

# STI Annual Diagnoses and Trends – 2022

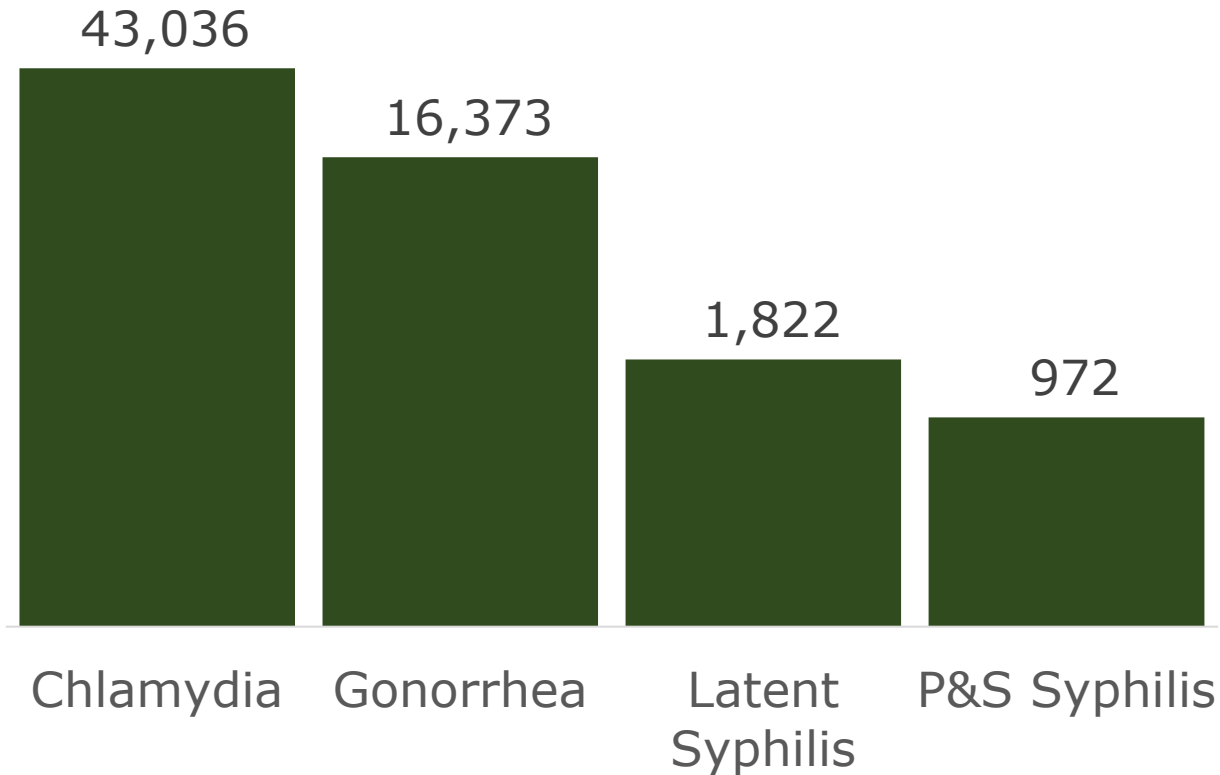
Data as of June 2023



Michigan Department of Health & Human Services

GRETCHEN WHITMER, GOVERNOR | ELIZABETH HERTEL, DIRECTOR

# 2022 STI Diagnoses at a glance



	<b>Diagnoses Count</b>	<b>Rate* per 100,000</b>
Chlamydia	42,521	428.9
Gonorrhea	16,087	163.2
Latent Syphilis	1,727	18.2
P&S Syphilis	920	9.7

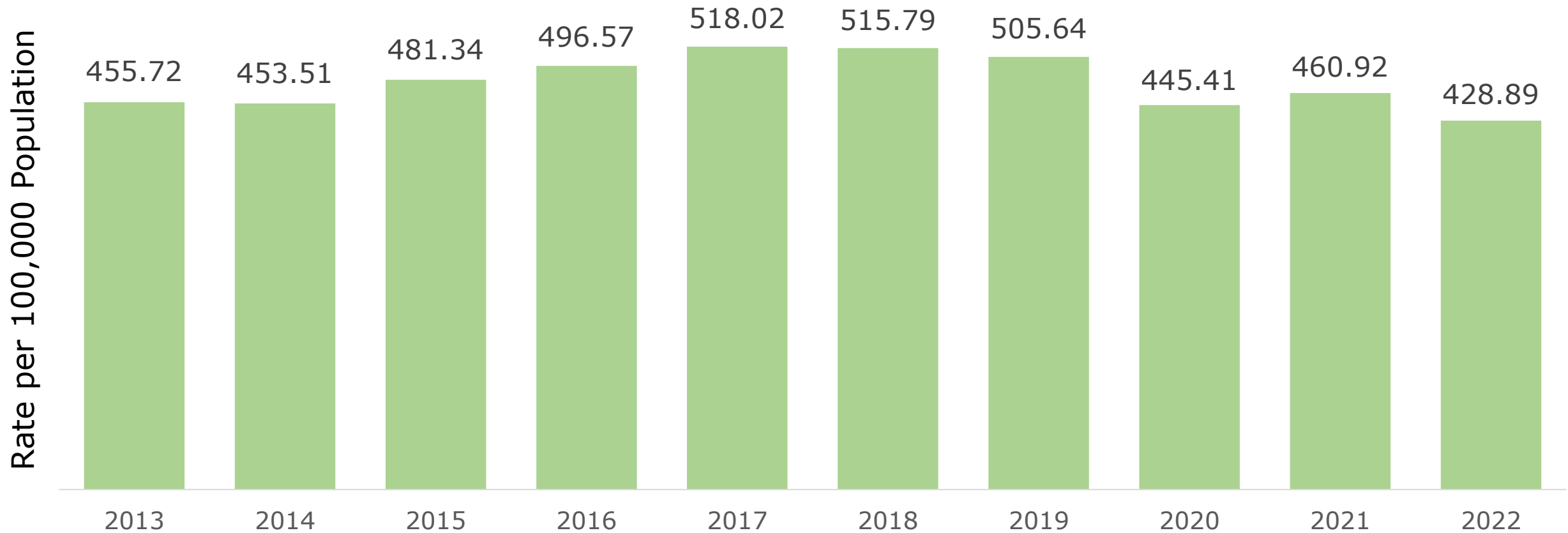
Includes probable and confirmed cases reported in the Michigan Disease Surveillance System (MDSS)

Case dates are pulled from onset date when available, then diagnosis date, then referral date to MDHHS if other dates are blank

\*2022 rates were calculated with 2020 census estimates

# Chlamydia – Trends over Time

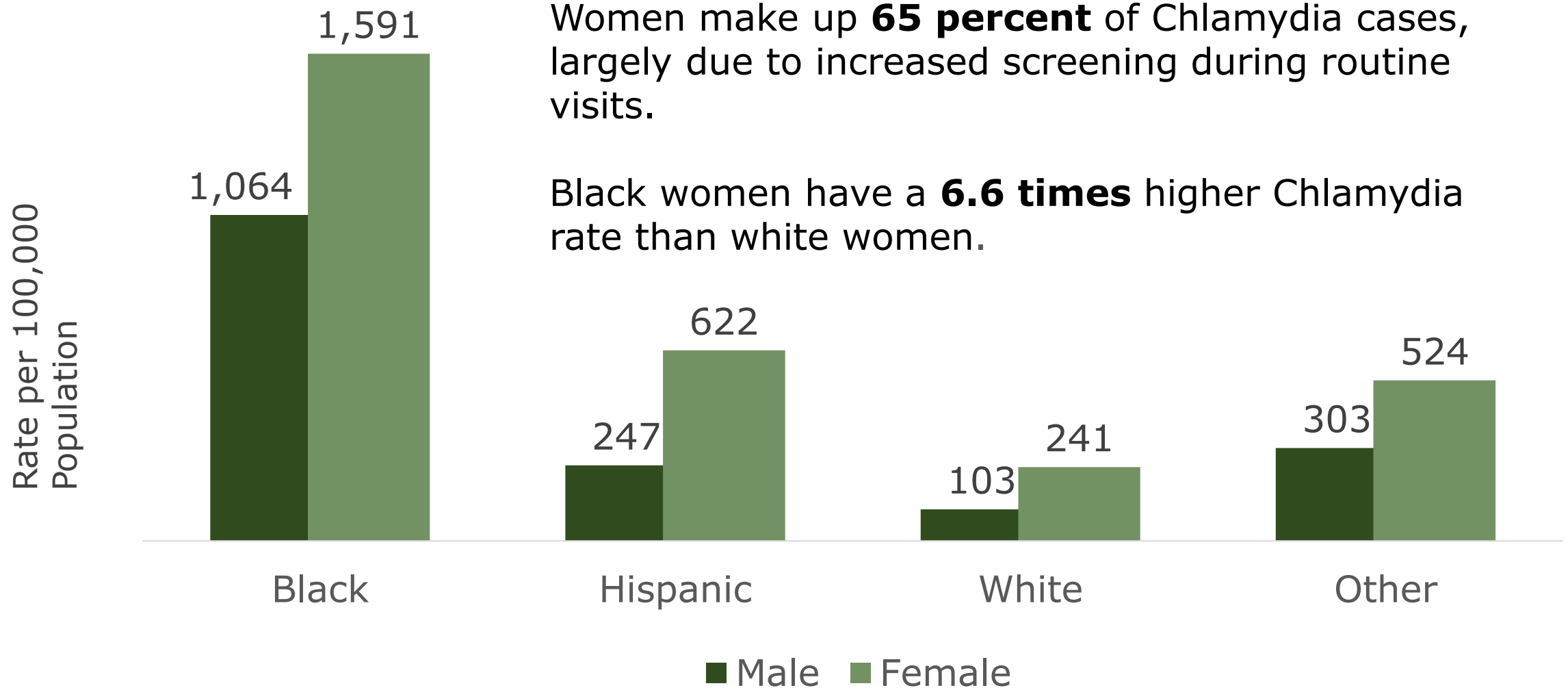
There has been no significant trend in chlamydia rates in the past 10 years.



[See full trend report here.](#)

\*2021 & 2022 rates were calculated with 2020 census estimates

# Chlamydia – Priority Populations



Women make up **65 percent** of Chlamydia cases, largely due to increased screening during routine visits.

Black women have a **6.6 times** higher Chlamydia rate than white women.

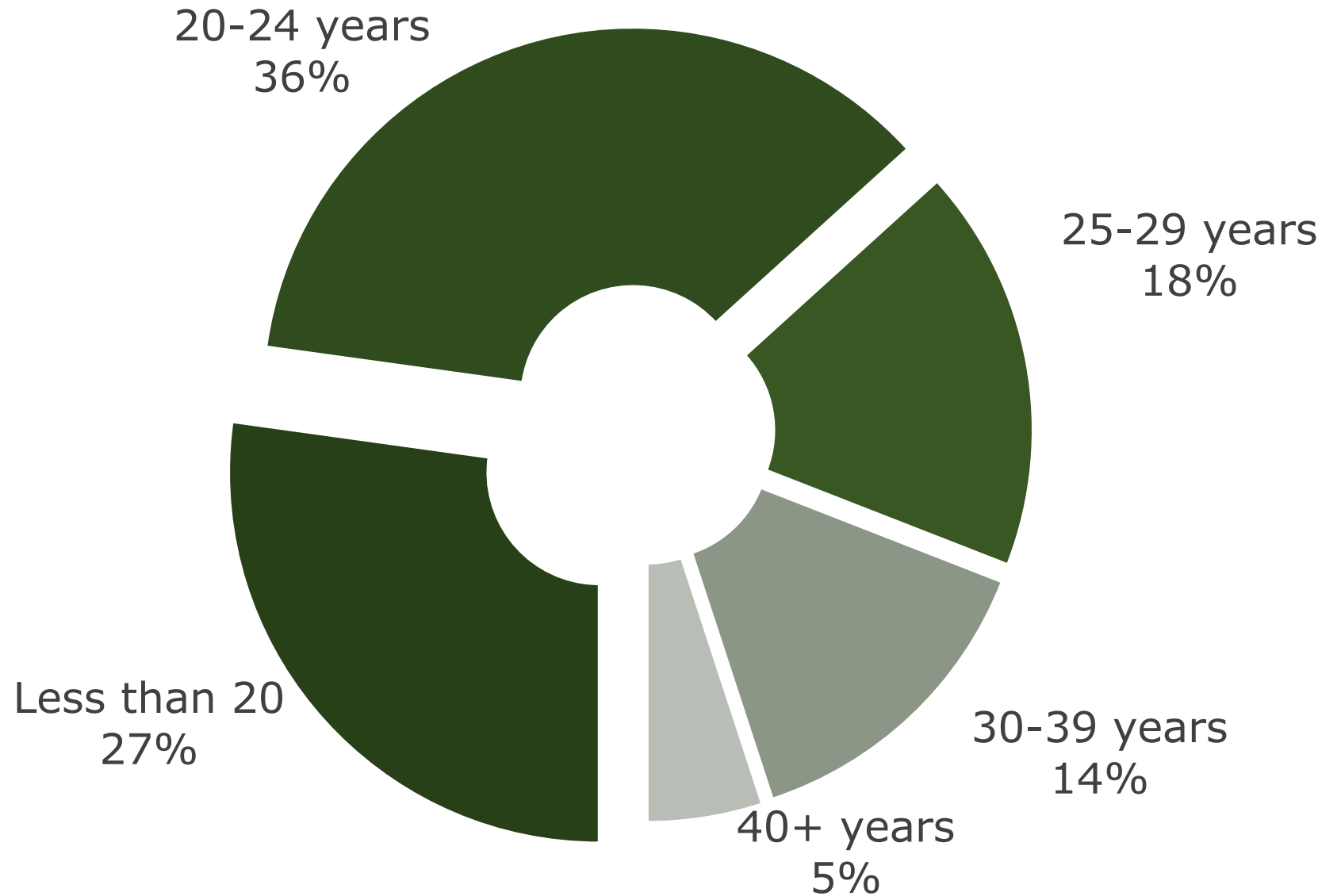


# Chlamydia – Priority Populations

**63 percent** of Chlamydia cases were diagnosed among patients less than 25 years old.

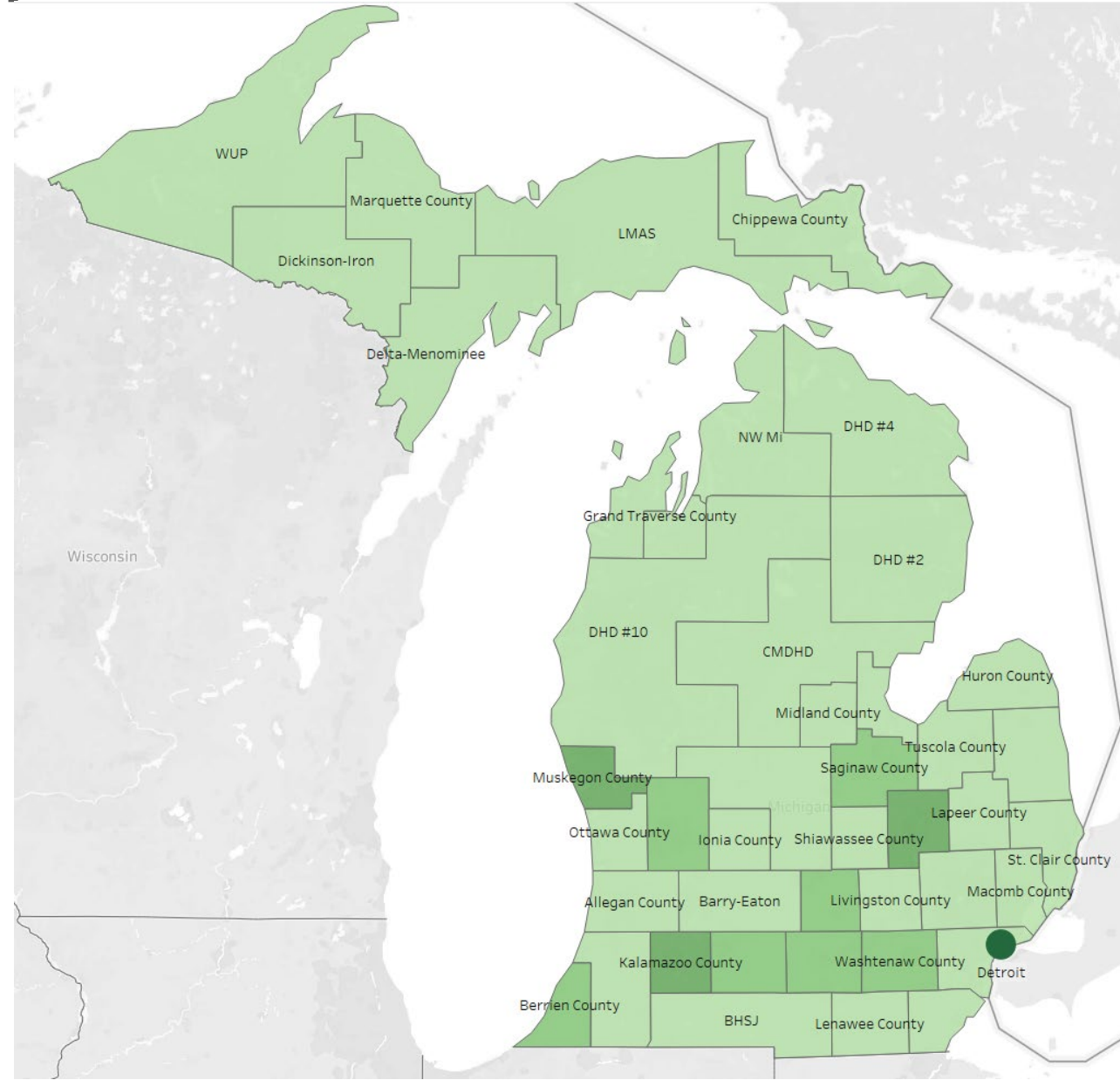
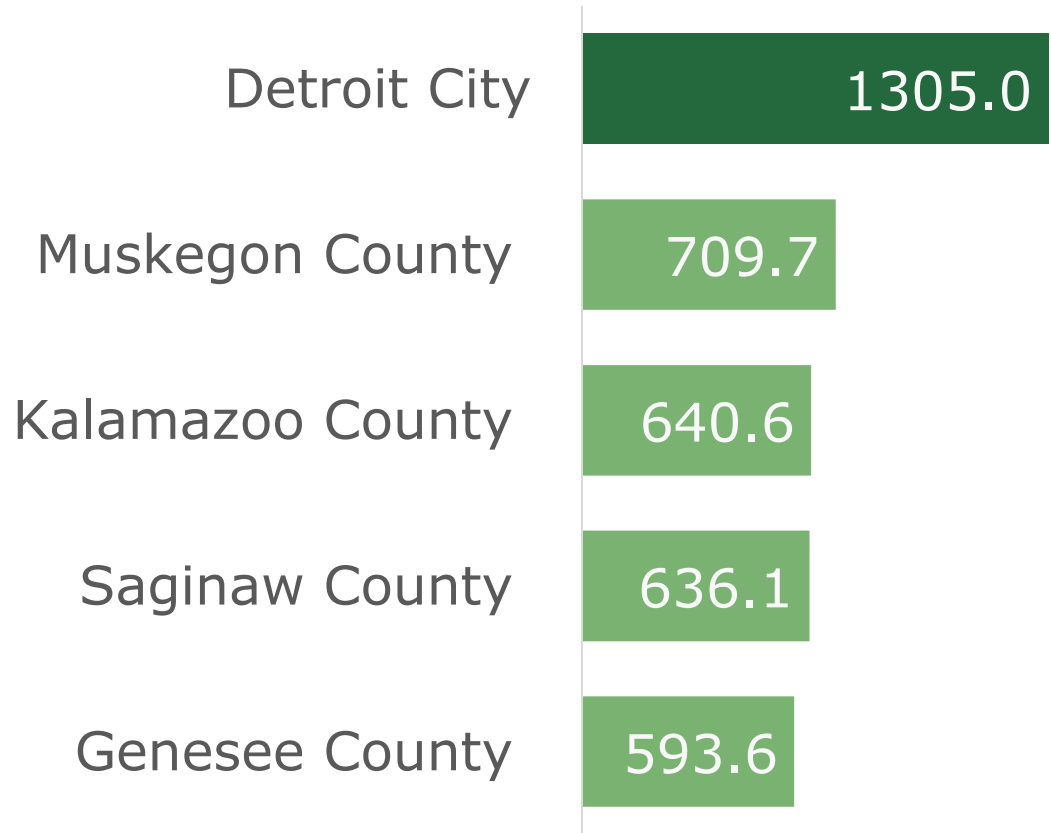
These young people have more than **10 times** higher risk of chlamydia diagnosis.

Over **10%** of cases in this age group are re-infections.



# Chlamydia – Geographic Distribution

Five Local Health Jurisdictions with Highest Case Rate per 100,000

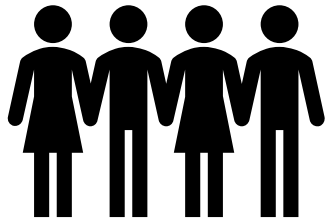




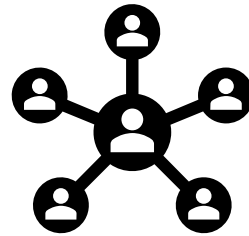
# Chlamydia–Gonorrhea Coinfections

In 2022, **10 percent** of all chlamydia patients were co-diagnosed with gonorrhea; **27 percent** of all gonorrhea patients were co-diagnosed with chlamydia.

People most likely to be co-diagnosed with gonorrhea and chlamydia include:



15-19 Year-Olds  
(31% of all co-infections)



20-24 Year-Olds  
(31% of all co-infections)

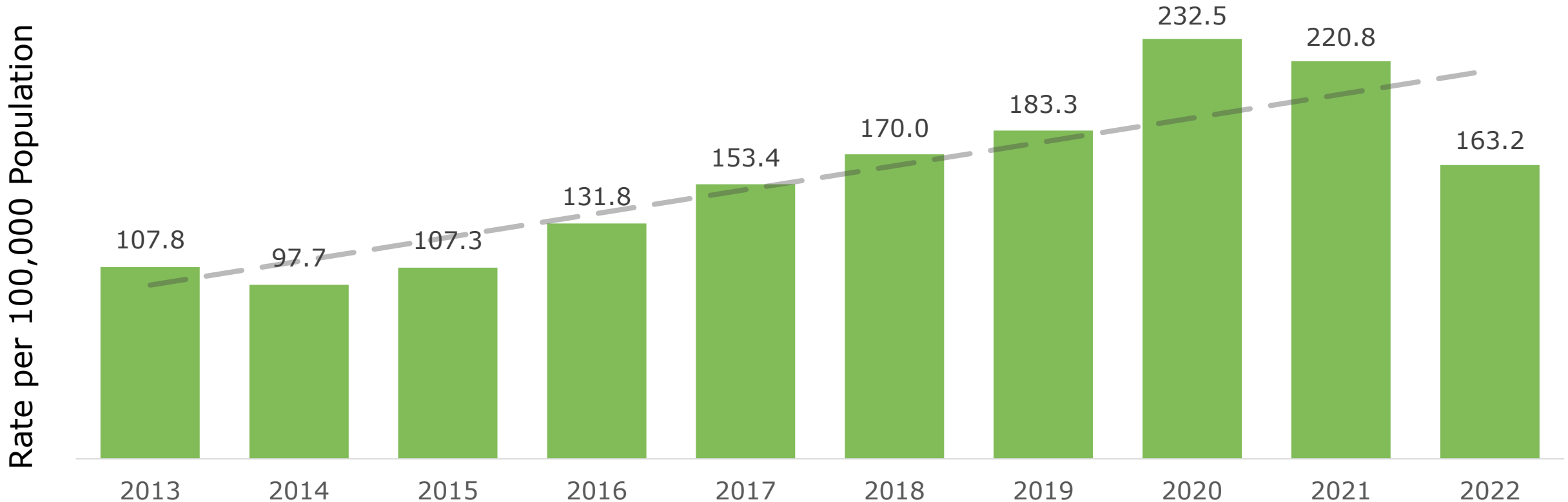


Black Women  
(30% of all co-infections)

# Gonorrhea – Trends over Time

Since 2013, gonorrhea rates have increased **9 percent** annually, on average.

Since 2020, gonorrhea cases have decreased **30 percent**, driven largely by decreased diagnoses in the city of Detroit.



[See full trend report here.](#)





# Gonorrhea – Geographic Distribution

Five Local Health Jurisdictions with Highest Case Rate per 100,000

Detroit City

644.3

Saginaw County

342.3

Kalamazoo County

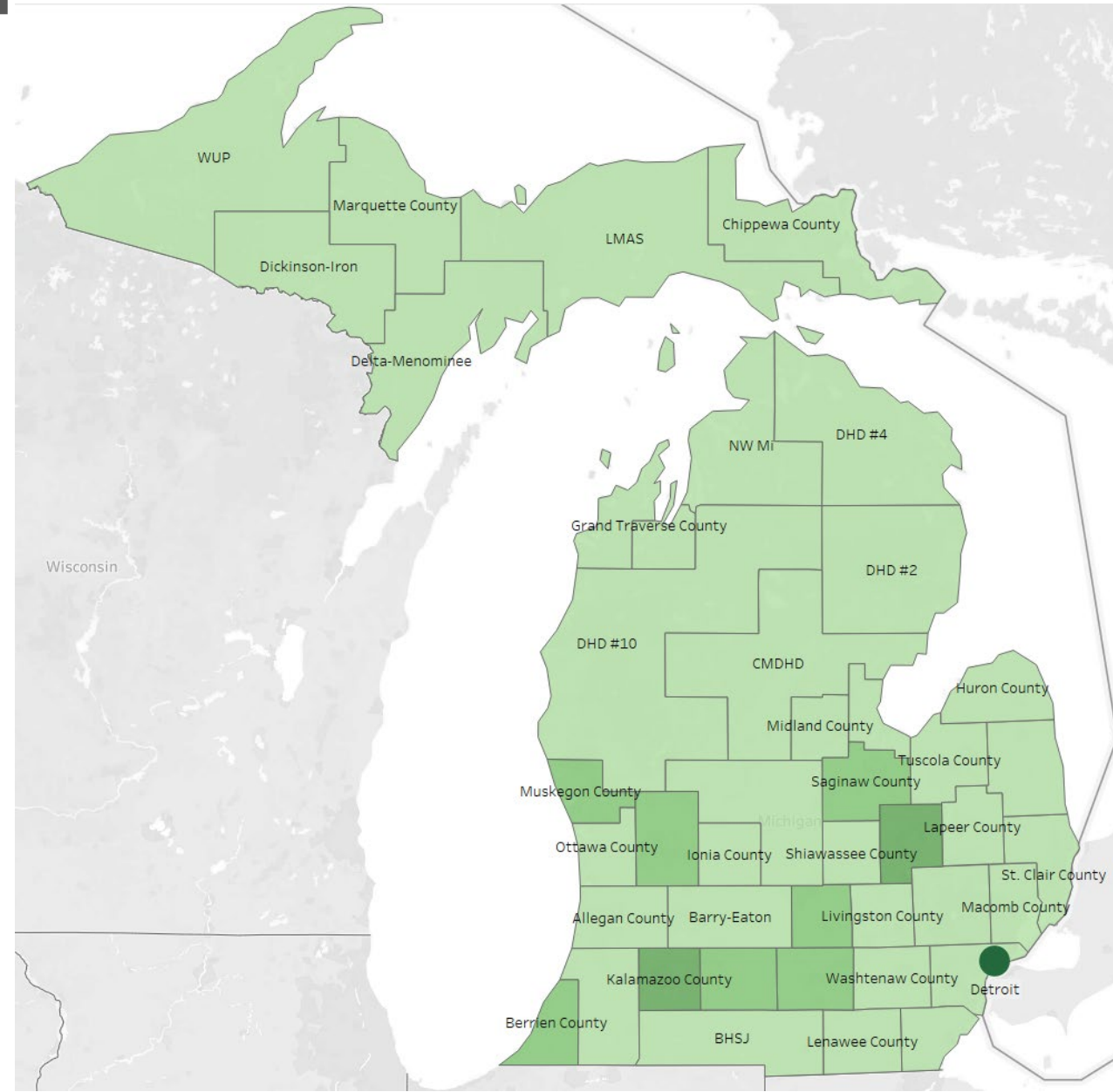
317.7

Genesee County

307.6

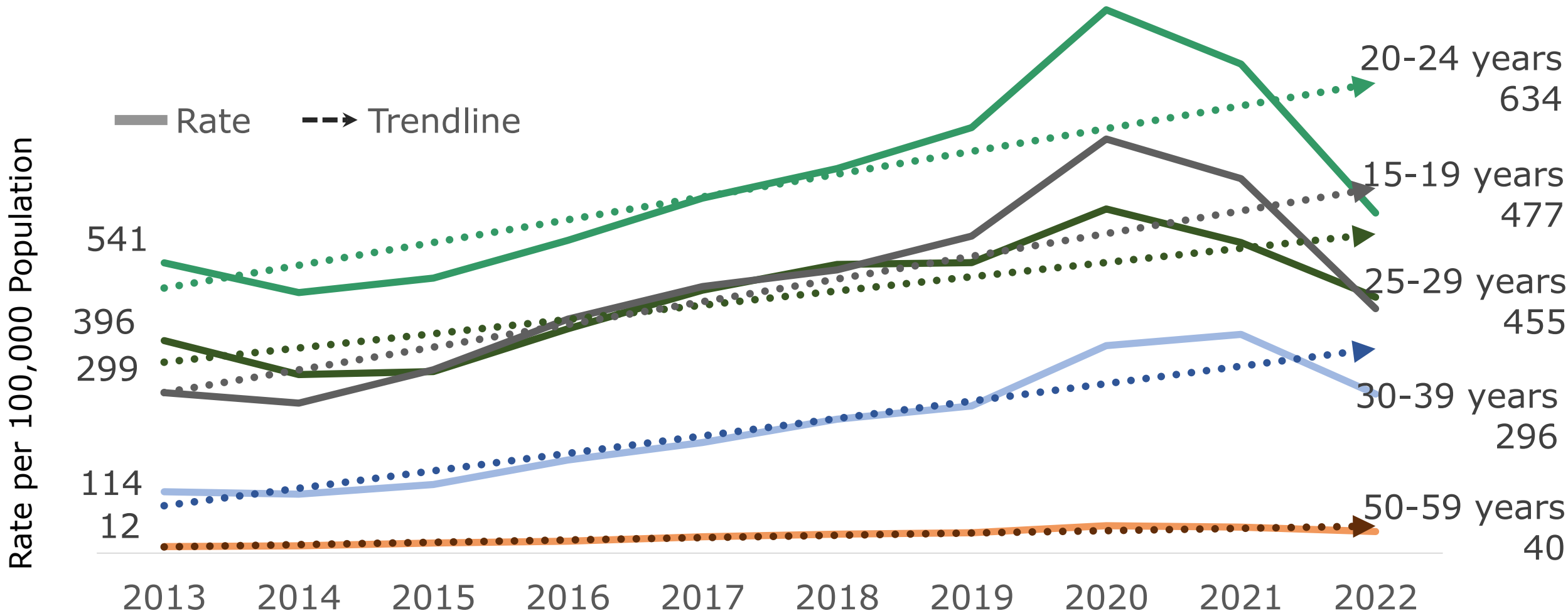
Berrien County

300.6



# Gonorrhea Trends

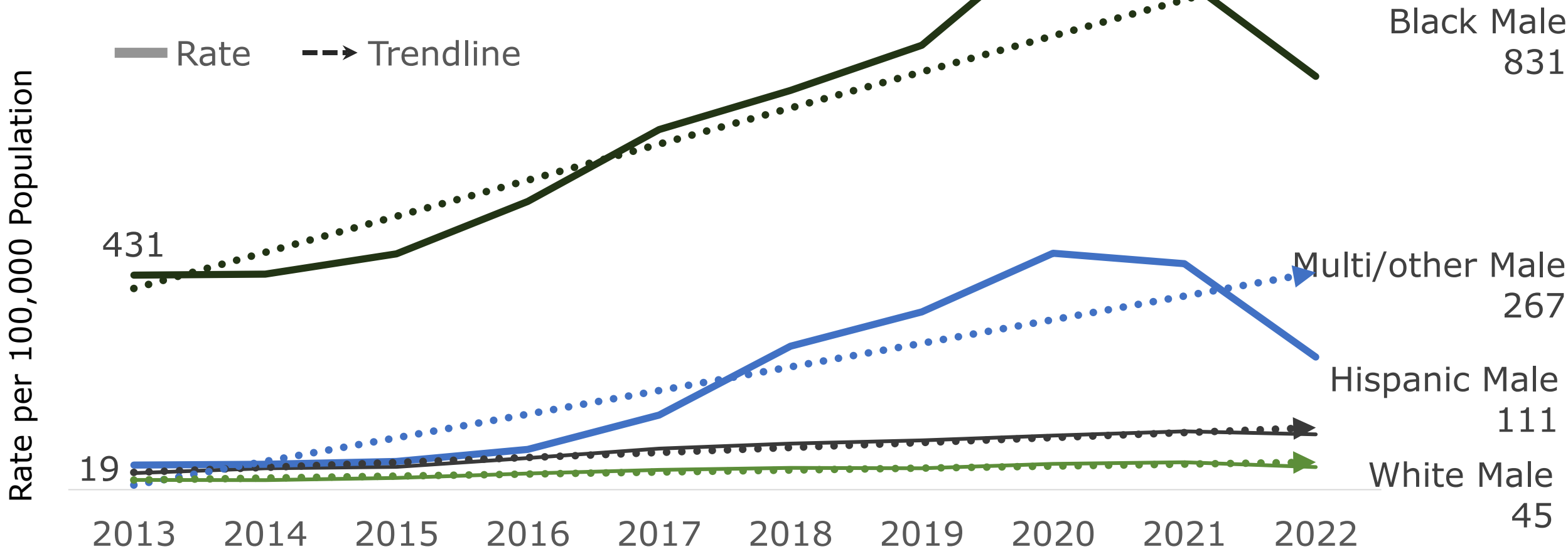
Similar gonorrhea trends have been noted in nearly all measurable sub-populations.



# Gonorrhea Trends - Men

Recent gonorrhea increases have been noted in nearly all measurable sub-populations.

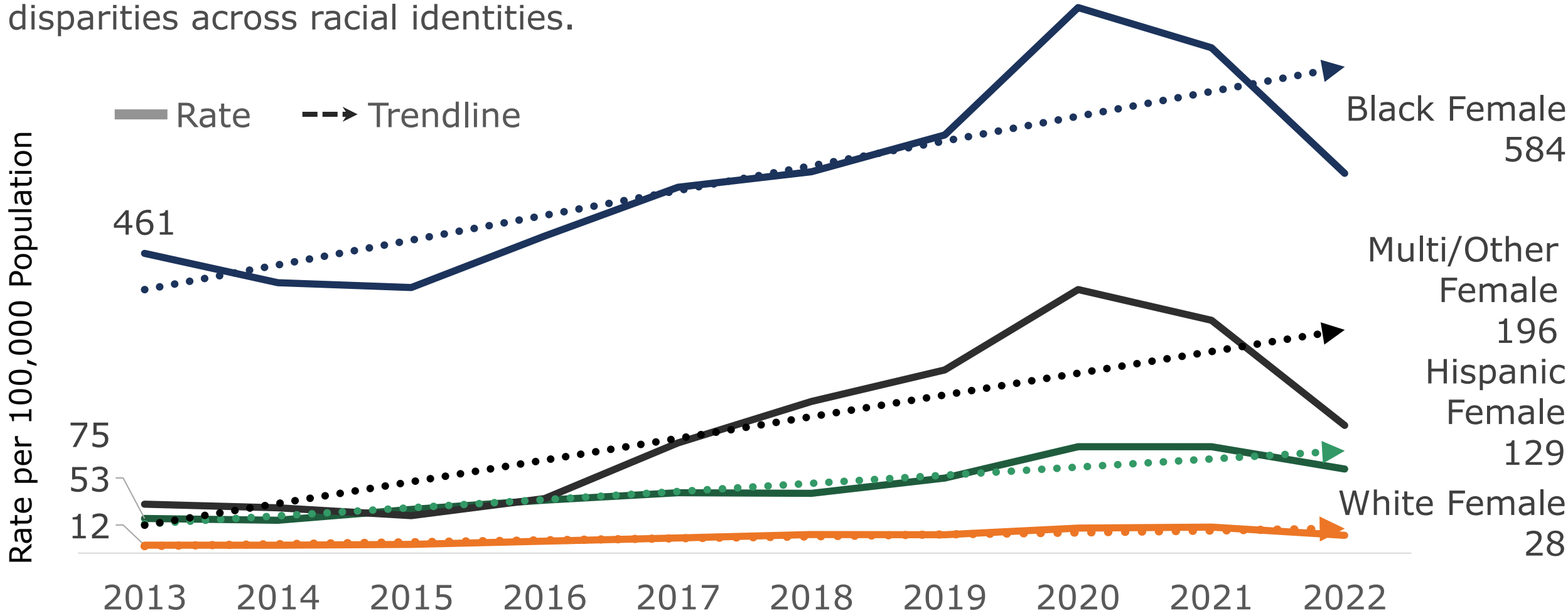
Among men, increases in diagnoses are visible in all racial/ethnic stratifications, but are steepest in Black men and multiracial men.



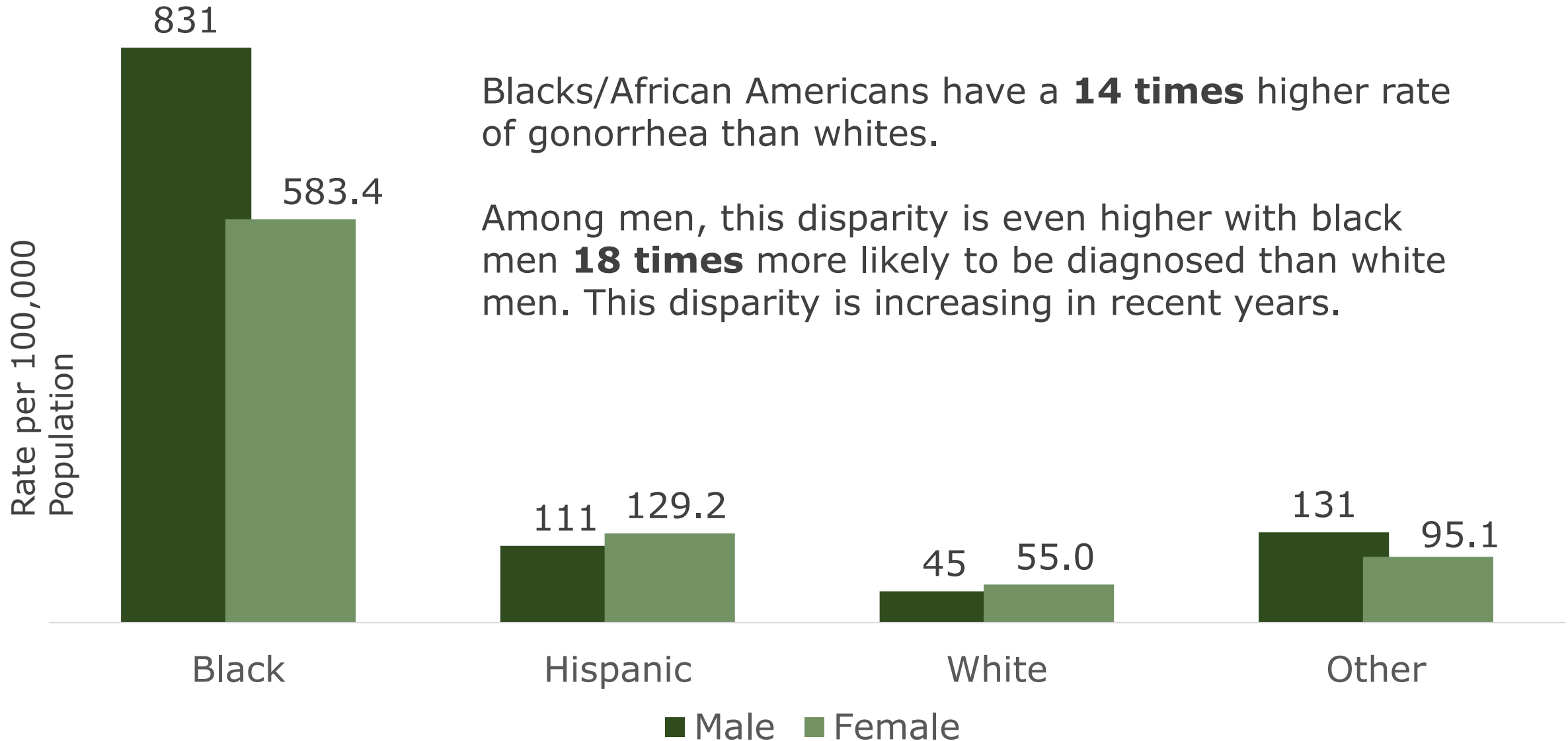
# Gonorrhea Trends - Women

Recent gonorrhea increases have been noted in nearly all measurable sub-populations.

Among women, increases are steep for all racial and ethnic groups with large disparities across racial identities.



# Gonorrhea – Priority Populations



Blacks/African Americans have a **14 times** higher rate of gonorrhea than whites.

Among men, this disparity is even higher with black men **18 times** more likely to be diagnosed than white men. This disparity is increasing in recent years.

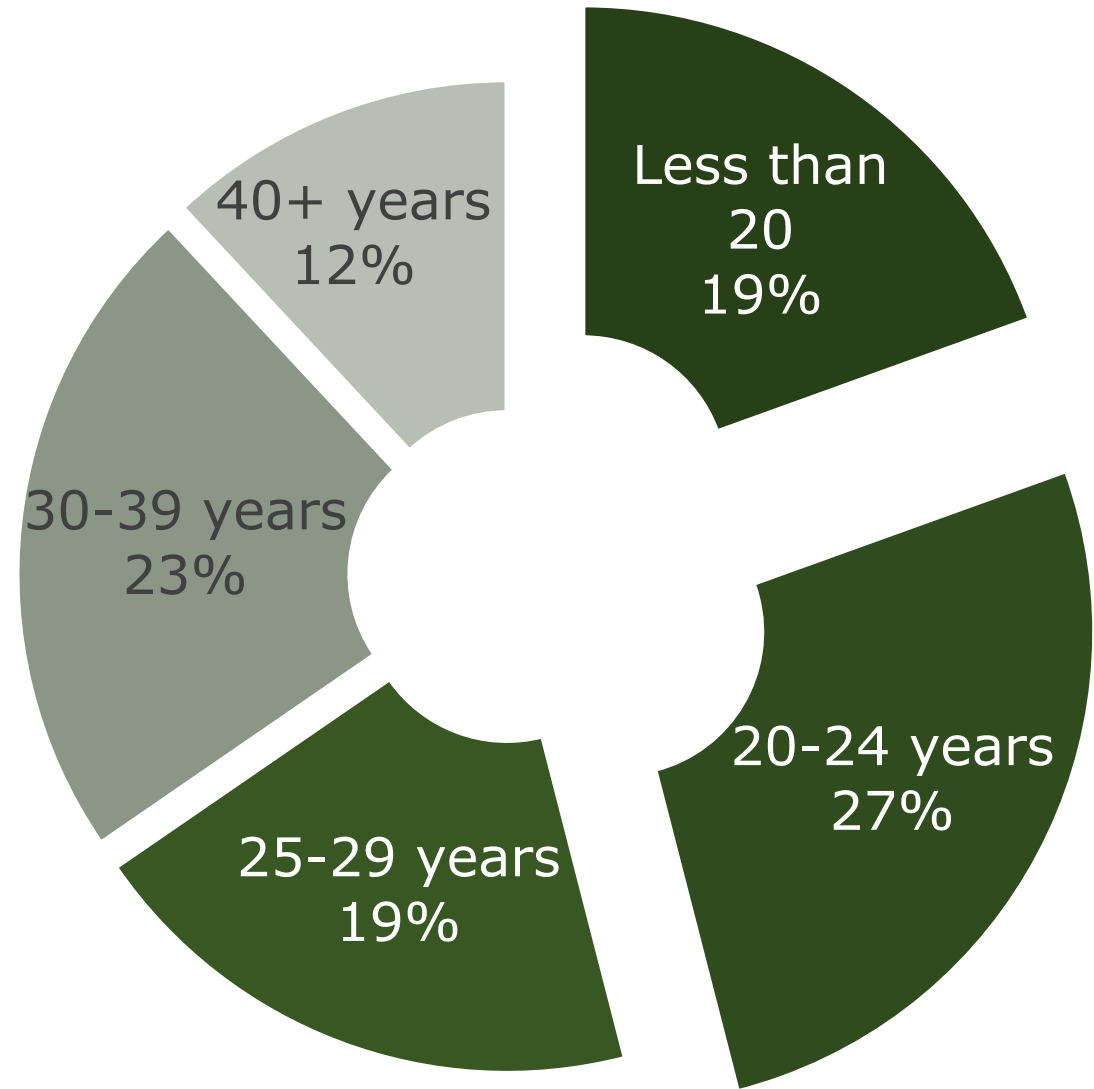


# Gonorrhea – Priority Populations

**46 percent** of gonorrhea cases were diagnosed among patients less than 25 years old.

**20–24 year-olds** have the highest gonorrhea diagnosis rate of all age groups (**619 cases per 100,000**).

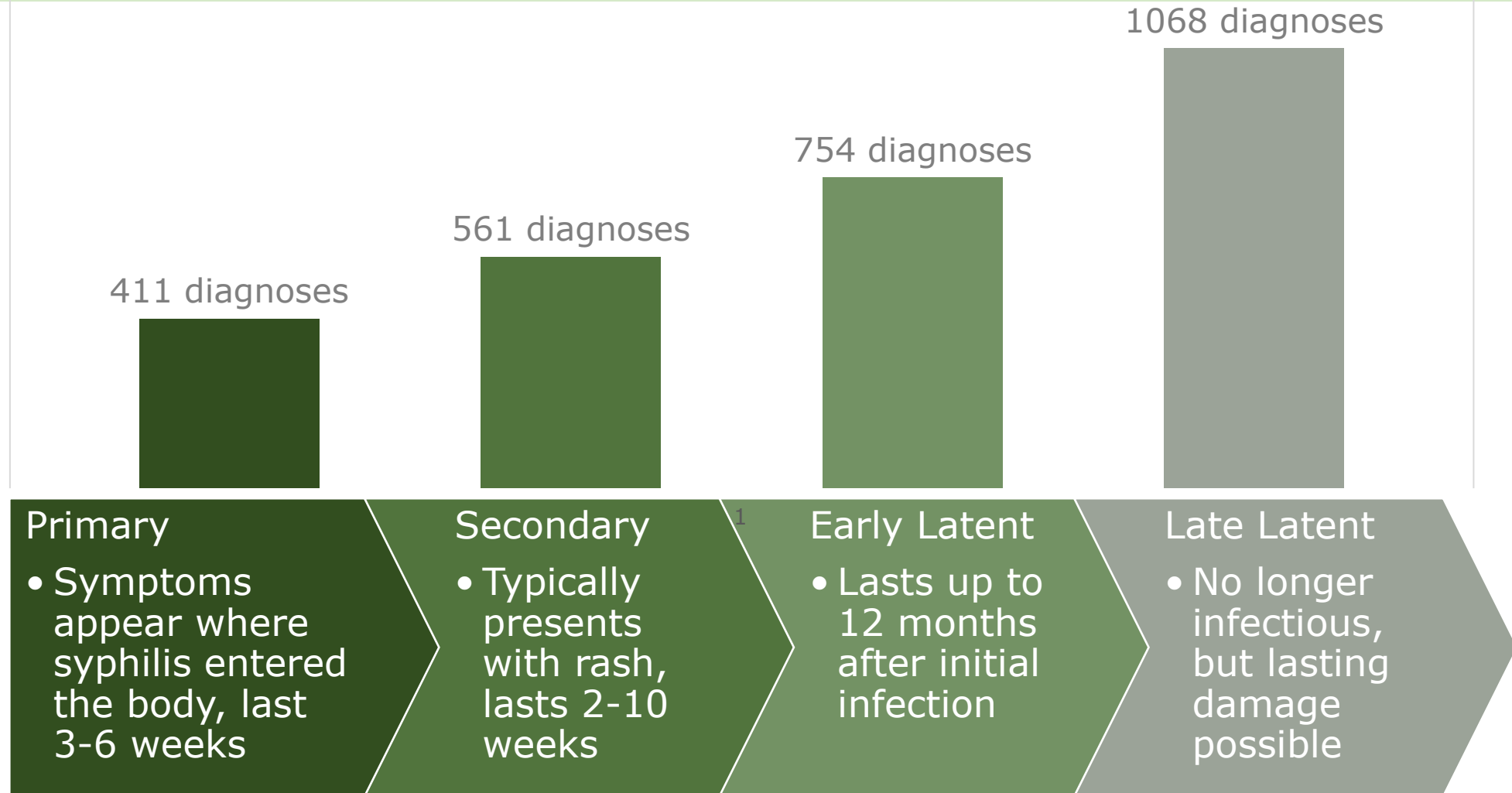
**15-24 year-olds** have the highest re-infection rate of all age groups (**10%**).



# Syphilis – Stages of Infection

Without proper treatment, early syphilis symptoms will fade but the infection remains in the body and can cause irreparable damage.

For capturing new diagnoses, we will focus on primary and secondary infections, which have symptoms.





# Syphilis Manifestations

Without treatment, syphilis can spread to the brain, eyes, ears, and other nervous system tissues. This can happen during any stage of syphilis.

Of Syphilis cases in 2022, **2.8 percent** had an adverse manifestation reported.

## Neurosyphilis

- Severe headache
- Muscle weakness
- Changes to mental state

## Ocular Syphilis

- Eye pain or redness
- Changes in vision of blindness

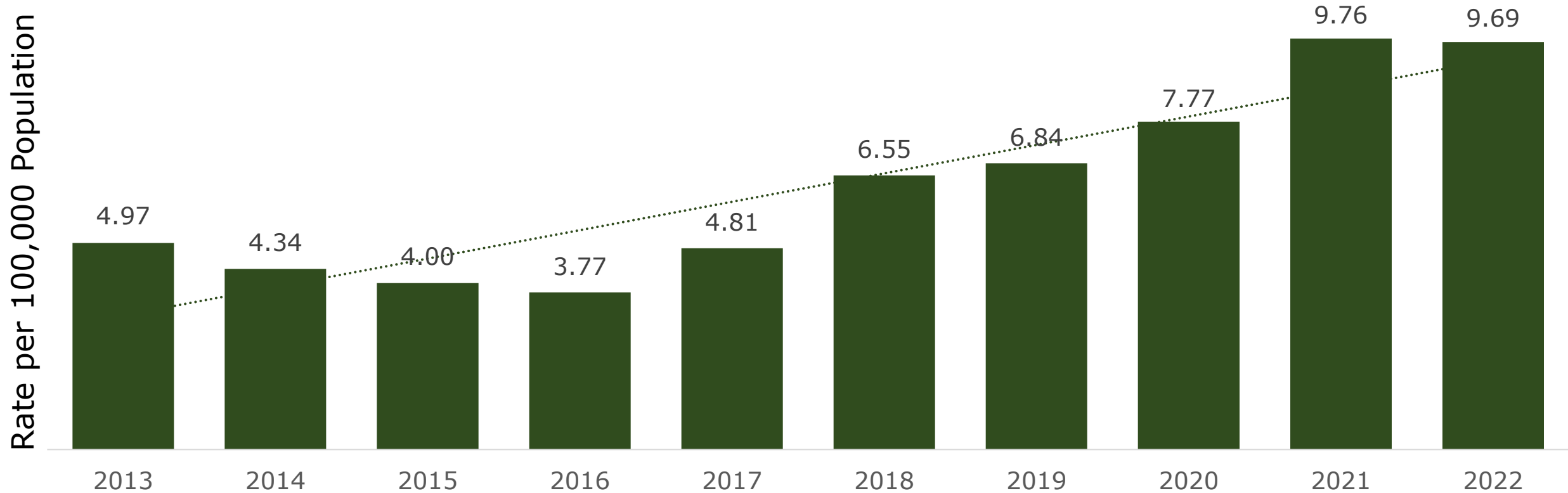
## Otosyphilis

- Hearing loss
- Ringing, buzzing in ear; tinnitus
- Dizziness or vertigo

# P&S Syphilis – Trends over Time

Since 2012, P&S Syphilis rates have increased **11 percent** annually, on average

From 2020 to 2021, syphilis cases increased **25 percent**, but in 2022 there was a **1%** decrease observed in case rate.

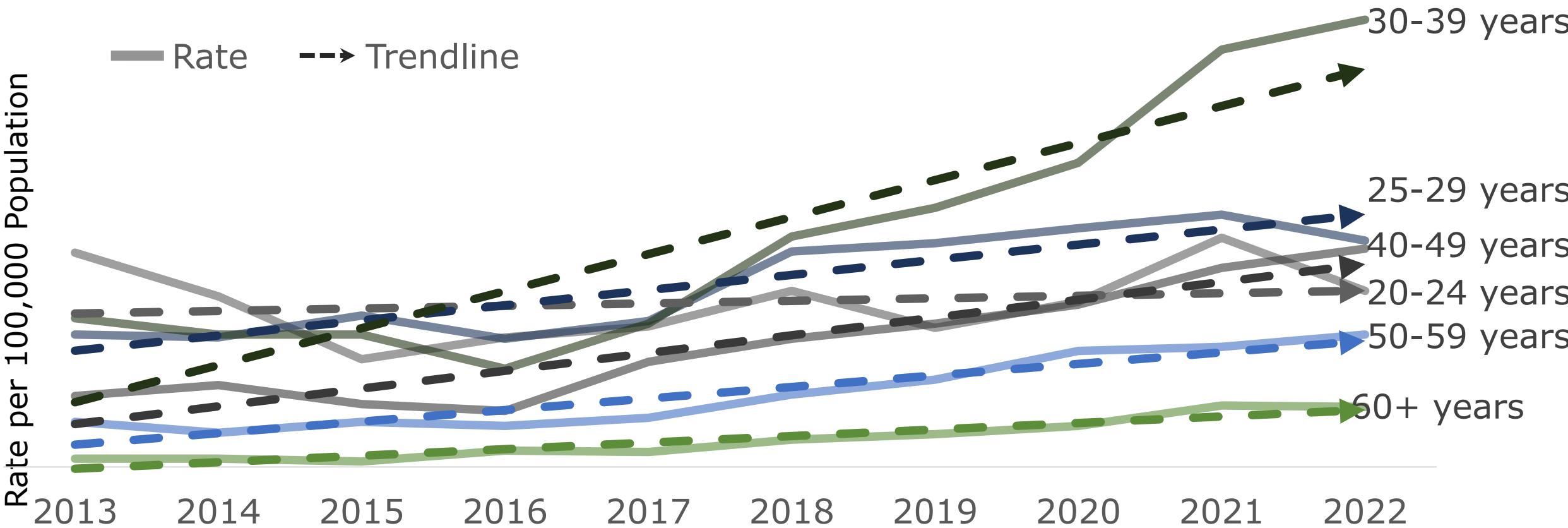


[See full trend report here.](#)

# P&S Syphilis Trends

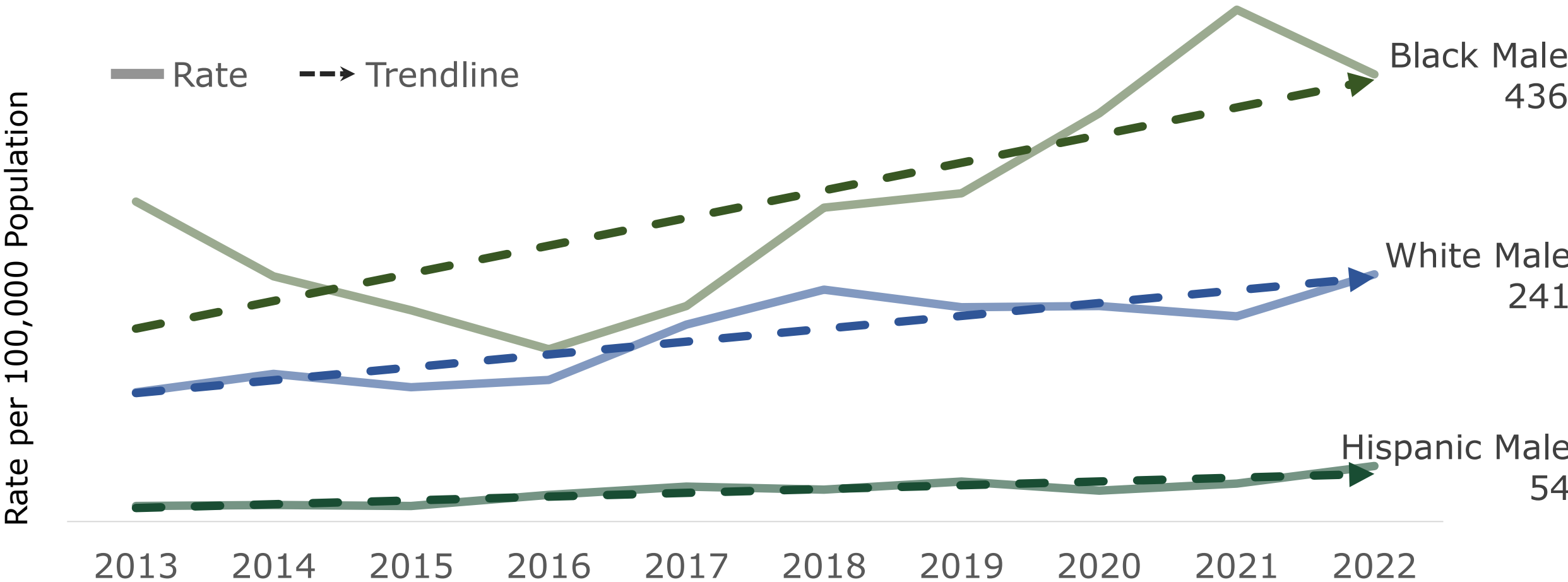
Recent syphilis increases have been noted in nearly all measurable sub-populations.

By age, people under 40 are experiencing the highest average annual increases, and differences in rates by age group are increasing.



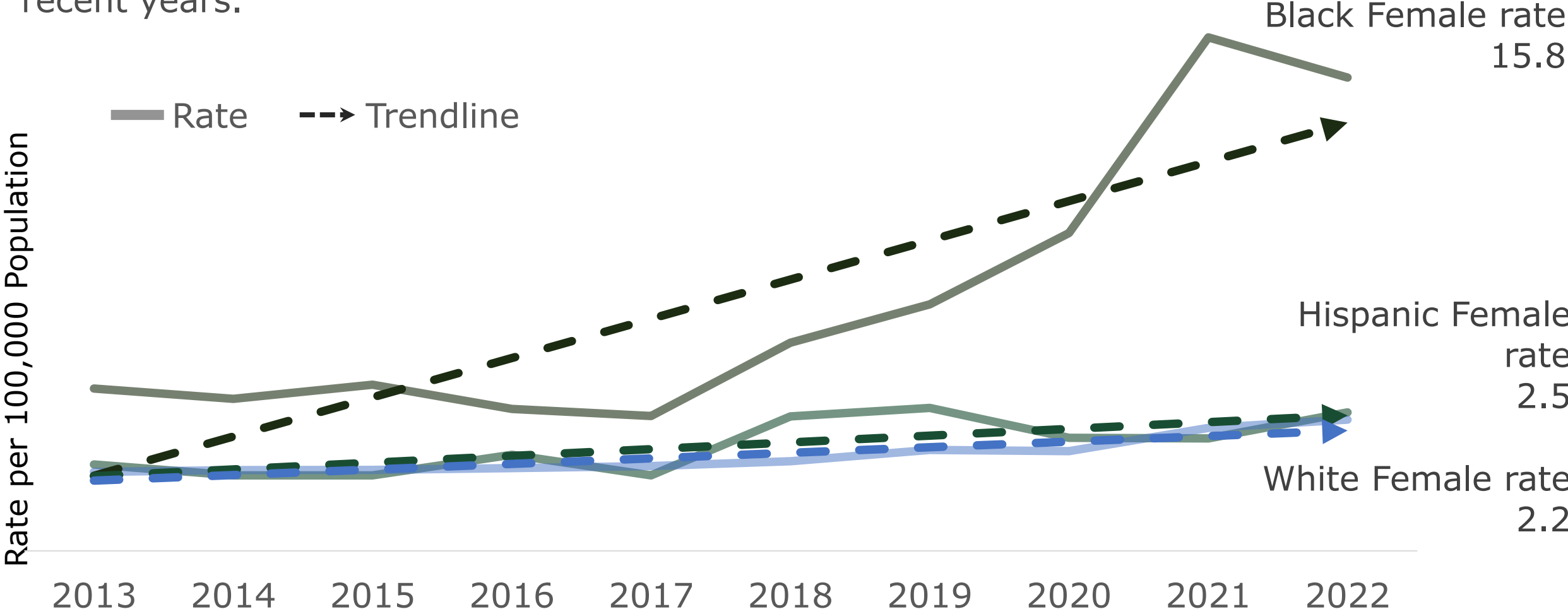
# P&S Syphilis Trends – Men

Among men, by race, significant increases have been measured for Black, Hispanic/Latino, and white men. There has been a widening of the disparity between Black and white men in syphilis diagnosis rates.



# P&S Syphilis Trends – Women

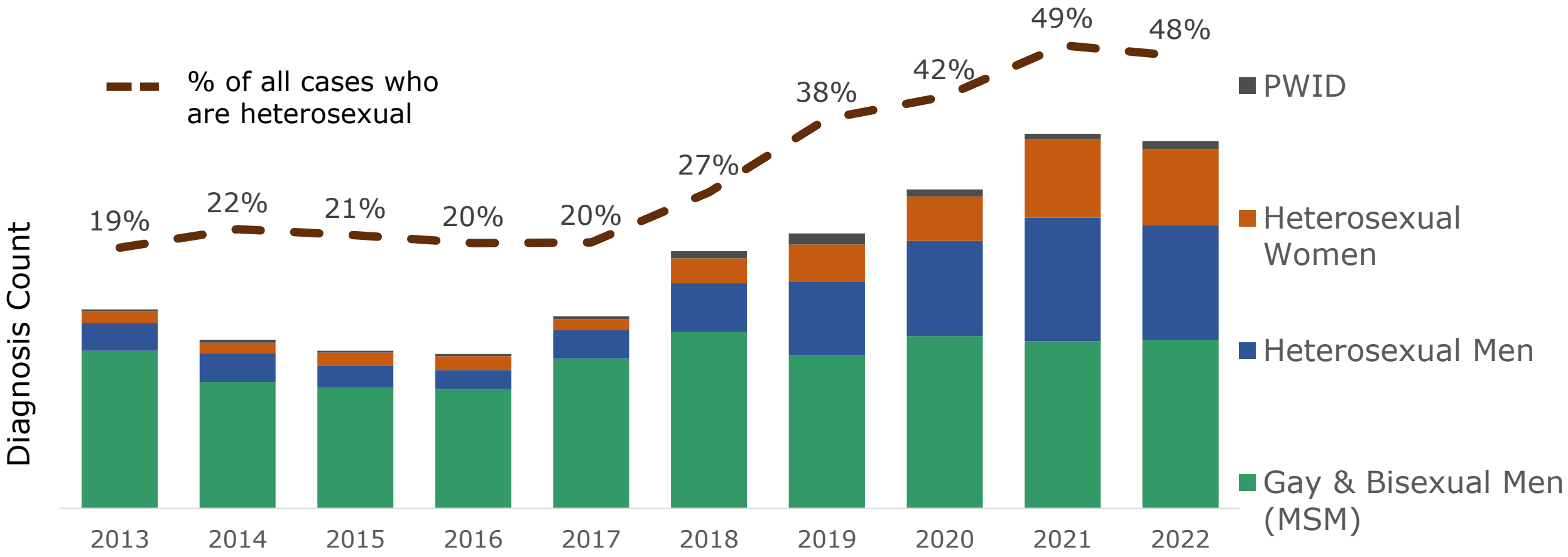
Cases among women have tripled in the past 5 years. Females remain less likely to be diagnosed with syphilis compared to men, but that risk difference is shrinking in recent years.



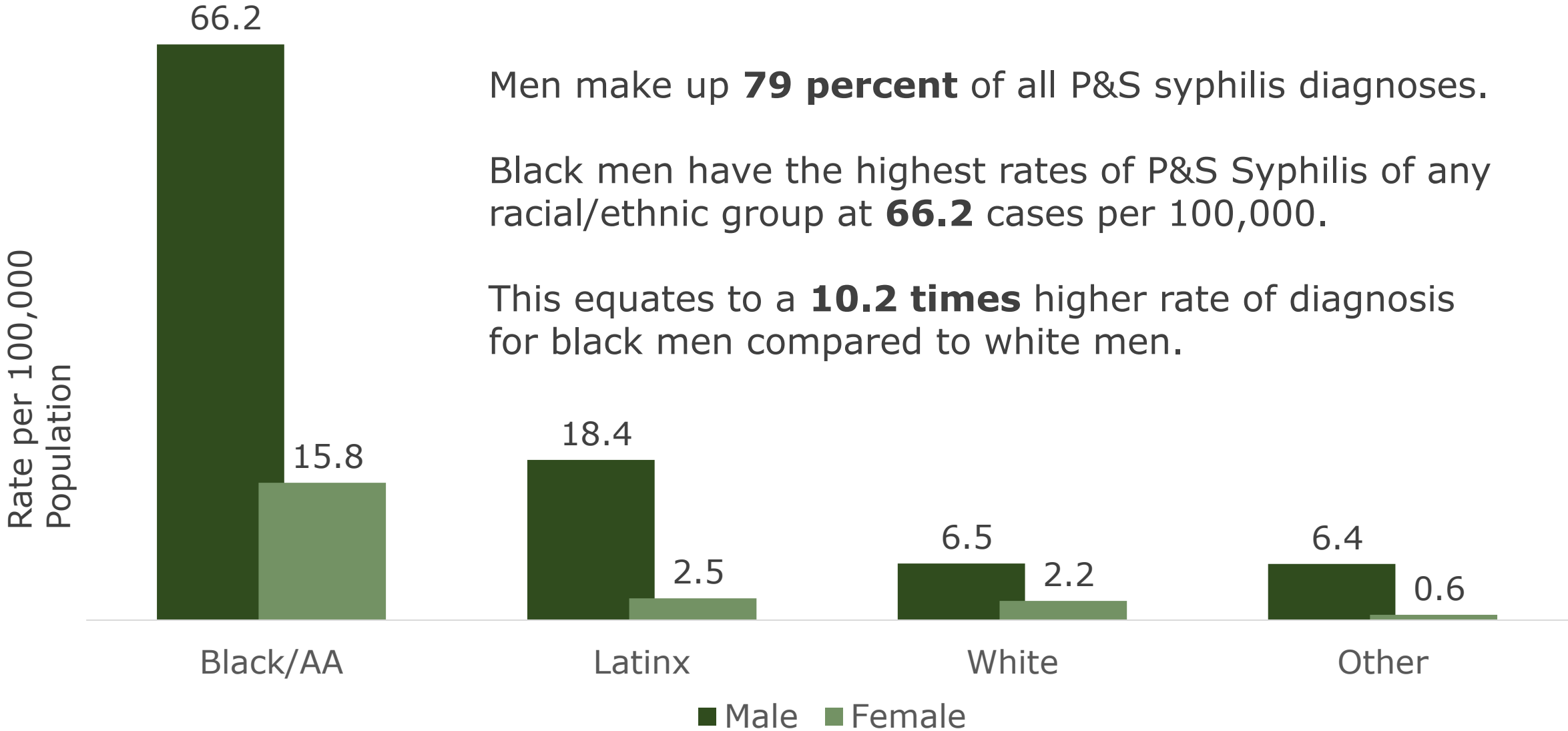


# P&S Syphilis Trends – Transmission Risk

By transmission risk, cases have been increasing most significantly among people who report only heterosexual sex (both males and females). Men who have sex with men remain at the highest risk of syphilis infection.



# P&S Syphilis – Priority Populations



Men make up **79 percent** of all P&S syphilis diagnoses.

Black men have the highest rates of P&S Syphilis of any racial/ethnic group at **66.2** cases per 100,000.

This equates to a **10.2 times** higher rate of diagnosis for black men compared to white men.

# P&S Syphilis – Priority Populations

Gay/Bisexual Males

379 cases \ 39%

syphilis manifestations

258 cases \ 27%

Heterosexual Females

170 cases \ 17%

People who inject drugs

22 cases \ 2%

Gay and bisexual men make up an estimated 6 percent of the general population but **38 percent** of all P&S Syphilis diagnoses.

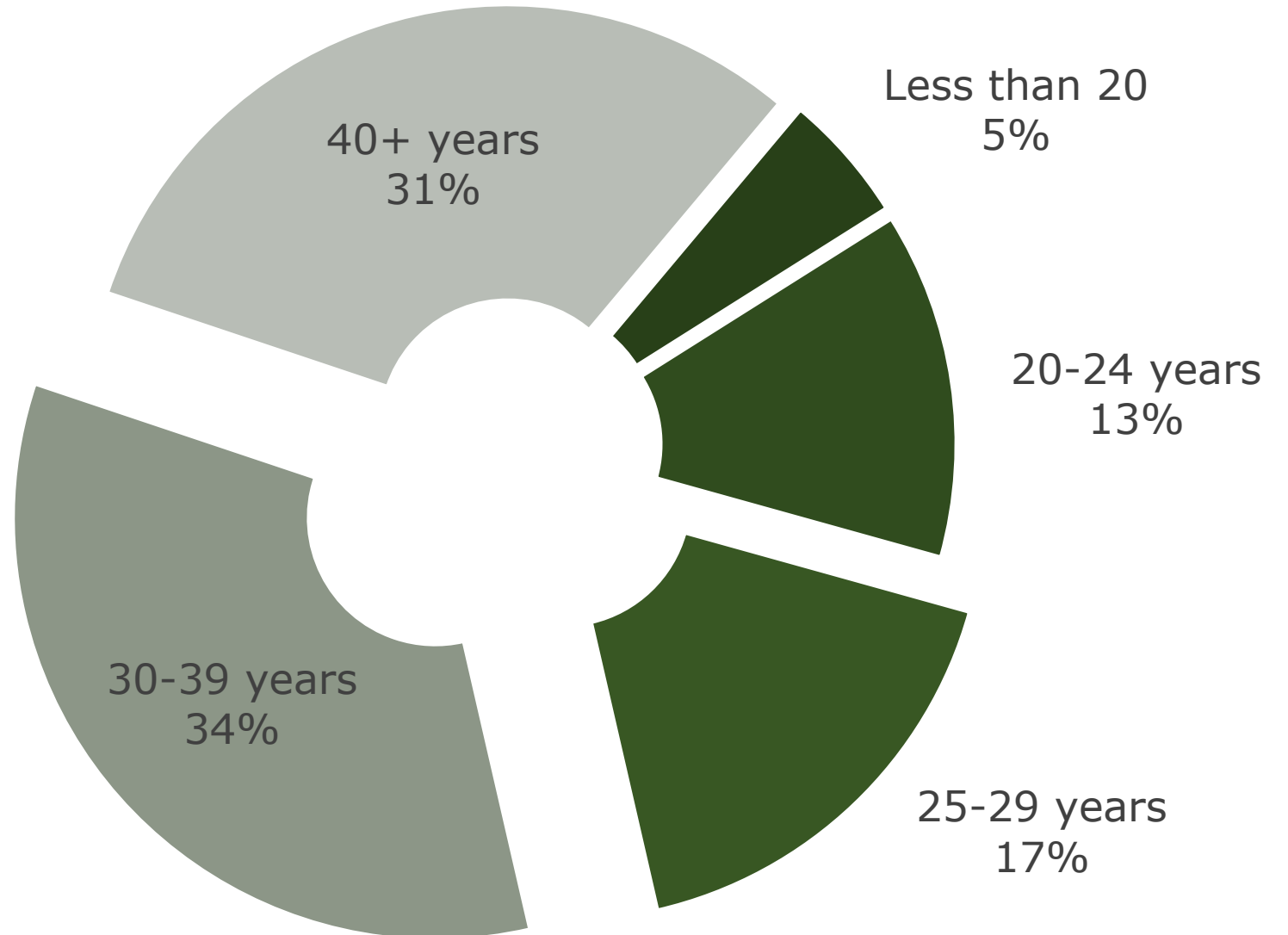
**15 percent** of cases had undetermined transmission risk.



# P&S Syphilis – Priority Populations

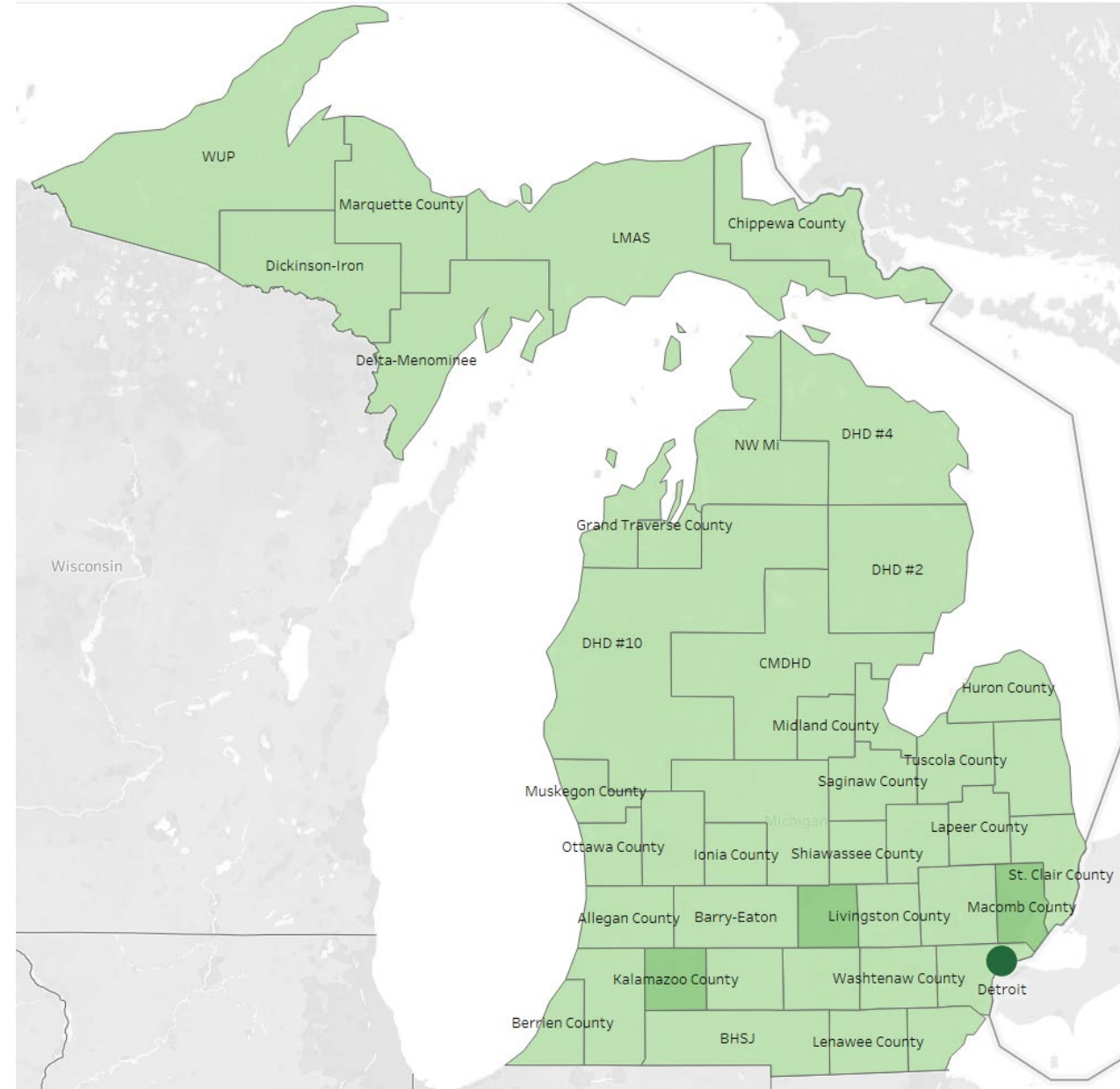
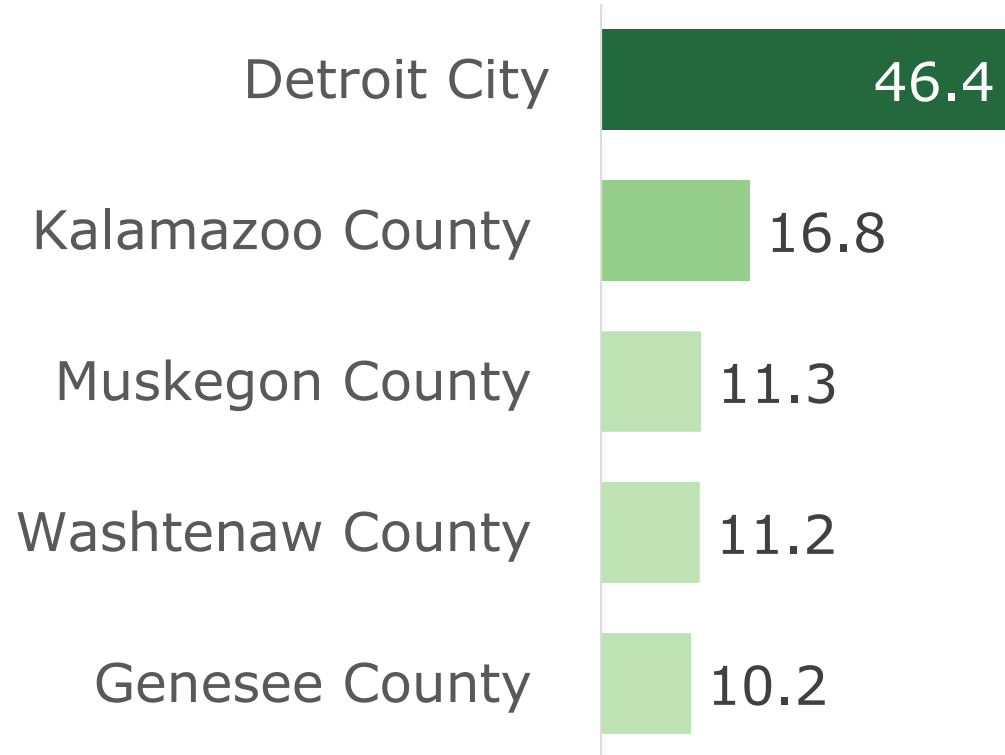
Less than **20 percent** of syphilis cases were diagnosed among patients less than 25 years old.

**30-39 year-olds** have the highest syphilis diagnosis rate of all age groups, followed by **25-29 year-olds**.



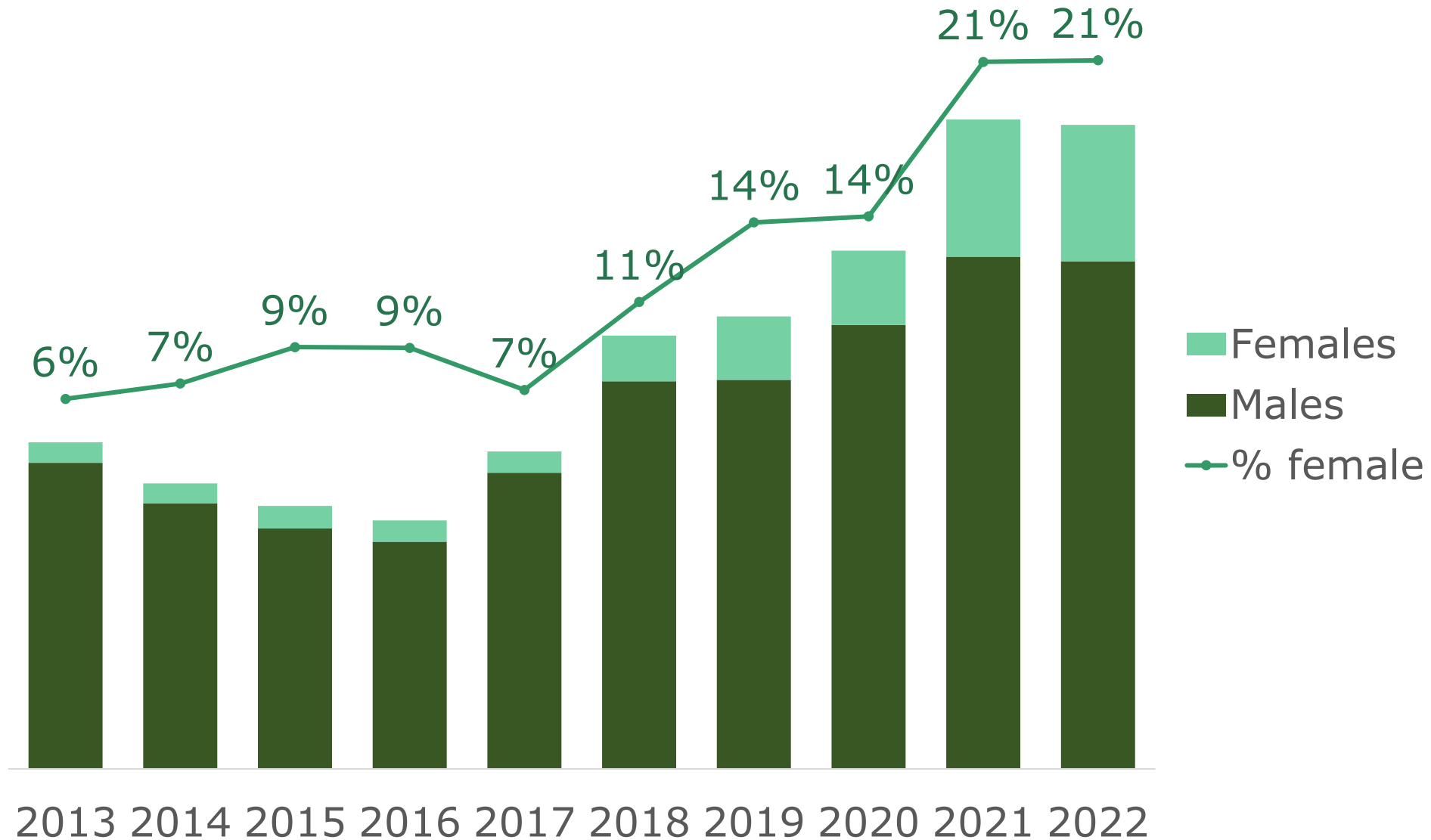
# P&S Syphilis – Geographic Distribution

Five Local Health Jurisdictions with Highest Case Rate per 100,000

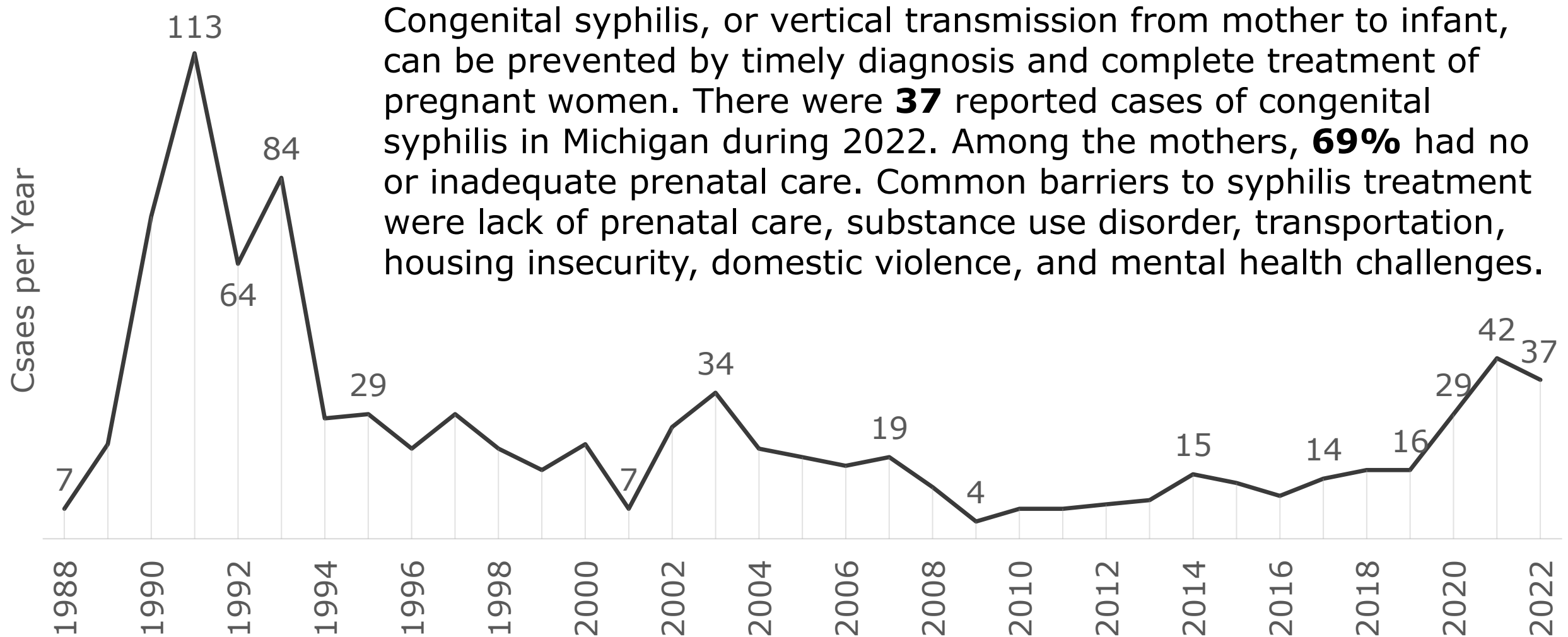


# P&S Syphilis and Women

Women of childbearing age (13-45) remain a priority population for public health follow-up as they are at risk of vertical transmission of syphilis to infants during pregnancy and childbirth.



# Congenital Syphilis



For questions on using these data or for additional data requests:

[www.Michigan.gov/SOARS](http://www.Michigan.gov/SOARS)