



# Sexually Transmitted Disease (STD) Surveillance Report, 2022

Minnesota Department of Health STD Surveillance System

# Introduction 1/2

- Under Minnesota law, physicians and laboratories are required to report all laboratory-confirmed cases of chlamydia, gonorrhea, syphilis, and chancroid to the Minnesota Department of Health (MDH) within one working day.
- The MDH does not maintain statistics for other, non-reportable STDs (ex: herpes, HPV/genital warts).
- This slide set describes trends in reportable STDs in Minnesota by person, place, and time.
- Analyses exclude cases reported from federal and private prisons.

## Introduction 2/2

- STD surveillance is the systematic collection of data from cases for the purpose of monitoring the frequency and distribution of STDs in a given population.
- STD surveillance data are used to detect problems, prioritize resources, develop and target interventions, and evaluate the effectiveness of interventions.

# Interpreting STD Surveillance Data (1/2)

- Factors that impact the completeness and accuracy of STD data include:
  - Level of STD screening by healthcare providers
  - Individual test-seeking behavior
  - Sensitivity of diagnostic tests
  - Compliance with case reporting
  - Completeness of case reporting
  - Timeliness of case reporting
- Increases and decreases in STD rates can be due to actual changes in disease occurrence and/or changes in one or more of the above factors.
- COVID-19 lockdowns likely played a role in the number of cases reported/diagnosed this past year.

## Interpreting STD Surveillance Data (2/2)

- The surveillance system only includes cases with a positive laboratory test. Cases diagnosed solely on symptoms are not counted.
- Since 2012 we have included cases that had only a lab report and no corresponding case report form. This has increased the number of unknowns in some variables.
- In 2020, the COVID-19 response accelerated the use of laboratory reporting by facilities, again increasing the number of unknown variables.
- In 2018, in order to be consistent with CDC, we categorized all White, Hispanic and Black, Hispanic cases as Hispanic. That means the race categories now reflect only White, Non-Hispanic and Black, Non-Hispanic cases.
- Surveillance data represent cases of infection, not individuals. A person with multiple infections in a given year will be counted more than once.
- Caution is warranted when interpreting changes in STD numbers that can seem disproportionately large when the number of cases is small.

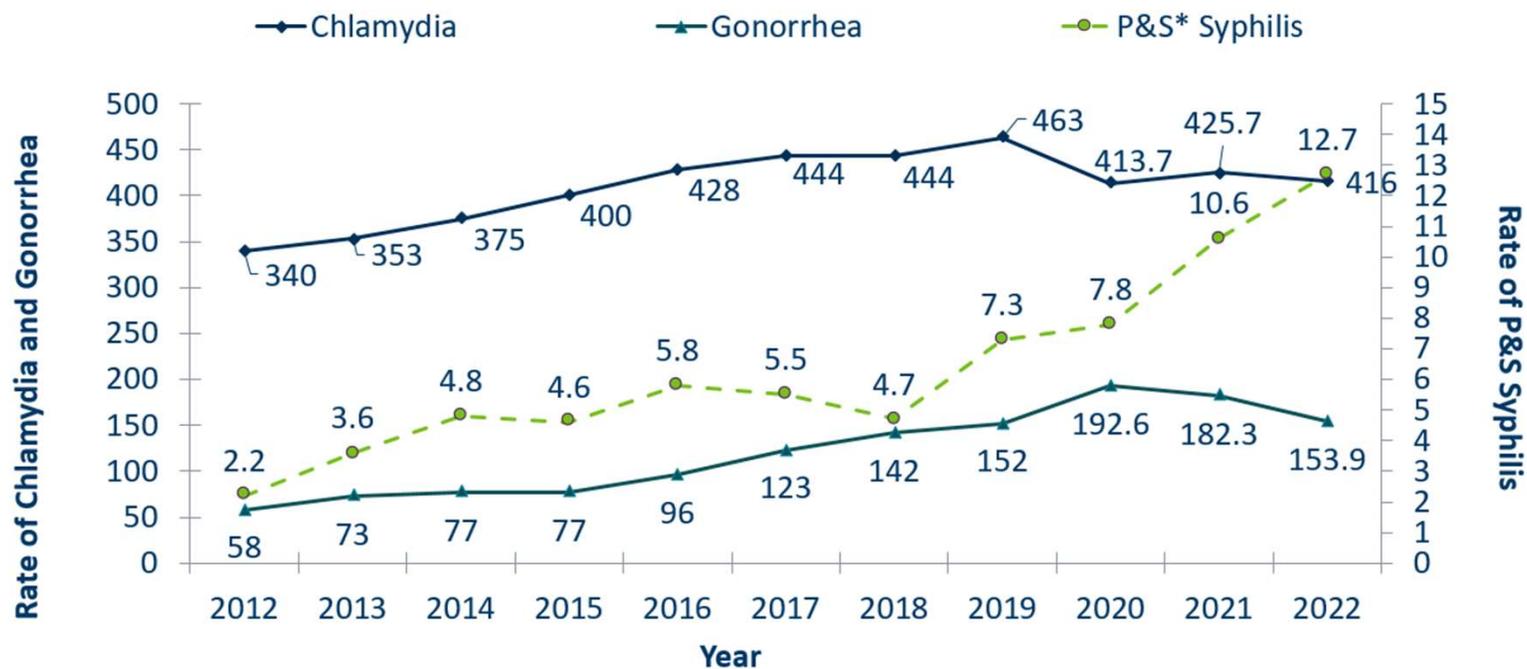
# Overview of STDs in Minnesota

Minnesota Department of Health STD Surveillance System

## STDs in Minnesota: Number of Cases Reported in 2022

- Total of 32,071 STD cases reported to MDH in 2022:
  - 22,079 Chlamydia cases
  - 8,161 Gonorrhea cases
  - 1831 Syphilis cases (all stages)
  - 0 Chancroid cases

# STDs in Minnesota: Rate per 100,000 by Year of Diagnosis, 2012-2022

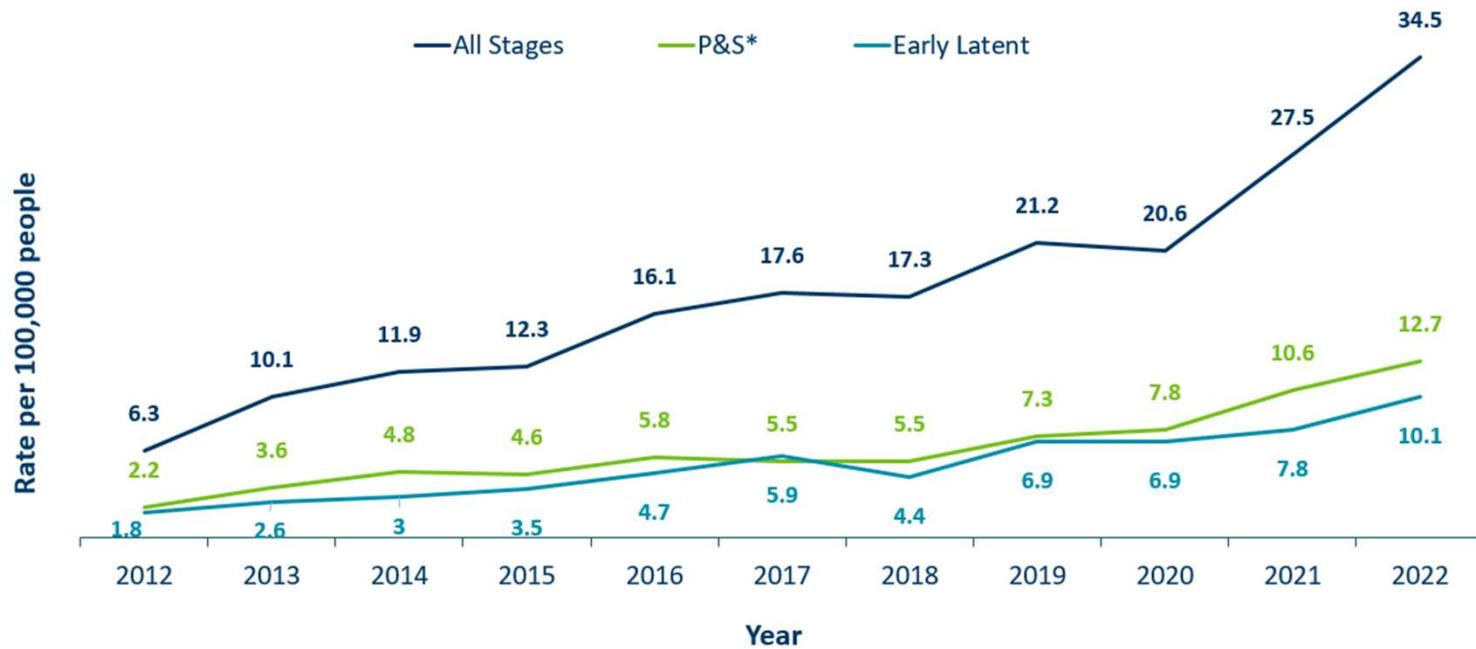


\* P&S = Primary and Secondary

# Syphilis

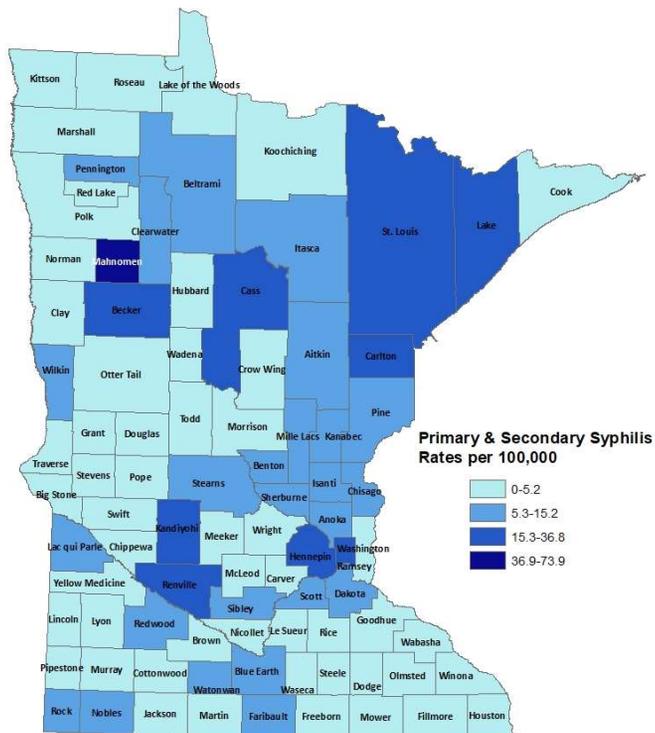
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# Syphilis Rates by Stage of Diagnosis, Minnesota, 2012-2022



\* P&S = Primary and Secondary

# 2022 Minnesota Primary and Secondary Syphilis Rates by County

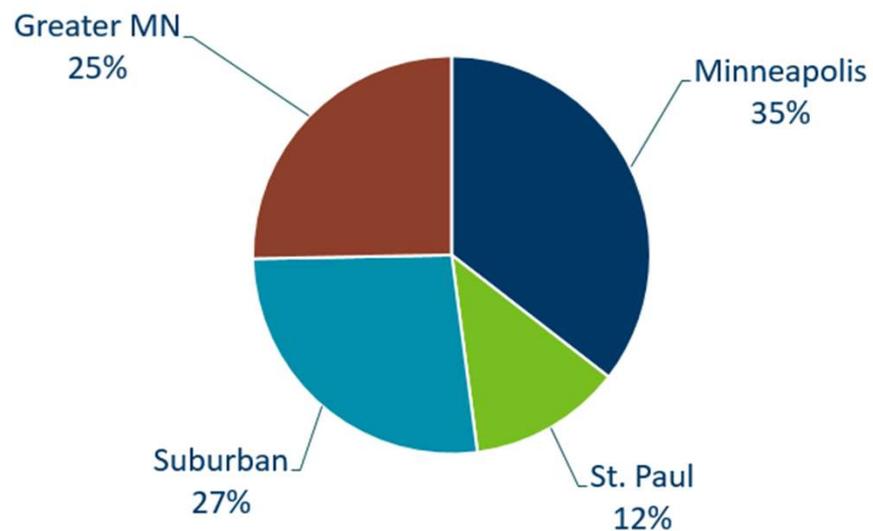


City of Minneapolis	62.7 per 100,000 (240 cases)
City of St. Paul	29.5 per 100,000 (84 cases)
Suburban*	8.3 per 100,000 (181 cases)
Greater Minnesota	7.0 per 100,000 (171 cases)
Total	12.7 per 100,000 (676 cases)

\*7-county metro area, excluding the cities of Minneapolis and St. Paul

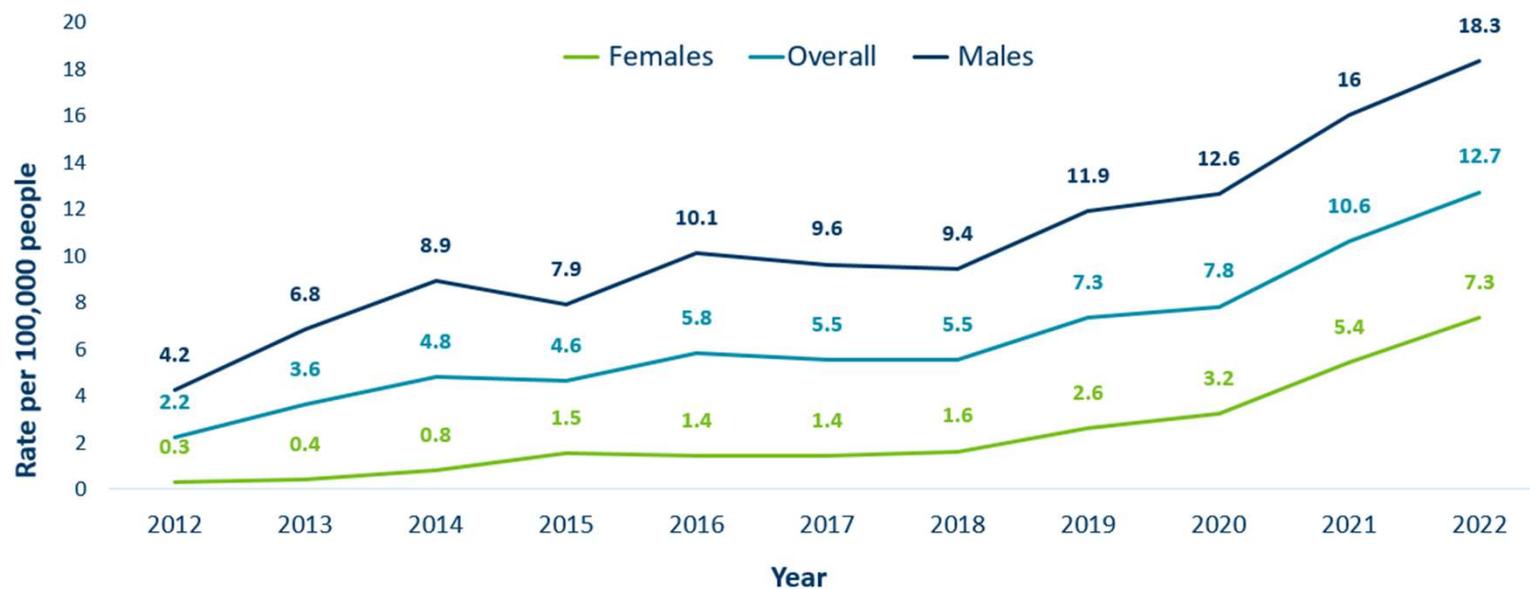
# Primary and Secondary Syphilis Infections by Residence at Diagnosis Minnesota, 2022

Total Number of Cases = 676

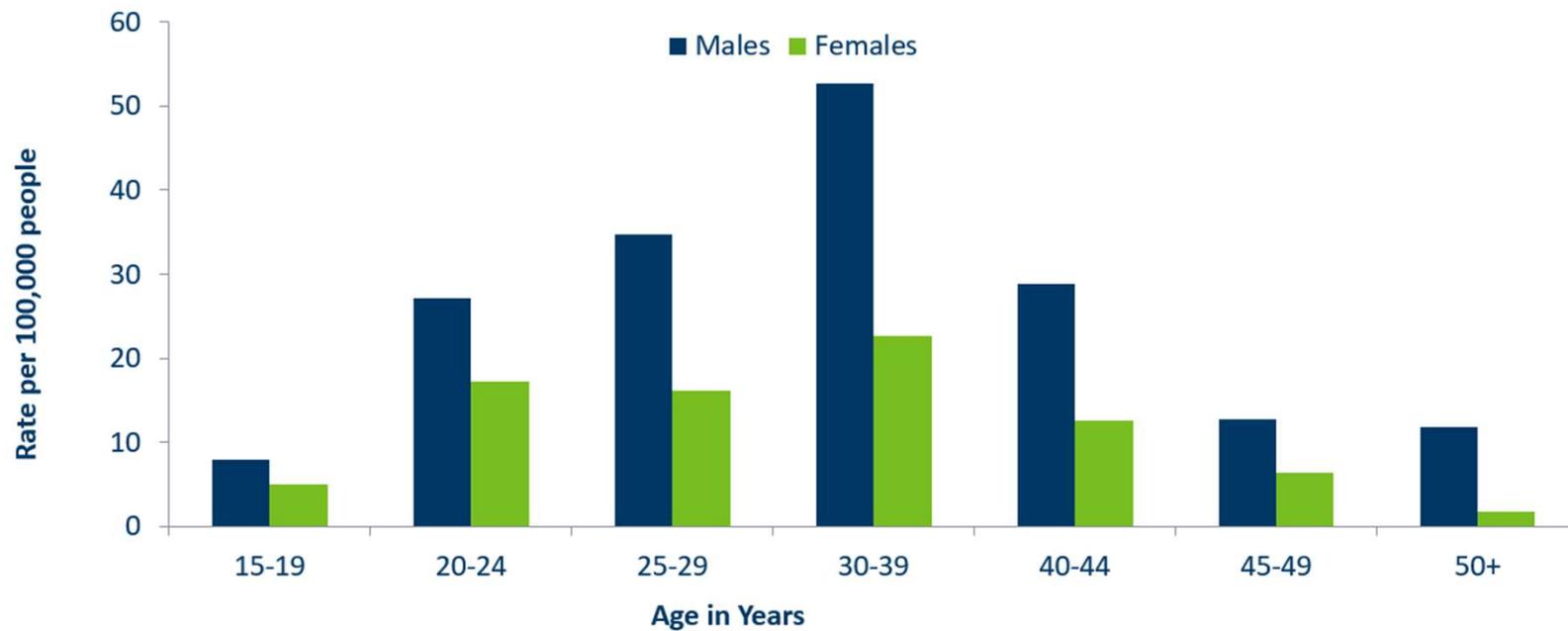


Suburban = Seven-county metro area including Anoka, Carver, Dakota, Hennepin (excluding Minneapolis), Ramsey (excluding St. Paul), Scott, and Washington counties. Greater MN = All other Minnesota counties outside the seven-county metro area.

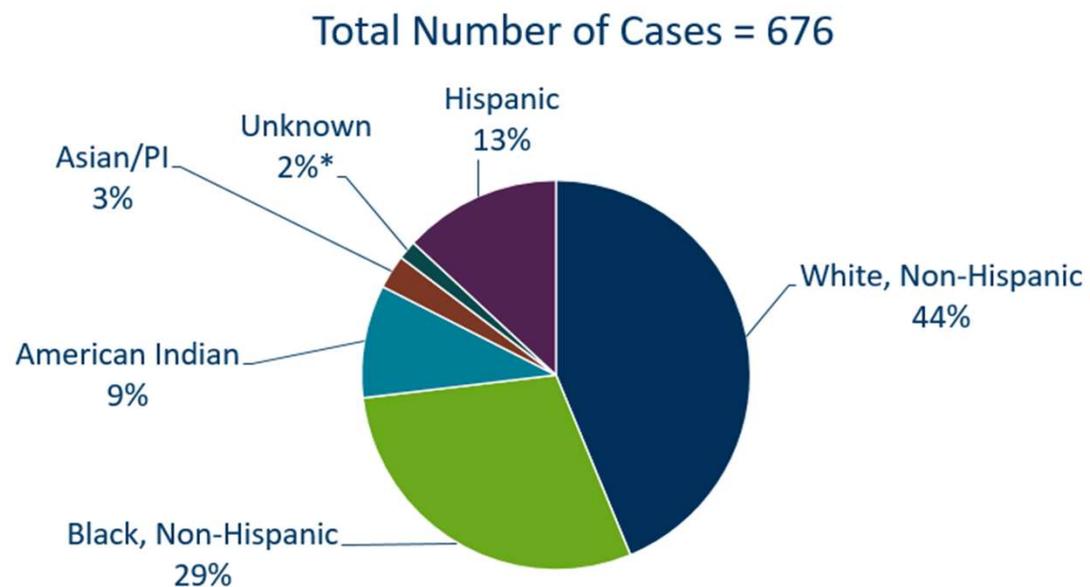
# Primary and Secondary Syphilis Rates by Gender, Minnesota, 2012-2022



# Age-Specific Primary and Secondary Syphilis Rates by Gender, Minnesota, 2022

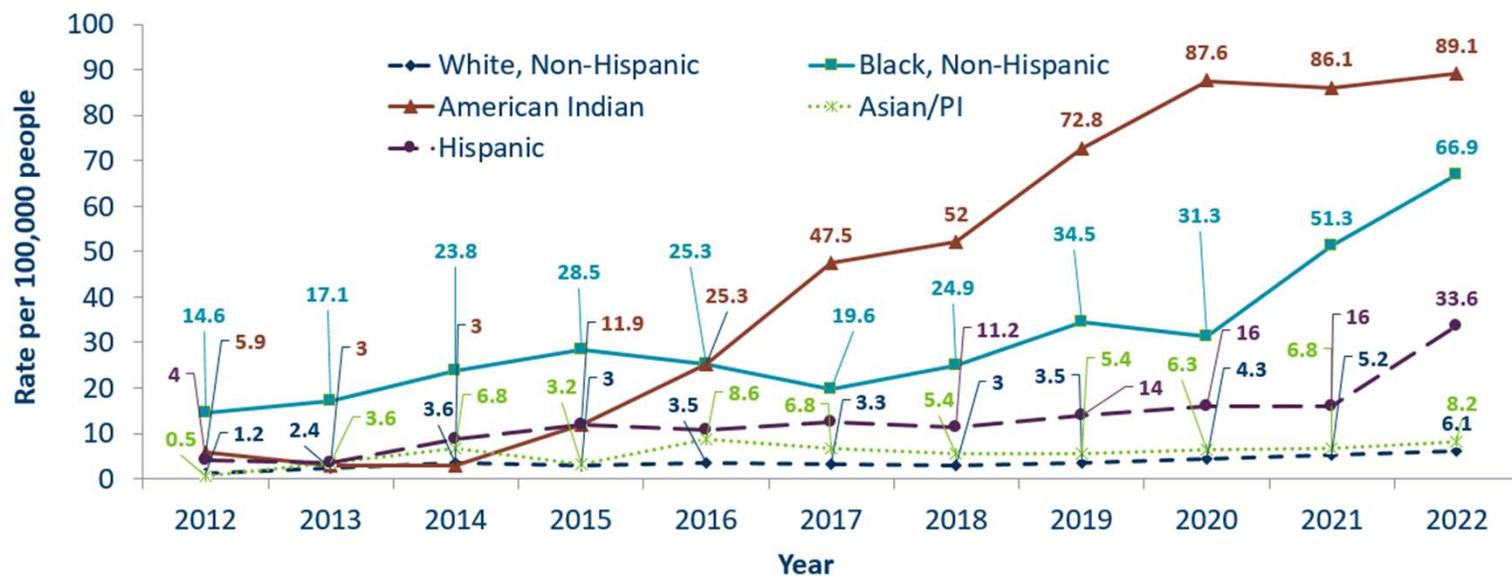


# Primary and Secondary Syphilis Cases by Race Minnesota, 2022



\*Includes people reported with more than one race

# Primary and Secondary Syphilis Rates by Race/Ethnicity Minnesota, 2012-2022

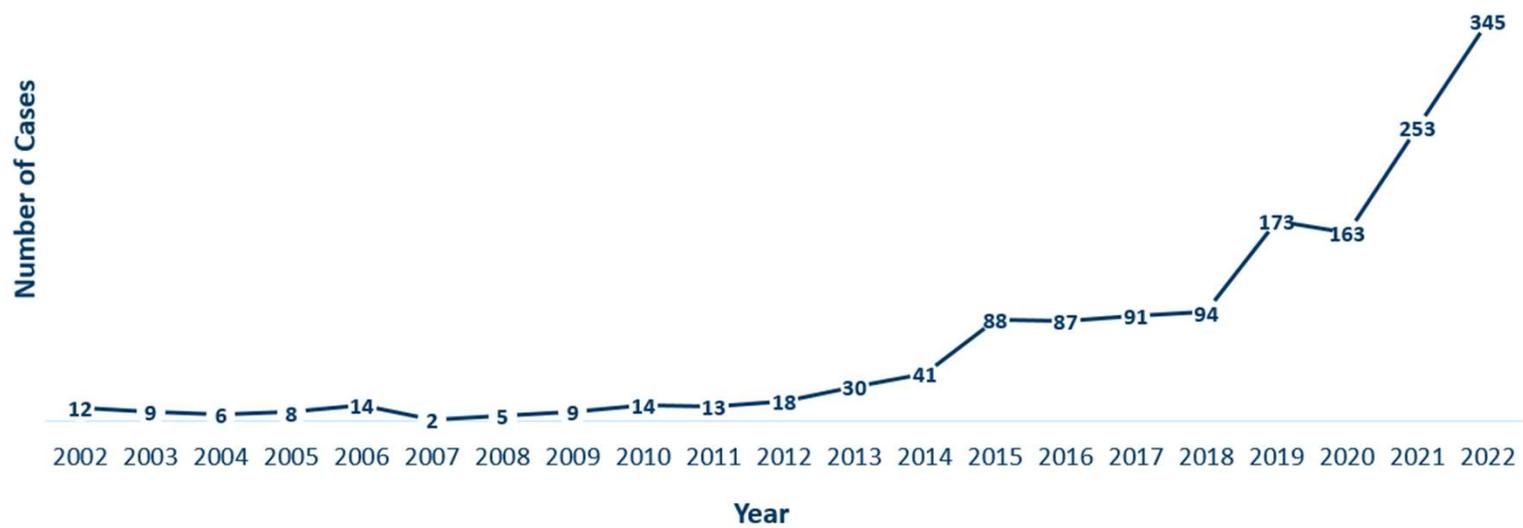


\* people of Hispanic ethnicity can be of any race.

## Topic of Interest: Syphilis Among Females and Congenital Syphilis in Minnesota

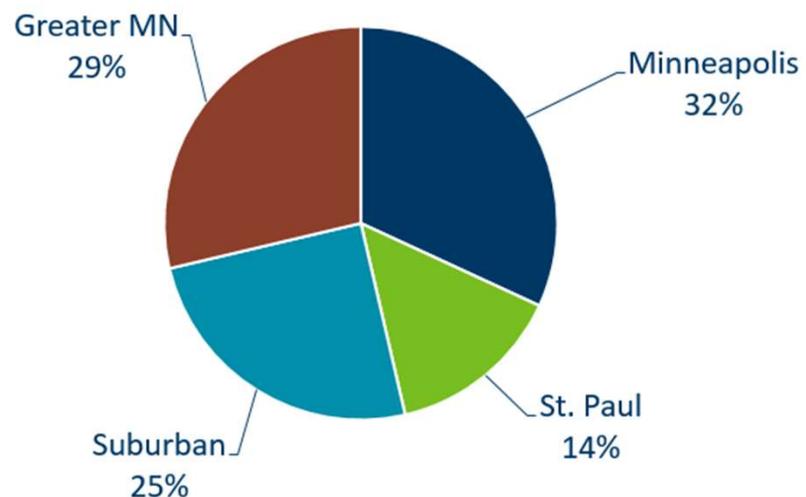
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# Female Early Syphilis Cases Minnesota, 2022



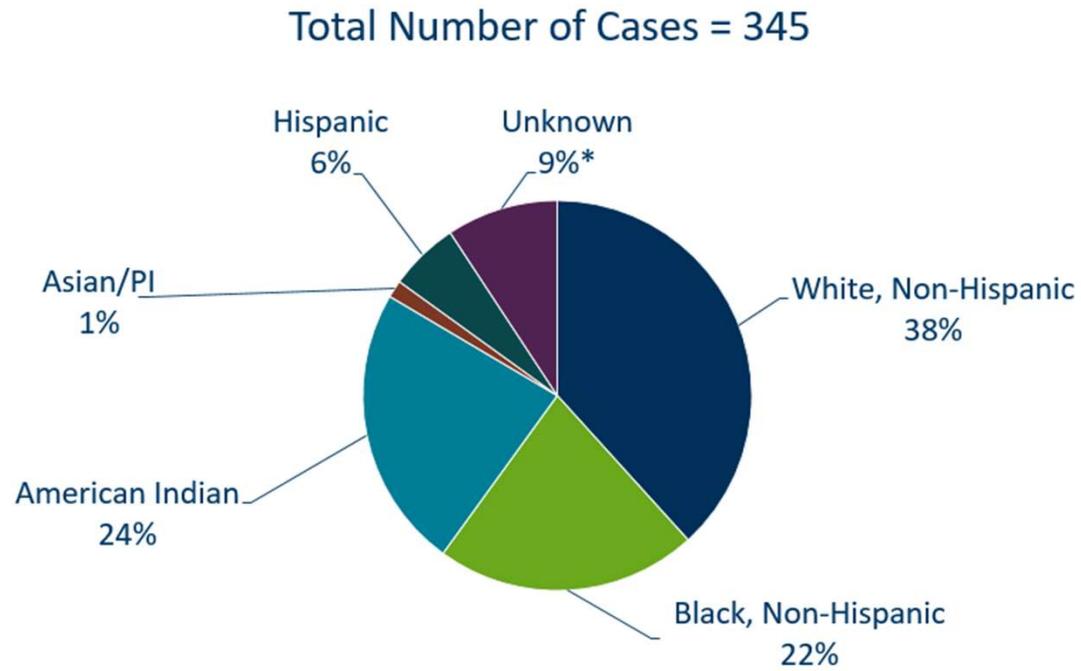
# Early Syphilis Infections in Females by Residence at Diagnosis Minnesota, 2022

Total Number of Cases = 345



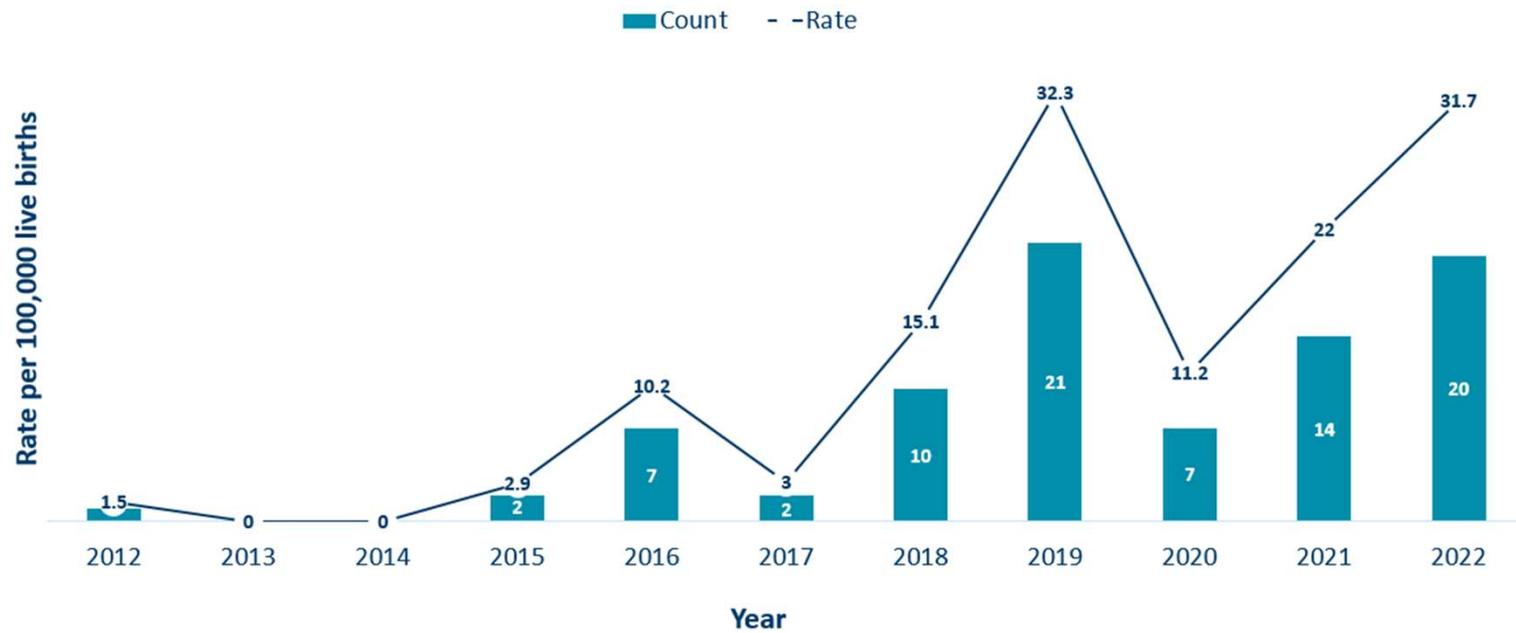
Suburban = Seven-county metro area including Anoka, Carver, Dakota, Hennepin (excluding Minneapolis), Ramsey (excluding St. Paul), Scott, and Washington counties. Greater MN = All other Minnesota counties outside the seven-county metro area.

# Early Syphilis Cases in Females by Race/Ethnicity Minnesota, 2022



\*Includes people reported with more than one race

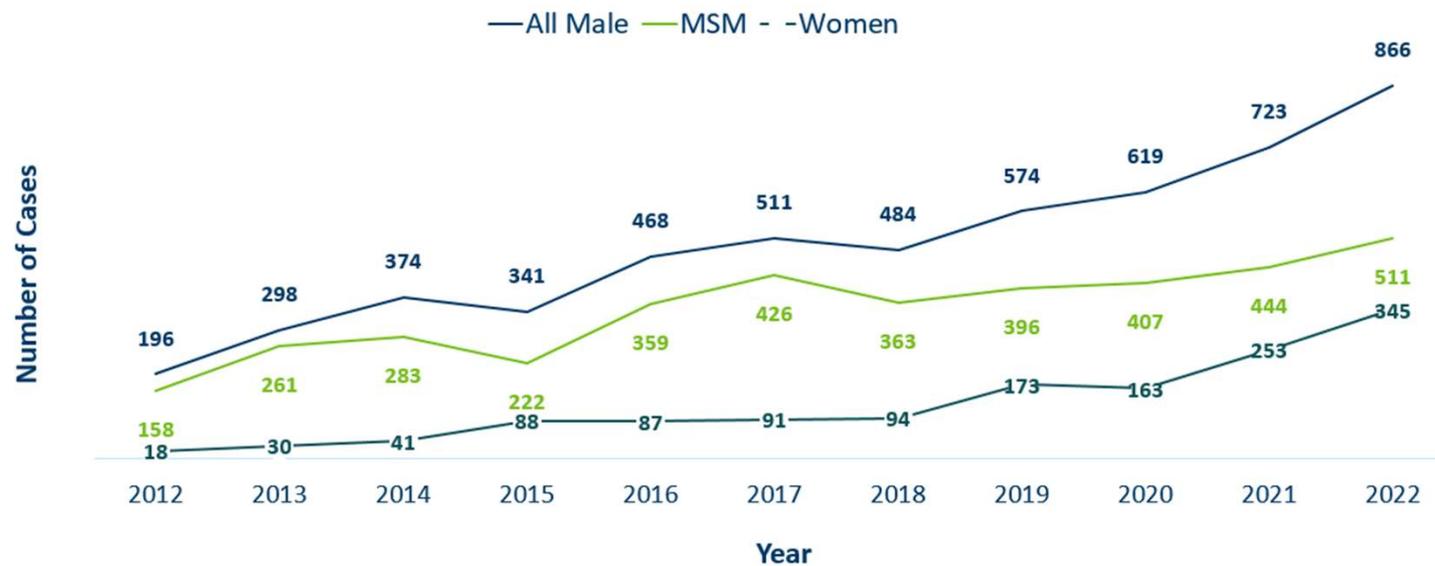
# Congenital Syphilis Rates Among Infants Minnesota, 2012-2022



## Topic of Interest: Early Syphilis Among Men Who Have Sex With Men in Minnesota

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# Number of Early Syphilis<sup>†</sup> Cases by Gender and MSM Minnesota, 2012-2022

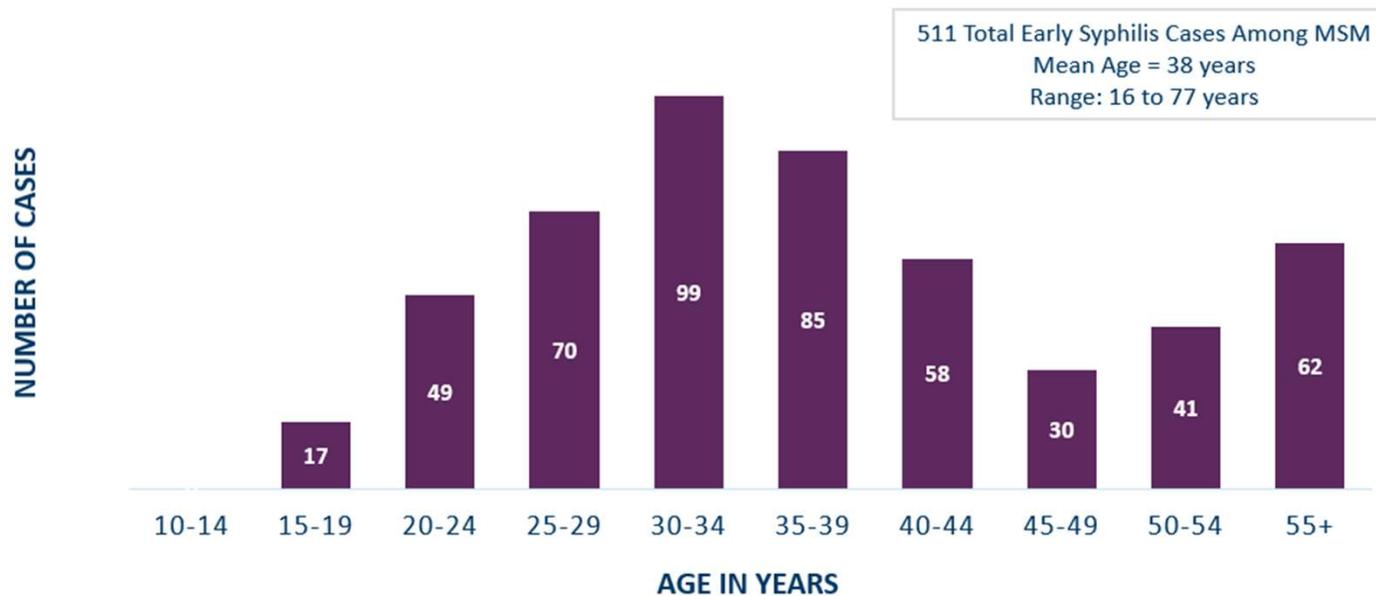


MSM=Men who have sex with men.

Figure does not include cases diagnosed in transgender people

<sup>†</sup> Early Syphilis includes primary, secondary, and early latent stages of syphilis.

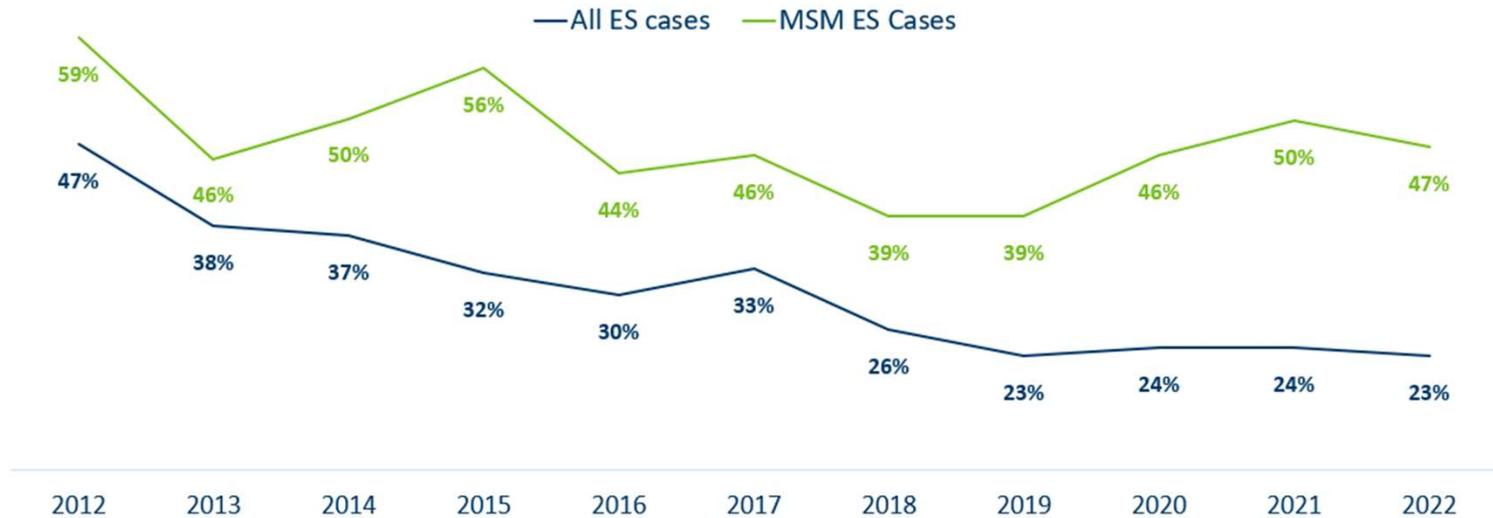
# Early Syphilis<sup>†</sup> Cases Among MSM by Age Minnesota, 2022



MSM=Men who have sex with men

<sup>†</sup> Early Syphilis includes primary, secondary, and early latent stages of syphilis.

# Early Syphilis<sup>†</sup> (ES) Cases Co-infected with HIV, 2012-2022



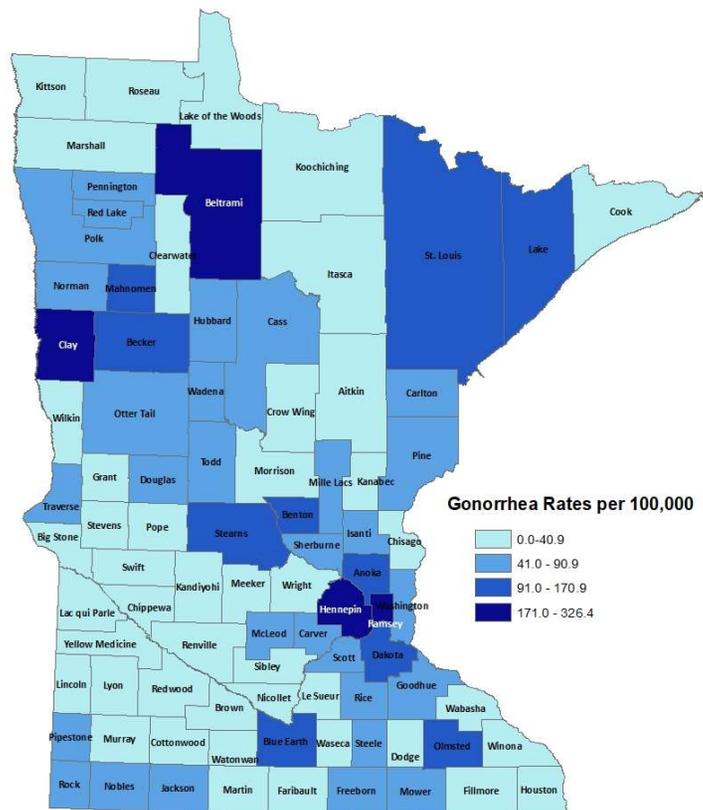
MSM=Men who have sex with men

<sup>†</sup> Early Syphilis includes primary, secondary, and early latent stages of syphilis.

# Gonorrhea

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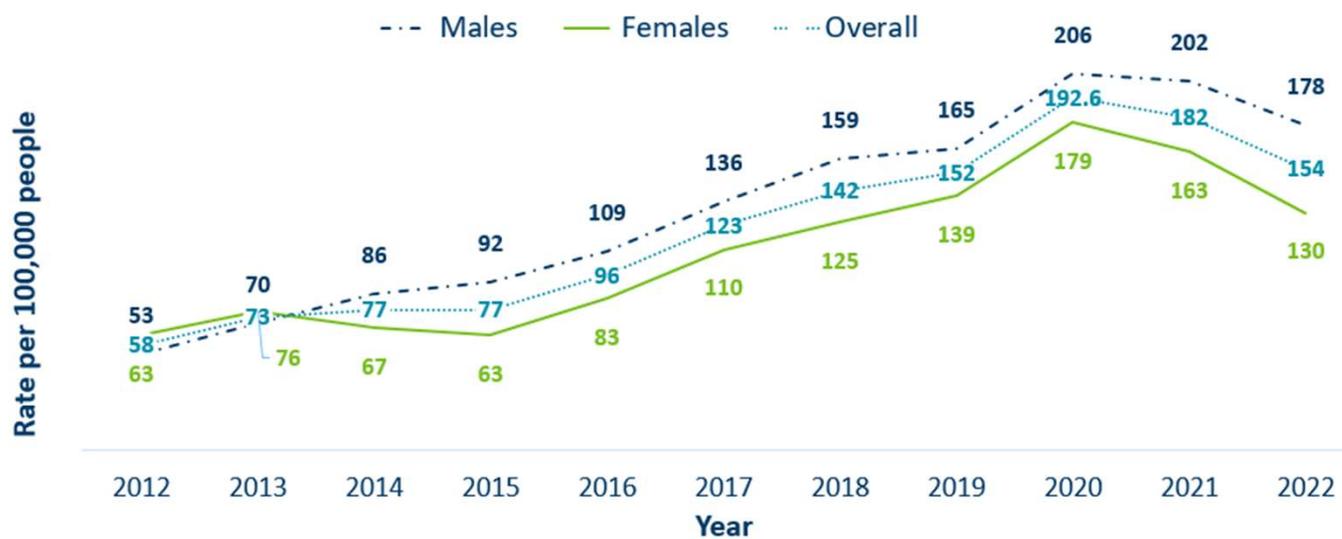
# 2022 Minnesota Gonorrhea Rates by County



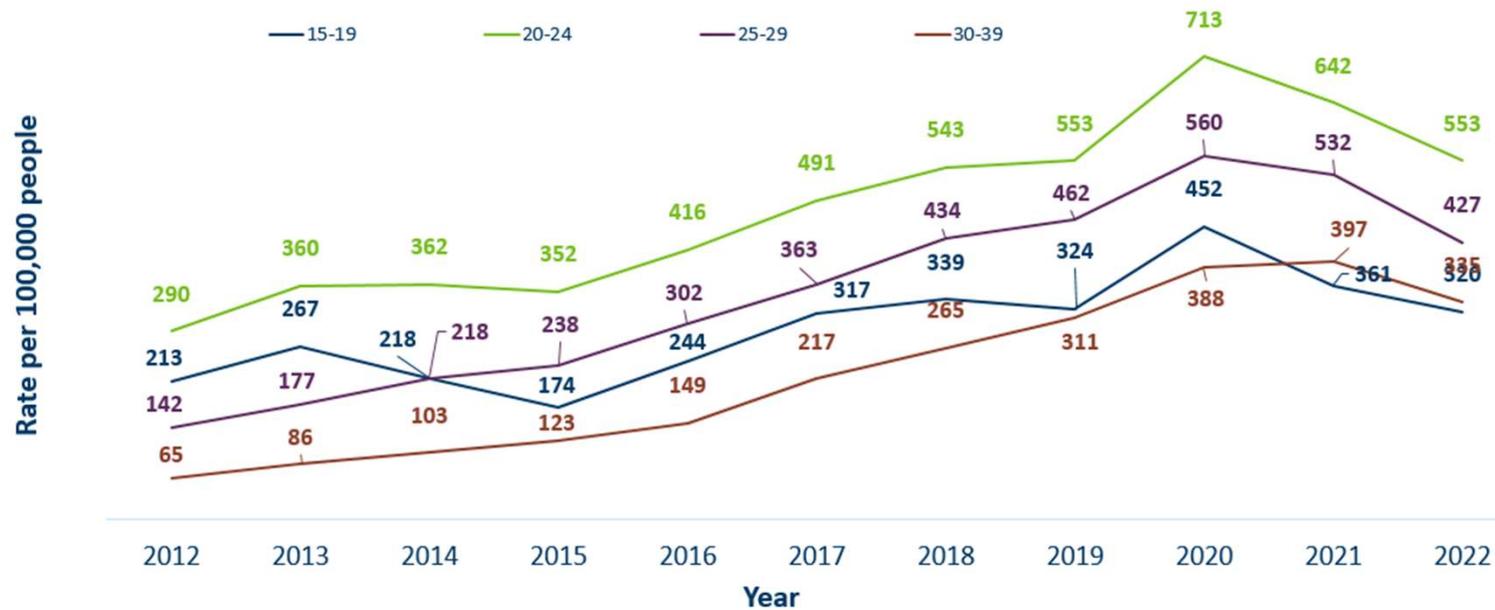
City of Minneapolis	693 per 100,000 (2,650 cases)
City of St. Paul	442 per 100,000 (1,261 cases)
Suburban*	111 per 100,000 (2,420 cases)
Greater Minnesota	72 per 100,000 (1,769 cases)
Total	154 per 100,000 (8,161 cases) (61 cases missing residence information)

\*7-county metro area, excluding the cities of Minneapolis and St. Paul  
[Data: STD Surveillance Report Data Tables, Minnesota 2022 \(PDF\)](#)

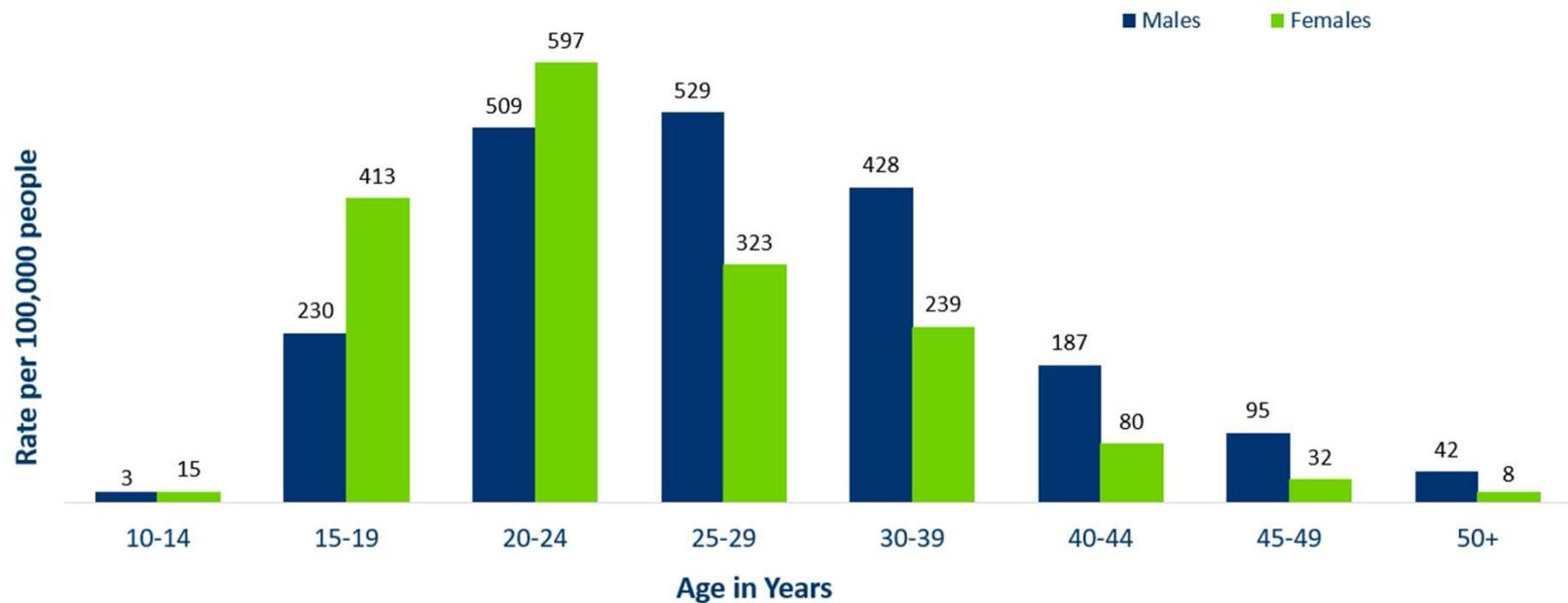
# Gonorrhea Rates by Gender Minnesota, 2012-2022



# Gonorrhea Rates by Age Minnesota, 2012-2022

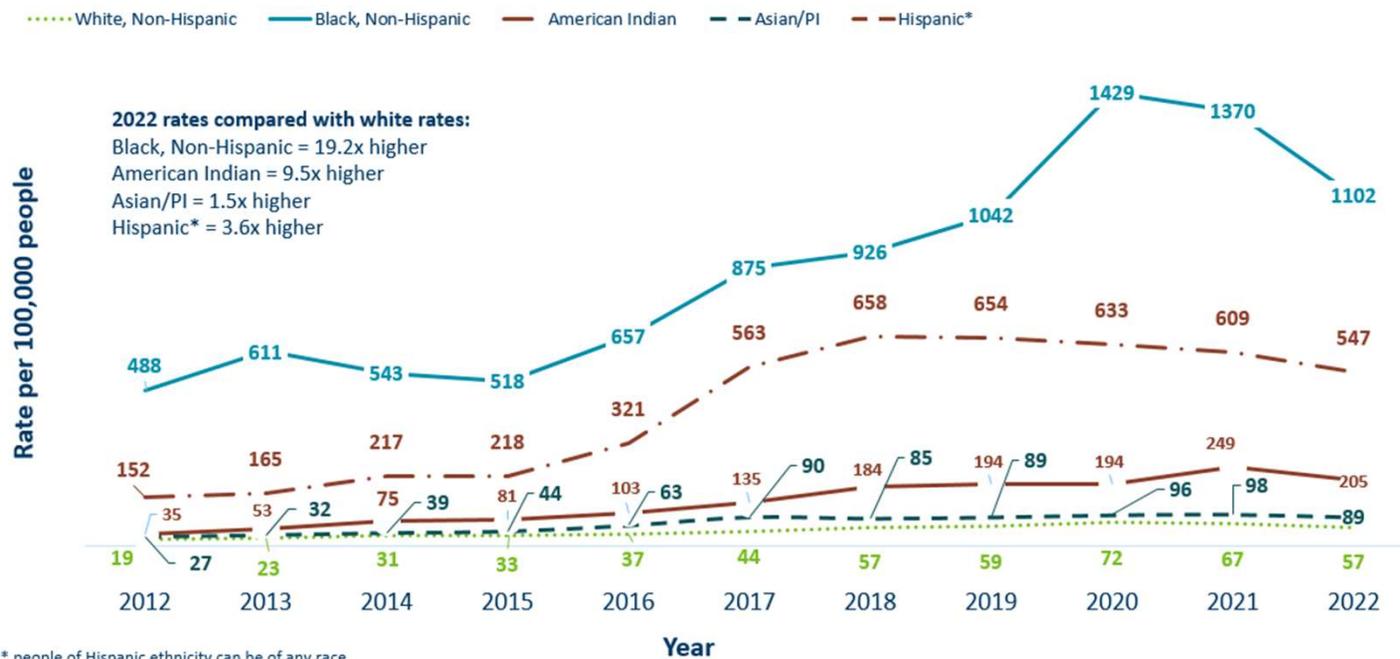


# Age-Specific Gonorrhea Rates by Gender Minnesota, 2022



Data: [STD Surveillance Report Data Tables, Minnesota 2022 \(PDF\)](#)

# Gonorrhea Rates by Race/Ethnicity Minnesota, 2012-2022

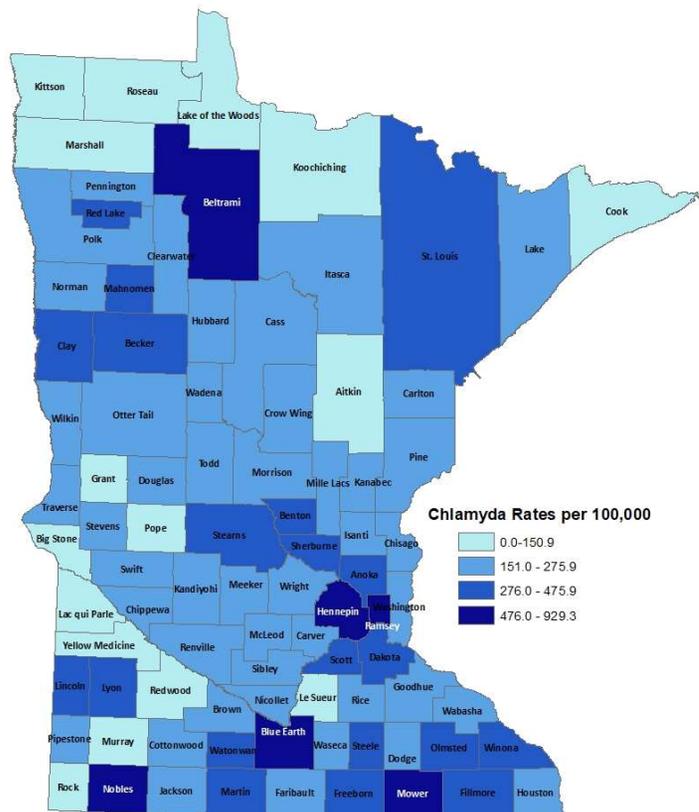


\* people of Hispanic ethnicity can be of any race

# Chlamydia

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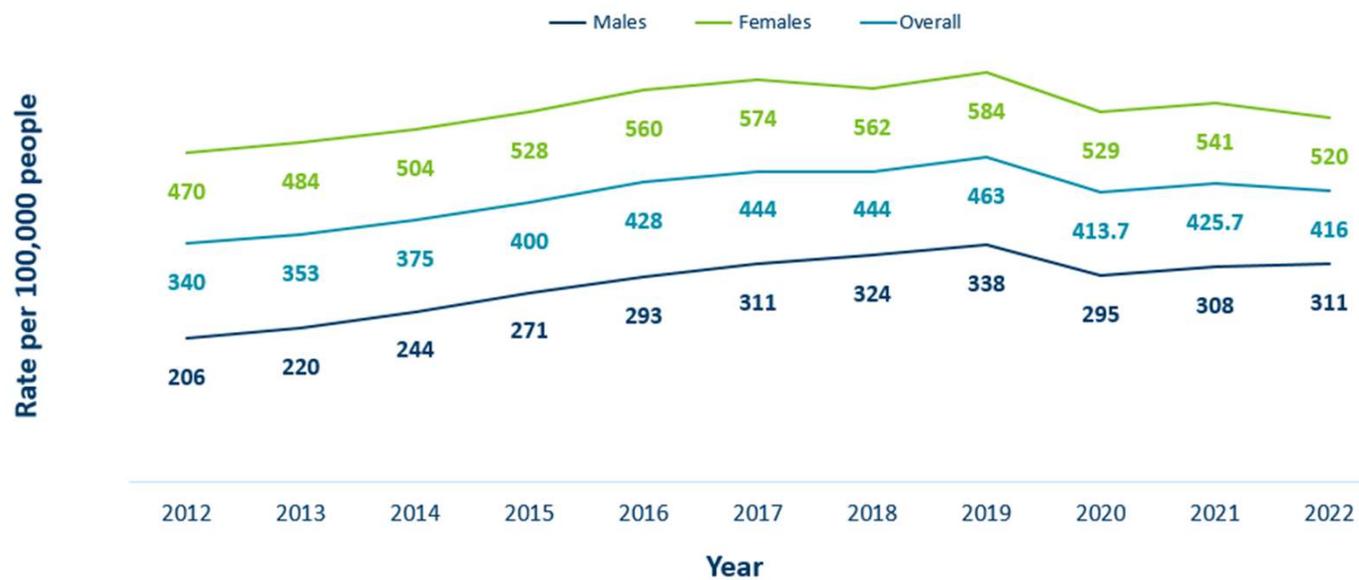
# 2022 Minnesota Chlamydia Rates by County



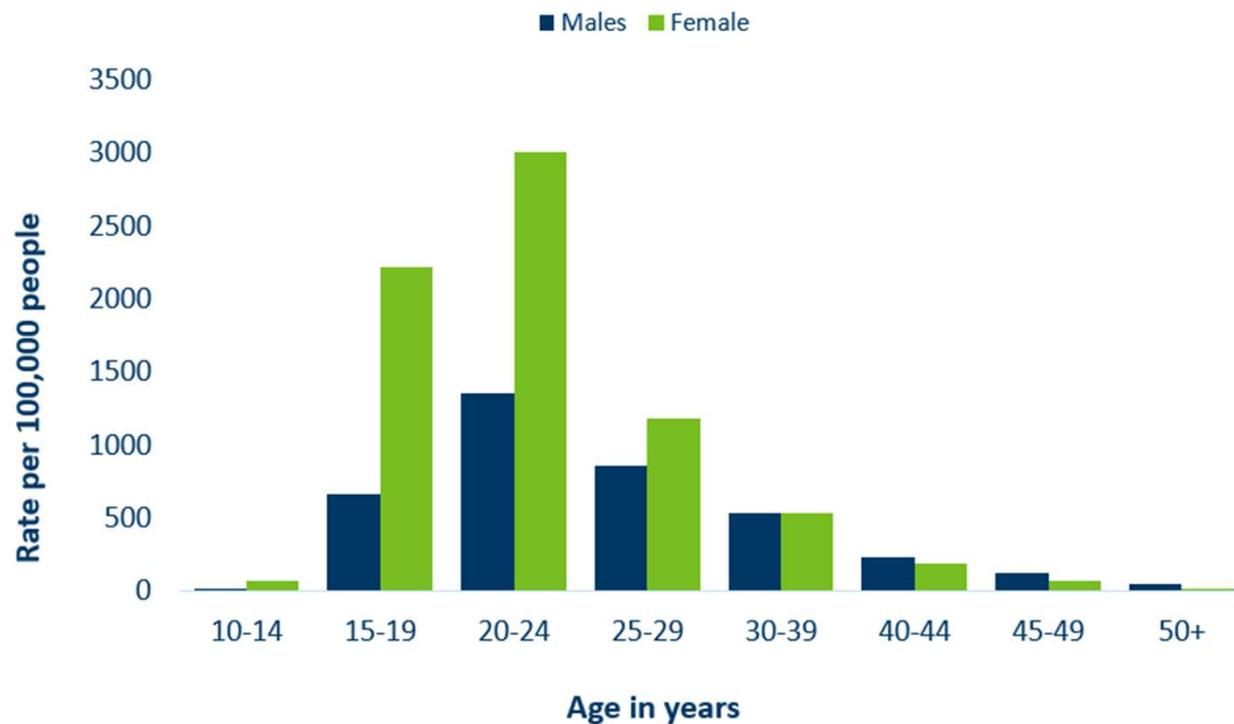
City of Minneapolis	1,267 per 100,000 (4,849 cases)
City of St. Paul	896 per 100,000 (2,553 cases)
Suburban*	344 per 100,000 (7,503 cases)
Greater Minnesota	288 per 100,000 (7,067 cases)
Total	416 per 100,000 (22,079 cases) <i>(108 cases missing residence information)</i>

\*7-county metro area, excluding the cities of Minneapolis and St. Paul  
[Data: STD Surveillance Report Data Tables, Minnesota 2022 \(PDF\)](#)

# Chlamydia Rates by Gender Minnesota, 2012-2022

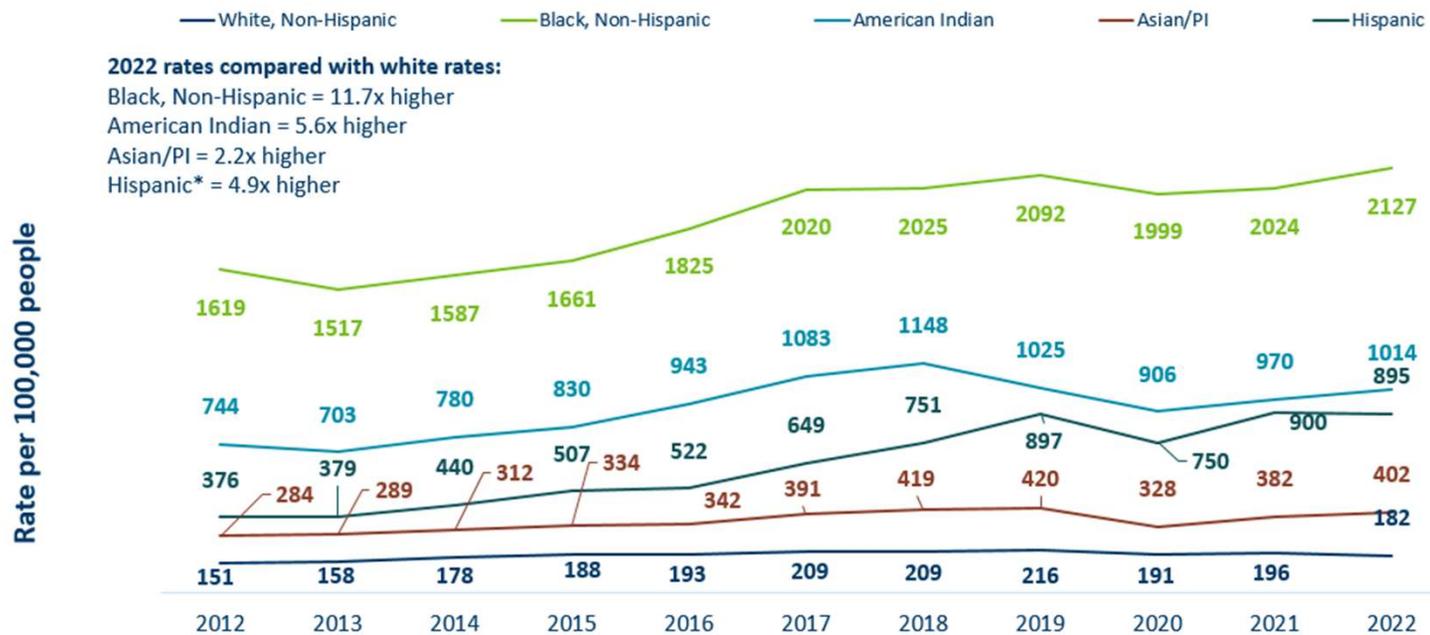


# Age-Specific Chlamydia Rates by Gender, Minnesota, 2022



Data: [STD Surveillance Report Data Tables, Minnesota 2022 \(PDF\)](#)

# Chlamydia Rates by Race/Ethnicity Minnesota, 2012-2022 (1/2)

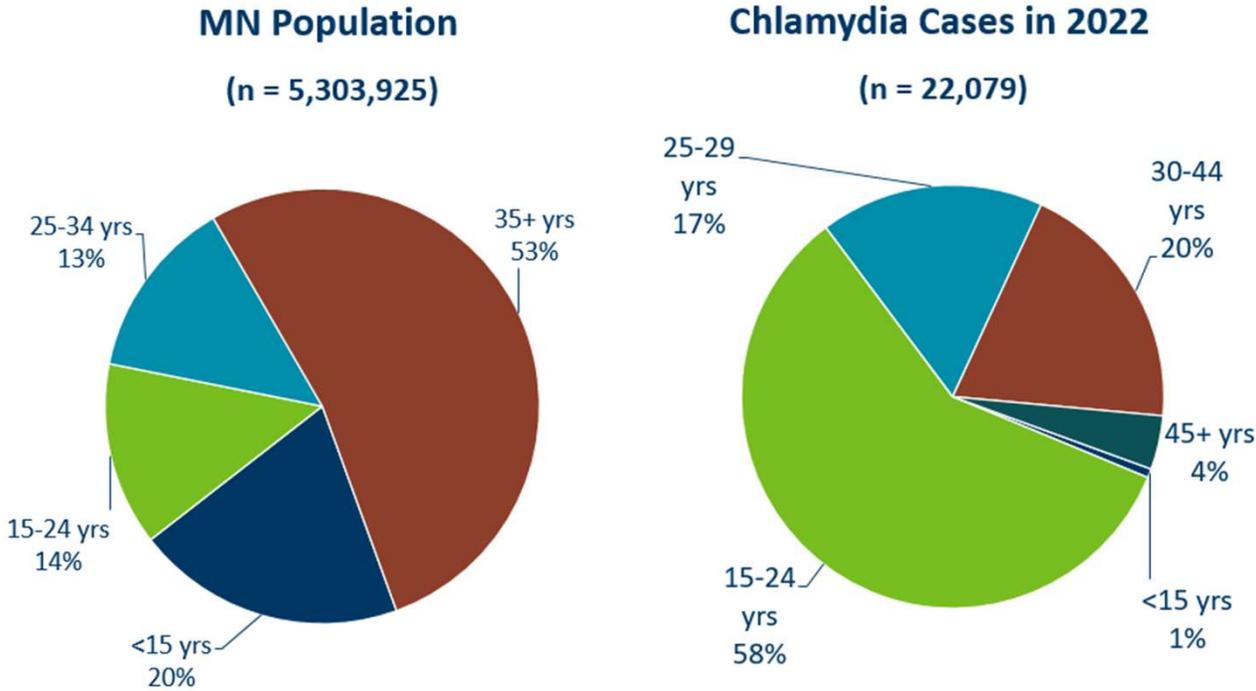


\* people of Hispanic ethnicity can be of any race

# Chlamydia and Gonorrhea Among Adolescents and Young Adults (15-24 years of age)

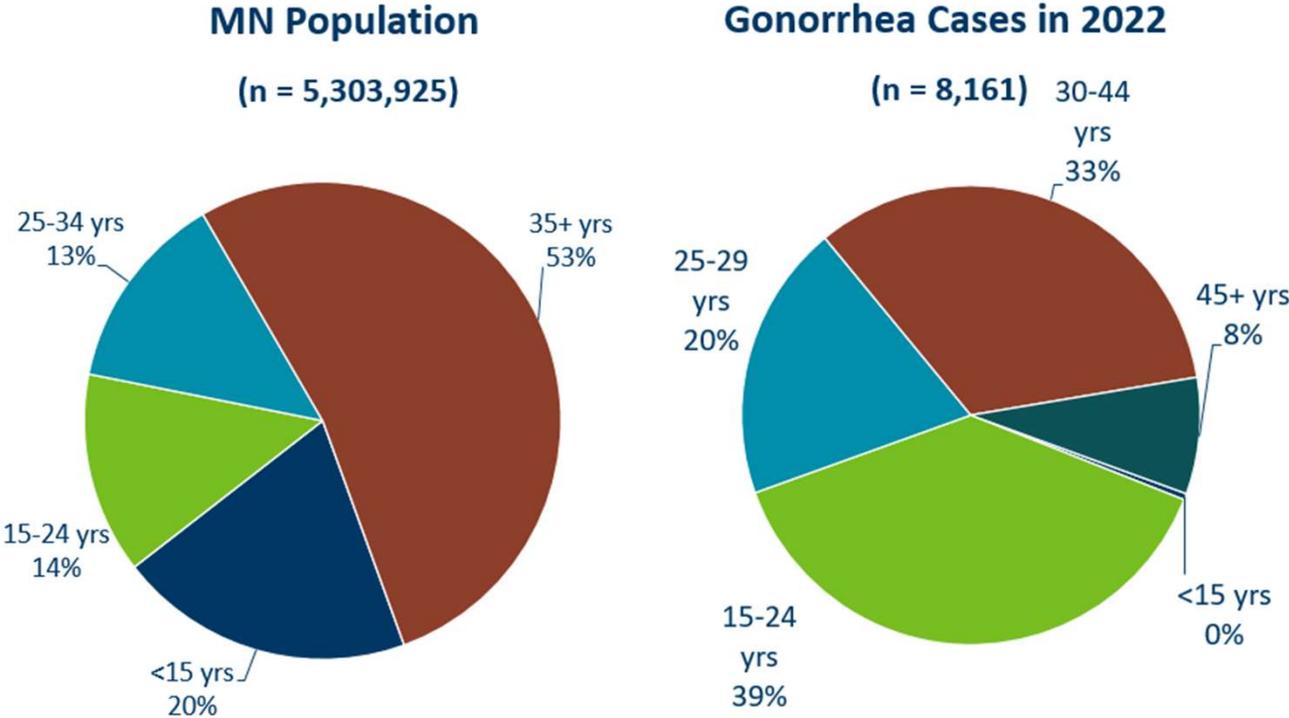
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# Chlamydia Disproportionately Impacts Youth and Young Adults



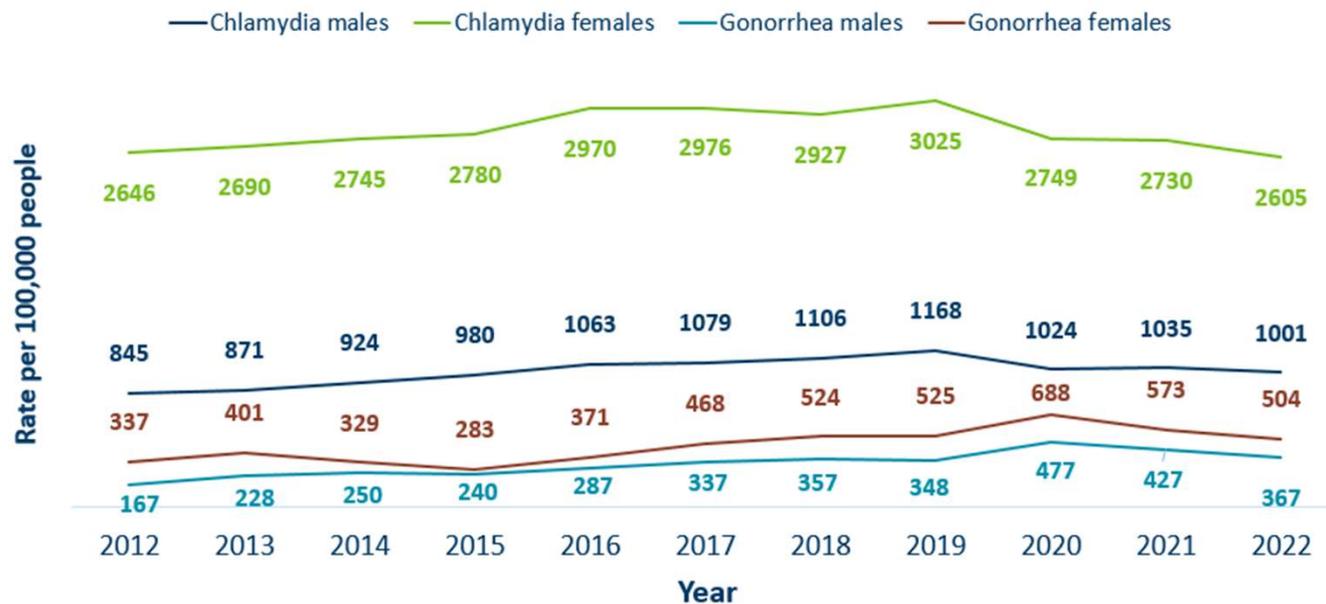
Data (right): [STD Surveillance Report Data Tables, Minnesota 2022 \(PDF\)](#)

# Gonorrhea Disproportionately Impacts Youth and Young Adults



Data (right): [STD Surveillance Report Data Tables, Minnesota 2022 \(PDF\)](#)

# Chlamydia and Gonorrhea Rates Among Adolescents & Young Adults<sup>†</sup> by Gender in Minnesota, 2012-2022



Rate = Cases per 100,000 people based on 2010 U.S. Census counts.

<sup>†</sup> Adolescents defined as 15-19 year-olds; Young Adults defined as 20-24 year-olds.

## Summary Characteristics of Adolescents and Young Adults<sup>†</sup> Diagnosed With Chlamydia or Gonorrhea in 2022

Demographic	Cases	% of Total
Male	5,050	31
Female	11,012	69
White, Non-Hispanic	5,630	35
Black, Non-Hispanic	4,951	31
Am Indian/Am Native	439	2.7
Asian/PI	554	3.4
Hispanic	1,576	9.8
Unknown/Other	2,912	18
<b>TOTAL</b>	<b>16,062</b>	

<sup>†</sup> Adolescents defined as 15-19 year-olds; young adults defined as 20-24 year-olds, excludes 4 transgender + 22 missing/unknown

## Summary of STD Trends in Minnesota

- From 2012-2022, the chlamydia rate increased by 22%. The rate of gonorrhea increased by 165%, syphilis has increased by 447%.
- Adolescent and young females aged 15-24 years old continue to make up the majority of all chlamydia or gonorrhea cases at 53%.
- Syphilis has resurged in MN over the past decade, with MSM and those co-infected with HIV being especially impacted. However, the number of females impacted is near the record high for the last decade.
- People of color continue to be disproportionately affected by all STDs in Minnesota. Disparities in the rates of STDs are not explained by differences in sexual behavior, but are due to differences in health insurance coverage, employment status and access to healthcare with preventative, screening, and treatment services.

# Updates to STD Reporting and Current Follow-Up

- A new chlamydia and gonorrhea case report form is available on the MDH website, to accommodate changes in treatment guidelines and highlight DGI reporting.
- The case report form can be filled out and mailed or faxed to MDH at **1-800-298-3775**.
- More information may be requested on gonorrhea cases for Enhanced Gonorrhea Surveillance as part of the CDC PCHD grant.
- All cases co-infected with early syphilis will continue to be assigned to MDH Partner Services for follow-up.
- All STD cases continue to have the potential for being contacted by MDH for additional follow-up.

**GONORRHEA (GC) - LAB CONFIRMED**

Specimen collection date:

Source (mark all that apply):

Cervix       Rectum  
 Vagina       Pharynx  
 Urethra       Urine  
 Other:

**To report disseminated gonorrhea or concern over persistent infection call: 651-201-5414.**

EPT Given?:  Yes       No

Treatment date:

Ceftriaxone (Rocephin) 500 mg IM x 1 (For persons weighing <150 kg (300 lbs))\*       Not treated for gonorrhea  
 Ceftriaxone (Rocephin) 1 g IM x 1 (For person weighing >=150 kg (300 lbs))\*

Alternative regimens:

Cefixime (Suprax) 800 mg po x 1\*  
 Gentamicin 240 mg IM x 1 plus Azithromycin (Zithromax) 2 g po x 1  
 Other:

\*If chlamydial infection has not been excluded, providers should treat for chlamydia with doxycycline 100 mg orally twice daily for 7 days (Doxycycline 100 mg po BID x 7 days). During pregnancy, azithromycin 1 g as a single dose is recommended to treat chlamydia (Azithromycin (Zithromax) 1 g po x 1).