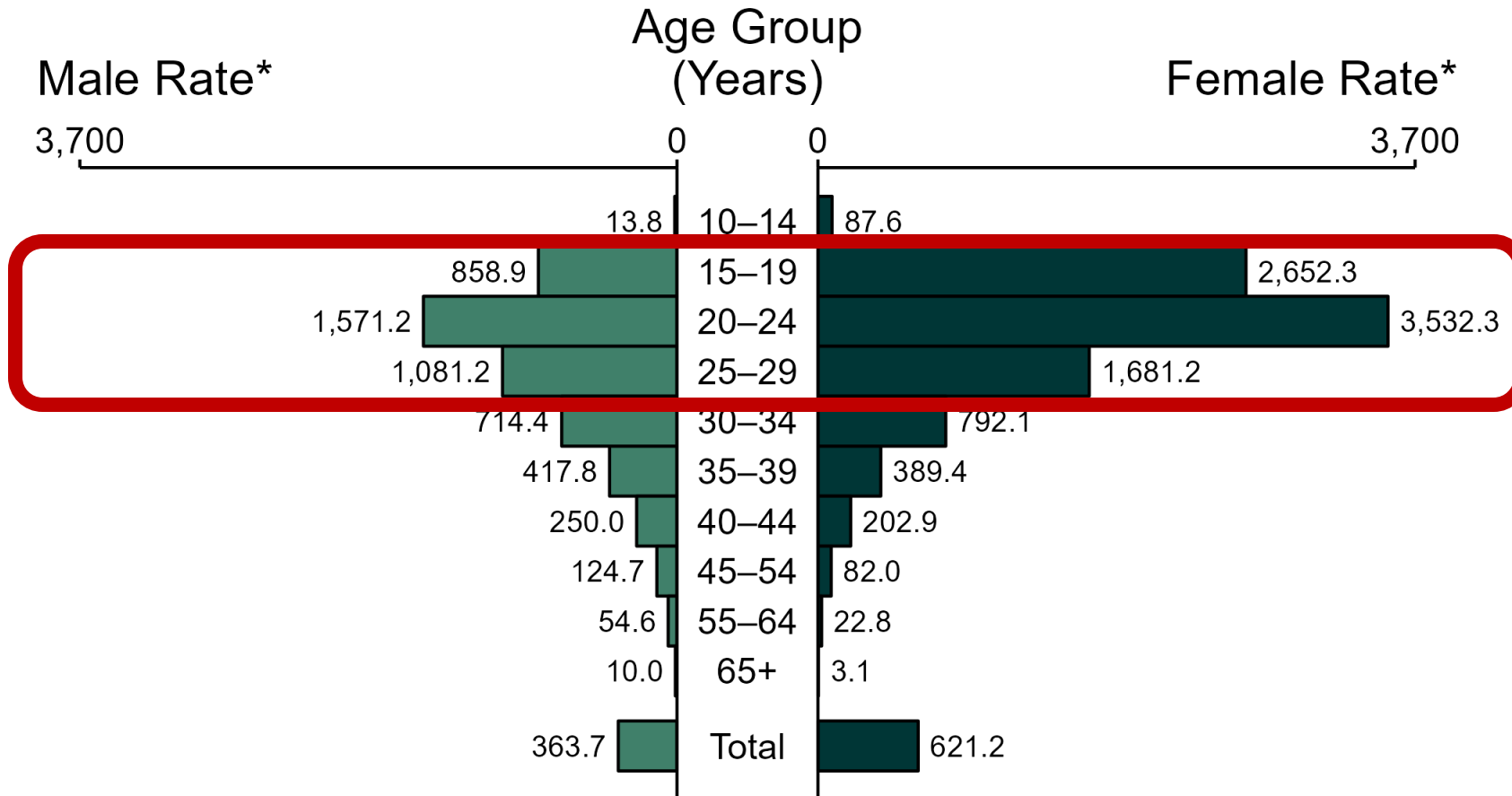
Chlamydia — Rates of Reported Cases by Sex, United States, 2013–2022



* Per 100,000



Chlamydia — Rates of Reported Cases by Age Group and Sex, United States, 2022

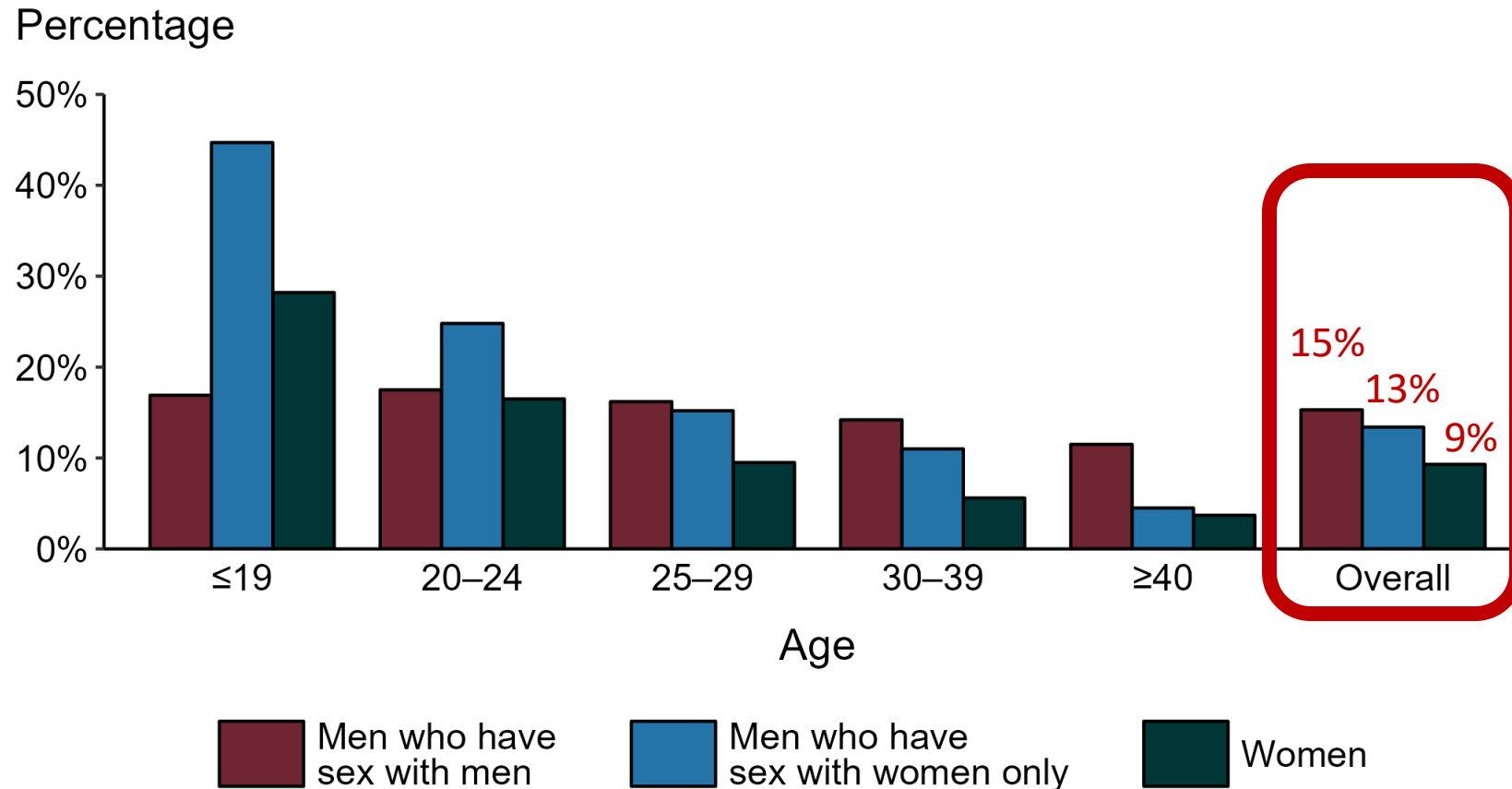


* Per 100,000

NOTE: Total includes cases of all ages, including those with unknown age.



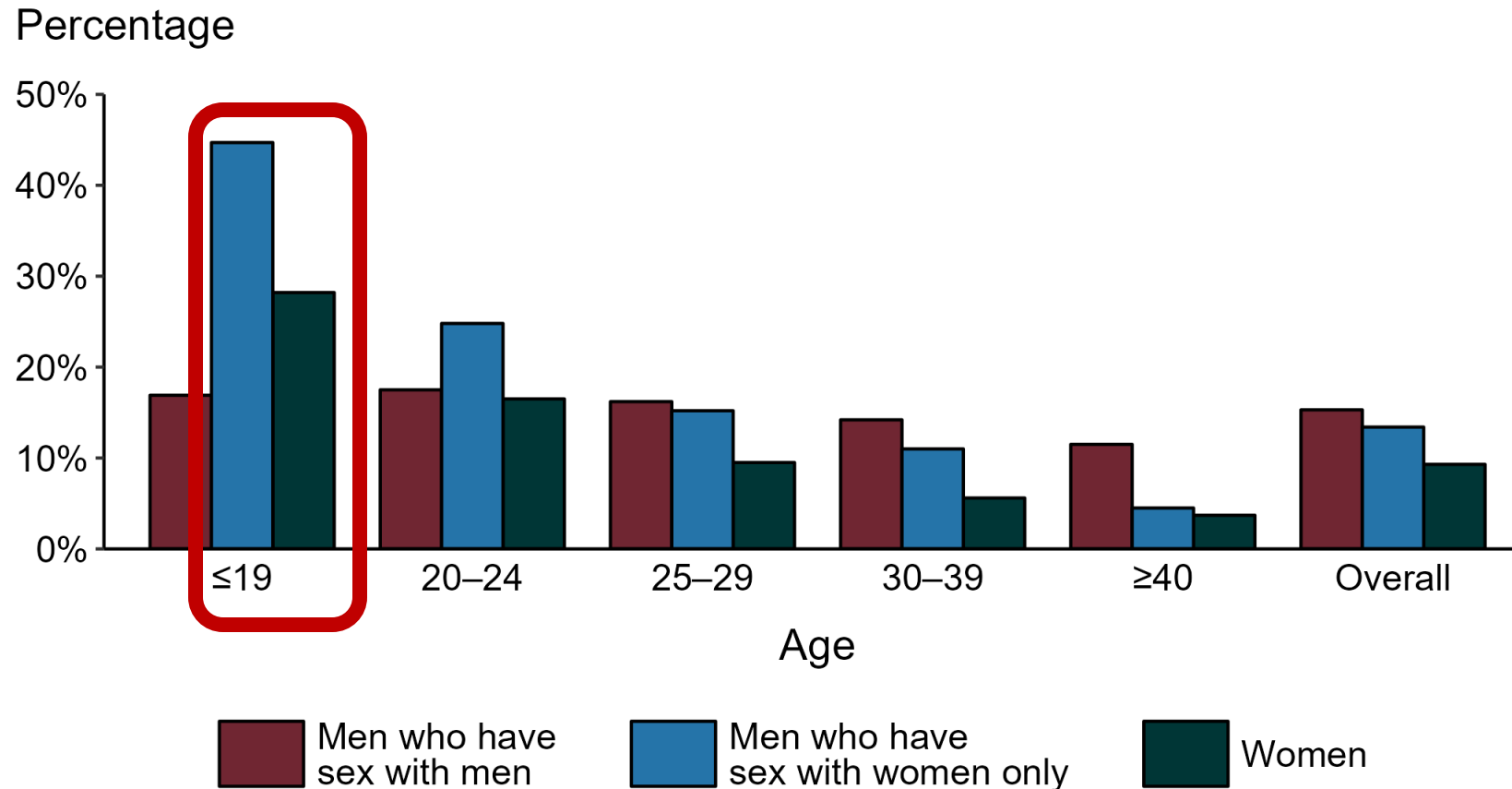
Chlamydia — Proportion of STD Clinic Patients Testing Positive by Age Group, Sex, and Sex of Sex Partners, STD Surveillance Network (SSuN), 2022



NOTE: Results are based on 49,665 unique patients in 10 participating jurisdictions (Baltimore City, California [excluding San Francisco], Columbus, Florida, Indiana, Multnomah County, New York City, Philadelphia, San Francisco, and Washington) with known sex of sex partners attending SSuN STD clinics who were tested ≥ 1 times for chlamydia in 2022.



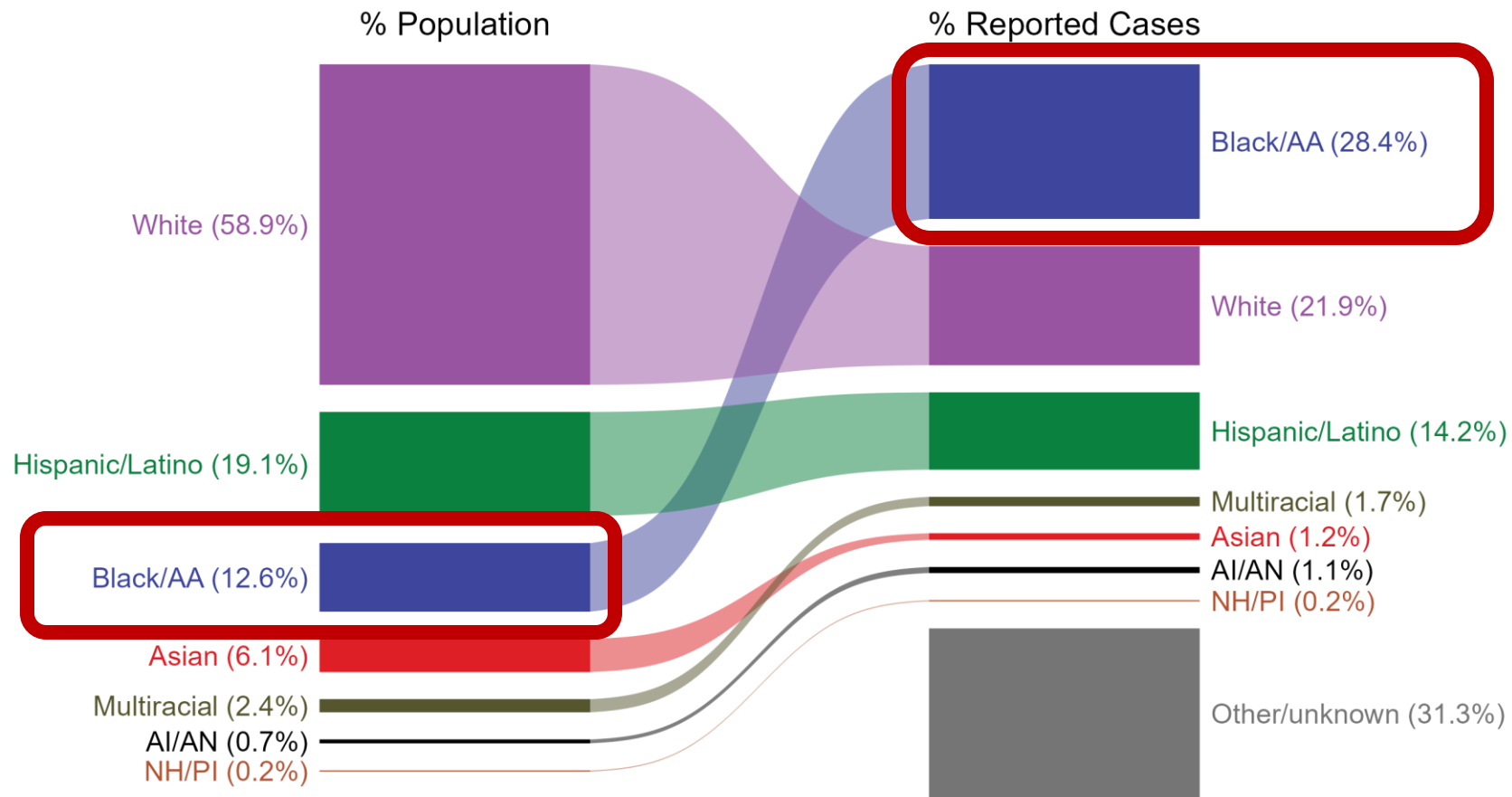
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Chlamydia — Total Population and Reported Cases by Race/Hispanic Ethnicity, United States, 2022



* Per 100,000

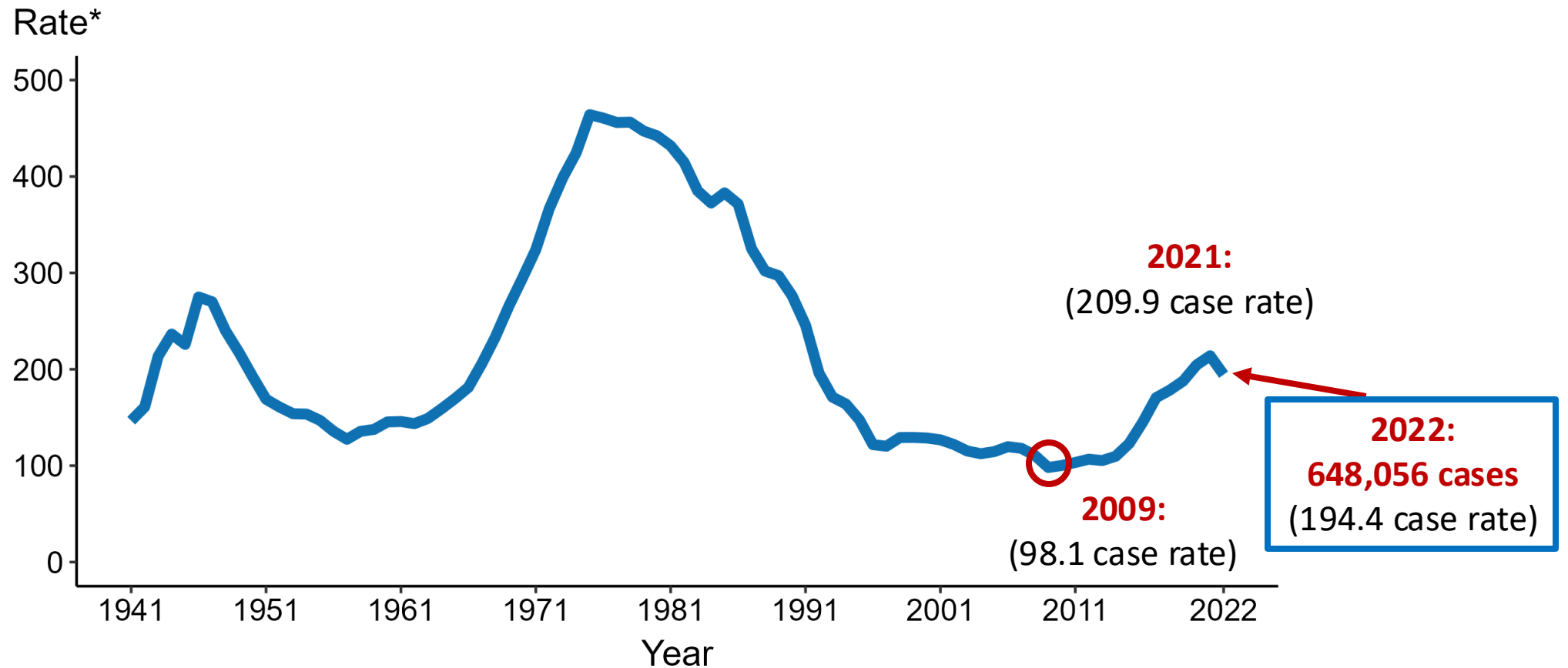
NOTE: In 2022, a total of 515,552 chlamydia cases (31.3%) had missing, unknown, or other race and were not reported to be of Hispanic ethnicity. These cases are included in the “other/unknown” category.

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander



Gonorrhoea

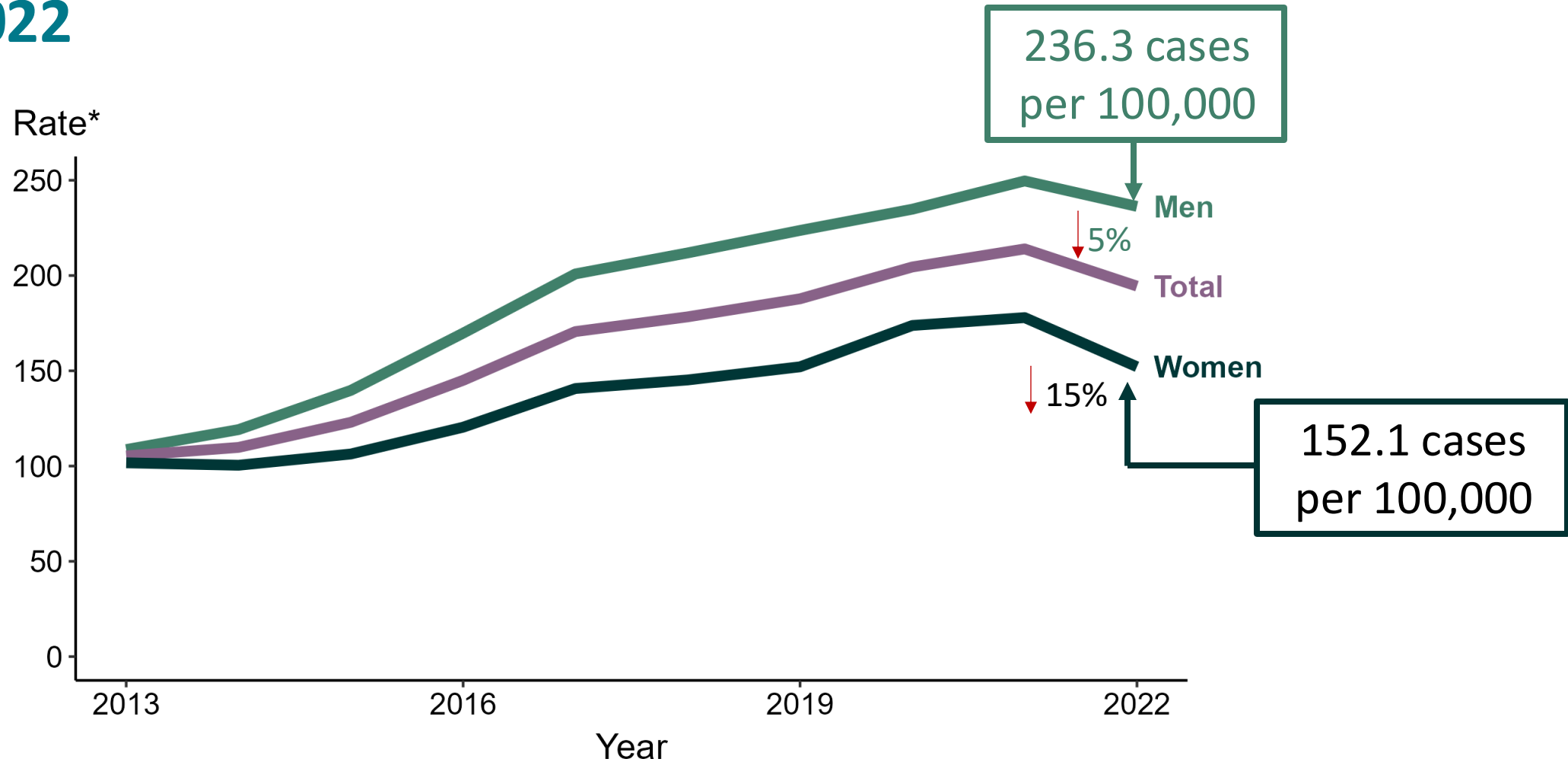
Gonorrhea — Rates of Reported Cases by Year, United States, 1941–2022



* Per 100,000



Gonorrhea — Rates of Reported Cases by Sex, United States, 2013–2022



* Per 100,000

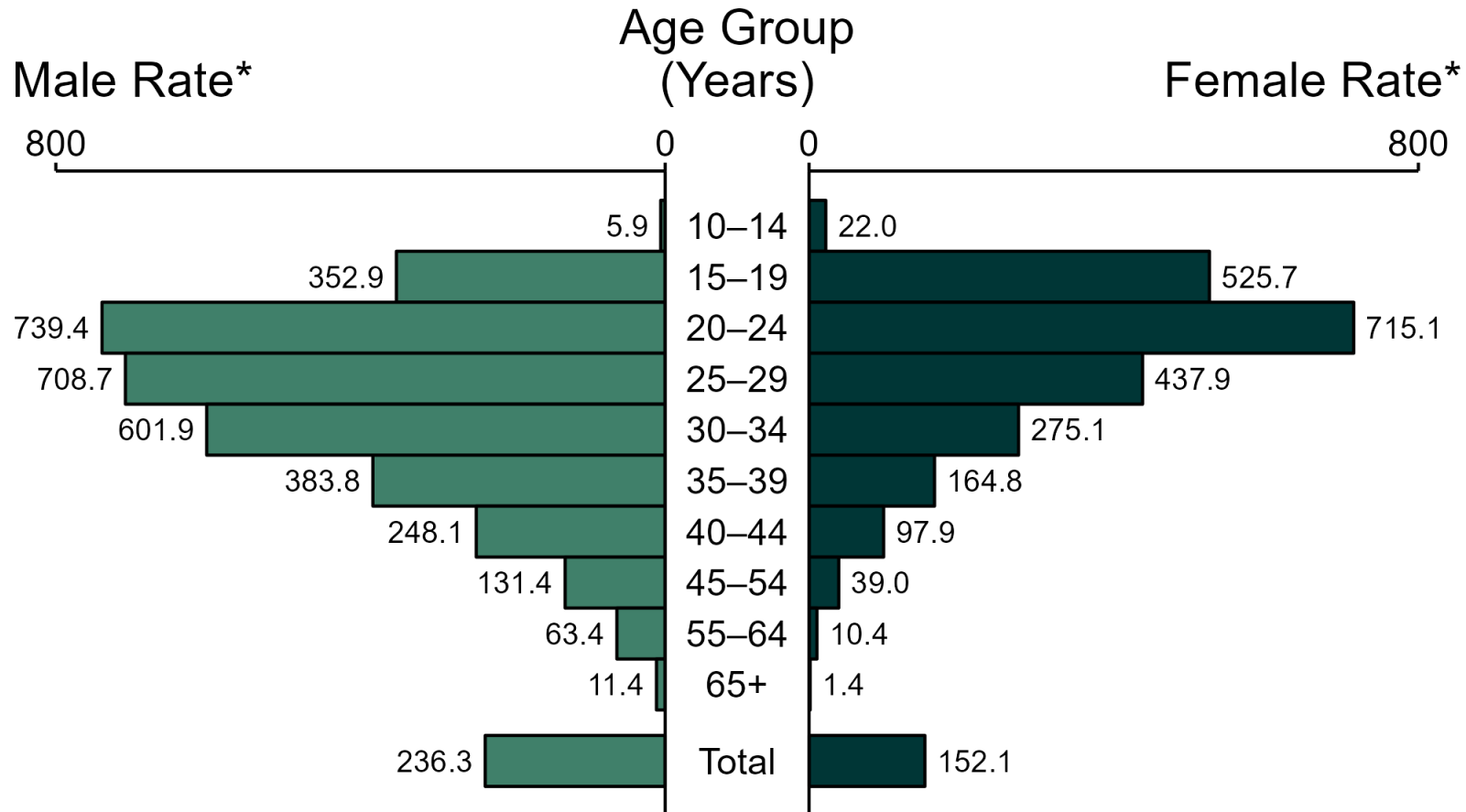


Why Did Gonorrhea Cases Decrease in 2022?

- Single year of data
- Changes in healthcare seeking behavior or access
- Changes in provider screening practices
- True decrease in incidence



Gonorrhea — Rates of Reported Cases by Age Group and Sex, United States, 2022

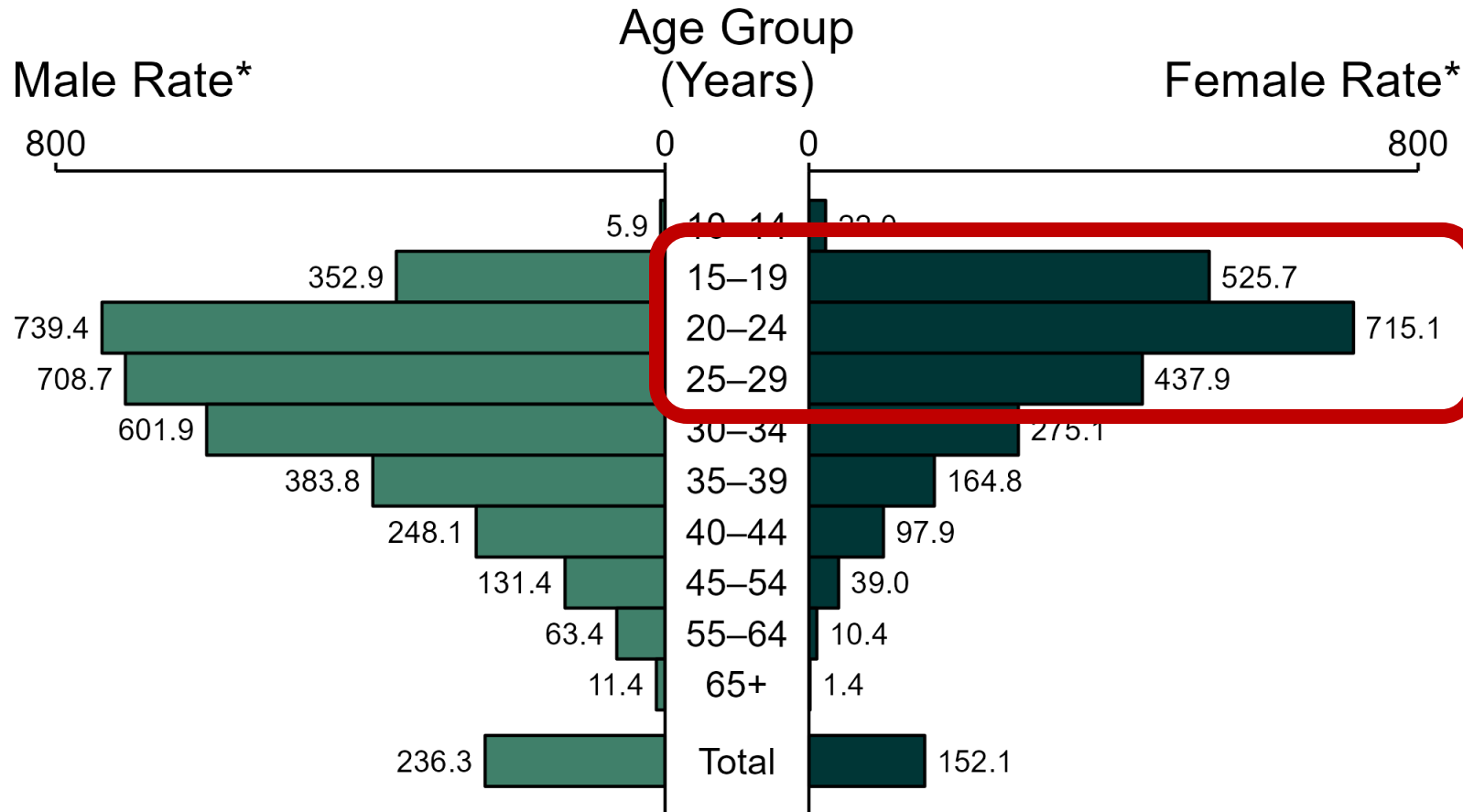


* Per 100,000

NOTE: Total includes cases of all ages, including those with unknown age.



Gonorrhea — Rates of Reported Cases by Age Group and Sex, United States, 2022

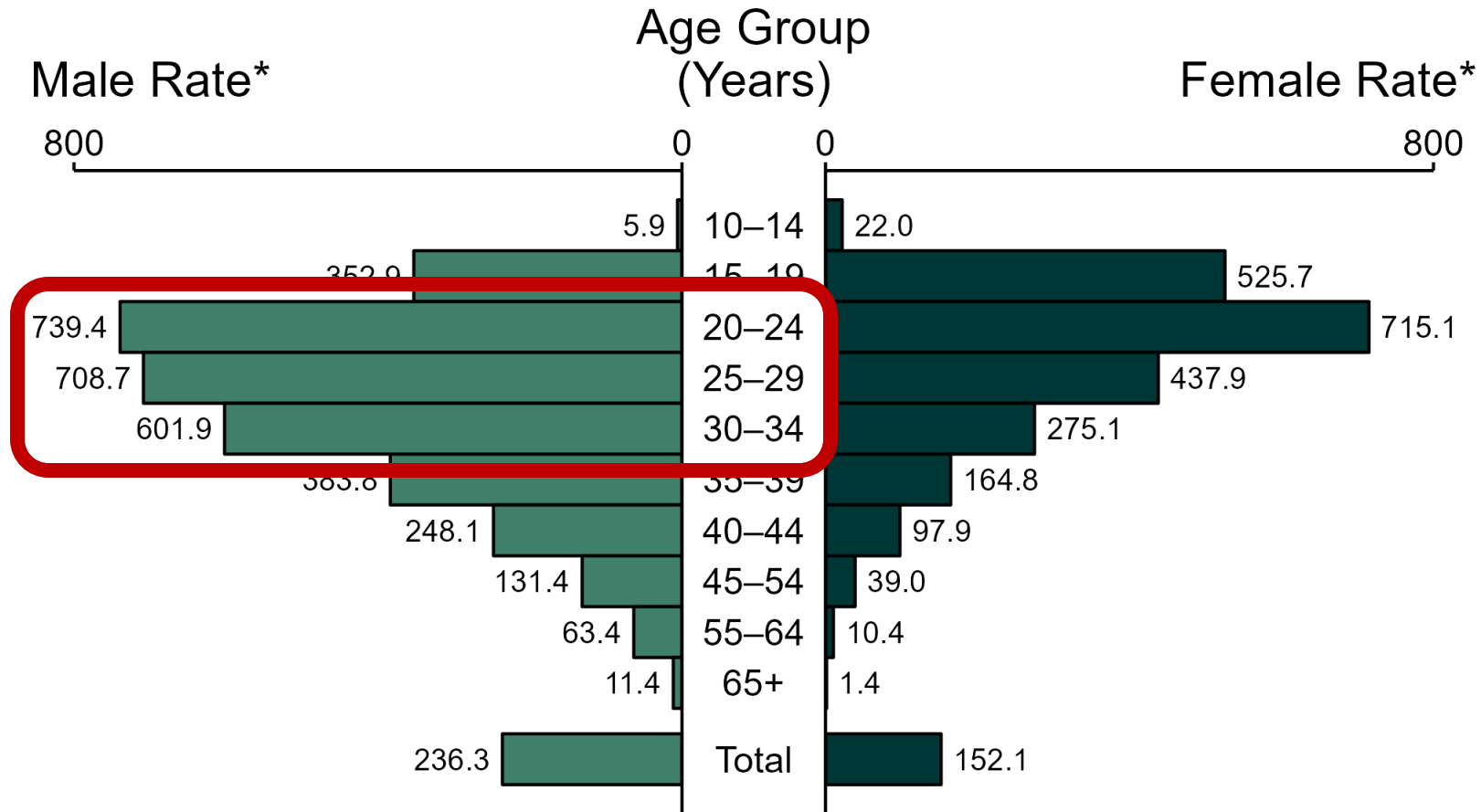


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Gonorrhea — Rates of Reported Cases by Age Group and Sex, United States, 2022

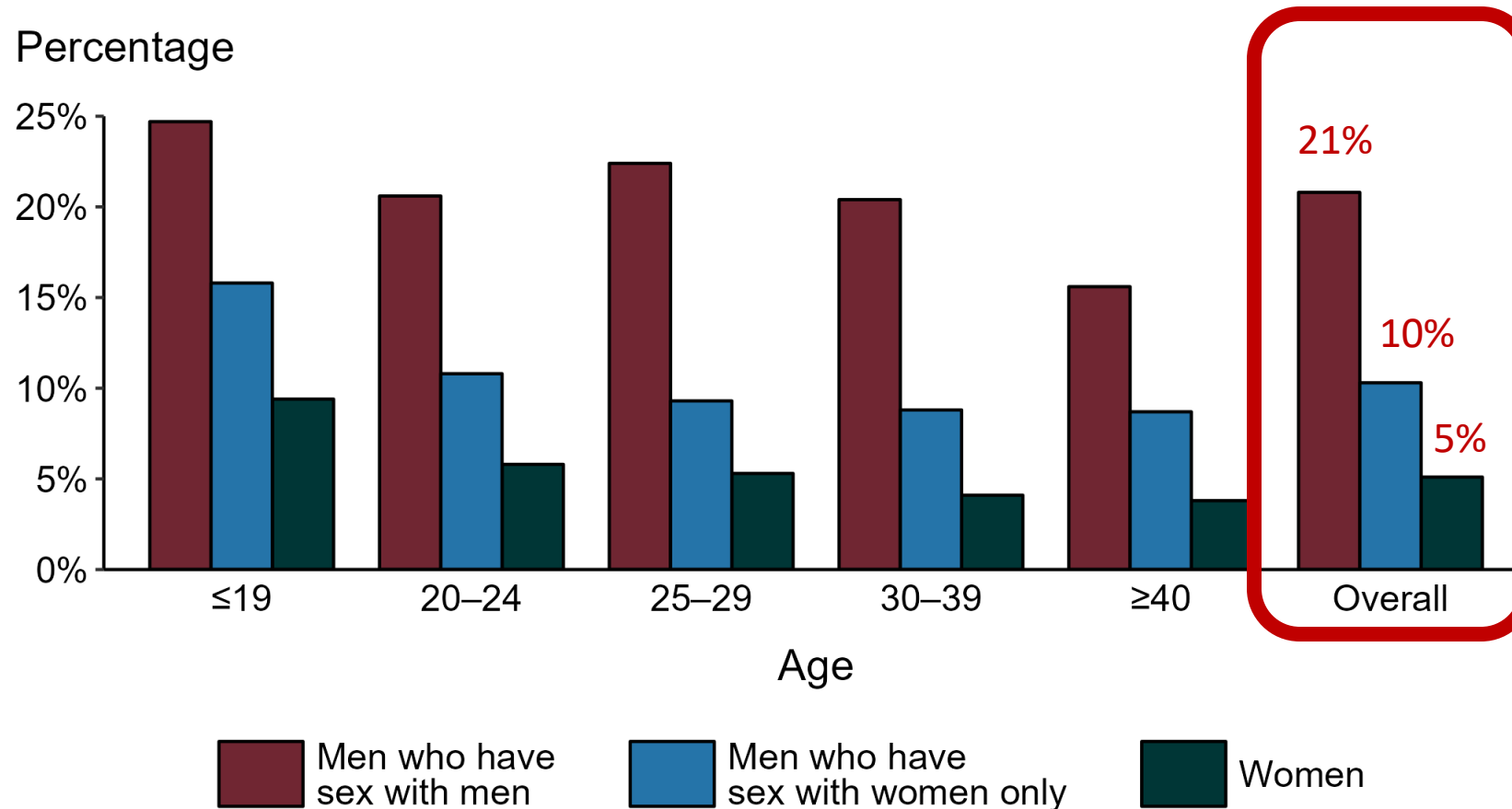


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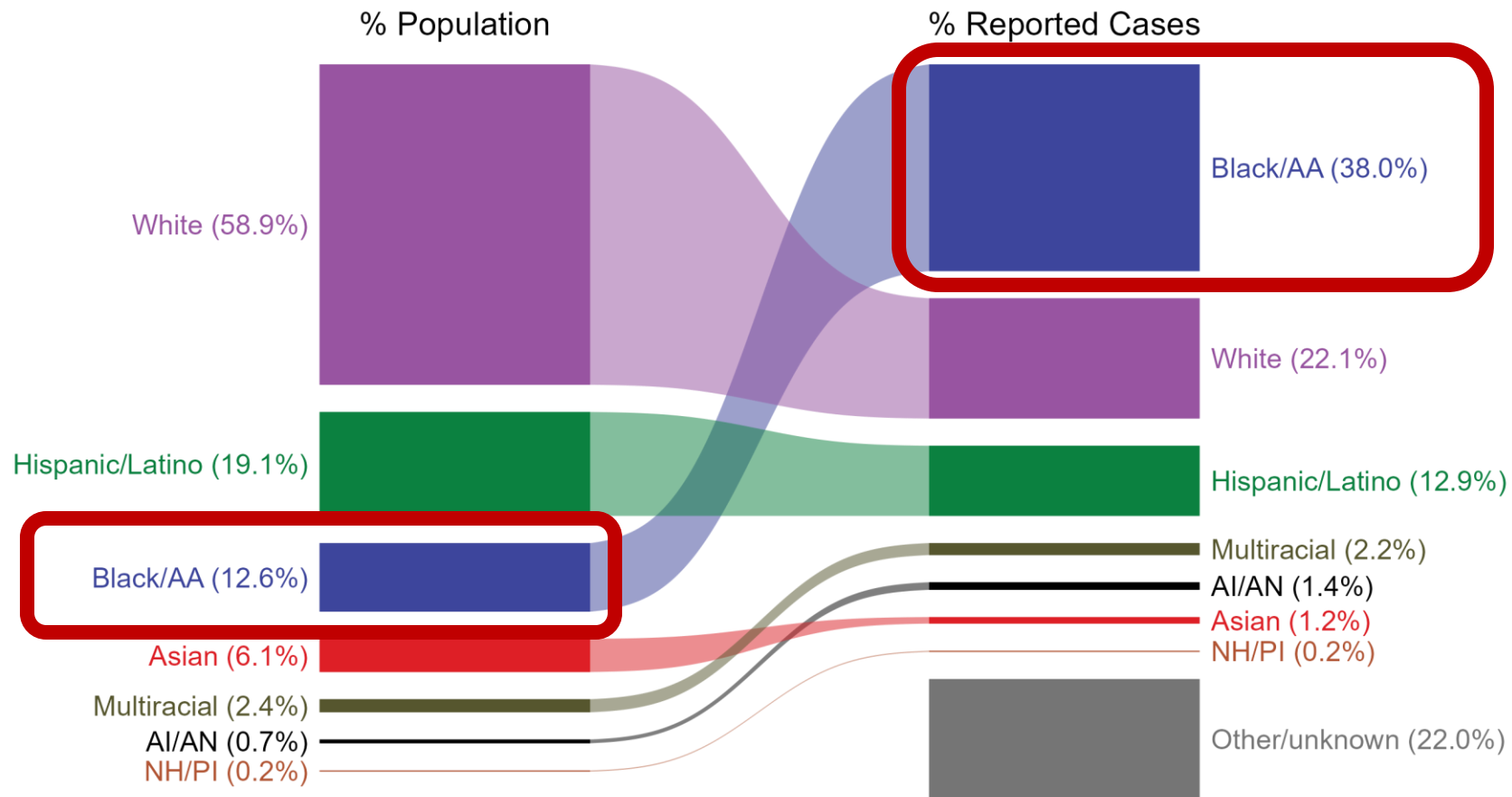
Gonorrhea — Proportion of STD Clinic Patients Testing Positive by Age Group, Sex, and Sex of Sex Partners, STD Surveillance Network (SSuN), 2022



NOTE: Results are based on 49,726 unique patients in 10 participating jurisdictions (Baltimore City, California [excluding San Francisco], Columbus, Florida, Indiana, Multnomah County, New York City, Philadelphia, San Francisco, and Washington) with known sex of sex partners attending SSuN STD clinics who were tested ≥ 1 times for gonorrhea in 2022.



Gonorrhea — Total Population and Reported Cases by Race/Hispanic Ethnicity, United States, 2022



* Per 100,000

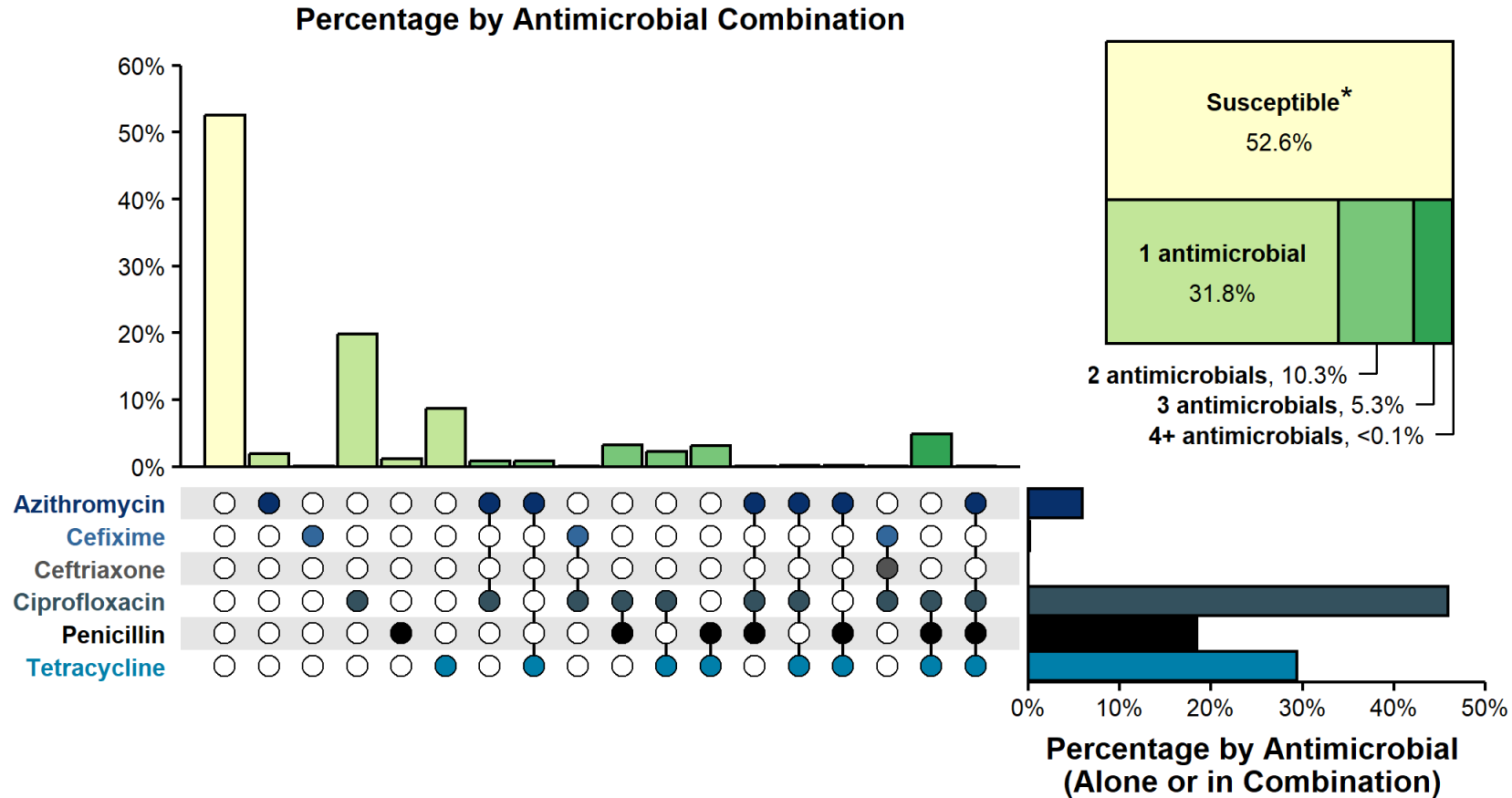
NOTE: In 2022, a total of 142,317 gonorrhea cases (22.0%) had missing, unknown, or other race and were not reported to be of Hispanic ethnicity. These cases are included in the “other/unknown” category.

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander



Neisseria gonorrhoeae:
developed resistance to all drugs used for treatment

Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns of *Neisseria gonorrhoeae* Isolates to Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), 2022

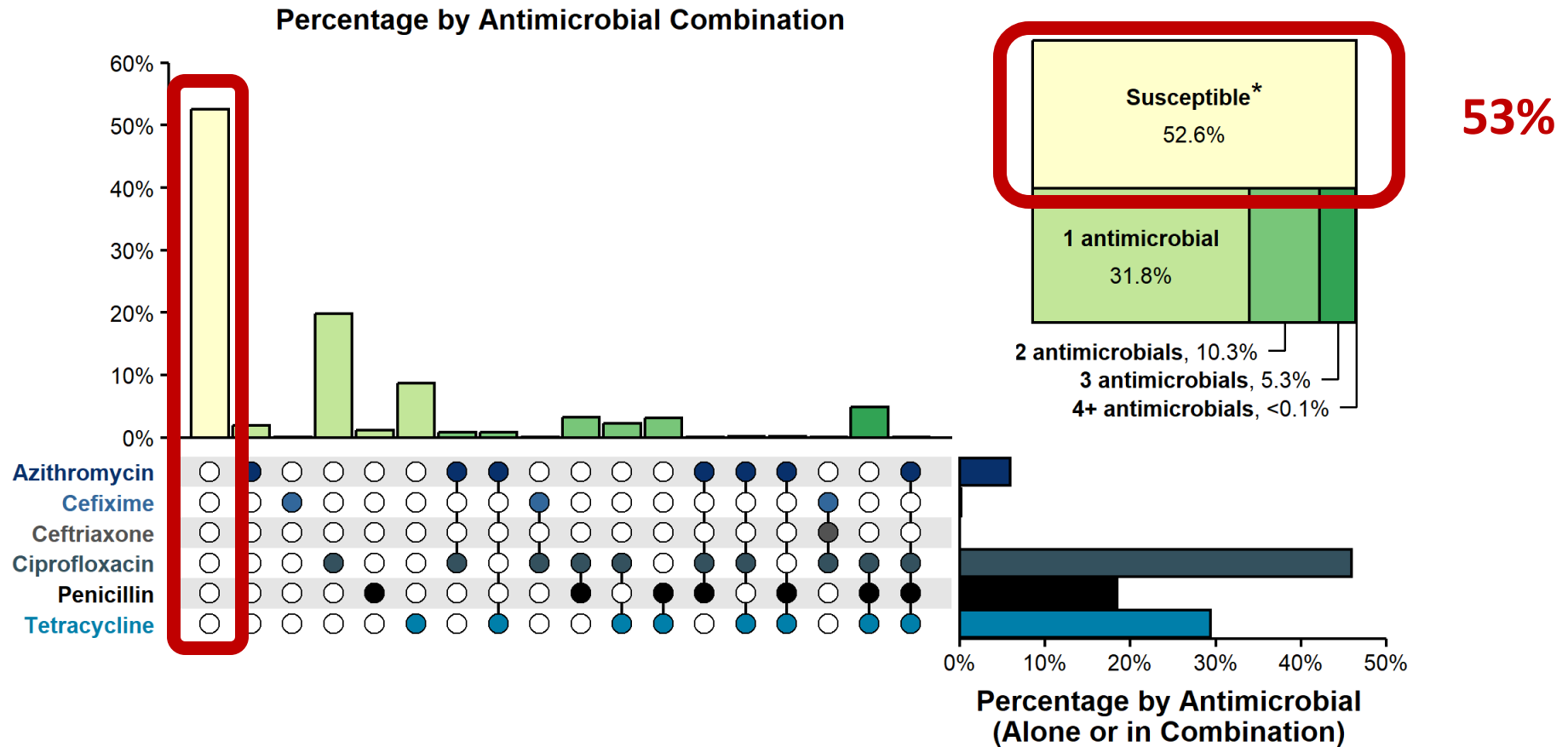


* Susceptible category includes isolates with penicillin (or Beta-lactamase negative), tetracycline, and ciprofloxacin MIC values that are not considered resistant (i.e., susceptible and intermediate resistant) based on Clinical & Laboratory Standards Institute criteria and isolates with ceftriaxone, cefixime, and azithromycin MIC values that are not considered elevated based on GISP "alert" values.

NOTE: Elevated MIC = Ceftriaxone: MIC \geq 0.125 μ g/mL; Cefixime: MIC \geq 0.25 μ g/mL; Azithromycin: MIC \geq 2.0 μ g/mL. Resistance = Tetracycline: MIC \geq 2.0 μ g/mL; Ciprofloxacin: MIC \geq 1.0 μ g/mL; Penicillin: MIC \geq 2.0 μ g/mL or Beta-lactamase positive. In the figure, a filled circle reflects resistance or elevated MIC to a specific antimicrobial; only antimicrobial combinations with non-zero percentages are shown.



Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns of *Neisseria gonorrhoeae* Isolates to Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), 2022

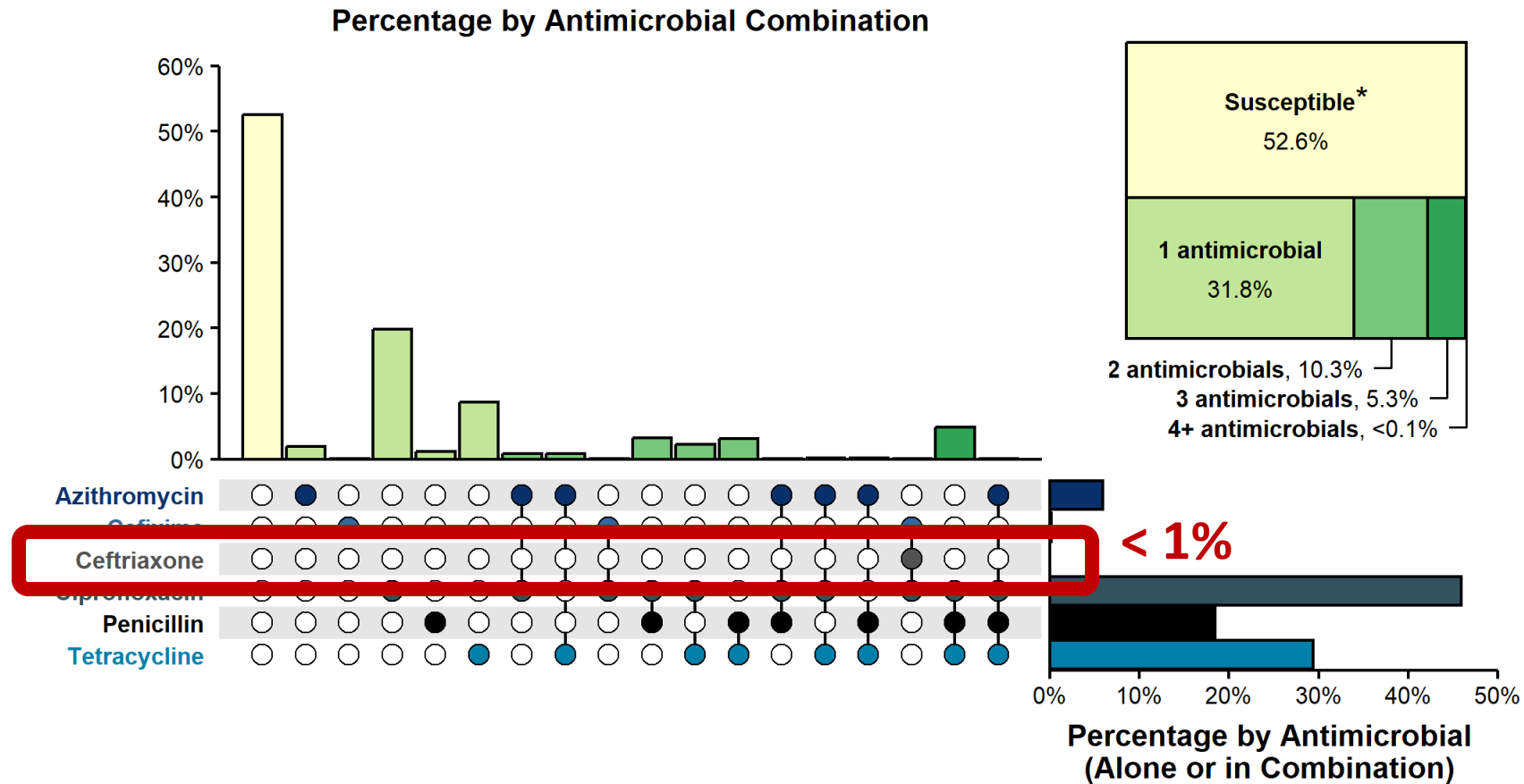


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Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns of *Neisseria gonorrhoeae* Isolates to Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), 2022



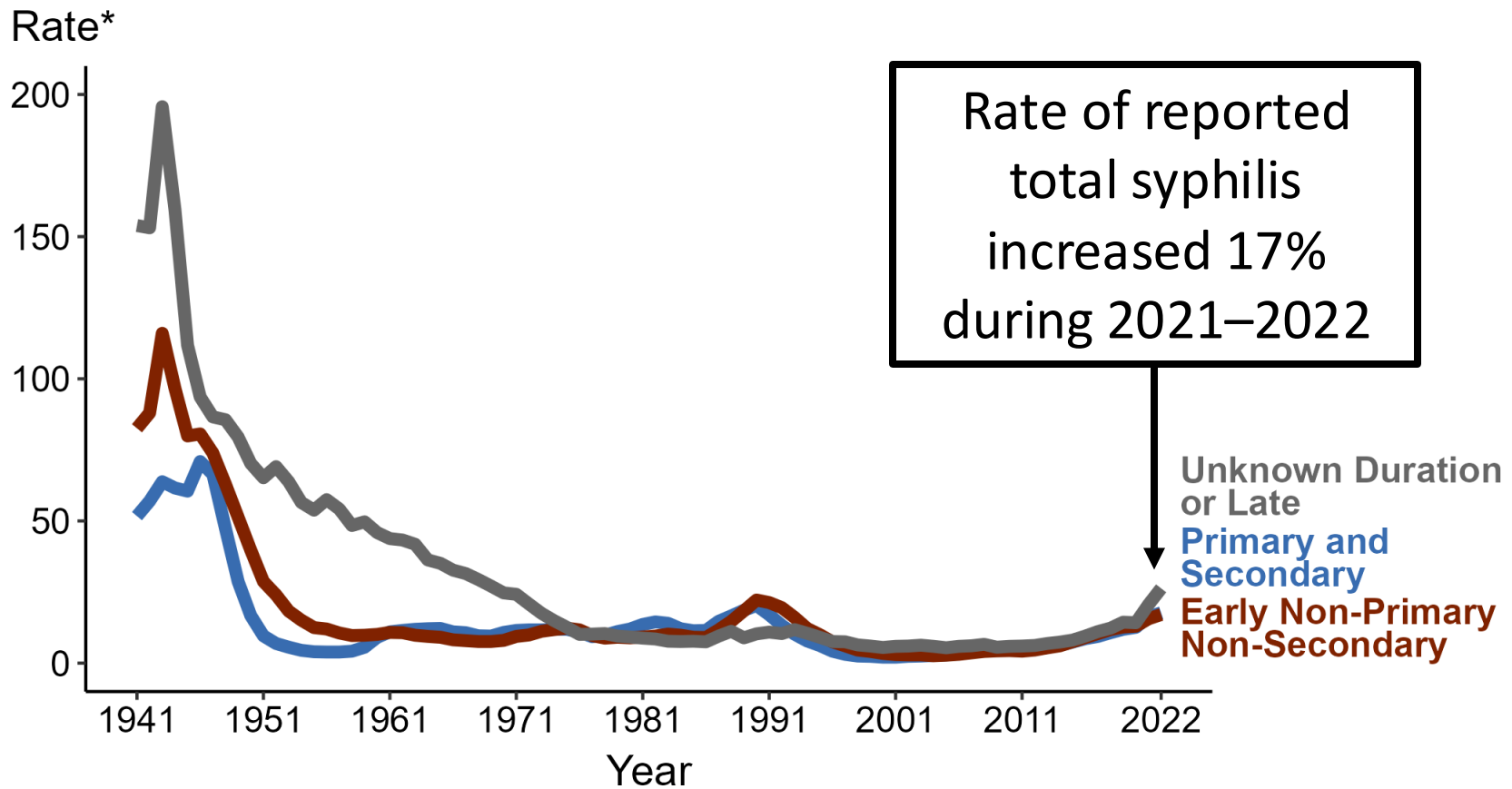
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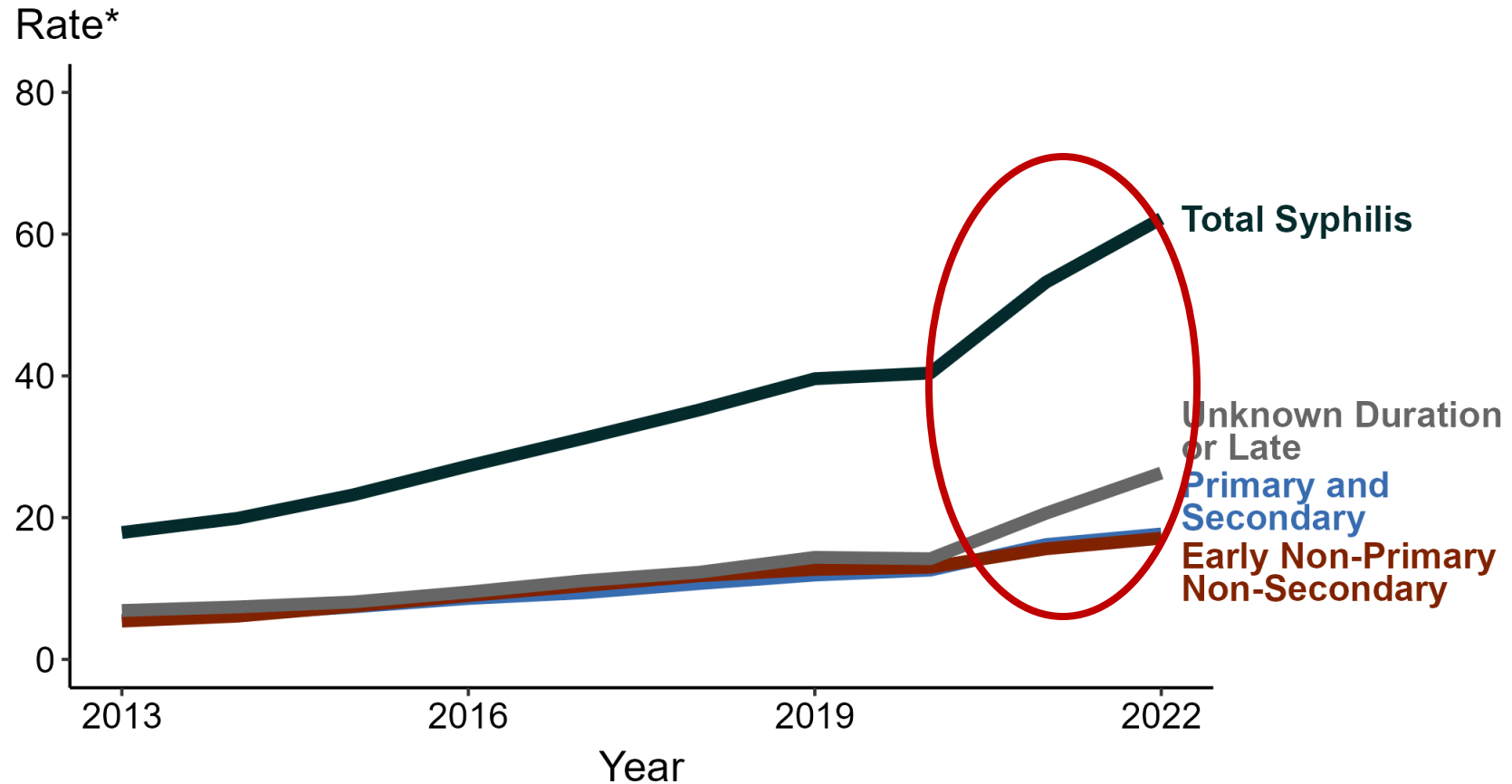
Syphilis

Syphilis — Rates of Reported Cases by Stage of Infection, United States, 1941–2022



* Per 100,000

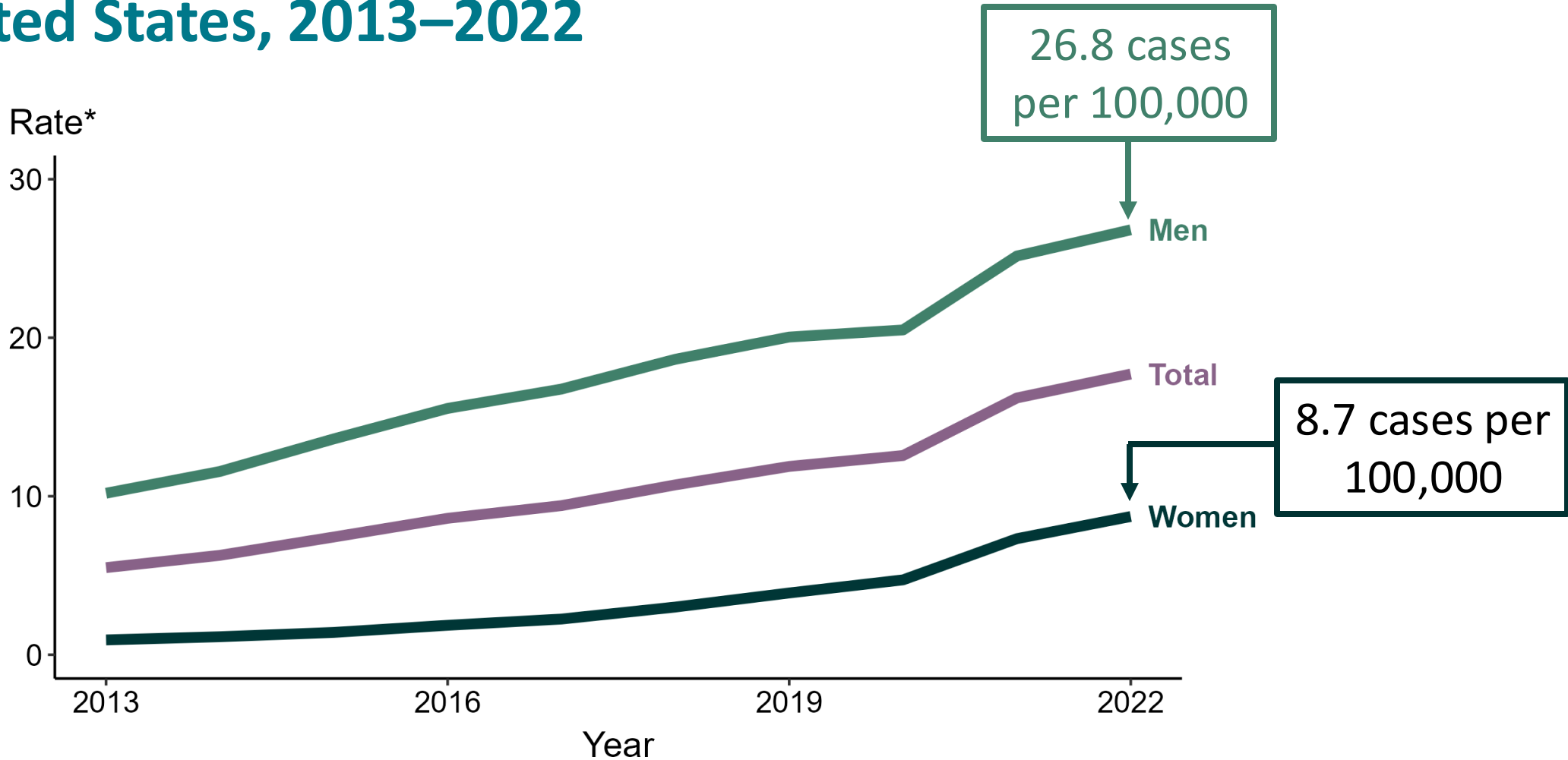
Syphilis — Rates of Reported Cases by Stage of Infection, United States, 2013–2022



* Per 100,000

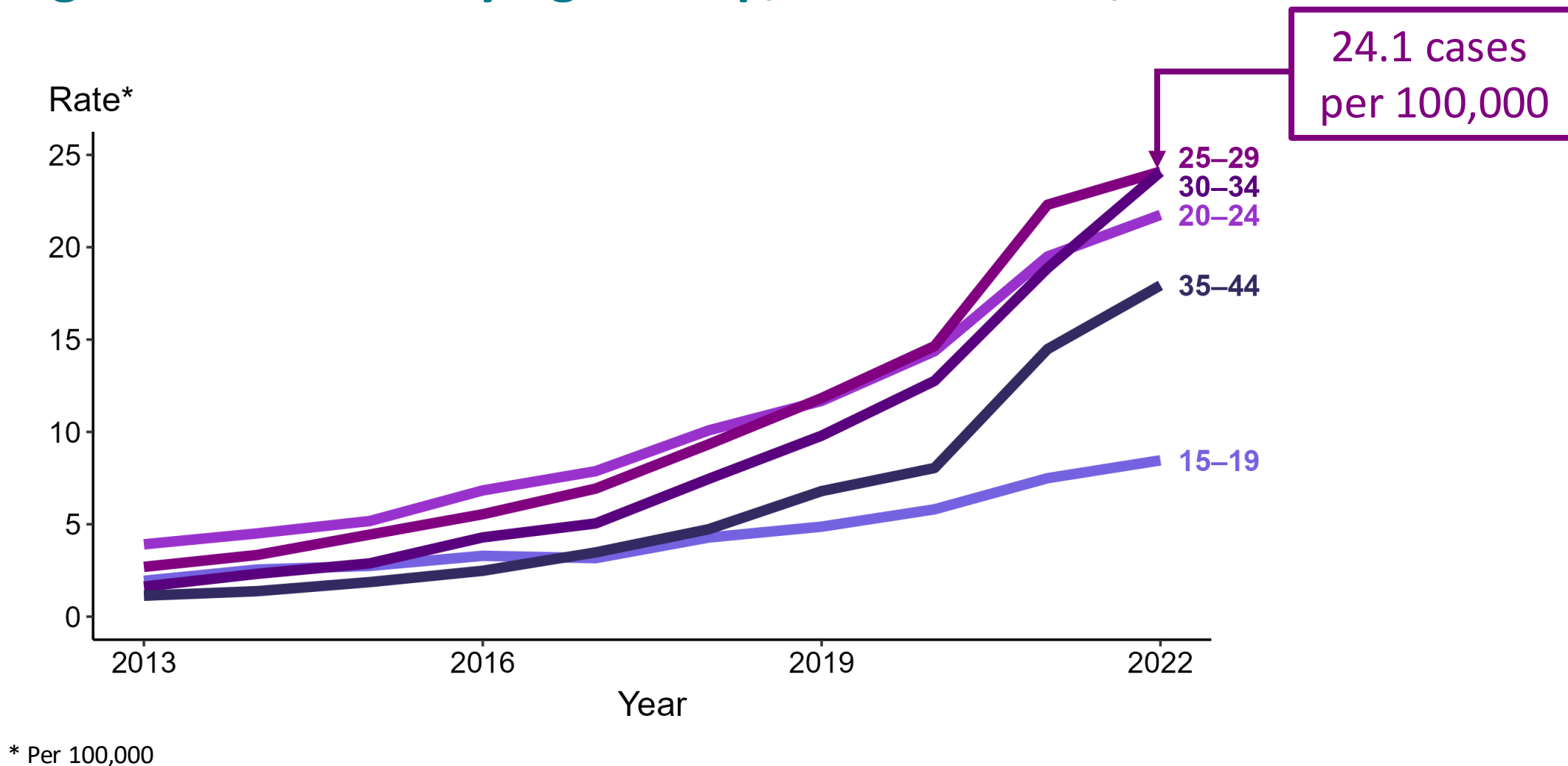
NOTE: Includes all stages of syphilis and congenital syphilis

Primary and Secondary Syphilis — Rates of Reported Cases by Sex, United States, 2013–2022

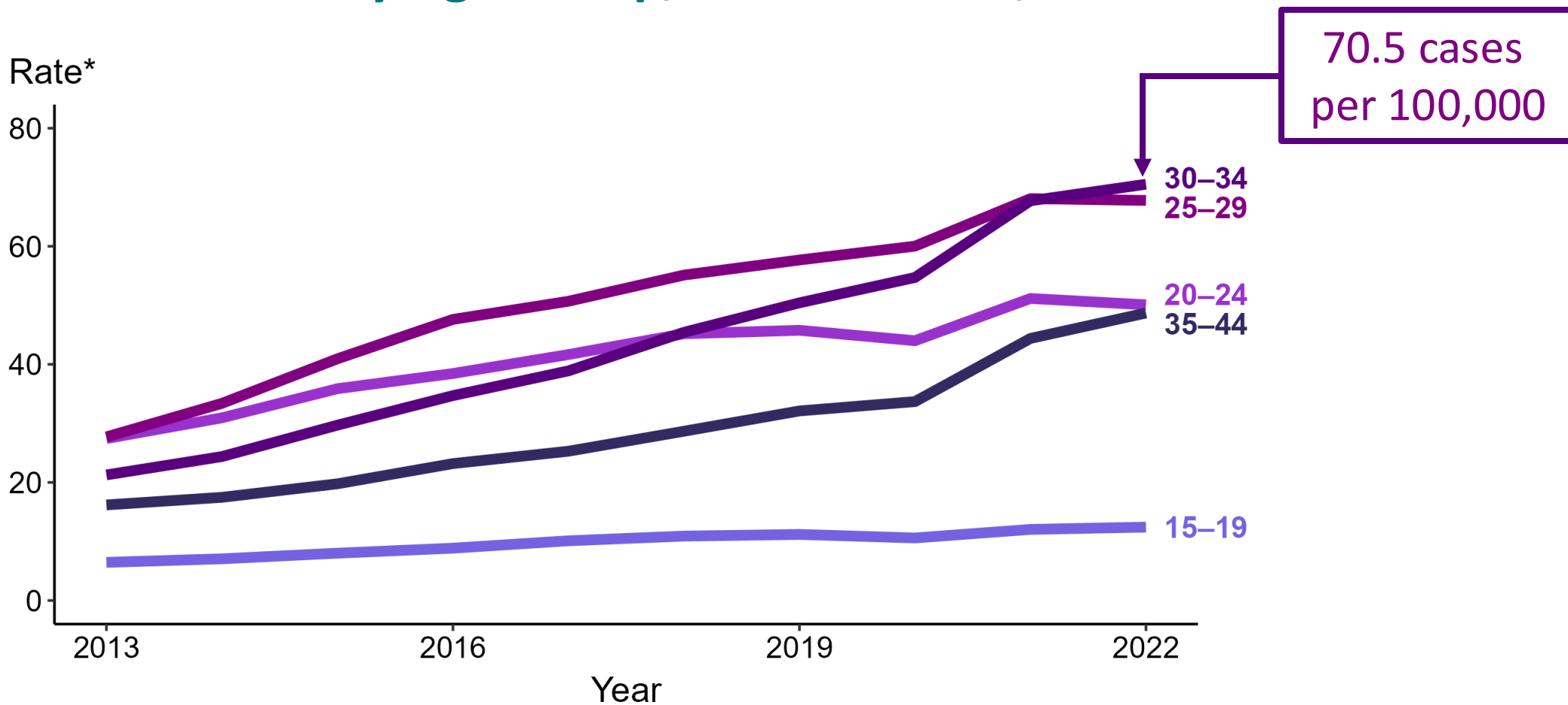


* Per 100,000

Primary and Secondary Syphilis — Rates of Reported Cases Among Women Aged 15–44 Years by Age Group, United States, 2013–2022

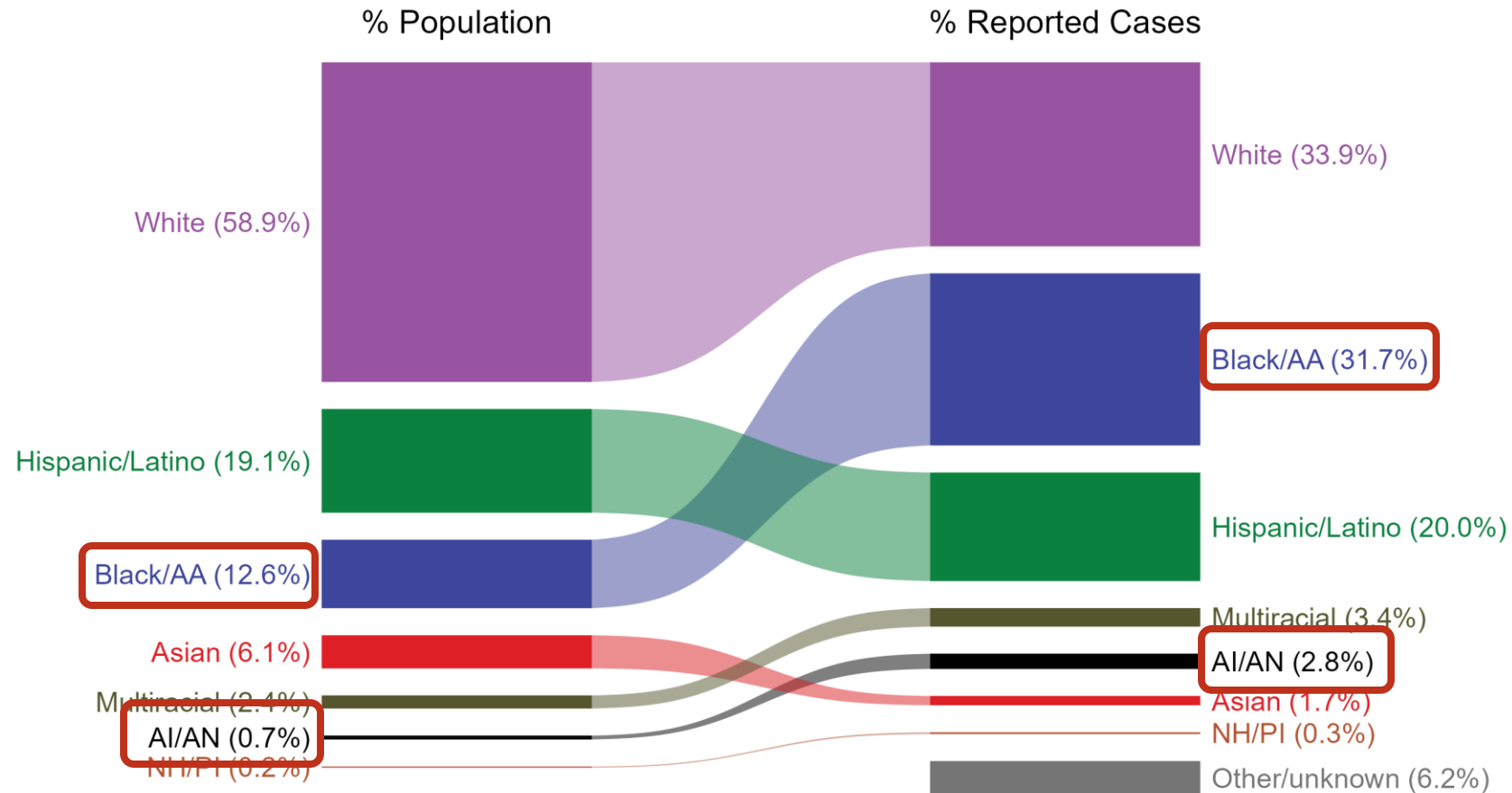


Primary and Secondary Syphilis — Rates of Reported Cases Among Men Aged 15–44 Years by Age Group, United States, 2013–2022



* Per 100,000

Primary and Secondary Syphilis — Total Population and Reported Cases by Race/Hispanic Ethnicity, United States, 2022



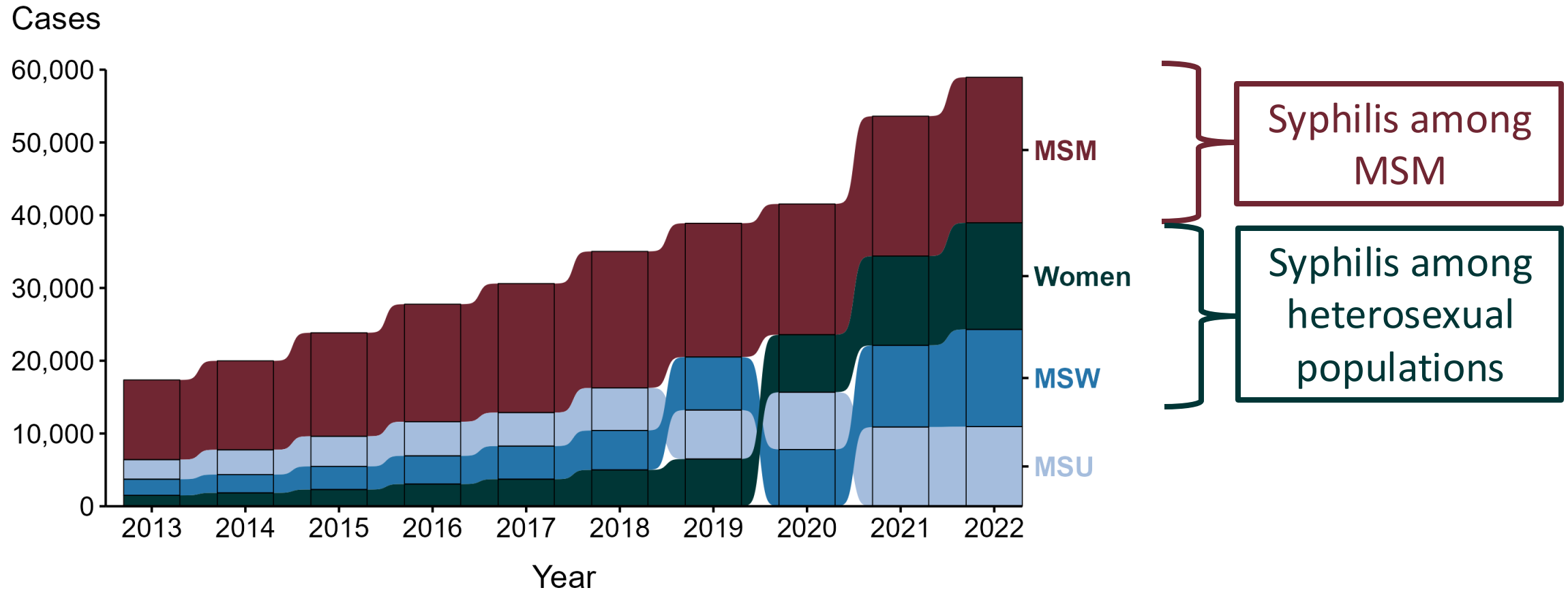
* Per 100,000

NOTE: In 2022, a total of 3,686 primary and secondary (P&S) syphilis cases (6.2%) had missing, unknown, or other race and were not reported to be of Hispanic ethnicity. These cases are included in the “other/unknown” category.

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

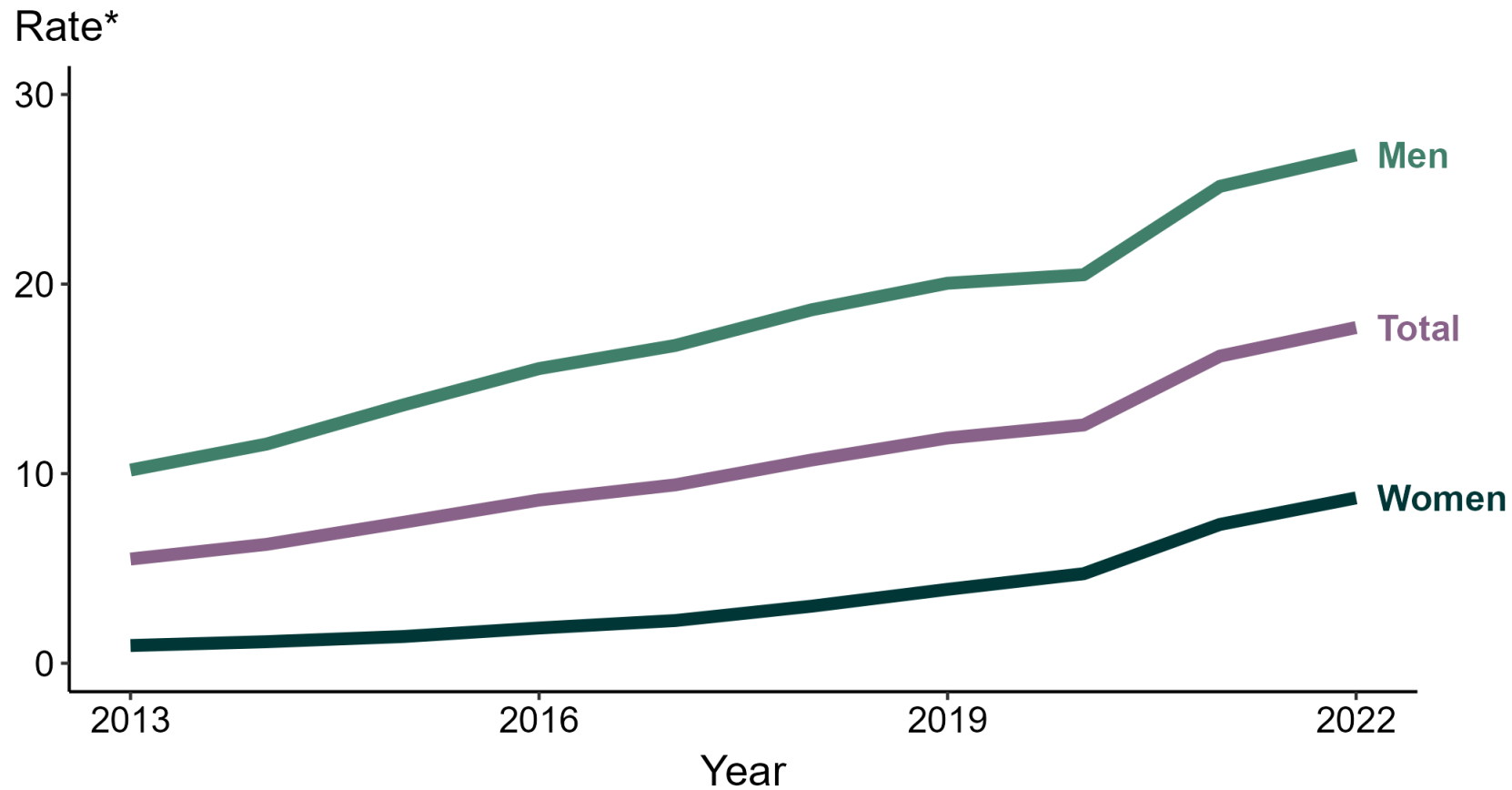


Primary and Secondary Syphilis — Reported Cases by Sex and Sex of Sex Partners, United States, 2013–2022



ACRONYMS: MSM = Men who have sex with men; MSU = Men with unknown sex of sex partners; MSW = Men who have sex with women only

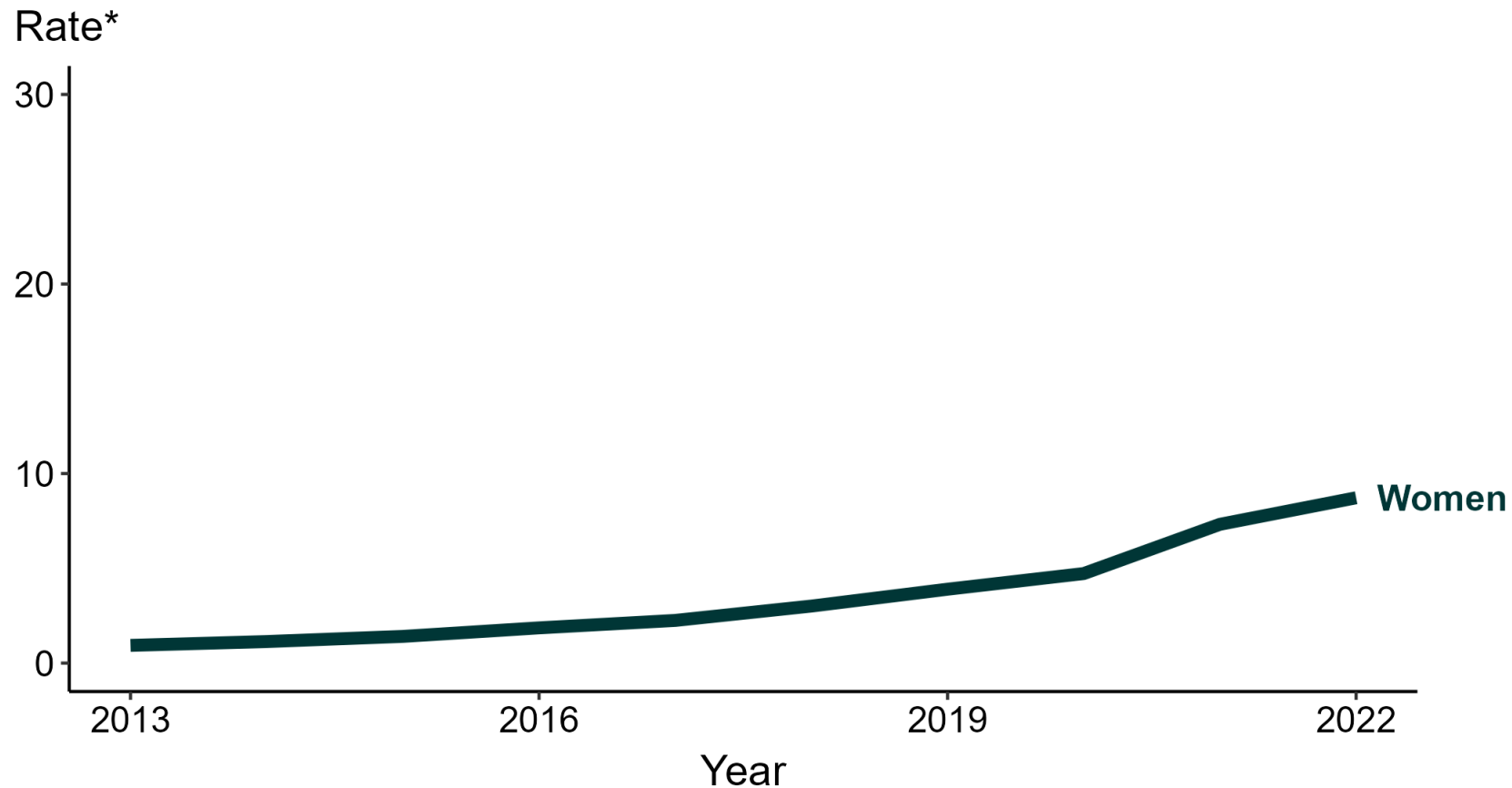
Primary and Secondary Syphilis — Rates of Reported Cases by Sex, United States, 2013–2022



* Per 100,000



Primary and Secondary Syphilis — Rates of Reported Cases by Sex, United States, 2013–2022



Over ten years,
the primary and
secondary syphilis
**rate among
women
increased
867%.**

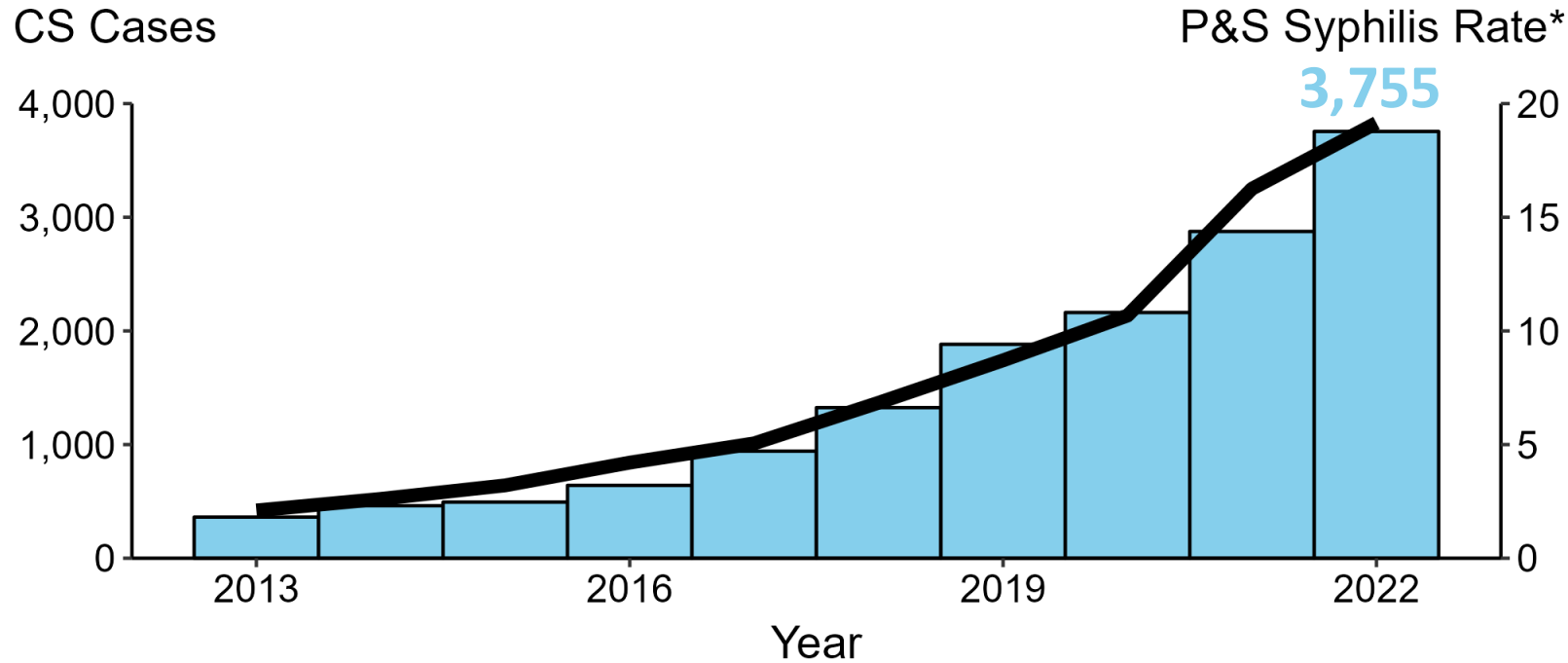
* Per 100,000



Syphilis:

Congenital Syphilis

Congenital Syphilis — Reported Cases by Year of Birth and Rates of Reported Cases of Primary and Secondary Syphilis Among Women Aged 15–44 Years, United States, 2013–2022



↑ **31%** since 2021

↑ **937%** since 2013

CS cases
 Female (15–44 years) P&S syphilis rate*

* Per 100,000

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



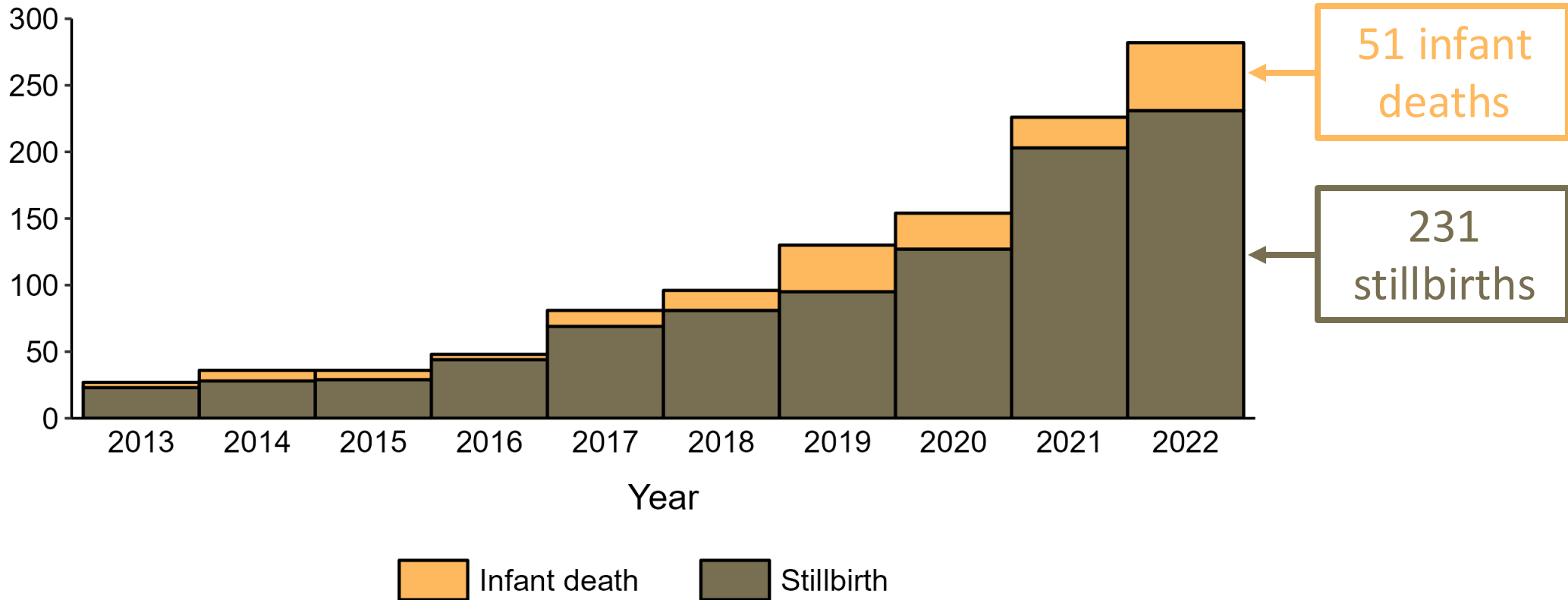
Syphilis During Pregnancy Is Associated With:

- Miscarriage
- Stillbirth
- Preterm delivery
- Perinatal death
- Congenital infection



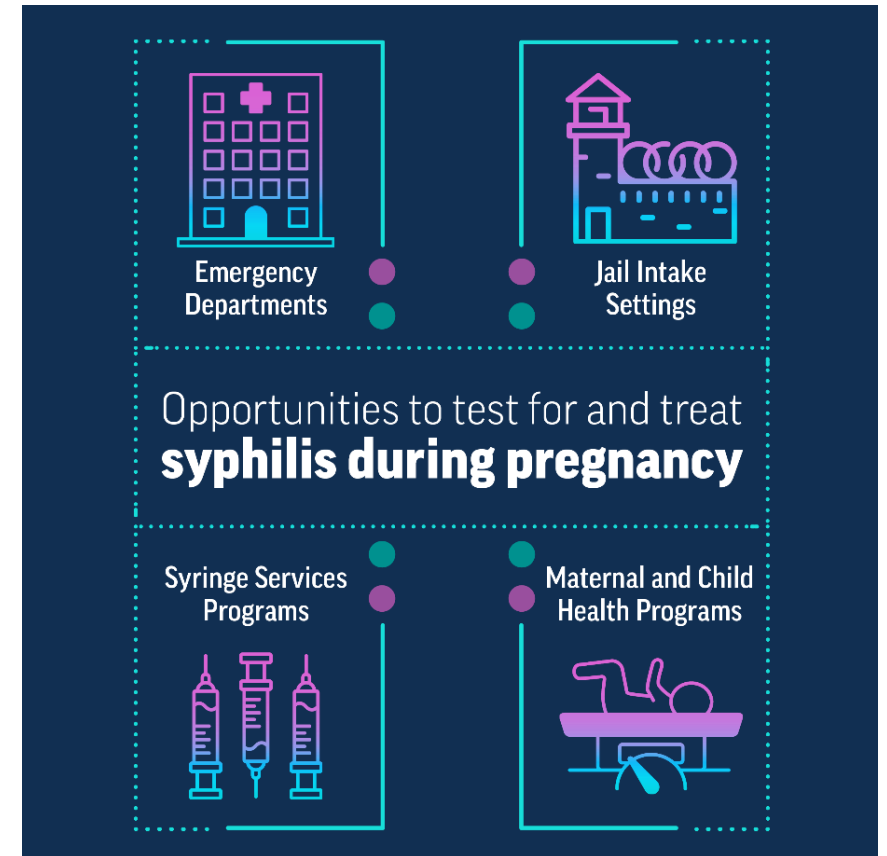
Congenital Syphilis — Reported Stillbirths and Infant Deaths, United States, 2013–2022

Deaths/Stillbirths



Congenital Syphilis Can Be Prevented

- Prior to pregnancy
 - Treat infected persons of reproductive capacity
- During pregnancy
 - Screen
 - Diagnose
 - Treat infected pregnant persons



****Treatment of syphilis in pregnancy can treat fetal infection and prevent congenital syphilis****

Screening & Treatment

Chlamydia and Gonorrhea: Screening & Treatment

Screening Recommendations: Chlamydia & Gonorrhea



Screening Recommendations: Chlamydia & Gonorrhea

Women

Annually under 25 years of age, and those **25 years and older (if at increased risk)**

Rectal testing (chlamydia) and **pharyngeal and rectal testing (gonorrhea)**
based on reported sexual behaviors and exposure

Screening Recommendations: Chlamydia & Gonorrhea

Women

Annually under 25 years of age, and those **25 years and older (if at increased risk)**

Rectal testing (chlamydia) and **pharyngeal and rectal testing (gonorrhea)**

based on reported sexual behaviors and exposure

Pregnant Persons

At initial visit under 25 years of age, and those **25 years and older (if at increased risk)**

During the 3rd trimester for persons under 25 years of age or at increased risk

Test of cure 4 weeks after treatment (**chlamydia**)

Screening Recommendations: Chlamydia & Gonorrhea

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Annually under 25 years of age, and those **25 years and older (if at increased risk)**

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During the 3rd trimester for persons under 25 years of age or at increased risk

Test of cure 4 weeks after treatment (**chlamydia**)

Men Who Have Sex with Women (MSW)

Insufficient evidence for screening

Can be considered in high prevalence clinical settings
(adolescent clinics, correctional facilities, STI/sexual health clinic)

Screening Recommendations: Chlamydia & Gonorrhea

Women

Annually under 25 years of age, and those **25 years and older (if at increased risk)**

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Test of cure 4 weeks after treatment (**chlamydia**)

Men Who Have Sex with Women (MSW)

Insufficient evidence for screening

Can be considered in high prevalence clinical settings
(adolescent clinics, correctional facilities, STI/sexual health clinic)

Men Who Have Sex With Men (MSM)

At least annually at sites of contact

(chlamydia: urethra, rectum; gonorrhea: urethra, pharynx, rectum) regardless of condom use

Every 3 to 6 months if at increased risk

(i.e., MSM on PrEP, with HIV infection, or if they or their sex partners have multiple partners)

Screening Recommendations: Chlamydia & Gonorrhea

Women

Annually under 25 years of age, and those **25 years and older (if at increased risk)**

Rectal testing (chlamydia) and **pharyngeal and rectal testing (gonorrhea)**
based on reported sexual behaviors and exposure

Pregnant Persons

At initial visit under 25 years of age, and those **25 years and older (if at increased risk)**

During the 3rd trimester for persons under 25 years of age or at increased risk

Test of cure 4 weeks after treatment (**chlamydia**)

Men Who Have Sex with Women (MSW)

Insufficient evidence for screening

Can be considered in high prevalence clinical settings
(adolescent clinics, correctional facilities, STI/sexual health clinic)

Men Who Have Sex With Men (MSM)

At least annually at sites of contact

(chlamydia: urethra, rectum; gonorrhea: urethra, pharynx, rectum) regardless of condom use

Every 3 to 6 months if at increased risk

(i.e., MSM on PrEP, with HIV infection, or if they or their sex partners have multiple partners)

Transgender and Gender Diverse Persons

Based on anatomy

Rectal testing (chlamydia) and **pharyngeal and rectal testing (gonorrhea)**
based on reported sexual behaviors and exposure

Screening Recommendations: Chlamydia & Gonorrhea

Women

Annually under 25 years of age, and those **25 years and older (if at increased risk)**

Rectal testing (chlamydia) and **pharyngeal and rectal testing (gonorrhea)**
based on reported sexual behaviors and exposure

Pregnant Persons

At initial visit under 25 years of age, and those **25 years and older (if at increased risk)**

During the 3rd trimester for persons under 25 years of age or at increased risk

Test of cure 4 weeks after treatment (**chlamydia**)

Men Who Have Sex with Women (MSW)

Insufficient evidence for screening

Can be considered in high prevalence clinical settings
(adolescent clinics, correctional facilities, STI/sexual health clinic)

Men Who Have Sex With Men (MSM)

At least annually at sites of contact

(chlamydia: urethra, rectum; gonorrhea: urethra, pharynx, rectum) regardless of condom use

Every 3 to 6 months if at increased risk

(i.e., MSM on PrEP, with HIV infection, or if they or their sex partners have multiple partners)

Transgender and Gender Diverse Persons

Based on anatomy

Rectal testing (chlamydia) and **pharyngeal and rectal testing (gonorrhea)**
based on reported sexual behaviors and exposure

Persons with HIV

At **first HIV evaluation**, and **at least annually** thereafter,

More frequent based on risk behaviors and local epidemiology

Screening Recommendations: Chlamydia & Gonorrhea

Women

Annually under 25 years of age, and those 25 years and older (if at increased risk)

Rectal testing (chlamydia) and pharyngeal and rectal testing (gonorrhea) based on reported sexual behaviors and exposure

Pregnant Persons

At initial visit under 25 years of age, and those 25 years and older (if at increased risk)

During the 3rd trimester for persons under 25 years of age or at increased risk

Test of cure 4 weeks after treatment (chlamydia)

Men Who Have Sex with Women (MSW)

Insufficient evidence for screening
Can be considered in high-evidence clinical settings (adolescent clinics, correctional facilities, STI/sexual health clinic)

Men Who Have Sex with Men (MSM)

At least annually at sites of contact

(chlamydia: urethra, rectum; gonorrhea: urethra, pharynx, rectum) regardless of condom use

Every 3 to 6 months if at increased risk

(i.e., MSM on PrEP, with HIV infection, or if they or their sex partners have multiple partners)

Transgender and Gender Diverse Persons

Based on anatomy

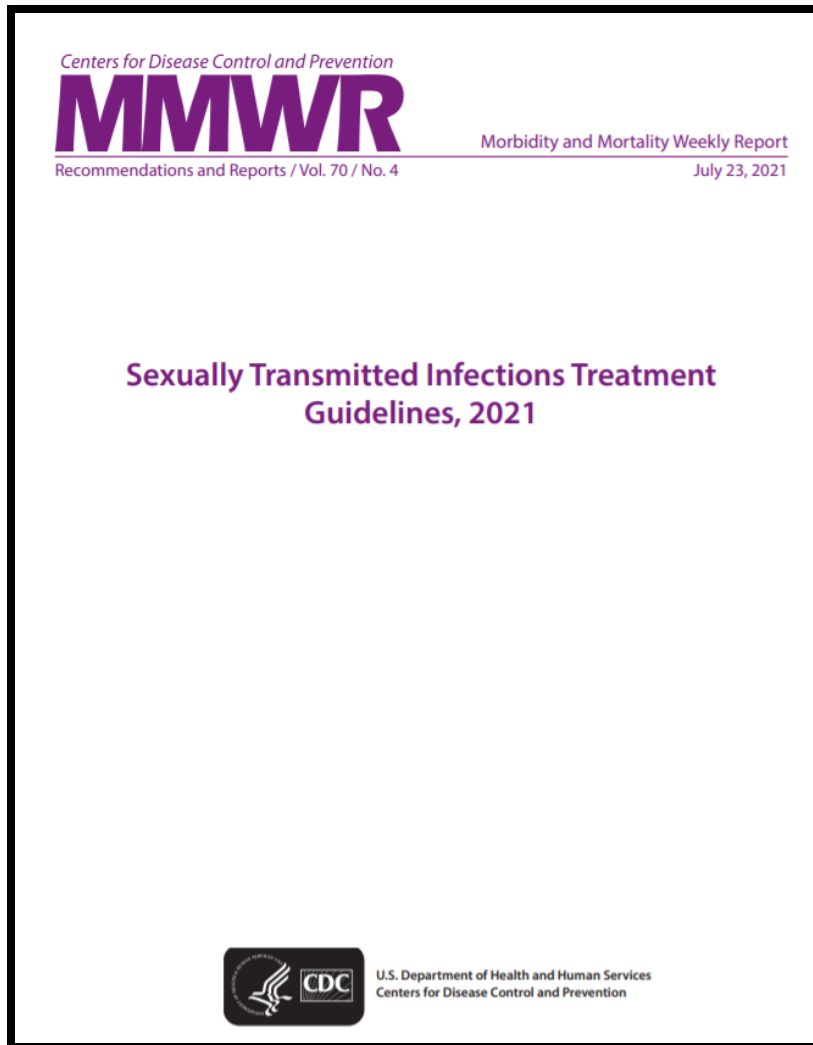
Rectal testing (chlamydia) and pharyngeal and rectal testing (gonorrhea) based on reported sexual behaviors and exposure

Persons with HIV

At first HIV evaluation, and at least annually thereafter,

More frequent based on risk behaviors and local epidemiology

Retest 3 Months After Treatment



Chlamydia

Treatment Recommendations

Doxycycline 100 mg PO twice daily x 7 days

Alternative Regimens:

Azithromycin 1 g PO x 1 dose

Levofloxacin 500 mg PO daily x 7 days

Gonorrhea

Treatment Recommendations

Ceftriaxone 500 mg IM x 1 dose

*(Ceftriaxone 1 g IM x 1 dose)**

**if weight \geq 150 kg (330 lbs)*

Alternative Regimens:

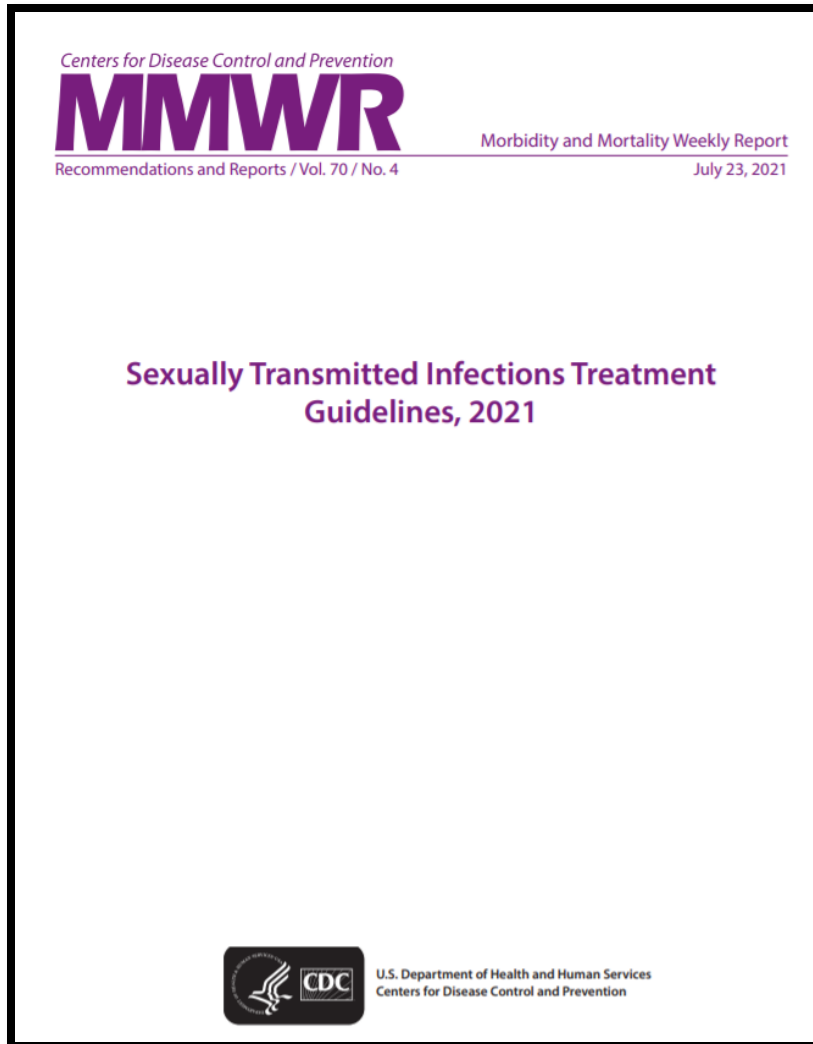
Cefixime 800 mg PO x 1 dose

**Gentamicin 240 mg IM x 1 dose +
Azithromycin 2 g PO x 1 dose**

Pharyngeal Infections

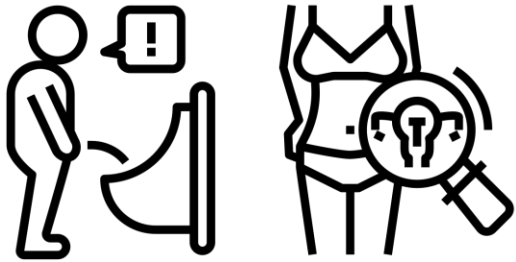
No alternative treatment regimens provided

**Test-of-cure of ALL pharyngeal infections
(14 days after treatment)**



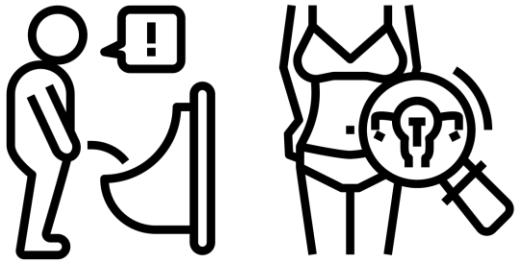
Suspected Gonorrhea Treatment Failure

Suspected Gonorrhea Treatment Failure

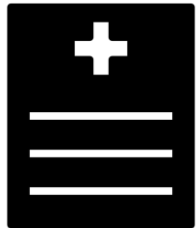


Persistent symptoms
Positive test-of-cure

Suspected Gonorrhea Treatment Failure

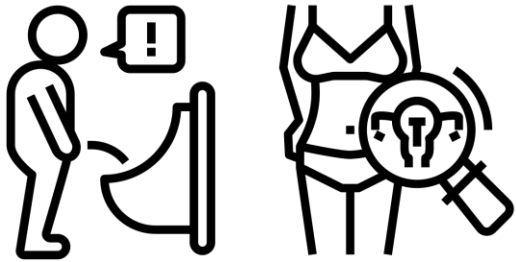


Persistent symptoms
Positive test-of-cure



Sexual history
Rule out re-infection

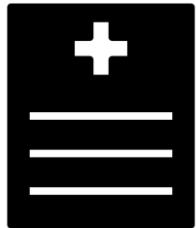
Suspected Gonorrhea Treatment Failure



Persistent symptoms
Positive test-of-cure

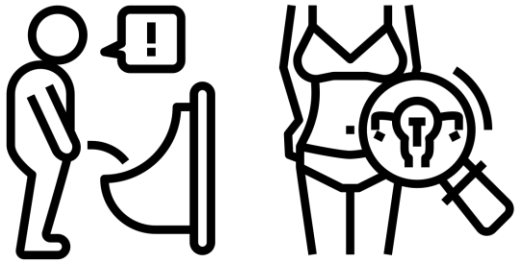


**Re-treat with initial
treatment**

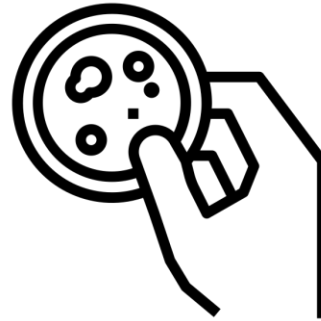


Sexual history
Rule out re-infection

Suspected Gonorrhea Treatment Failure



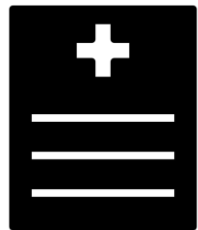
Persistent symptoms
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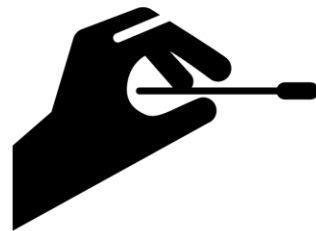
Sample for culture



**Re-treat with initial
treatment**

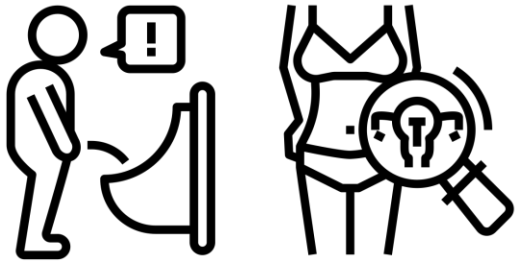


Sexual history
Rule out re-infection

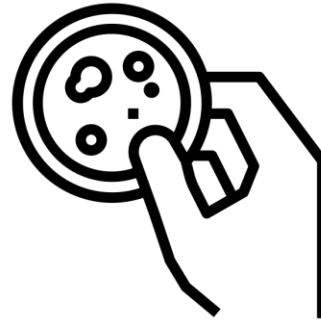


Simultaneous NAAT

Suspected Gonorrhea Treatment Failure



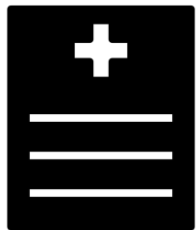
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Positive test-of-cure



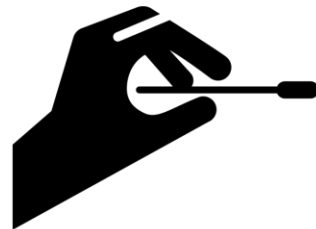
Sample for culture



**Re-treat with initial
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Sexual history
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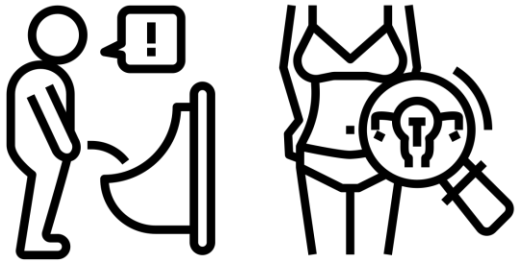


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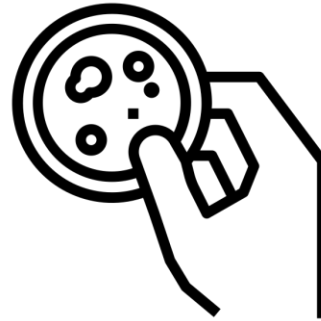


Consider:
Gentamicin 240 mg IM
+
Azithromycin 2 g PO

Suspected Gonorrhea Treatment Failure



Persistent symptoms
Positive test-of-cure



Sample for culture



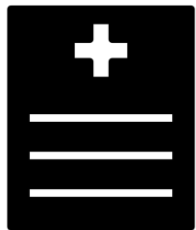
Contact



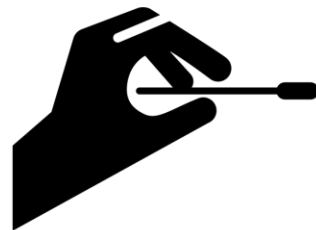
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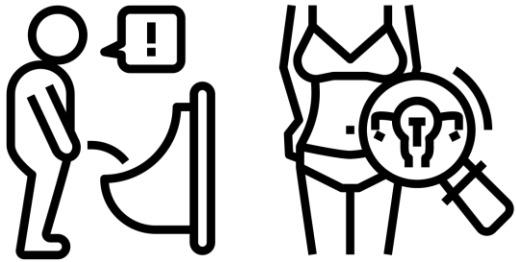


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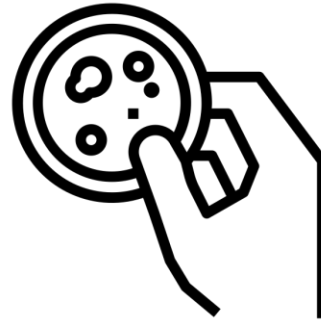


Simultaneous NAAT

Suspected Gonorrhea Treatment Failure



Persistent symptoms
Positive test-of-cure



Sample for culture



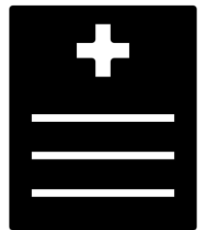
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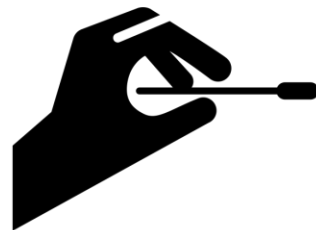
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Consider:
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+
Azithromycin 2 g PO



Sexual history
Rule out re-infection



Simultaneous NAAT



Syphilis: Screening & Treatment

Screening Recommendations: Syphilis

Women

Asymptomatic women at increased risk

(history of incarceration or transactional sex work, geography, race/ethnicity)

Screening Recommendations: Syphilis

Women

Asymptomatic women at increased risk

(history of incarceration or transactional sex work, geography, race/ethnicity)

All pregnant persons at the first prenatal visit

Pregnant Persons

Retest at 28 weeks gestation **and at delivery if at increased risk**

(e.g., geography, substance use, STIs during pregnancy, multiple partners, a new partner, partner with STIs)

Screening Recommendations: Syphilis

Women

Asymptomatic women at increased risk

(history of incarceration or transactional sex work, geography, race/ethnicity)

All pregnant persons at the first prenatal visit

Pregnant Persons

Retest at 28 weeks gestation **and at delivery if at increased risk**

(e.g., geography, substance use, STIs during pregnancy, multiple partners, a new partner, partner with STIs)

Men Who Have Sex with Women (MSW)

Asymptomatic adults at increased risk

(history of incarceration or transactional sex work, geography, race/ethnicity, male younger than 29 years)

Screening Recommendations: Syphilis

Women

Asymptomatic women at increased risk

(history of incarceration or transactional sex work, geography, race/ethnicity)

All pregnant persons at the first prenatal visit

Pregnant Persons

Retest at 28 weeks gestation **and at delivery if at increased risk**

(e.g., geography, substance use, STIs during pregnancy, multiple partners, a new partner, partner with STIs)

Men Who Have Sex with Women (MSW)

Asymptomatic adults at increased risk

(history of incarceration or transactional sex work, geography, race/ethnicity, male younger than 29 years)

At least annually

Men Who Have Sex With Men (MSM)

Every 3 to 6 months if at increased risk

Asymptomatic adults at increased risk

(history of incarceration or transactional sex work, geography, race/ethnicity, male younger than 29 years)

Screening Recommendations: Syphilis

Women

Asymptomatic women at increased risk

(history of incarceration or transactional sex work, geography, race/ethnicity)

All pregnant persons at the first prenatal visit

Pregnant Persons

Retest at 28 weeks gestation **and at delivery if at increased risk**

(e.g., geography, substance use, STIs during pregnancy, multiple partners, a new partner, partner with STIs)

Men Who Have Sex with Women (MSW)

Asymptomatic adults at increased risk

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At least annually

Men Who Have Sex With Men (MSM)

Every 3 to 6 months if at increased risk

Asymptomatic adults at increased risk

(history of incarceration or transactional sex work, geography, race/ethnicity, male younger than 29 years)

Transgender and Gender Diverse Persons

At least annually

based on reported sexual behaviors and exposure

Screening Recommendations: Syphilis

Women

Asymptomatic women at increased risk

(history of incarceration or transactional sex work, geography, race/ethnicity)

All pregnant persons at the first prenatal visit

Pregnant Persons

Retest at 28 weeks gestation **and at delivery if at increased risk**

(e.g., geography, substance use, STIs during pregnancy, multiple partners, a new partner, partner with STIs)

Men Who Have Sex with Women (MSW)

Asymptomatic adults at increased risk

(history of incarceration or transactional sex work, geography, race/ethnicity, male younger than 29 years)

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Men Who Have Sex With Men (MSM)

Every 3 to 6 months if at increased risk

Asymptomatic adults at increased risk

(history of incarceration or transactional sex work, geography, race/ethnicity, male younger than 29 years)

Transgender and Gender Diverse Persons

At least annually

based on reported sexual behaviors and exposure

Persons with HIV

At **first HIV evaluation**, and **at least annually** thereafter,

More frequent based on risk behaviors and local epidemiology

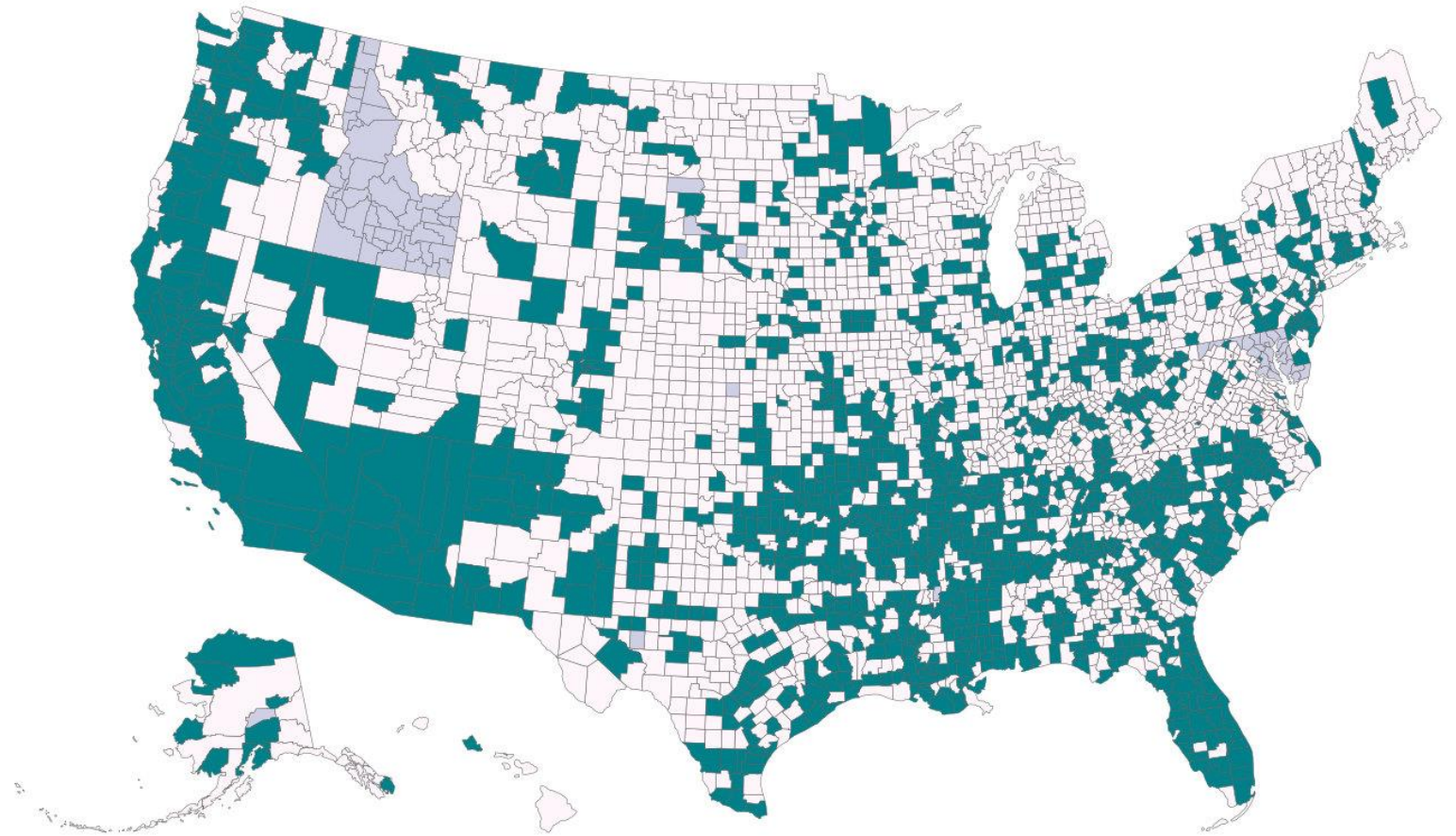
Geography Based Screening




Test sexually active people aged 15-44 years in **counties with rates of P&S syphilis above 4.6/100,000** among females aged 15-44 yrs



Scan to Find Your County's Syphilis Rate!

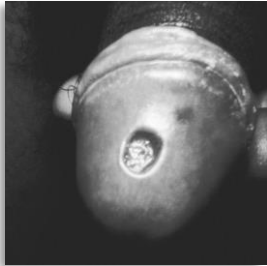
County-level Syphilis Rates



-  Continue to assess individual risk factors to determine screening needs
-  Offer syphilis testing to all sexually active people aged 15-44 years
-  Suppressed

Clinical Stages

Primary



Secondary



Early Latent

≤1 Year

Late Latent

> 1 Year

Tertiary



No signs or symptoms

Primary

Secondary

Early Non-Primary, Non-Secondary

Unknown Duration or Late

Surveillance Stages

Clinical Stages

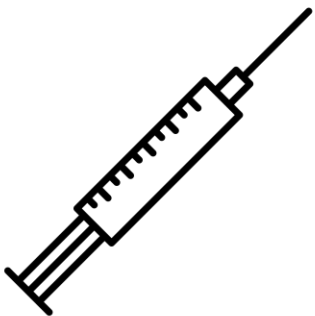
Primary

- Ulcer or chancre at site of infection

Secondary

- Skin rash
- Mucocutaneous lesions
- Generalized lymphadenopathy

Treatment:



Recommended Regimen for Primary and Secondary Syphilis* Among Adults

Benzathine penicillin G 2.4 million units IM in a single dose

* Recommendations for treating syphilis among persons with HIV infection and pregnant women are discussed elsewhere in this report (see Syphilis Among Persons with HIV Infection; Syphilis During Pregnancy).

Clinical Stages

Primary

- Ulcer or chancre at site of infection

Secondary

- Skin rash
- Mucocutaneous lesions
- Generalized lymphadenopathy

Treatment:



Alternative Regimens for Non-Pregnant Adults

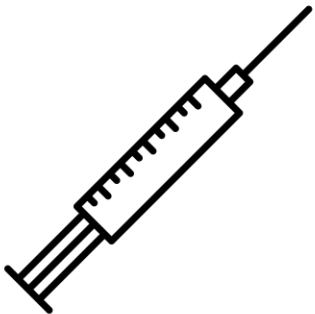
- Doxycycline 100 mg orally twice daily for 14 days
- Tetracycline 500 mg orally four times daily for 14 days

Clinical Stages

Latent

- No visible signs/symptoms
- Early latent (≤ 1 year)
- Late latent (> 1 year)

Treatment:



Recommended Regimens for Latent Syphilis* Among Adults

Early Latent Syphilis: Benzathine penicillin G 2.4 million units IM in a single dose

Late Latent Syphilis: Benzathine penicillin G 7.2 million units total, administered as 3 doses of 2.4 million units IM each at 1-week intervals

* Recommendations for treating syphilis in persons with HIV and pregnant women are discussed elsewhere in this report (see Syphilis in Persons with HIV; Syphilis During Pregnancy).

Clinical Stages

Latent

- No visible signs/symptoms
- Early latent (≤ 1 year)
- Late latent (>1 year)

Treatment:



Alternative Regimens for Non-Pregnant Adults

- Early latent syphilis
 - Doxycycline 100 mg orally twice daily for 14 days
 - Tetracycline 500 mg orally four times daily for 14 days
- Late latent syphilis
 - Doxycycline 100 mg orally twice daily for 28 days
 - Tetracycline 500 mg orally four times daily for 28 days

Benzathine Penicillin Shortage:



Centers for Disease Control and Prevention
National Center for HIV, Viral Hepatitis, STD, and TB Prevention
Division of STD Prevention

July 20, 2023

Dear Colleagues,

We would like to bring your attention to [FDA's listing of Penicillin G benzathine injectable suspension products \(Bicillin L-A®\) on their drug shortage webpage](#), noting limited supply due to increased demand. In addition, Penicillin G procaine [has been discontinued by the manufacturer](#).

We are aware that jurisdictions may currently be [experiencing challenges](#) procuring enough Bicillin L-A® to meet their needs. As we await resolution of this issue, it remains critical that limited inventory be used to treat the patients who need it most.

CDC strongly encourages the following priority actions during the ongoing shortage:

Take inventory:

- Monitor local supply of Bicillin L-A® and [determine the local pattern of use to forecast need](#).
- Continue to contact distributors to procure Bicillin L-A® as appropriate. Contact Pfizer (see ["Dear Patient Letter"](#) posted on the FDA website) if there is less than a 2-week supply, the distributor has no supply, and there is a risk that patients may not be treated.

Prioritize using Bicillin L-A® to treat pregnant people with syphilis and babies with congenital syphilis – penicillin is the only recommended treatment for these populations.

- Choose doxycycline for non-pregnant people to help preserve Bicillin L-A® supplies. See [CDC's treatment recommendations](#) for more.
- Consider involving antimicrobial stewardship leaders to help institute systems-level approaches to limit the use of Bicillin L-A® and encourage the use of alternative effective antimicrobials for treatment of other infectious diseases.

Appropriately stage syphilis cases to ensure appropriate use of antimicrobials. Early syphilis (primary, secondary and early latent) only requires 2.4 million units of Bicillin L-A®.

Benzathine Penicillin Shortage: Temporary Importation of Extencilline



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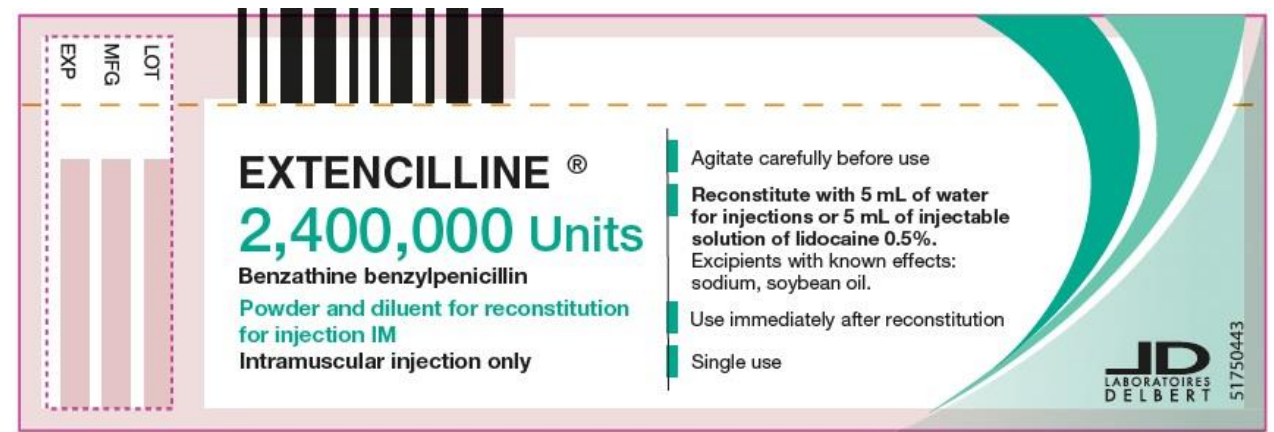
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Benzathine Penicillin Shortage: Improving Supply, Ongoing Shortage



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What you need to know

Update from Pfizer - June 10, 2024

On June 10, 2024, Pfizer shared an update on their 2.4 million Units/4 milliliter Bicillin L-A® supply, noting that they currently have available supply. If there is sufficient supply of Bicillin L-A® in your jurisdiction, please consider using Bicillin L-A® for all appropriate patients, per [CDC's standard guidance](#) [↗](#).

If you are experiencing Bicillin L-A® supply issues, please notify DSTDP of any shortages and contact Pfizer Hospital US directly at the number or email below:

Pfizer Hospital US:

Phone: 844-646-4398

Hours: M-F 7am-5pm CST

Email: PISupplyContinuity@Pfizer.com (For assistance with orders/supply information)

Note Bicillin® L-A supply is improving, but it will not be fully available until later this year, per [Pfizer's Availability Report](#) [↗](#).

E-mail for assistance with orders/supply information.

Takeaways

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- **STIs in the US remain high**
 - Chlamydia rates continue to increase
 - Gonorrhea rates had a 1-year decrease, but may not represent a new trend
 - Syphilis continues to demonstrate a dual epidemic among MSM and heterosexual populations
 - Syphilis epidemic is resulting in increasing congenital syphilis cases

Takeaways

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- **Screening and treatment of STIs prevent complications of infection**
 - Treatment of syphilis in pregnancy can prevent congenital syphilis and treat fetal infection

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 - Syphilis epidemic is resulting in increasing congenital syphilis cases
- **Screening and treatment of STIs prevent complications of infection**
 - Treatment of syphilis in pregnancy can prevent congenital syphilis and treat fetal infection
- **Treatment challenges**
 - Suspected treatment failure can add complexity to gonorrhea management
 - Benzathine penicillin G supply is improving, but the national shortage is ongoing

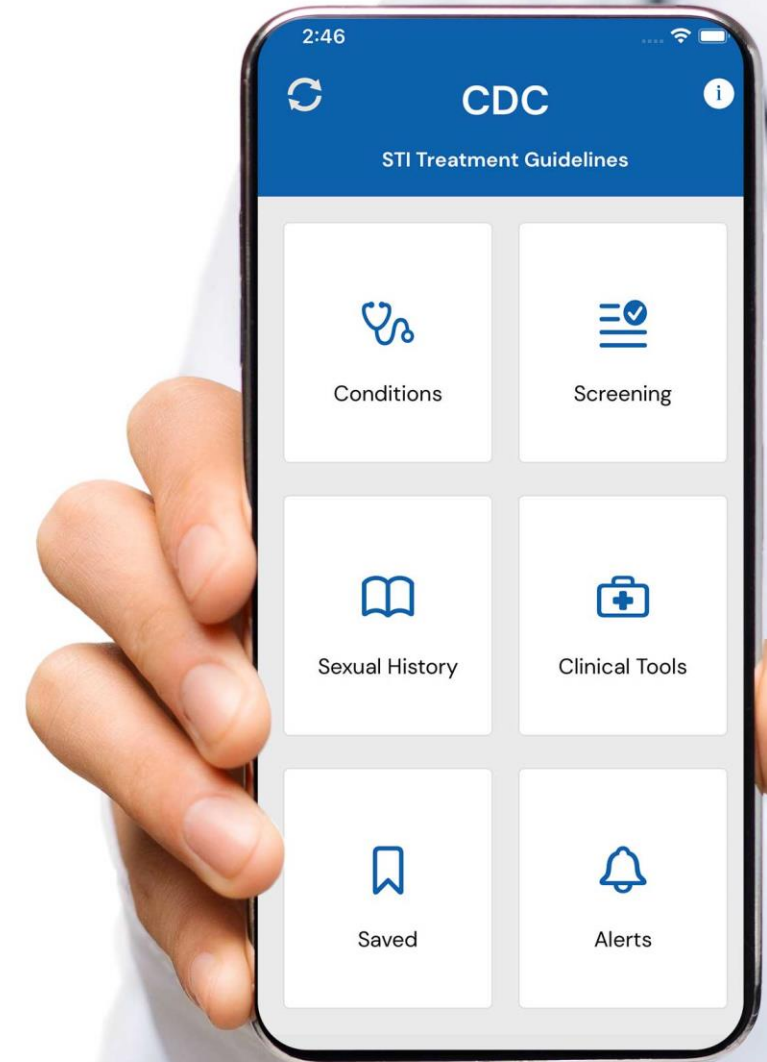
Resources

The Updated 2021 STI Treatment Guidelines App Is Now Available

Get treatment regimens *FAST*

Download CDC's free app for iPhone and Android devices

www.cdc.gov/std



CLINICIANS, Got a Tough STD Question?

GET FREE EXPERT STD CLINICAL
CONSULTATION AT YOUR FINGERTIPS



Ask your question



National STD experts review



Response within 1-5 business
days, depending on urgency

GO ▶

*THIS SERVICE IS FOR CLINICAL PROVIDERS, INQUIRIES FROM THE GENERAL PUBLIC WILL NOT BE ANSWERED

www.stdccn.org



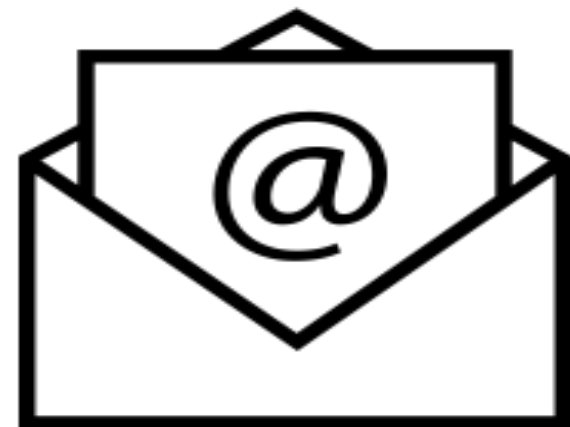
National Network of
STD Clinical Prevention
Training Centers

Contact Information

- Suspected gonorrhea treatment failure
 - gcfailure@cdc.gov

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Phone: 844-646-4398
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- DSTDP drug shortages
 - stdshortages@cdc.gov



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Morbidity and Mortality Weekly Report

Recommendations and Reports / Vol. 73 / No. 2

June 6, 2024

**CDC Clinical Guidelines on the Use of Doxycycline
Postexposure Prophylaxis for Bacterial Sexually
Transmitted Infection Prevention,
United States, 2024**

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- Rachel Wingard

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- Lindley Barbee
- Bobby McDonald
- Kate Miele
- Laura Quilter
- Hilary Reno



Thank You!

oeW3@cdc.gov

Sancta St. Cyr

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 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.



Questions?