2023

SAINT LOUIS COUNTY
Public Health

Sexually Transmitted Infections Annual Surveillance Report 2023

ST. LOUIS COUNTY DEPARTMENT OF PUBLIC HEALTH
6121 NORTH HANLEY ROAD, BERKELEY, MO 63134

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St. Louis County Department of Public Health

Mission

To promote, protect, and improve the health and environment of the community.

Vision

Healthy people, healthy environment, equitable communities.

Values

We believe in:

- Being a public health leader in the community
- Providing equitable access to services and resources
- Being responsive to the changing needs of our community
- Operating in an ethical, transparent, and fiscally responsible manner
- Serving our community with dignity and respect

Report Preparation

This report was prepared by the St. Louis County Department of Public Health (DPH), Divisions of Communicable Disease Control Prevention and Response.

- Epidemiology Program
- Sexual Health Program

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The Sexual Health Program

The Sexual Health Program seeks to promote healthier, safer sexual behavior, to reduce the transmission of sexually transmitted infections (STIs) and HIV, and to thereby reduce the incidence of chlamydia, gonorrhea, syphilis, and HIV among St. Louis County residents. To this end, the STI program:

- Investigates reported STI and HIV cases to determine the source of infection and ensure that infected persons are treated according to CDC guidelines;
- Offers partner services, including partner notification, STI/HIV testing, risk reduction counseling, and treatment or linkage to care;
- Through evidence-based initiatives, increases the accessibility of free sexual health resources for residents and visitors of St. Louis County;
- Regularly analyzes STI epidemiological data to monitor local trends in STI incidence and guide the program's decision-making;
- Conducts educational outreach to high-risk populations to increase awareness of STIs and promote healthy sexual behavior, and;
- Collaborates with partner organizations throughout the St. Louis region to improve STI screening, reporting, treatment, and prevention.

Executive Summary

There were 6,318 cases of chlamydia (632.0 cases per 100,000 population), 2,927 cases of gonorrhea (292.8 per 100,000), and 258 cases of early syphilis (25.8 per 100,000) diagnosed among St. Louis County residents in 2023. Compared to the previous year, chlamydia incidence decreased by two percent, gonorrhea incidence decreased by eight percent, and early syphilis incidence decreased by two percent. Since 2019, chlamydia incidence has decreased by four percent, gonorrhea incidence decreased by three percent, and syphilis incidence increased by 25 percent.

The interrelated socioeconomic factors of race, geography, and poverty continue to contribute to pronounced disparities in STI incidence. Rates of chlamydia, gonorrhea, and early syphilis are much higher – often by an order of magnitude – among St. Louis County's Black population, people living in the Inner North region of the county, and people living in census tracts with very high poverty rates when compared to White residents, residents of West County, and people living in low-poverty census tracts.

Syphilis incidence continued to be elevated among women in 2023, contributing to congenital syphilis infections. The 69 cases of primary, secondary, or early latent syphilis diagnosed among women in St. Louis County (13.2 cases per 100,000 women) represent an eight percent increase from 2022 (64 cases; 12.3 per 100,000). This is also a 23 percent increase from 2020 (56 cases; 10.7 per 100,000), and a 92 percent increase from 2019 (36 cases; 6.9 per 100,000). Eighty-six percent of the women diagnosed between 2019 and 2023 were of childbearing age (15 to 44 years). Ten cases of congenital syphilis were reported in 2023 (96.0 cases per 100,000 live births), which is one less than the 11 cases each reported in 2022 and 2021. More cases of congenital syphilis were reported in 2021–2023 than in the previous 21 years combined (16 cases in 1999–2020).

HIV status was unknown for 23 percent of early syphilis cases in 2023, including 10 percent of cases reported among gay, bisexual, or other men who have sex with men (MSM), while at least 60 percent of early syphilis cases were diagnosed among people with a previous diagnosis of at least one STI (chlamydia, gonorrhea, or syphilis). This indicates a need for improved HIV screening and reporting in St. Louis County. The Centers for Disease Control and Prevention (CDC) recommends that all persons seeking evaluation and treatment for STIs should be screened for HIV infection, and that all sexually active MSM be screened for HIV at least annually.

Notes About the Data

Data about chlamydia, gonorrhea, congenital syphilis, and syphilis cases were obtained from the Missouri Health Surveillance Information System (WebSurv), which is maintained by the Missouri Department of Health and Senior Services (MDHSS). Data on live births were obtained from Missouri's Bureau of Vital Statistics from 2019 through 2022. Data from 2023 is not yet available. Live birth rates did not exclude instances of women with multiple births. Missouri's communicable disease reporting law, 19 CSR 20-20.020, requires reporting of chlamydia, gonorrhea, and HIV/AIDS diagnoses within three days, and syphilis diagnoses within one day, to the local health authority or to MDHSS. Chlamydia, gonorrhea, and syphilis cases are classified according to the National Notifiable Diseases Surveillance System (NNDSS) case definitions.

St. Louis County rates were calculated with population totals from the 2018–2022 American Community Survey 5-Year Estimates. In ZIP Code-level analyses, the St. Louis County proportion of the population of ZIP Code tabulation areas that cross the county boundary has been estimated using areal weighted interpolation.

DPH recognizes that there are gender identities beyond the binary of male and female. However, when stratifying STI cases by sex, transgender persons are categorized according to the sex they were assigned at birth, in accordance with CDC reporting guidelines.

DPH, along with the St. Louis County Department of Planning, established five St. Louis County regions based on the social and demographic characteristics of the regions' residents. Using five county regions also allows for sub-county-level comparisons, without the volatility or risk of individual identifiers which may be present in ZIP Code- or census tract-level comparisons.

"Neighborhood poverty level" is a census tract-level measure. Based on the proportion of each census tract's population living below the federal poverty level (FPL), census tracts were categorized as low (<10% below FPL), medium (10% to <20% below FPL), high (20% to <30% below FPL), or very high (≥30%) poverty neighborhoods. Census tract poverty estimates were obtained from the 2018 - 2022 American Community Survey. Chlamydia, gonorrhea, and syphilis cases were geocoded to census tracts based on their residential address at the time they were reported to the health department.

Case counts by region and neighborhood poverty level may not sum to the total number of reported cases. Some cases were reported without addresses or with addresses that could not be geocoded (e.g., PO Boxes).

For cells with exact (non-average) counts, counts and rates are suppressed if the denominator population is less than 100,000 and the number of cases is between 1 and 5. For subgroups with mutually exclusive categories where the sum of cases in the categories add up to the county-level total, if a single category is suppressed, an additional category is suppressed to disallow overcoming of suppression with simple addition/subtraction. These suppression rules are an adaptation of suppression rules for CDC National Environmental Public Health Tracking Network.

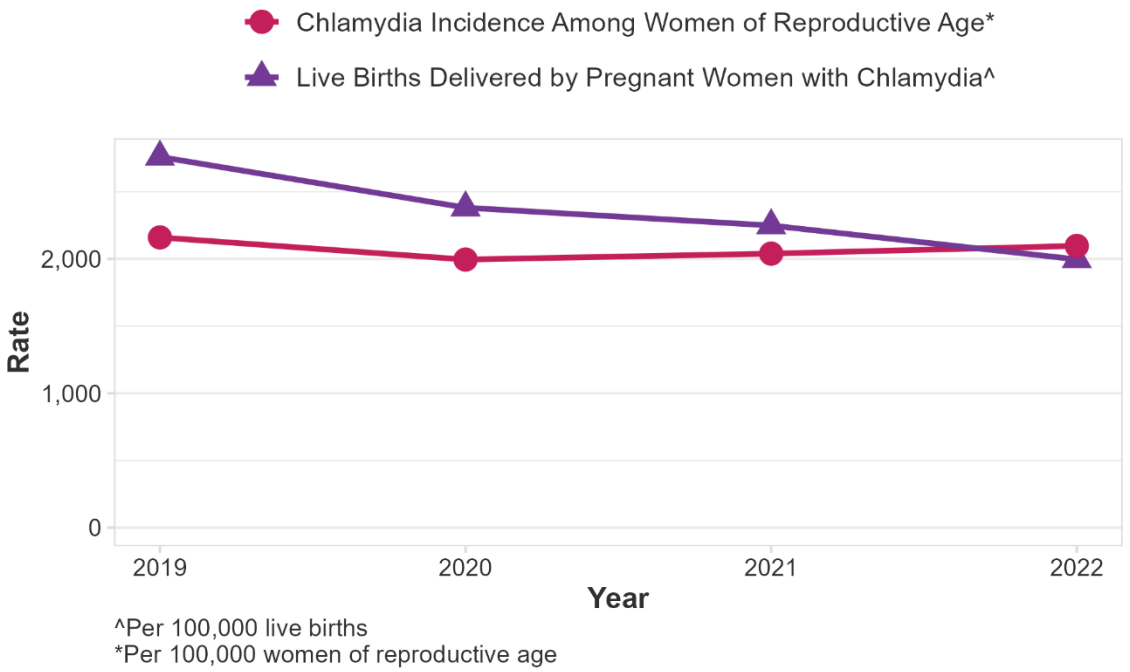
STIs and Pregnancy

STIs acquired during pregnancy can cause complications both for the pregnant person and the developing fetus. Some adverse events that can occur include preterm labor, low birth weight, and eye infections (specific to chlamydia and gonorrhea)[1]. Congenital syphilis, a multisystem infection transmitted during pregnancy, can have particularly severe consequences, including stillbirth or infant death, or, in infants who survive, anemia, enlarged liver and spleen, and brain and nerve problems like blindness or deafness[1]. It's important to note that STIs acquired during pregnancy can be treated, and therefore pregnant persons should be screened appropriately[1].

Chlamydia

Chlamydia incidence among women of reproductive age (defined as females between the ages of 15 and 44 at time of diagnosis) was highest in 2019, with a rate of 2,160.2 cases per 100,000 women of reproductive age. The highest birth rate among women who were diagnosed with chlamydia at any time during their pregnancy was also in 2019, with 2,759.4 per 100,000 live births **(Figure 1)**. Note that 2023 data were not available at the time of report.

Figure 1. Rates of Chlamydia among Women of Reproductive Age and Rates of Live Births Among Chlamydia-Positive Women, St. Louis County, 2019 to 2022

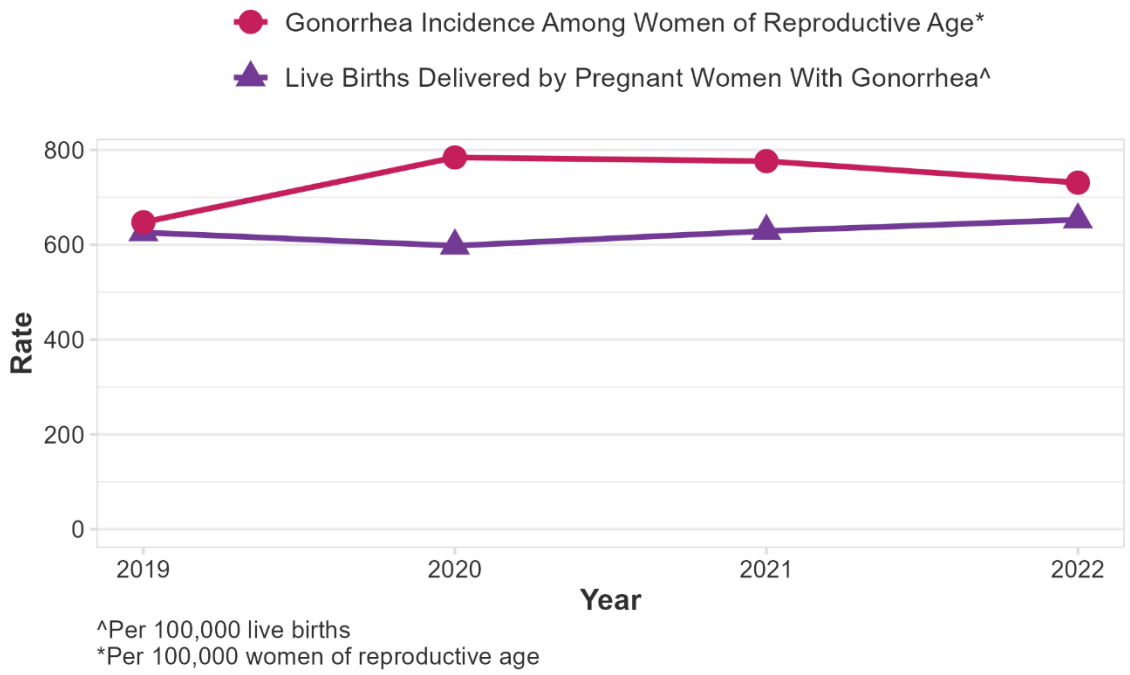


Data Sources: St. Louis County Department of Public Health, Communicable Disease Prevention & Response, Missouri Department of Health and Senior Services, Bureau of Vital Statistics, Missouri Health and Surveillance Information System (WebSurv)
This report is updated annually. Last Update 10/24/2024 (PK)

Gonorrhea

Gonorrhea incidence among women of reproductive age was highest in 2020, with a rate of 784.1 cases per 100,000. The birth rate among women who were diagnosed with gonorrhea at any time during their pregnancy was highest in 2021, with a rate of 628.9 per 100,000 live births, as shown in Figure 2. Again, note that 2023 data were not available at the time of report.

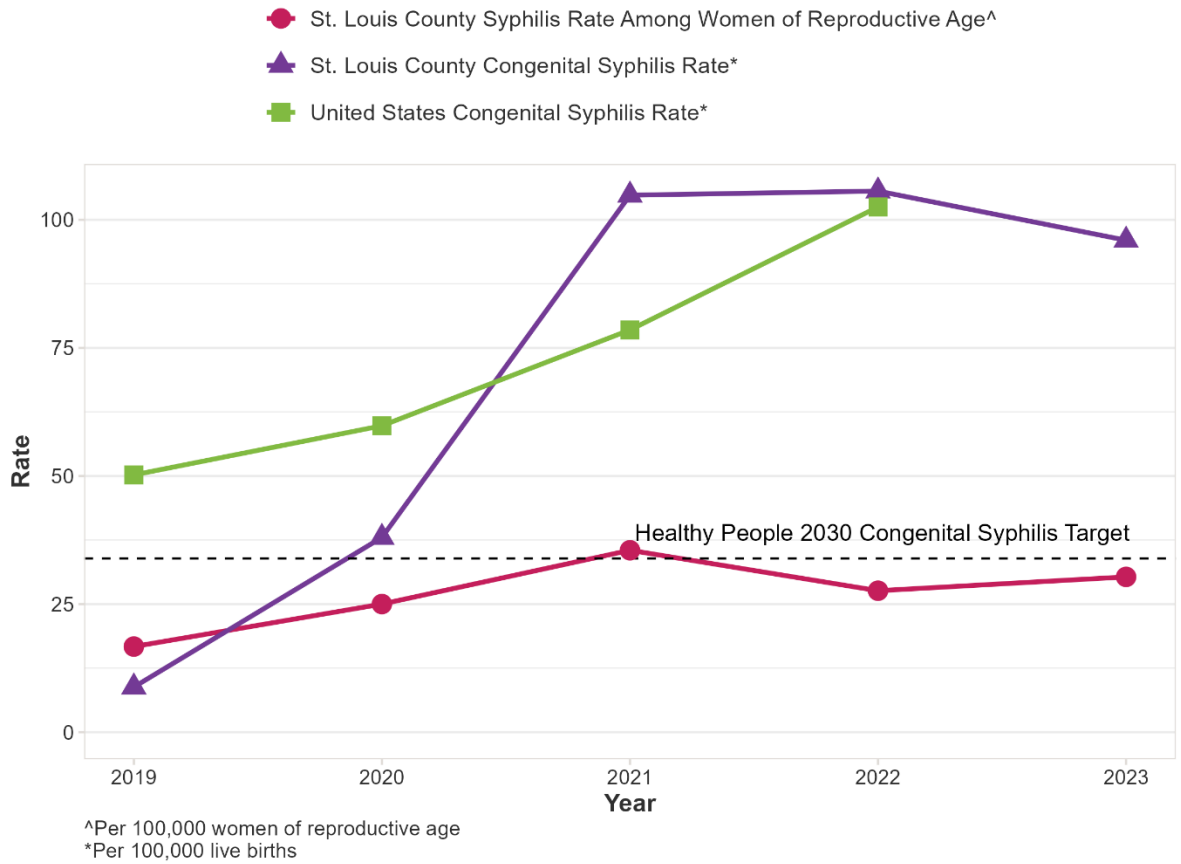
Figure 2. Rates of Gonorrhea among Women of Reproductive Age and Rates of Live Births Among Gonorrhea-Positive Women, St. Louis County, 2019 to 2022



Congenital Syphilis

Ten total cases of congenital syphilis (96.0 per 100,000 live births) were diagnosed in St. Louis County in 2023, which is fairly consistent with the 11 cases reported last year. While this is unfortunately consistent with national trends, it constitutes an enormous increase from the typical yearly incidence of the last two decades. More cases of congenital syphilis were reported in 2021–2023 than in the previous 21 years combined (16 cases in 1999–2020). The Healthy People 2030 target for congenital syphilis is 33.9 cases per 100,000 live births[2], so a considerable decrease must occur in order to meet that target. The incidence of early syphilis among women of reproductive age has increased from 2022 to 2023 (from 27.6 to 30.3 cases per 100,000 women of reproductive age), as seen in Figure 3, so there is continued need for syphilis screening among pregnant women. Please note that 2023 national data are not available at the time of report.

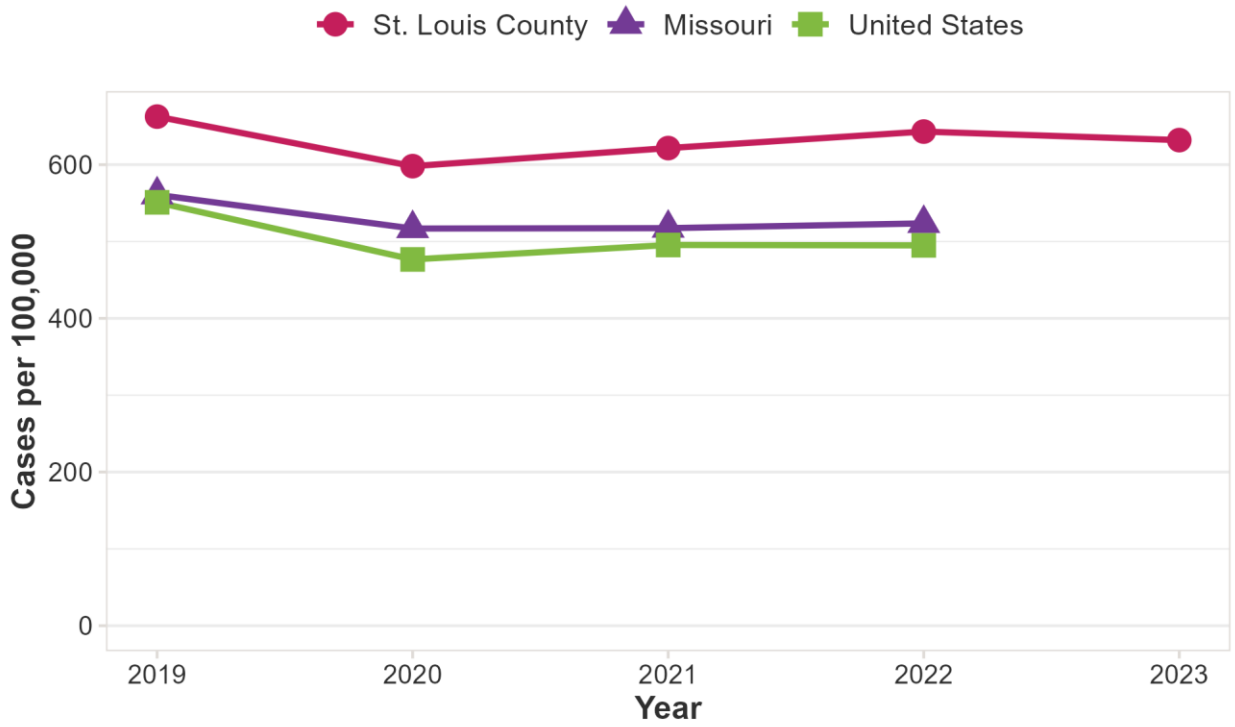
Figure 3. Rates of Early Syphilis among Women of Reproductive Age and Rates of Congenital Syphilis, St. Louis County and United States, 2019 to 2023



Chlamydia in St. Louis County

There were 6,318 *Chlamydia trachomatis* infections diagnosed among St. Louis County residents in 2023, for an incidence rate of 632.0 cases per 100,000 population. This represents a two percent decrease from 2022 (643.1 per 100,000), and a five percent decrease from 2019 (662.6 per 100,000). In 2023, 63.8 percent of chlamydia cases were diagnosed among women, and 81.2 percent of cases were diagnosed among people aged 15 to 29 years. As shown in Figure 4, St. Louis County consistently had higher rates of chlamydia when compared to both Missouri and the United States[3]. Please note that 2023 national and state data are not available at this time.

Figure 4. Chlamydia Rates in St. Louis County, Missouri, and the United States, 2019 to 2023



Chlamydia by Sex and Age Group

Sixty-four percent (n=4,036) of St. Louis County's chlamydia cases were reported among women in 2023, for a rate of 774.7 cases per 100,000 women – a two percent decrease from 2022 (793.5 cases per 100,000) (**Figure 5**). There were 2,251 chlamydia cases reported among St. Louis County males, for a rate of 470.2 per 100,000 men – a two percent decrease from the previous year (479.4 cases per 100,000). Between 2019 and 2023, chlamydia incidence decreased by five percent among women (from 814.6 to 774.7 cases per 100,000 women) and decreased by five percent among men (from 497.2 to 470.2 cases per 100,000 men).

People aged 15 to 29 years accounted for 81 percent of reported chlamydia cases in 2023, despite making up just 19 percent of the county's population. Within this group, chlamydia incidence was highest among people aged 20 to 24 years (3,347.8 per 100,000) (**Figure 6**), followed by people aged 15 to 19 years (3,132.7 per 100,000), followed by people aged 25 to 29 years (1,626.8 per 100,000).

Between 2022 and 2023, reported chlamydia incidence increased among people aged 14 and younger (+76%), 15 to 19 (+9%), and 30 to 39 (+4%), and decreased among people aged 20 to 24 (-7%), 25 to 29 (-8%), 30 to 39 (-5%), and 40 and older (-3%) (**Figure 6**). Note that while people aged 14 and younger had the largest increase in incidence, they only accounted for 2 percent of chlamydia cases in 2023.

Figure 5. Chlamydia Rates by Sex, St. Louis County, 2019 to 2023

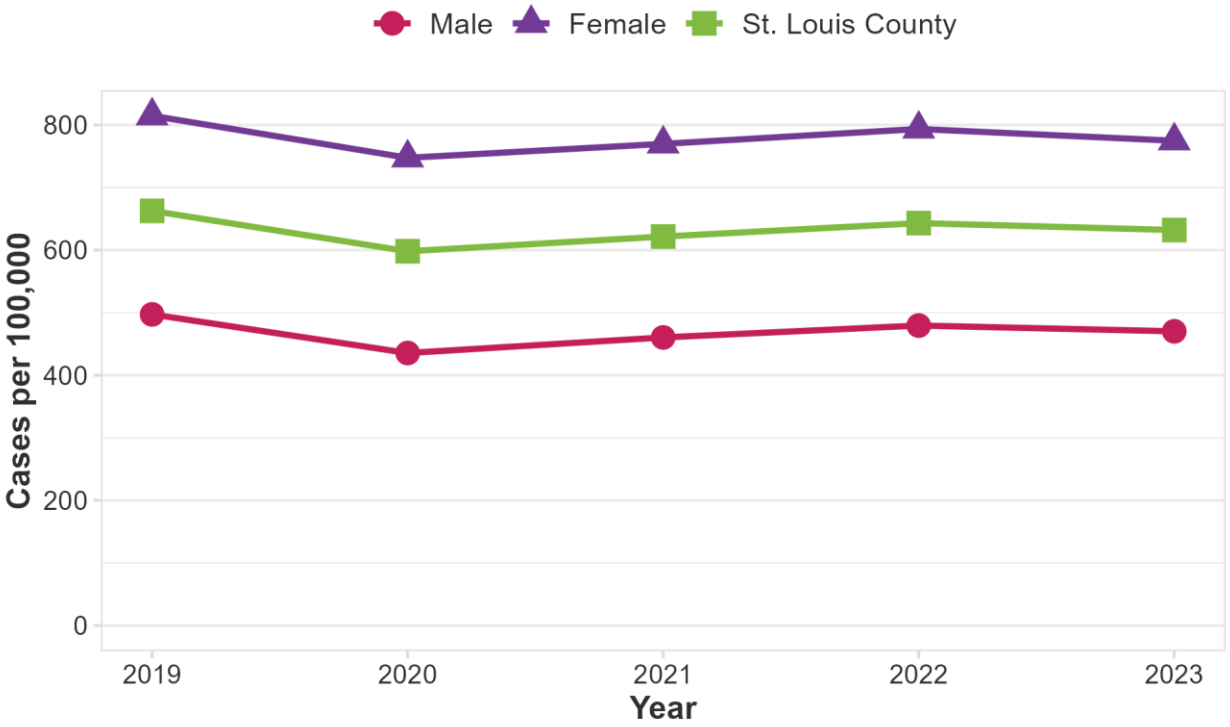


Figure 6. Chlamydia Rates by Age Group, St. Louis County, 2019 to 2023

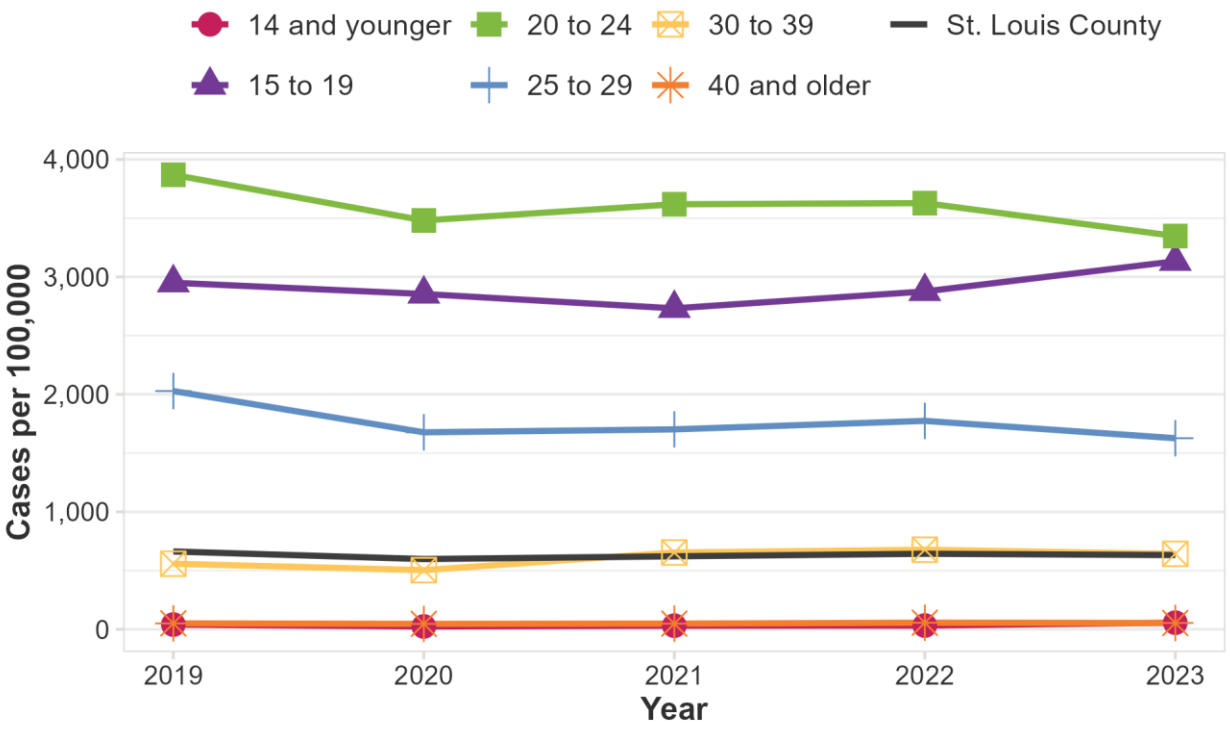
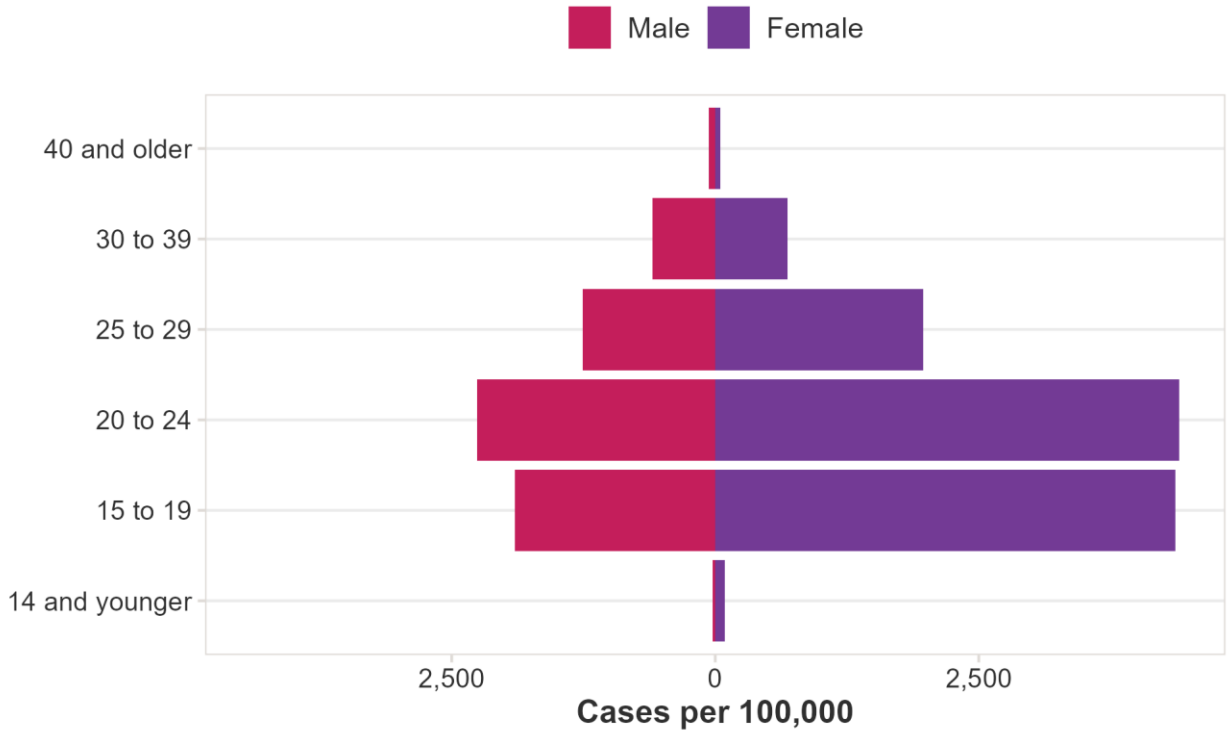
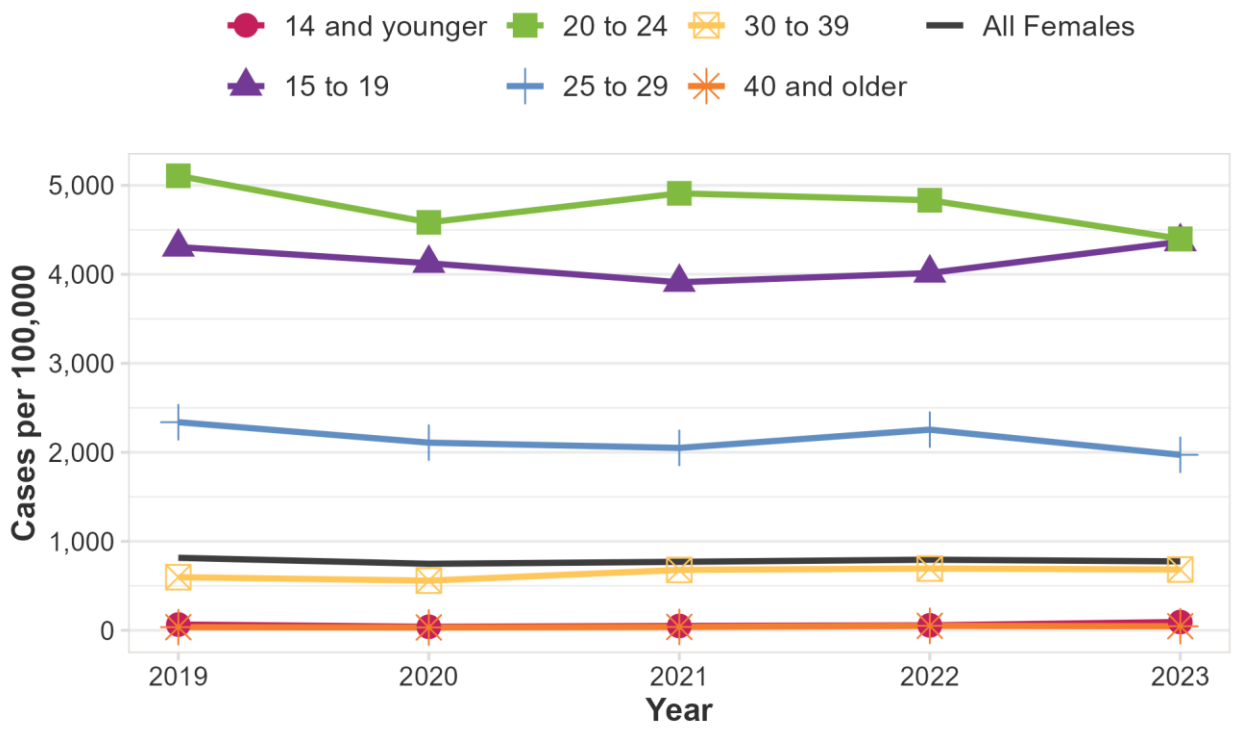


Figure 7. Chlamydia Rates by Sex and Age Group, St. Louis County, 2023



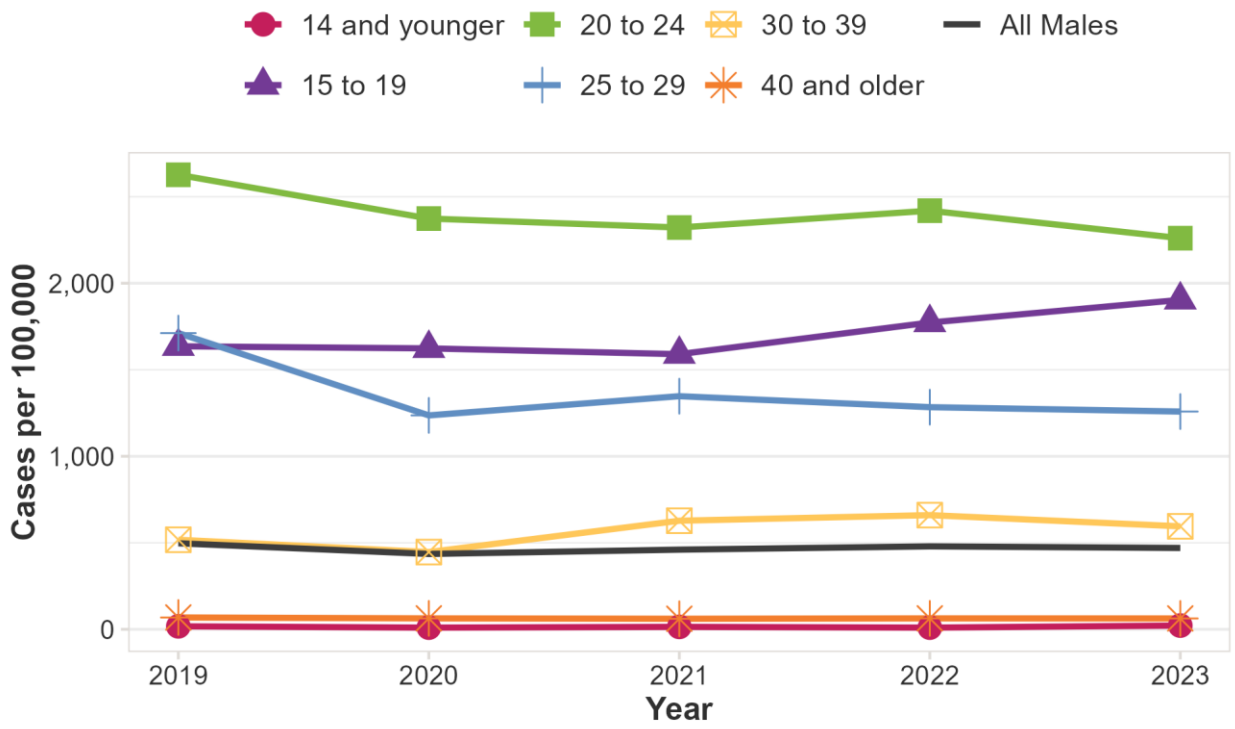
Among women, chlamydia rates were highest among those aged 20 to 24 years (4,399.5 cases per 100,000 women) and 15 to 19 years (4,366.7 per 100,000 women). These two groups accounted for 44 percent of all reported chlamydia cases in 2023 (**Figure 8**). Between 2022 and 2023, chlamydia incidence increased among females aged 14 and younger (+67%), and 15 to 19 (+9%), decreased among those aged 20 to 24 (-9%), 25 to 29 (-13%), and those 40 and older (-8%), and remained relatively stable for those between the ages of 30 and 39. Note that while women aged 14 and younger had the largest increase in incidence, they only accounted for two percent of chlamydia cases among women in 2023.

Figure 8. Chlamydia Rates among Women by Age Group, St. Louis County, 2019 to 2023



Among men, chlamydia rates were highest among those aged 20 to 24 years (2,260.3 cases per 100,000 men) and those aged 15 to 19 years (1,903.7 per 100,000), followed by those aged 25 to 29 years (1,258.5 per 100,000) (**Figure 9**). Between 2022 and 2023, chlamydia incidence increased among males aged 14 and younger (+121%), 15 to 19 (+7%), decreased among males aged 20 to 24 (-7%), 25 to 29 (-2%), 30 to 39 (-10%), and remained relatively stable among males aged 40 and older. Note that while males aged 14 and younger had the largest increase in incidence, they accounted for less than one percent of chlamydia cases among males.

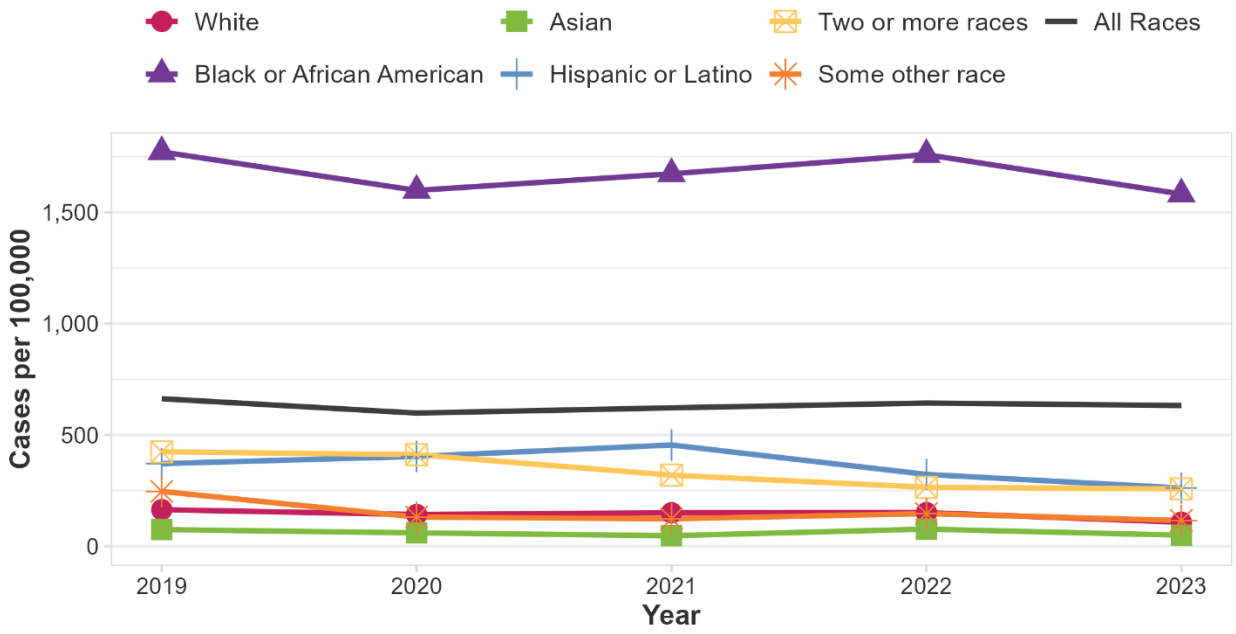
Figure 9. Chlamydia Rates among Men by Age Group, St. Louis County, 2019 to 2023



Chlamydia by Race and Ethnicity

While Missouri law requires that communicable disease case reports include the patient's race, race is nonetheless frequently not reported or reported as "unknown." Race was unknown for 26 percent of reported chlamydia cases in 2023. For cases where race was known, the chlamydia rate among Black residents of St. Louis County (1,582.7 cases per 100,000) was 14.8 times the rate among White residents (107.3 per 100,000) (**Figure 10**). The rate among St. Louis County's Asian population (49.0 per 100,000) was 0.5 times the rate among the White population. There were too few chlamydia cases reported among American Indians/Alaska Natives or Native Hawaiians/Other Pacific Islanders to calculate rates for those groups. The chlamydia rate among people identifying as multiracial (257.3 per 100,000) was 2.4 times the rate among White residents. Between 2022 and 2023, chlamydia incidence decreased among people identifying as Asian (-36%), Black (-10%), multiracial (-3%), and White (-29%).

Figure 10. Chlamydia Rates by Race and Ethnicity, St. Louis County, 2019 to 2023



*Excludes American Indians/Alaska Natives and Native Hawaiians/Other Pacific Islanders

Missouri law does not require that communicable disease case reports include the patient's ethnicity. As a result, ethnicity was missing or reported as "unknown" for 53 percent of reported chlamydia cases in 2023. For cases where ethnicity was reported, the chlamydia rate among Hispanics and Latinos was 261.2 cases per 100,000 population,

which is a 19 percent decrease from 2022 (**Figure 10**). However, given the incompleteness of the ethnicity data and the relatively small size of St. Louis County's Hispanic or Latino population (3.0% of the total population), this trend is difficult to interpret.

Chlamydia by Region

In 2023, as shown in Figure 11, the chlamydia rate was highest in the Inner North region of St. Louis County (1,629.7 cases per 100,000), followed by the Outer North (1,062.0 per 100,000), Central (379.6 per 100,000), South (218.5 per 100,000), and West (191.6 per 100,000) regions. Between 2022 and 2023, chlamydia incidence increased in the South region (+2%), decreased in the Central (-16%) and West (-7%) regions, and remained stable in the Inner North and Outer North regions. Since 2019, chlamydia incidence has decreased in the Central, Inner North, South, and West regions, and remained stable in the Outer North region.

Figure 11. Chlamydia Rates by Sub-County Region, St. Louis County, 2019 to 2023

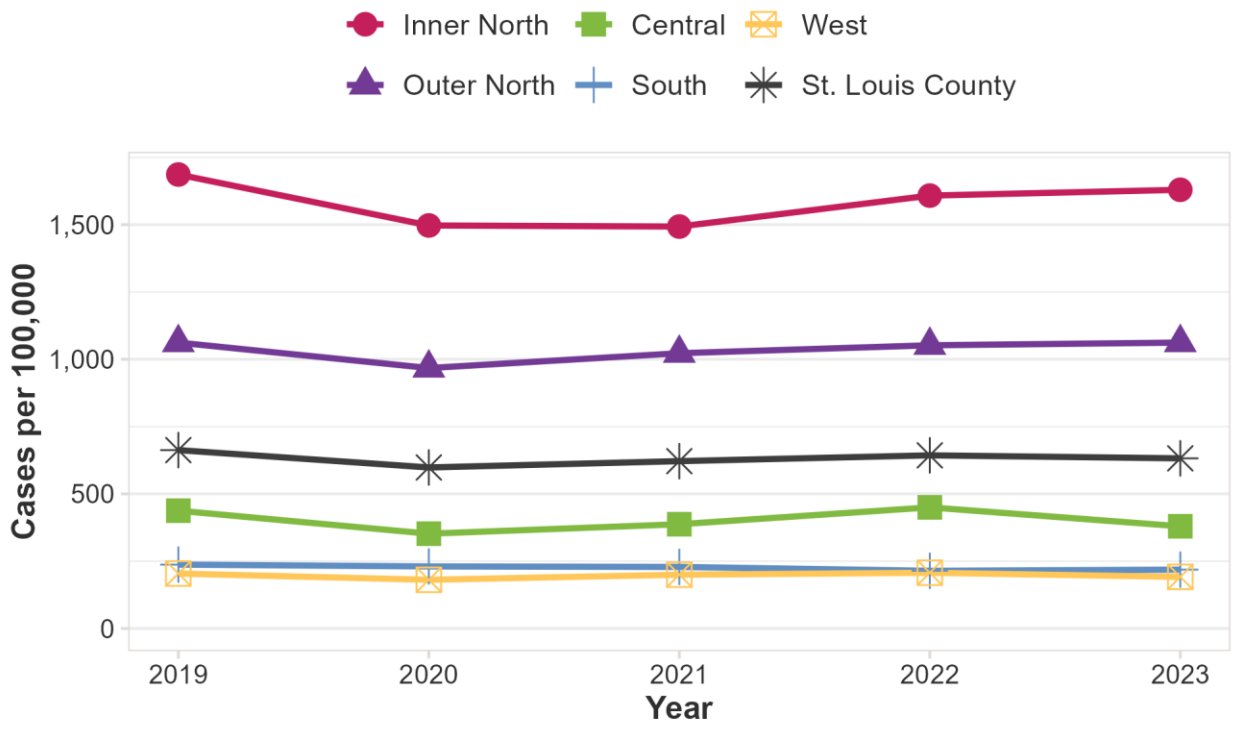
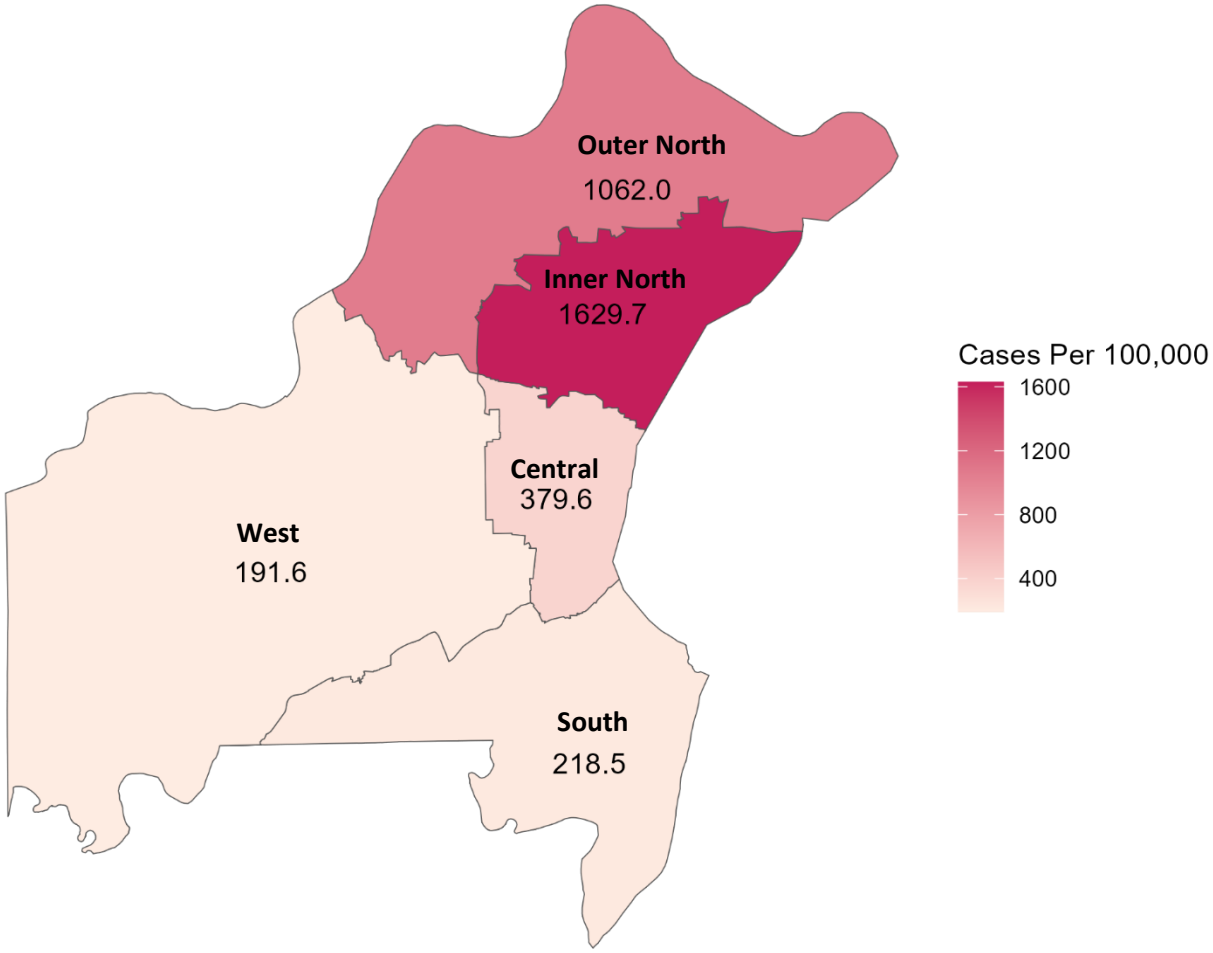
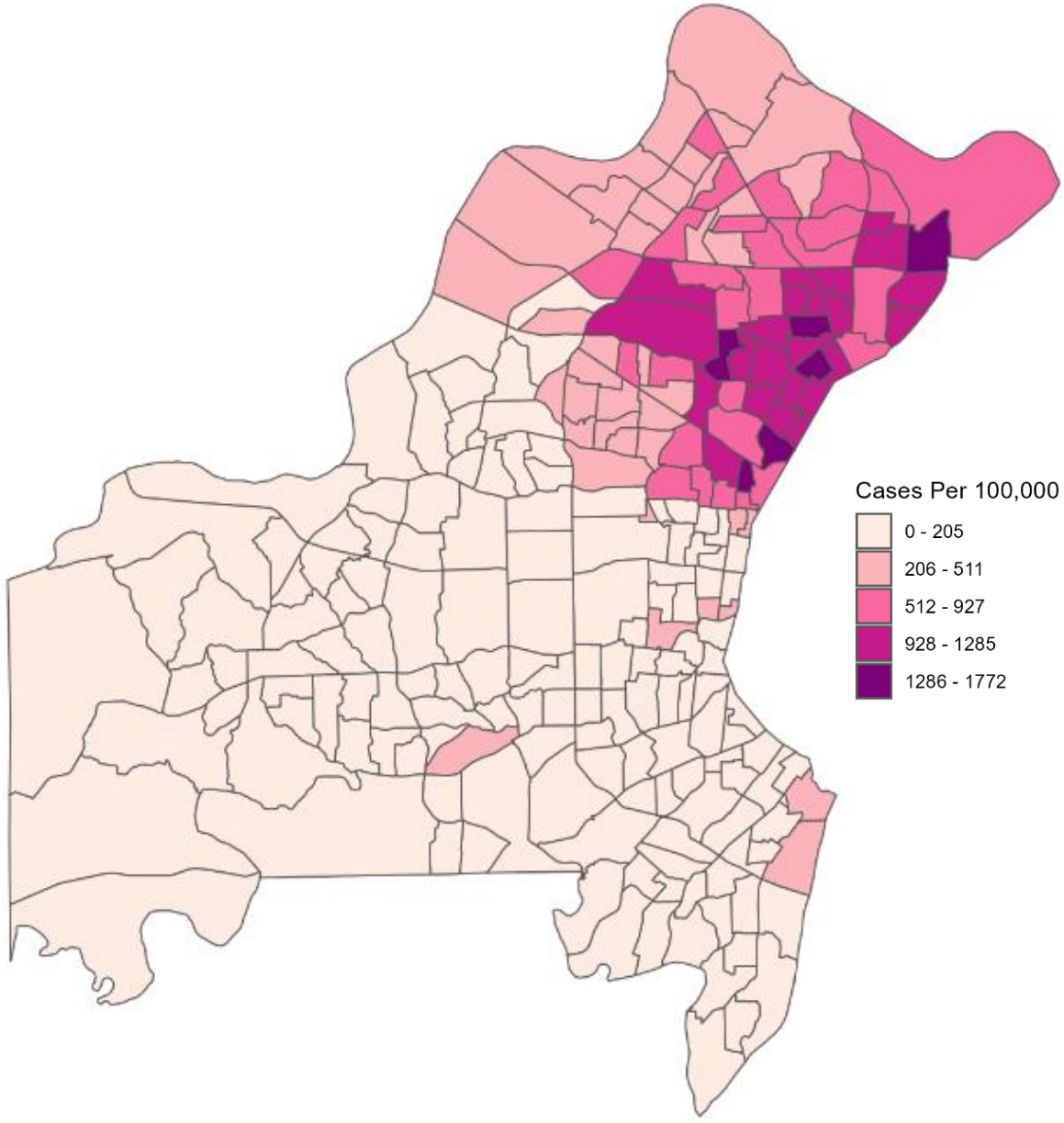


Figure 12. Chlamydia Rates by Sub-County Region, St. Louis County, 2023



As shown in Figure 12, the Inner North sub-county region had the highest rate of chlamydia – 1,629.7 cases per 100,000; this is 2.6 times the overall rate of chlamydia for St. Louis County (632.0 cases per 100,000).

Figure 13. Chlamydia Rates by Census Tract, St. Louis County, five-year average, 2019 to 2023

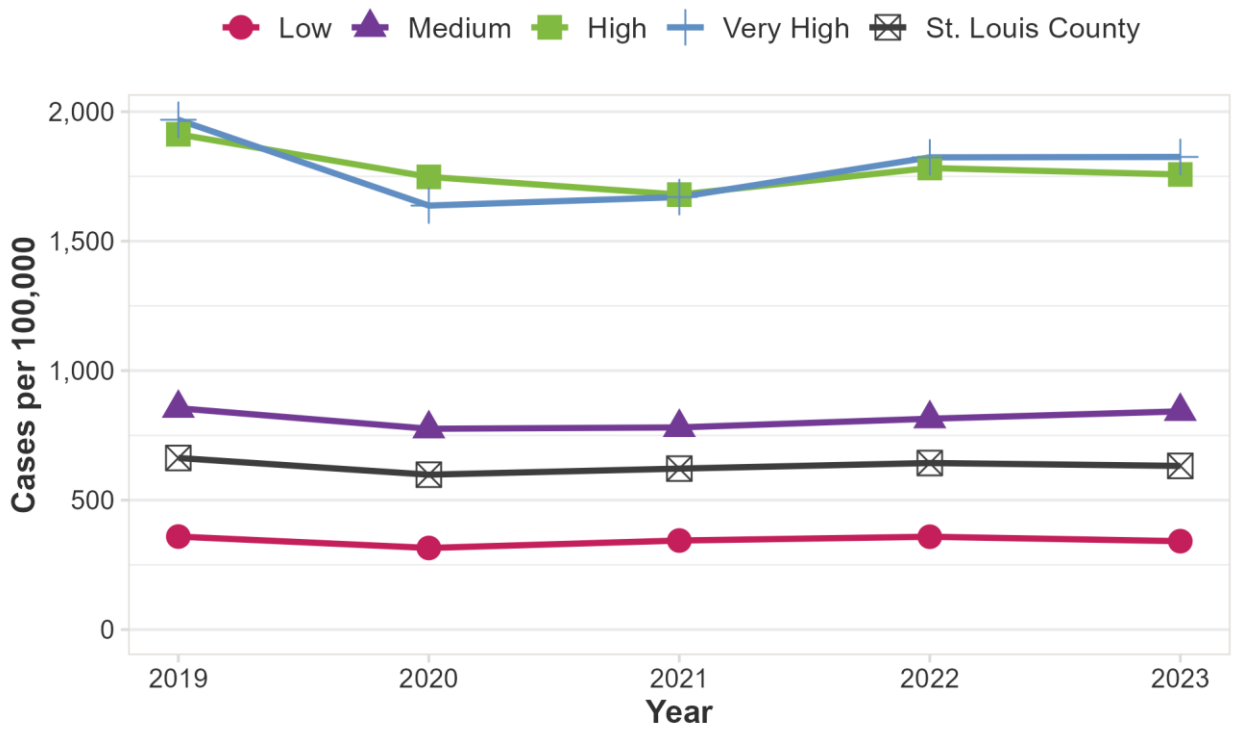


Mapping chlamydia rates by census tracts provides a more granular view of where rates are highest. As shown in Figure 13, census tracts with the highest rates of chlamydia are in the Inner North and Outer North sub-county regions.

Chlamydia by Neighborhood Poverty Level

In 2023, census tracts with very high poverty rates had the highest chlamydia rates (1,825.2 cases per 100,000), followed by high poverty (1,757.4 per 100,000), medium poverty (842.6 per 100,000) and low poverty (341.3 per 100,000) census tracts. Between 2022 and 2023, chlamydia incidence increased in medium poverty (+3%) census tracts, decreased in low poverty (-5%) census tracts, and remained relatively stable in high poverty and very high poverty census tracts. Since 2019, as shown in Figure 14, incidence decreased in census tracts across all poverty levels, with the largest decrease in the high poverty census tracts (from 1,912.7 cases per 100,000 in 2019 to 1,757.4 cases per 100,000 in 2023, an 8 percent decrease).

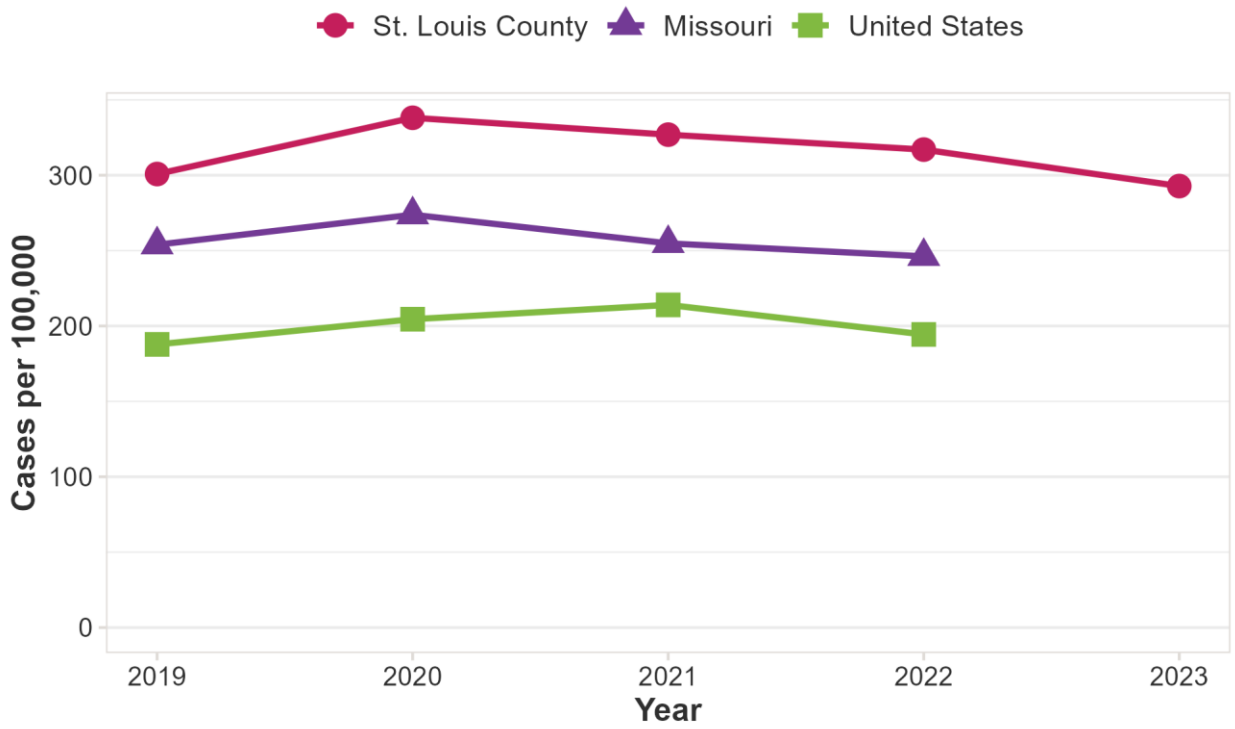
Figure 14. Chlamydia Rates by Neighborhood Poverty Level, St. Louis County, 2019 to 2023



Gonorrhea in St. Louis County

There were 2,927 *Neisseria gonorrhoeae* infections diagnosed among St. Louis County residents in 2023, for an incidence rate of 292.8 cases per 100,000 population. This represents an eight percent decrease from the previous year (317.0 per 100,000), and a three percent increase from 2019 (300.8 per 100,000). In 2023, 55.0 percent of gonorrhea cases were diagnosed among men, and 70.9 percent of cases were diagnosed among people aged 15 to 29 years. Between 2022 and 2023, gonorrhea incidence decreased by 10 percent among people aged 24 years and younger and decreased by five percent among people aged 25 years and older. As shown in Figure 16, St. Louis County consistently had higher rates of gonorrhea when compared to both Missouri and the United States[3]. Again, note that 2023 national and state data are not available at this time.

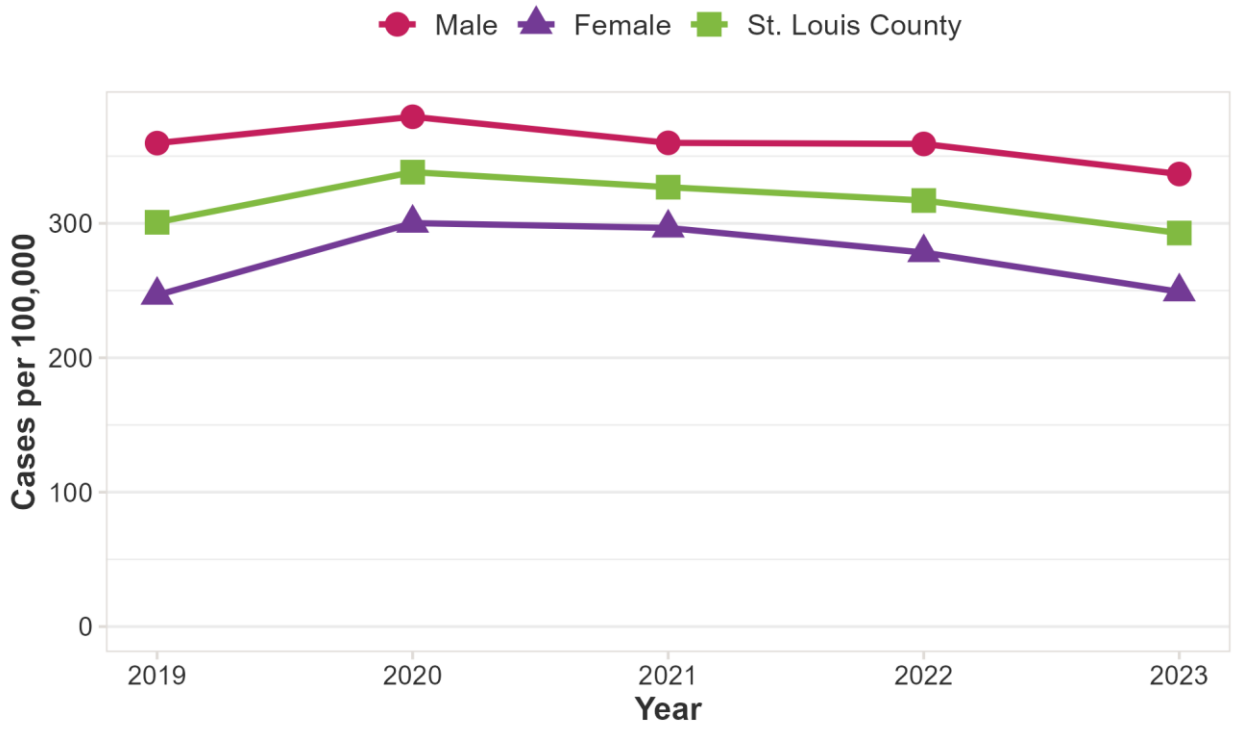
Figure 15. Gonorrhea Rates in St. Louis County, Missouri, and United States, 2019 to 2023



Gonorrhea by Sex and Age Group

In 2023, there were 1,612 gonorrhea cases reported among men and 1,298 cases reported among women. Between 2022 and 2023, gonorrhea incidence decreased by 10 percent among women (from 278.3 to 249.1 cases per 100,000 females) and decreased by six percent among men (from 359.1 to 336.7 cases per 100,000 males). Since 2019, gonorrhea incidence has decreased by six percent among men (from 359.7 to 336.7 cases per 100,000) and remained relatively stable in women, as shown in Figure 16.

Figure 16. Gonorrhea Rates by Sex, St. Louis County, 2019 to 2023



Just over half of gonorrhea cases were reported among people aged 15 to 24 years in 2023. Rates were highest among people aged 20 to 24 years (1,414.9 per 100,000), followed by those aged 15 to 19 years (1,024.1 per 100,000) and those aged 25 to 29 years (845.5 per 100,000). Between 2022 and 2023, gonorrhea incidence decreased by 10 percent among people aged 24 years and younger and decreased by five percent among people aged 25 years and older. More narrowly, incidence increased among people aged 14 and younger (+58%) and decreased among those aged 15 to 19 years (-8%), 20 to 24 years (-12%), 25 to 29 years (-5%), 30 to 39 years (-5%), and 40 and older (-10%). Note that although those aged 14 and younger had the largest increase in incidence, they only comprised two percent of 2023 cases. Since 2019, gonorrhea incidence has increased among those aged 24 and younger and decreased among those aged 25 and older (**Figure 17**).

Figure 17. Gonorrhea Rates by Age Group, St. Louis County, 2019 to 2023

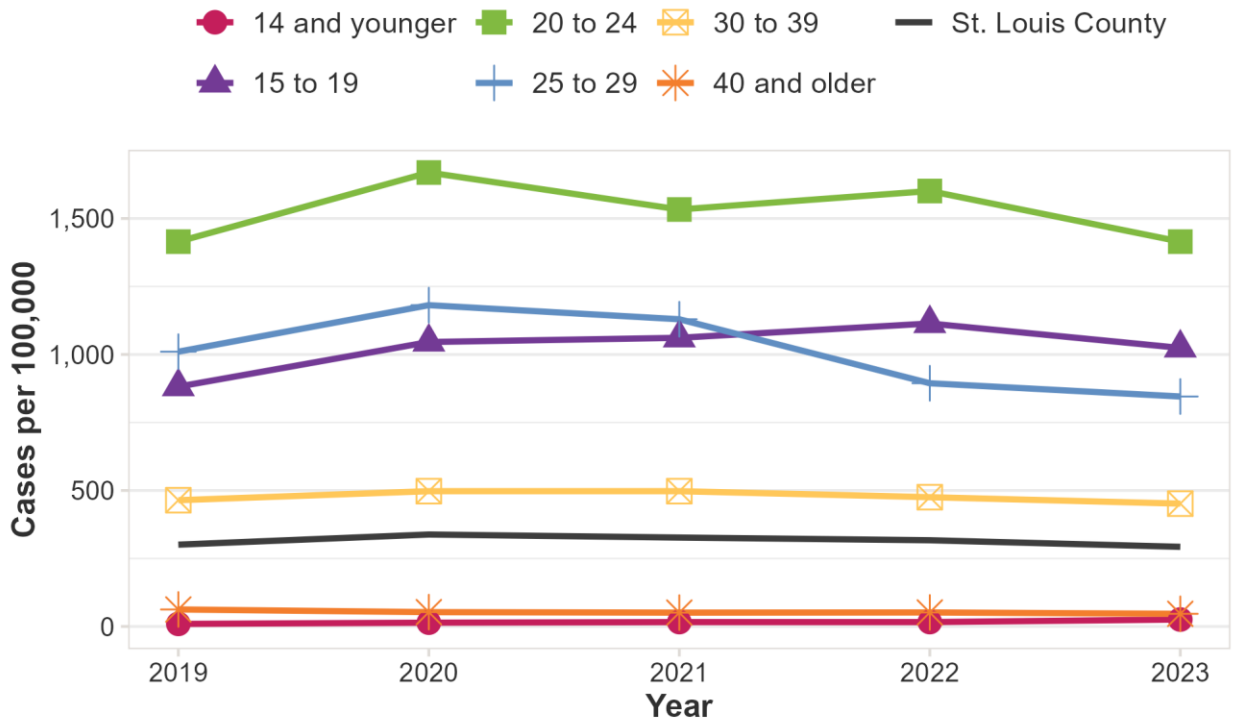
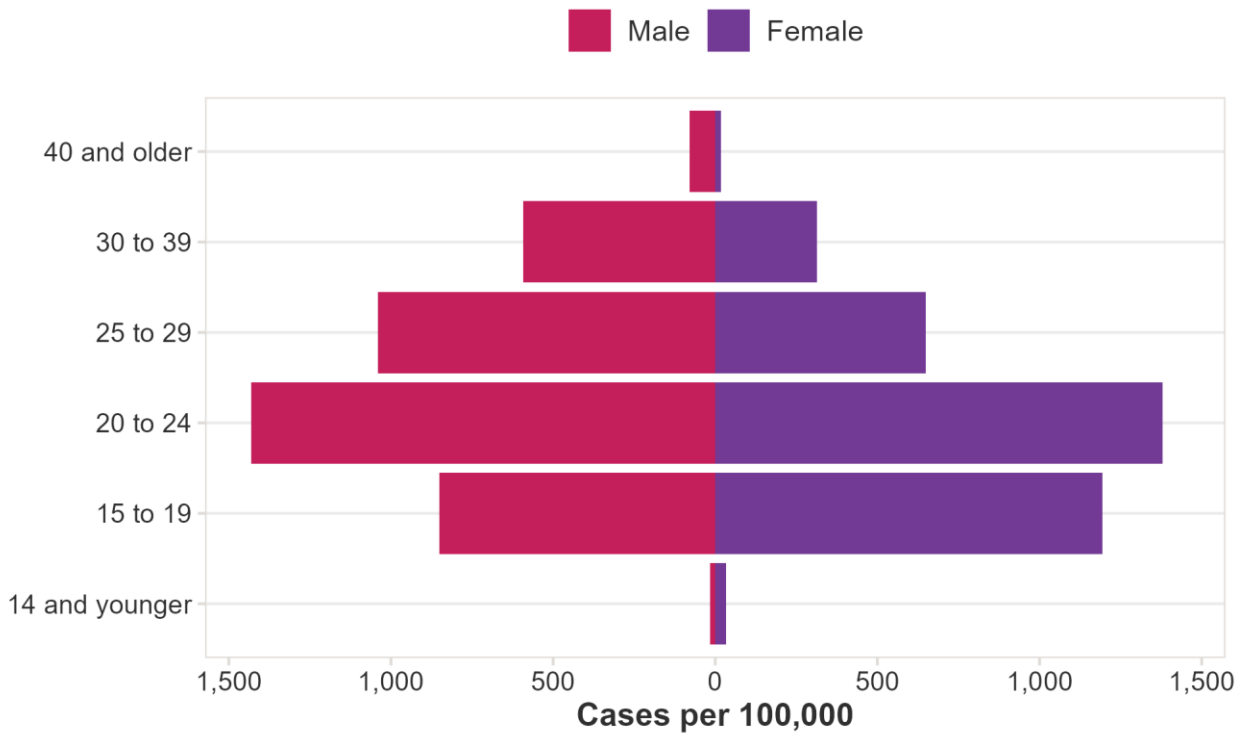


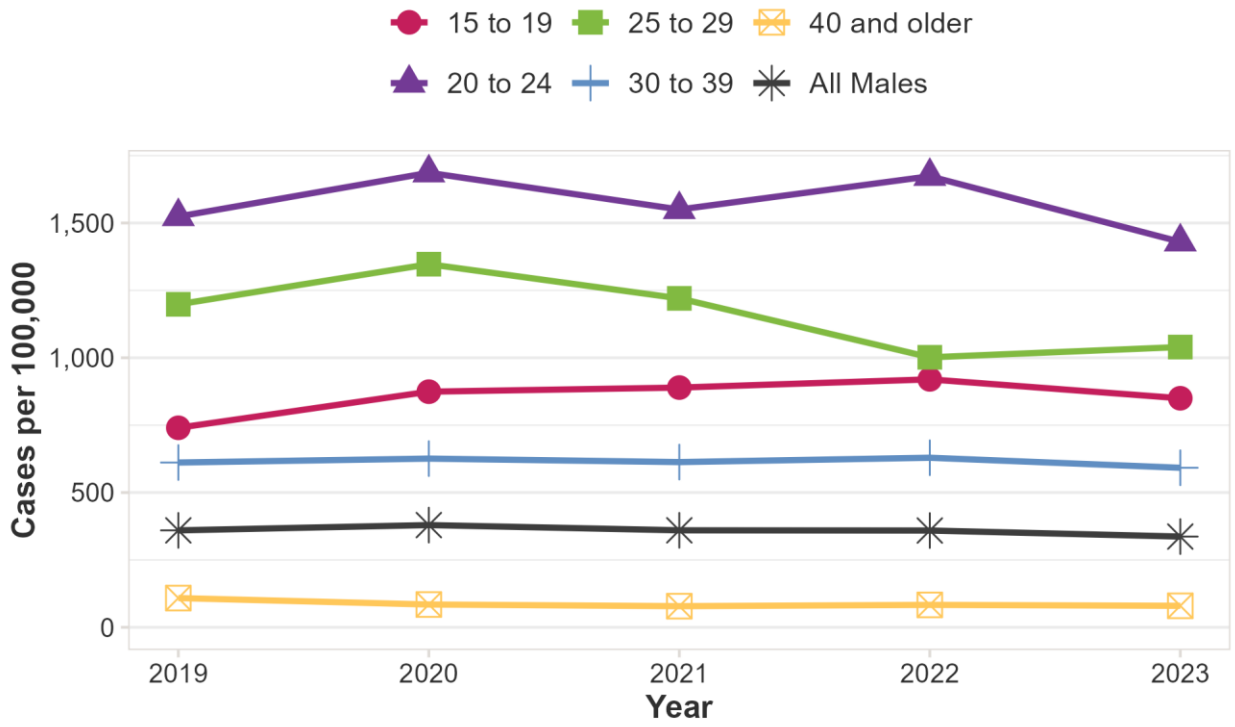
Figure 18. Gonorrhea Rates by Sex and Age Group, St. Louis County, 2023



As demonstrated in Figure 18, both men and women between the ages of 20 and 24 exhibited the highest incidence of gonorrhea in 2023 (1,430.1 cases per 100,000 males and 1,380.3 cases per 100,000 females, respectively).

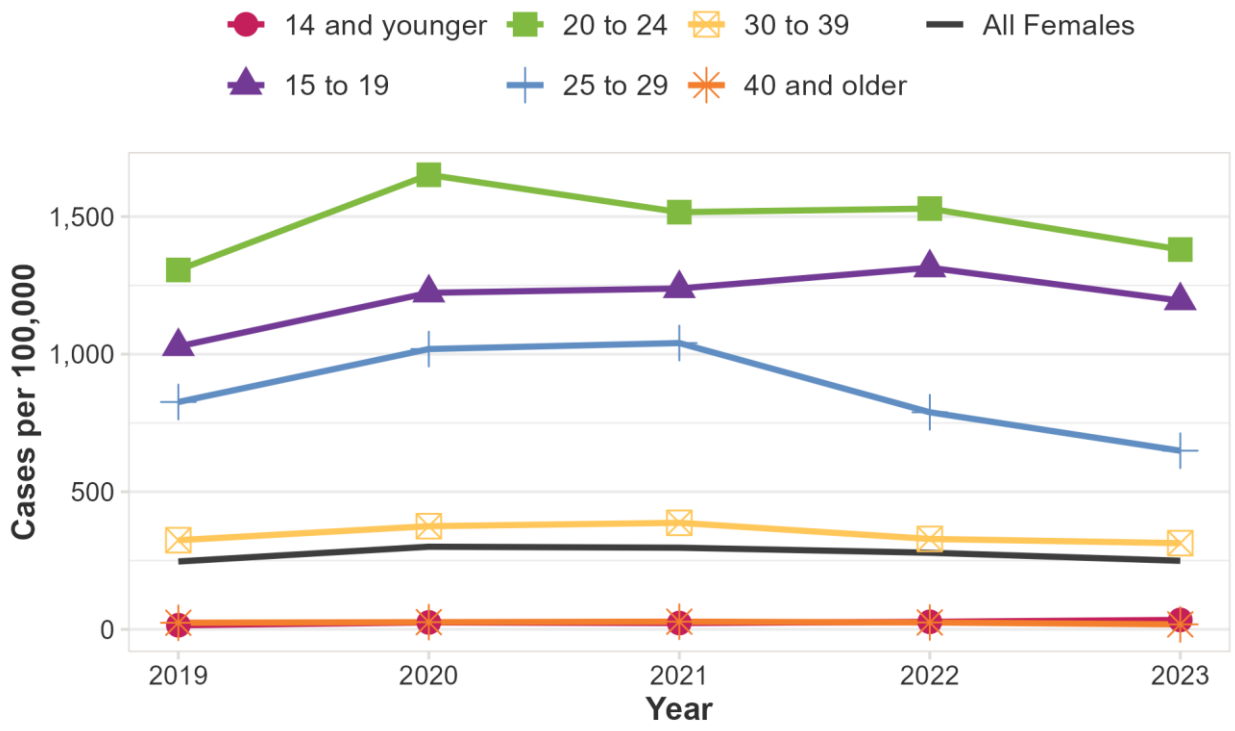
Among men, gonorrhea rates were highest among those aged 20 to 24 years (1,430.1 per 100,000) and 25 to 29 years (1,039.8 per 100,000) in 2023 (**Figure 18**). Between 2022 and 2023, broadly, gonorrhea incidence decreased by 12 percent among men aged 24 and younger and remained stable among men aged 25 and older. More narrowly, gonorrhea incidence decreased among males aged 15 to 19 (-8%), 20 to 24 (-15%), 30 to 39 (-6%), and 40 and older (-4%), and increased among those aged 25 to 29 (+4%). Since 2019, male gonorrhea incidence has increased among those aged 15 to 19 (+14%) and decreased among those aged 20 to 24 (-6%), 25 to 29 (-13%), 30 to 39 (-3%), and those 40 and older (-26%). Rates for males ages 14 and younger are not displayed in Figure 19 due to data suppression.

Figure 19. Gonorrhea Rates among Men by Age Group, St. Louis County, 2019 to 2023



Among women in 2023, gonorrhea rates were highest among those aged 20 to 24 years (1,380.3 per 100,000) and 15 to 19 years (1,194.6 per 100,000) (**Figure 20**). Between 2022 and 2023, broadly, gonorrhea incidence decreased by nine percent among women aged 24 years and younger and by 14 percent among women aged 25 years and older. More narrowly, incidence increased among those aged 14 and younger (+25%) and decreased among women aged 15 to 19 (-9%), 20 to 24 (-10%), 25 to 29 (-18%), 30 to 39 (-5%), and 40 and older (-28%).

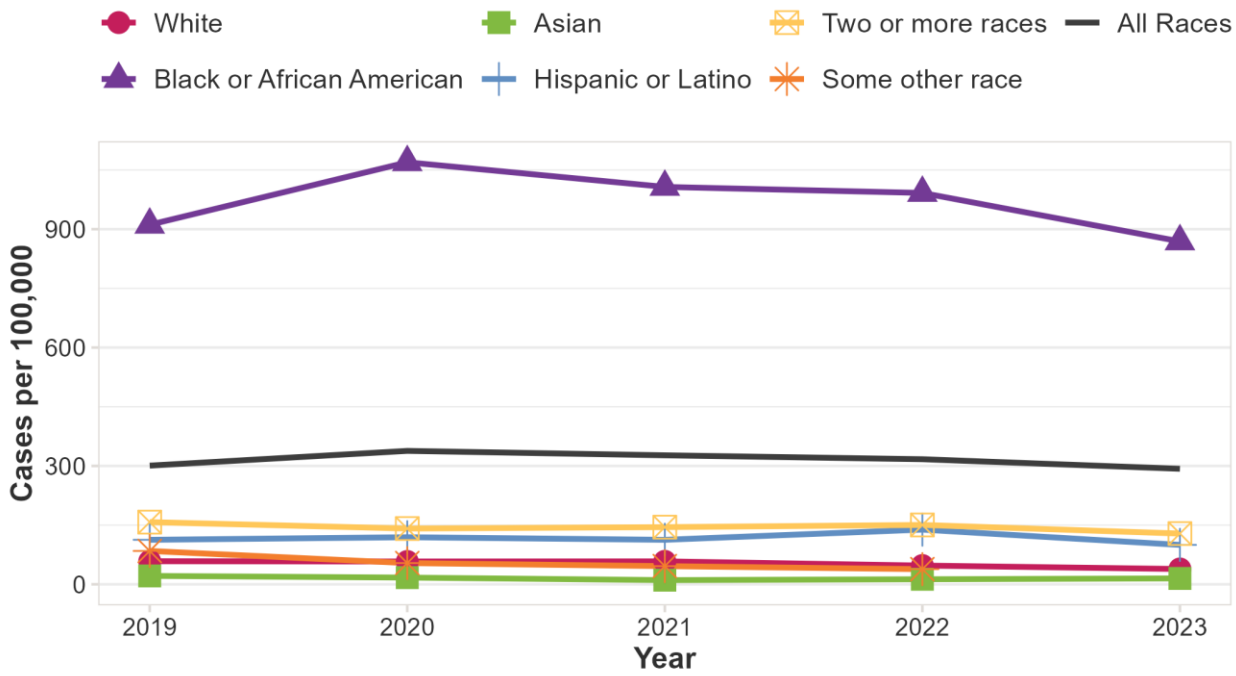
Figure 20. Gonorrhea Rates among Women by Age Group, St. Louis County, 2019 to 2023



Gonorrhea by Race and Ethnicity

Race was unknown for 17 percent of reported gonorrhea cases in 2023. For cases where race was reported, the gonorrhea rate among Black residents of St. Louis County (869.0 cases per 100,000) was 22.4 times the rate among White residents (38.8 per 100,000) (**Figure 21**). The rate among Asians (15.4 per 100,000) was 0.4 times the rate among White residents. Too few gonorrhea cases were reported among American Indians/Alaska Natives or Native Hawaiians/Other Pacific Islanders to calculate rates for those groups. The gonorrhea rate among people identifying as multiracial (128.6 per 100,000) was 3.3 times the rate among people identifying as White. Between 2022 and 2023, gonorrhea incidence decreased among people identifying as multiracial (-14%), Black (-12%), and White (-18%).

Figure 21. Gonorrhea Rates by Race and Ethnicity, St. Louis County, 2019 to 2023



*Excludes American Indians/Alaska Natives and Native Hawaiians/Other Pacific Islanders

Ethnicity was missing or reported as “unknown” for 44 percent of St. Louis County gonorrhea cases in 2023. For cases where ethnicity was known, the gonorrhea rate among Hispanics and Latinos was 99.9 cases per 100,000, which is a 28 percent decrease from 2022 (**Figure 21**). However, given the incompleteness of the ethnicity data and the

relatively small size of St. Louis County's Hispanic or Latino population (3.0% of the total population), this trend is difficult to interpret.

Gonorrhea by Region

In 2023, gonorrhea incidence was highest in the Inner North region of St. Louis County (892.6 cases per 100,000), followed by the Outer North (467.9 per 100,000), Central (171.9 per 100,000), South (66.3 per 100,000), and West (53.2 per 100,000) regions (**Figure 22**). Between 2022 and 2023, gonorrhea incidence decreased in all regions. Since 2017, gonorrhea incidence has decreased in the Central, Outer North, and South regions, remained stable in the Inner North region, and increased in the West region.

Figure 22. Gonorrhea Rates by Sub-County Region, St. Louis County, 2019 to 2023

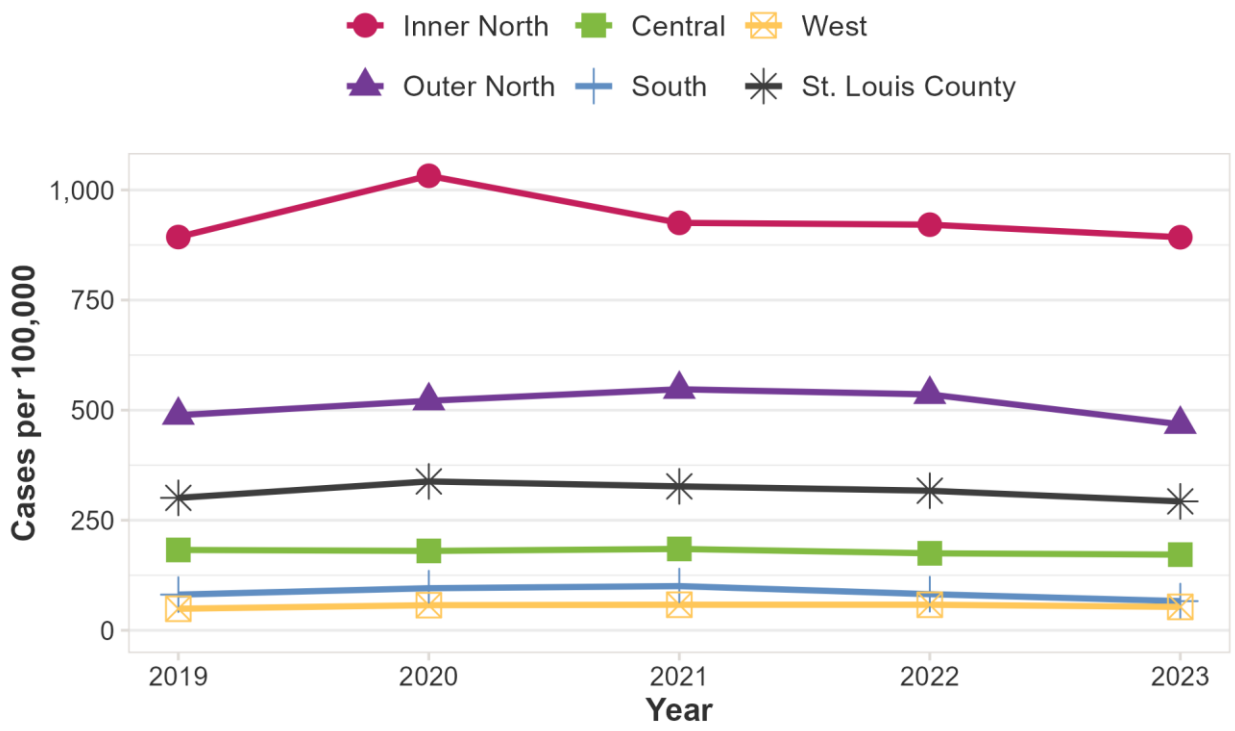
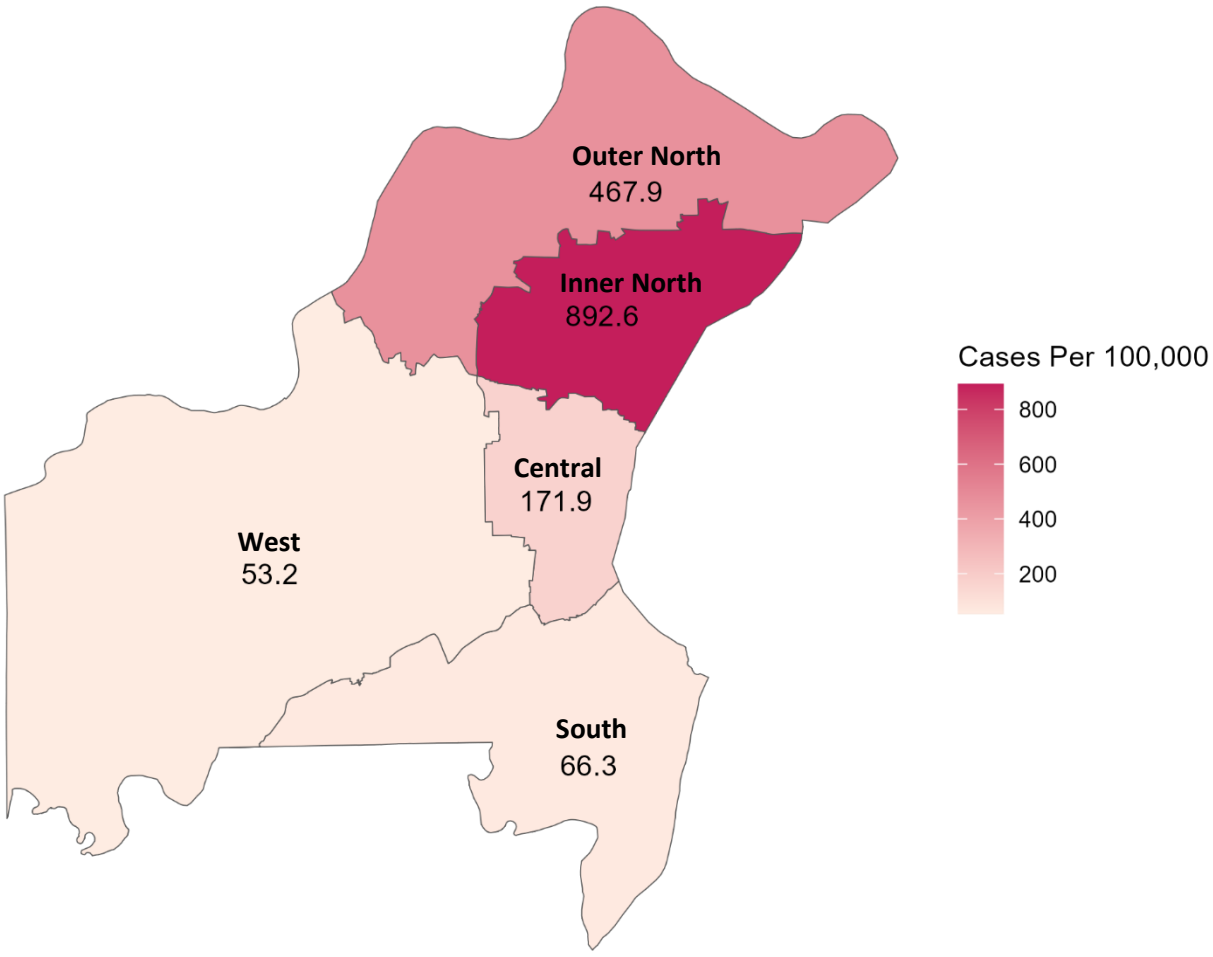
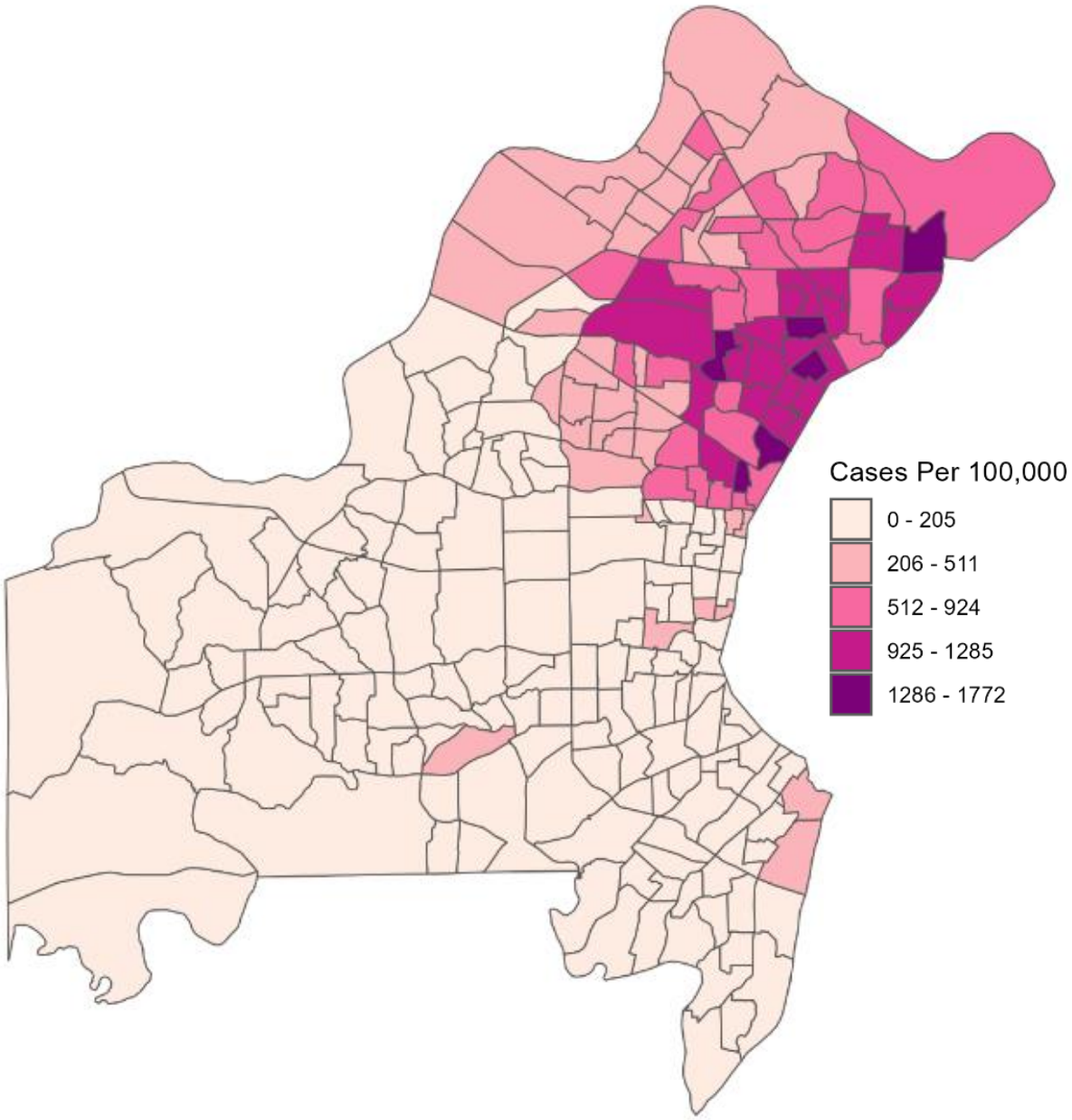


Figure 23. Gonorrhea Rates by Sub-County Region, St. Louis County, 2023



As shown in Figure 23, the Inner North sub-county region had the highest rate of gonorrhea – 892.6 cases per 100,000; this is 3.0 times the overall rate of gonorrhea for St. Louis County (292.8 cases per 100,000).

Figure 24. Gonorrhea Rates by Census Tract, St. Louis County, five-year average, 2019 to 2023

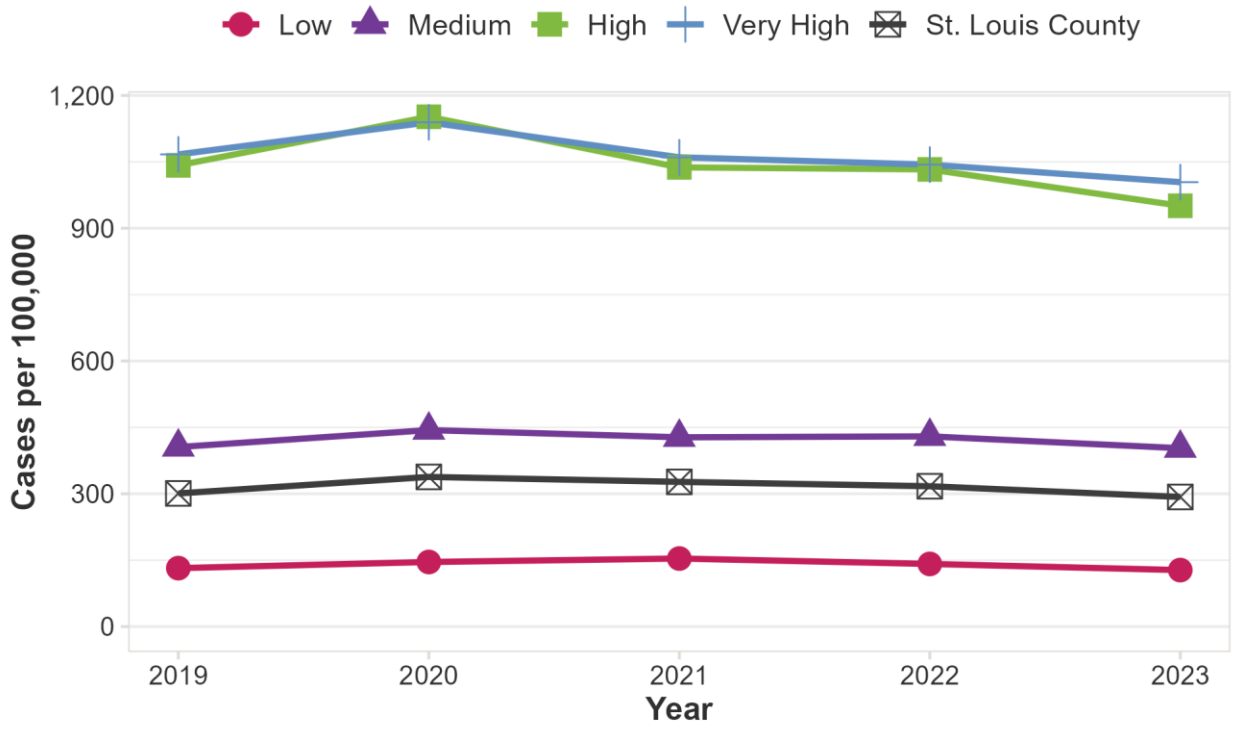


As shown in Figure 24, census tracts with the highest rates of gonorrhea are in the Inner North and Outer North sub-county regions.

Gonorrhea by Neighborhood Poverty Level

In 2023, the highest gonorrhea rates were reported in census tracts with very high poverty rates (1,004.1 cases per 100,000), followed by high poverty census tracts (950.7 per 100,000), medium poverty (403.0 per 100,000) and low poverty (127.6 per 100,000) census tracts (**Figure 25**). Between 2022 and 2023, gonorrhea incidence decreased among low poverty (-10%), medium poverty (-6%), high poverty (-8%), and very high poverty (-4%) census tracts. Since 2019, gonorrhea incidence rates have decreased across all neighborhood poverty levels.

Figure 25. Gonorrhea Rates by Neighborhood Poverty Level, St. Louis County, 2019 to 2023



Early Syphilis in St. Louis County

"Early syphilis" refers to the primary, secondary, and early non-primary non-secondary stages of *Treponema pallidum* infection. Syphilis cases diagnosed in those stages are known to have been transmitted in the previous 12 months. Cases classified as "late or unknown duration" are cases in which there is no evidence that the patient acquired the disease in the previous 12 months. Because they are indicators of incident infection, syphilis surveillance focuses on early syphilis cases.

There were 160 cases of primary and secondary syphilis diagnosed among St. Louis County residents in 2023, for a primary and secondary syphilis rate of 16.0 cases per 100,000 population. With an additional 98 cases of early non-primary non-secondary syphilis, St. Louis County's early syphilis rate was 25.8 cases per 100,000 population. This represents a two percent decrease from 2022 (26.4 per 100,000), but a 25 percent increase from 2019 (20.6 per 100,000) (**Figure 26**). As shown in Figure 26, St. Louis County mostly had lower rates of early syphilis when compared to both Missouri and the United States[4,5]. Please note that 2023 national and state data are not available at this time. Although they do not reflect recent infections, the number of diagnosed cases of syphilis of unknown duration or late syphilis rose rapidly from 142 cases in 2019 to 295 cases in 2023 (**Figure 27**).

Figure 26. Early Syphilis Rates in St. Louis County, Missouri, and United States, 2019 to 2023

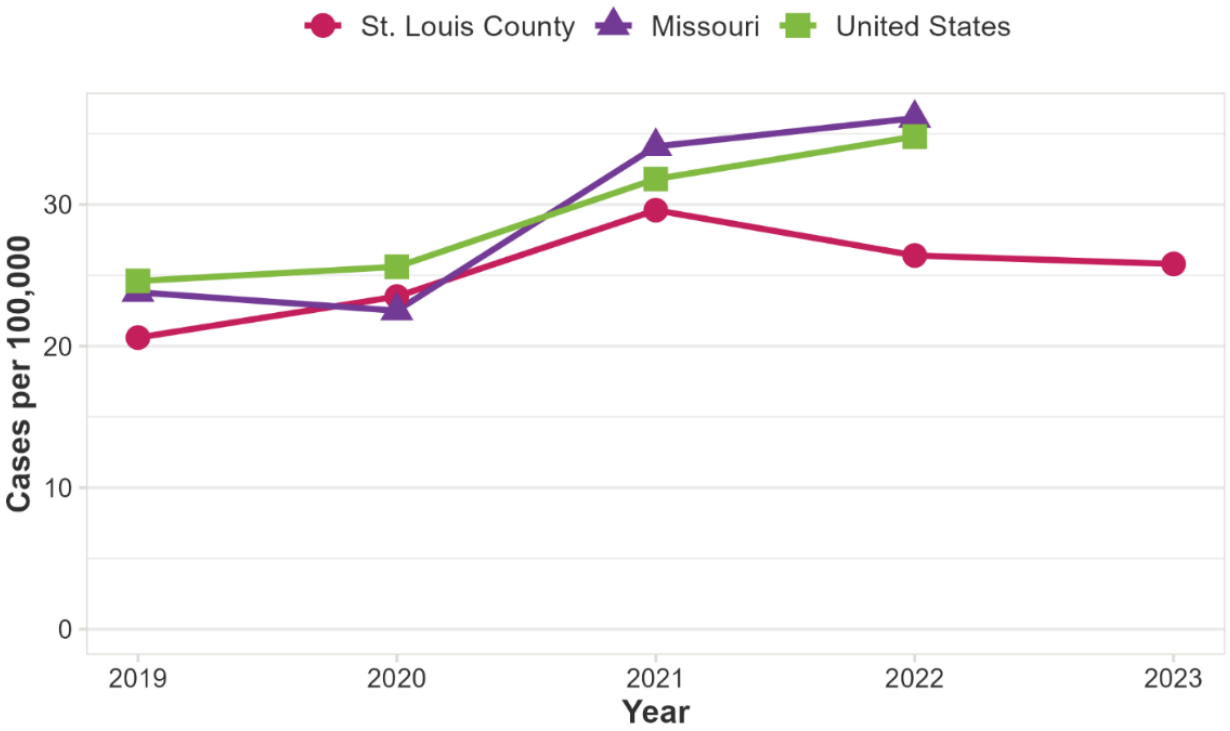
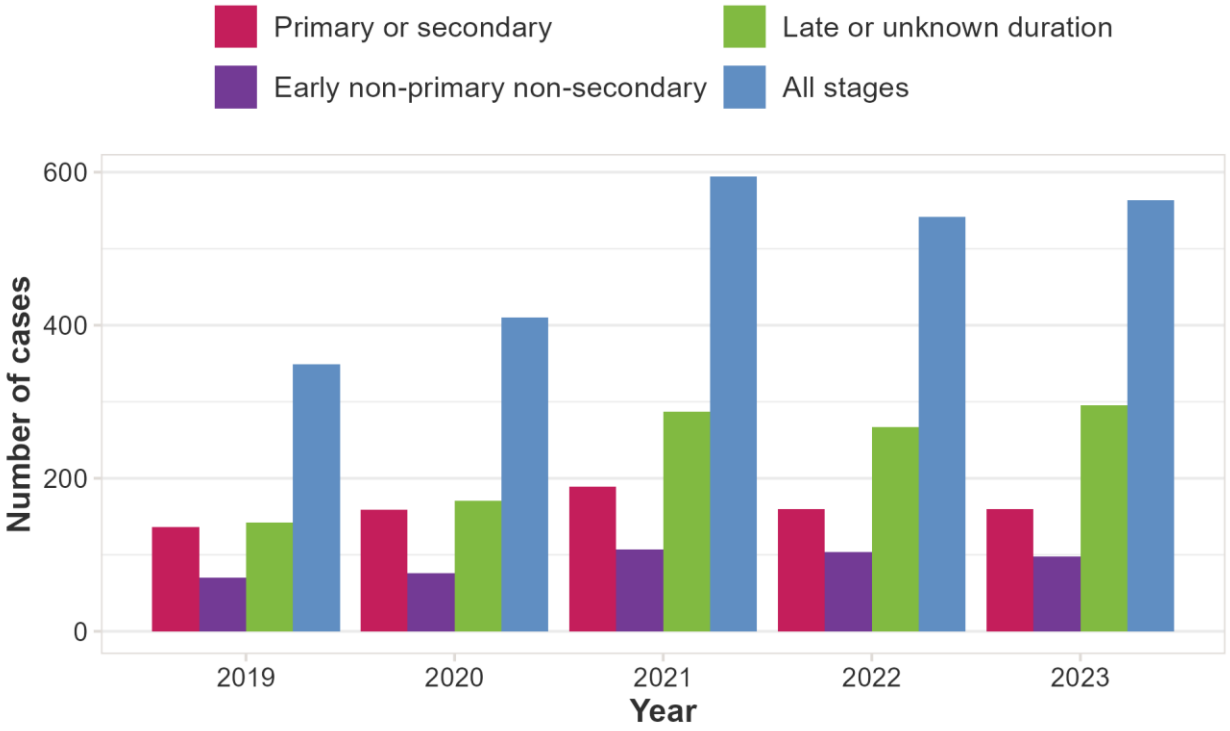


Figure 27. Reported Syphilis Cases by Stage of Disease, St. Louis County, 2019 to 2023



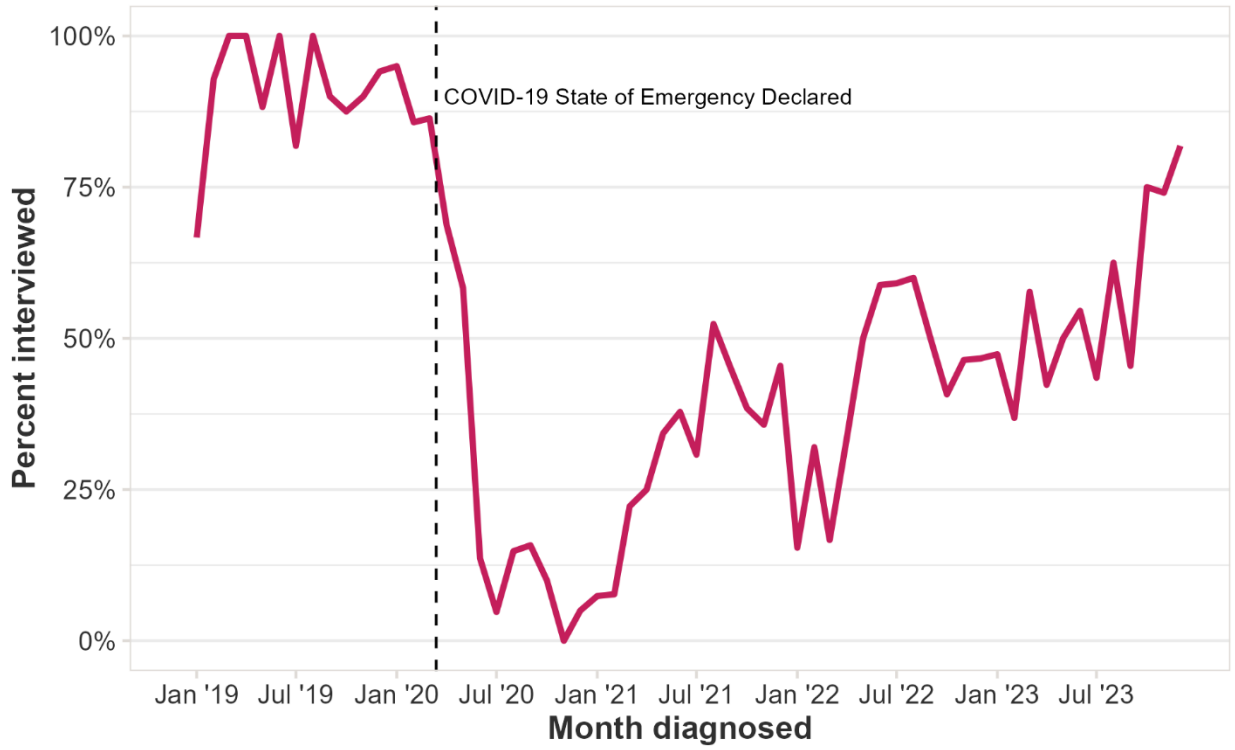
Data Sources: St. Louis County Department of Public Health, Communicable Disease Prevention & Response,
Missouri Department of Health and Senior Services, Bureau of Vital Statistics,
Missouri Health and Surveillance Information System (WebSurv)
This report is updated annually. Last Update 10/24/2024 (PK)

Seventy-three percent of early syphilis cases were diagnosed among men in 2023. From 2020 to 2022, many Disease Intervention Specialists (DIS), who locate, interview, and provide services to people infected with syphilis and other STIs, were diverted to the COVID-19 response. As a result, some syphilis data for those years are incomplete, like data about sex of sexual partners and other epidemiological factors.

Early Syphilis and COVID-19

Public health resources were redirected during the COVID pandemic. Many disease intervention specialists (DIS), who normally interview people diagnosed with syphilis and HIV to ensure adequate treatment and to identify partners who may be infected, were reassigned to COVID-related activities. As a result, the proportion of St. Louis County's early syphilis cases who were interviewed by DIS declined dramatically in mid-2020 and only started to return to pre-pandemic levels in 2023, as shown in Figure 28. This resulted in certain epidemiological data (e.g., sex of sexual partners) going uncollected, and may have contributed to increased syphilis transmission. The proportion of cases interviewed may also be impacted by a steady increase in reported cases.

Figure 28. Proportion of Early Syphilis Cases Interviewed by Month, St. Louis County, 2019 to 2023



Data Sources: St. Louis County Department of Public Health, Communicable Disease Prevention & Response,
Missouri Department of Health and Senior Services, Bureau of Vital Statistics,
Missouri Health and Surveillance Information System (WebSurv)
This report is updated annually. Last Update 10/24/2024 (PK)

Early Syphilis by Sex and Age Group

In 2023, the early syphilis rate for men was reported to be 39.5 cases per 100,000 males, and the early syphilis rate for women was reported to be 13.2 cases per 100,000 females. Between 2022 and 2023, syphilis incidence decreased by six percent among men (from 41.8 to 39.5 cases per 100,000 males) and increased by seven percent among women (from 12.3 to 13.2 cases per 100,000 females). Since 2019, as shown in Figure 31, syphilis incidence has increased by 11 percent among men (from 35.5 to 39.5 cases per 100,000 males) and by 91 percent among women (from 6.9 to 13.2 cases per 100,000 females). Of note, the number and proportion of early syphilis cases reported among women has been increasing since 2019, with a slight dip in cases in 2022 (**Figure 29**). In 2023, early syphilis rates were highest among men aged 25 to 29 years (126.8 cases per 100,000). When compared to 2019, syphilis incidence remained stable among men aged 29 years and younger, while decreasing by six percent among men aged 30 years and older (**Figure 32**). Syphilis rates were highest among people aged 25 to 29 years (87.8 cases per 100,000) and 30 to 39 years (61.6 cases per 100,000) (**Figure 30**).

Figure 29. Early Syphilis Rates by Sex, St. Louis County, 2019 to 2023

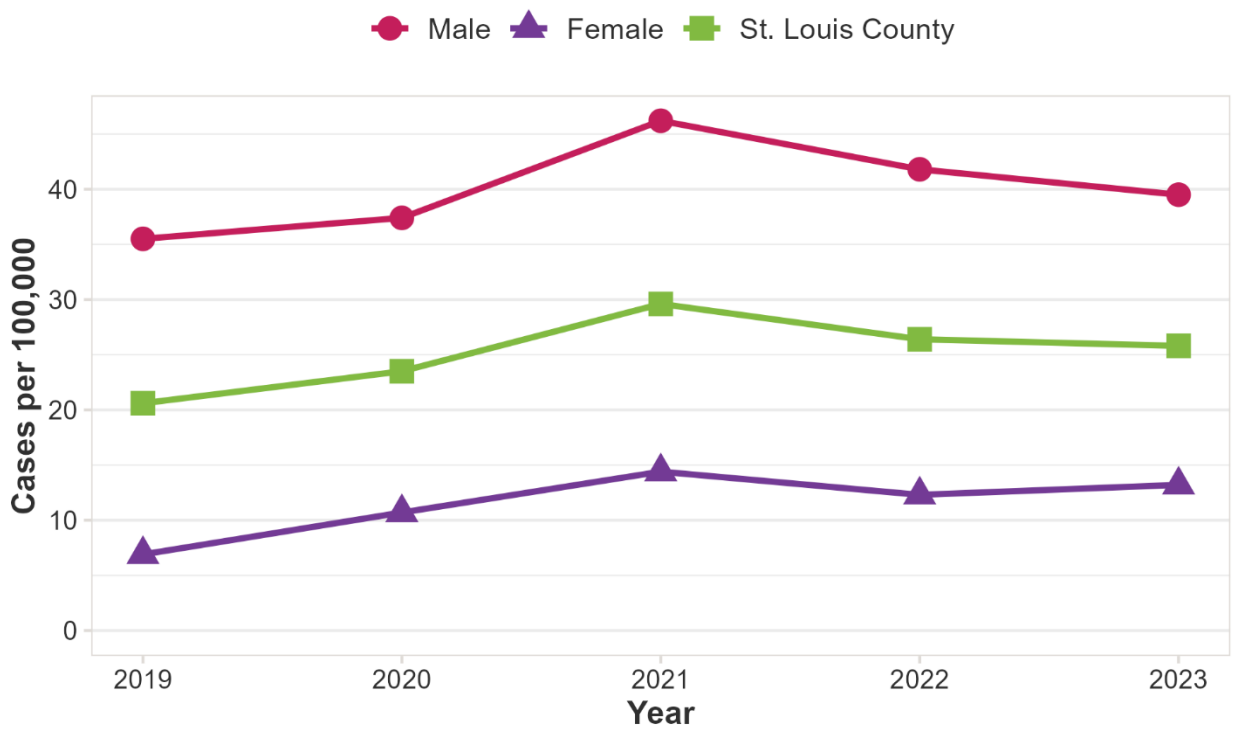


Figure 30. Early Syphilis Rates by Age Group, St. Louis County, 2019 to 2023

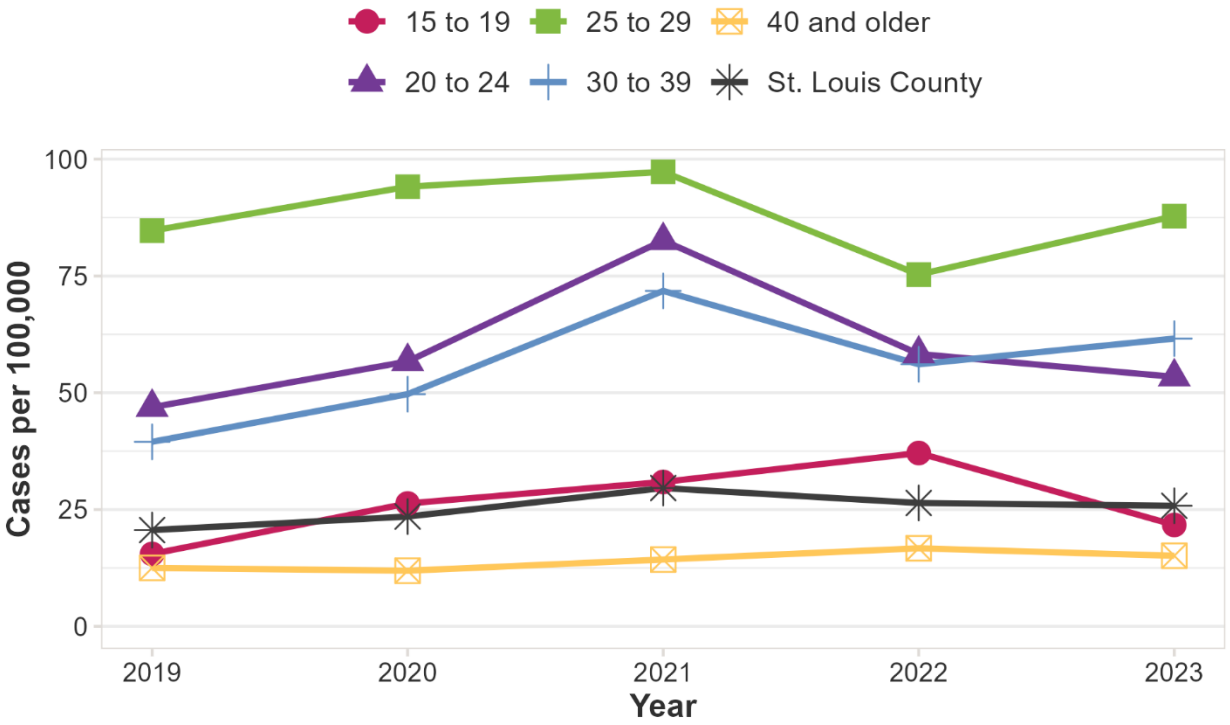
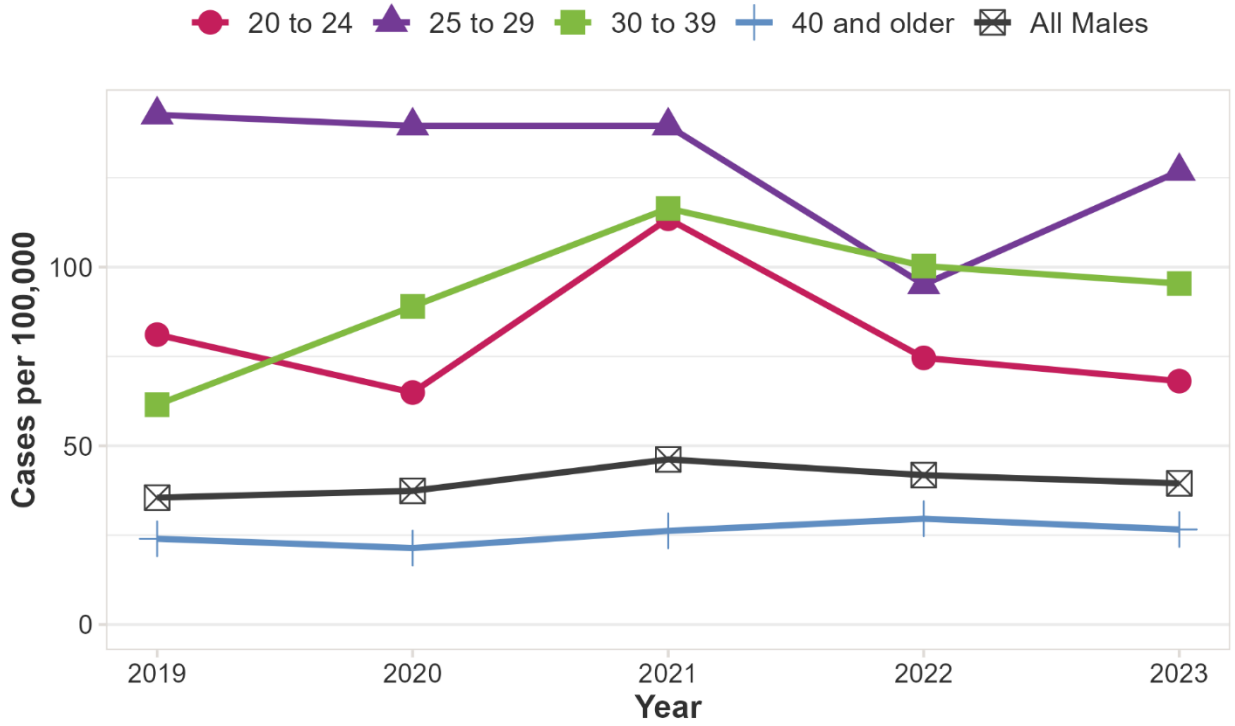


Figure 31. Early Syphilis Rates by Sex and Age Group, St. Louis County, 2023

In 2023, men between the ages of 25 and 29 had the highest incidence rate of early syphilis (126.8 cases per 100,000) (**Figure 31**). Compared with 2022, syphilis incidence remained stable among men aged 29 and younger and decreased by six percent among men aged 30 and younger (from 65.0 to 61.0 cases per 100,000 men). Since 2019, syphilis incidence has decreased among men aged 20 to 24 (-16%), 25 to 29 (-11%) years old, and increased among men aged 30 to 39 (+55%) and those 40 and older (+11%) (**Figure 32**).

Figure 32. Early Syphilis Rates among Men by Age Group, St. Louis County, 2019 to 2023



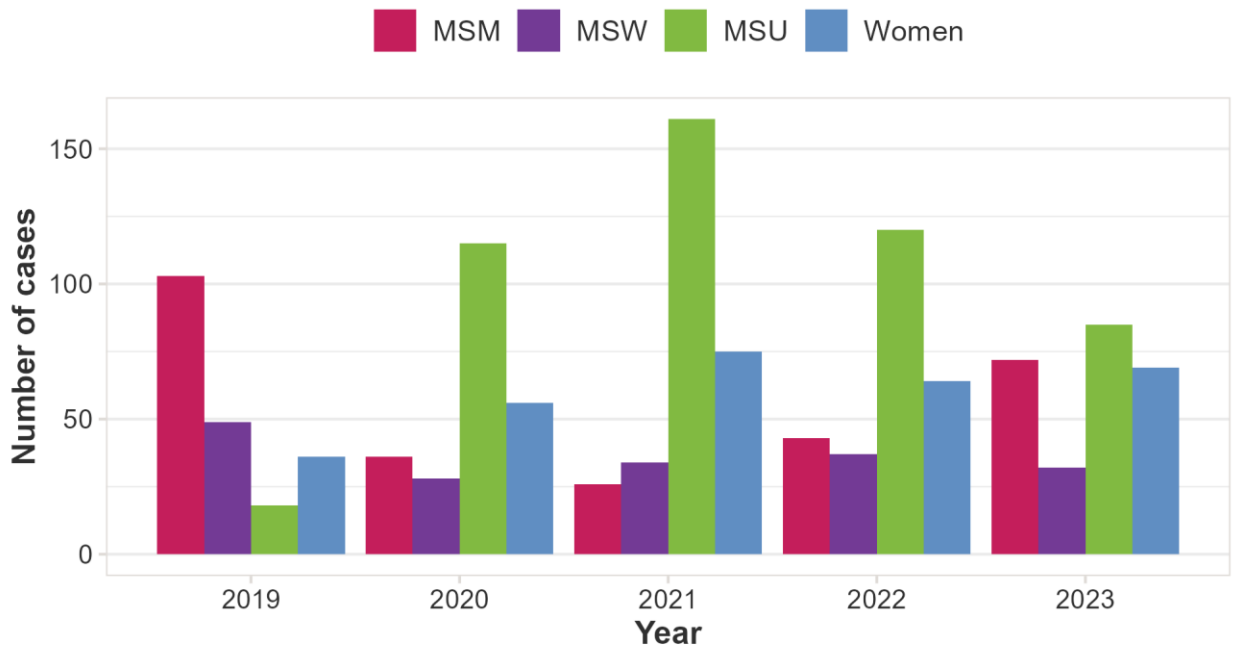
Among women, early syphilis rates were highest among those aged 25 to 29 years (49.7 cases per 100,000), followed by those aged 20 to 24 years (38.8 per 100,000) and 30 to 39 years (29.3 per 100,000) (**Figure 31**). When compared to 2022, early syphilis rates have decreased for women in all age groups except those between the ages of 30 and 39 (from 13.9 to 29.3 per 100,000). Overall, early syphilis incidence among women in St. Louis County increased by 91% between 2019 and 2023, and 86 percent of the 300 female cases reported in that period were diagnosed among women of childbearing age (15 to 44 years). The five-year trend graph of females by age group is not displayed due to data suppression guidelines.

Early Syphilis by Sexual Behavior

Of the 258 early syphilis cases diagnosed among St. Louis County residents in 2023, 72 (28%) were among men who have sex with men (MSM), 32 (12%) were among men who have sex with women only (MSW), 85 (33%) were among men whose sexual partners' sex is unknown (MSU), and 69 (27%) were among women (**Figure 33**).

Due to staffing changes amidst the COVID-19 pandemic, much of the syphilis questionnaire data were incomplete from 2020 to 2022, hence a larger proportion of cases where information about sex of sex partners is unknown – see the "Syphilis and COVID-19" section for details. This makes it difficult to assess meaningful trends over time. However, it is important to note that although early syphilis has disproportionately affected men, the percentage of women who were diagnosed with early syphilis has increased from 18 percent of cases in 2019 to 27 percent of cases in 2023, which strongly suggests increased syphilis incidence among heterosexual and/or bisexual men (**Figure 33**).

Figure 33. Early Syphilis Cases by Sex and Sexual Behavior, St. Louis County, 2019 to 2023

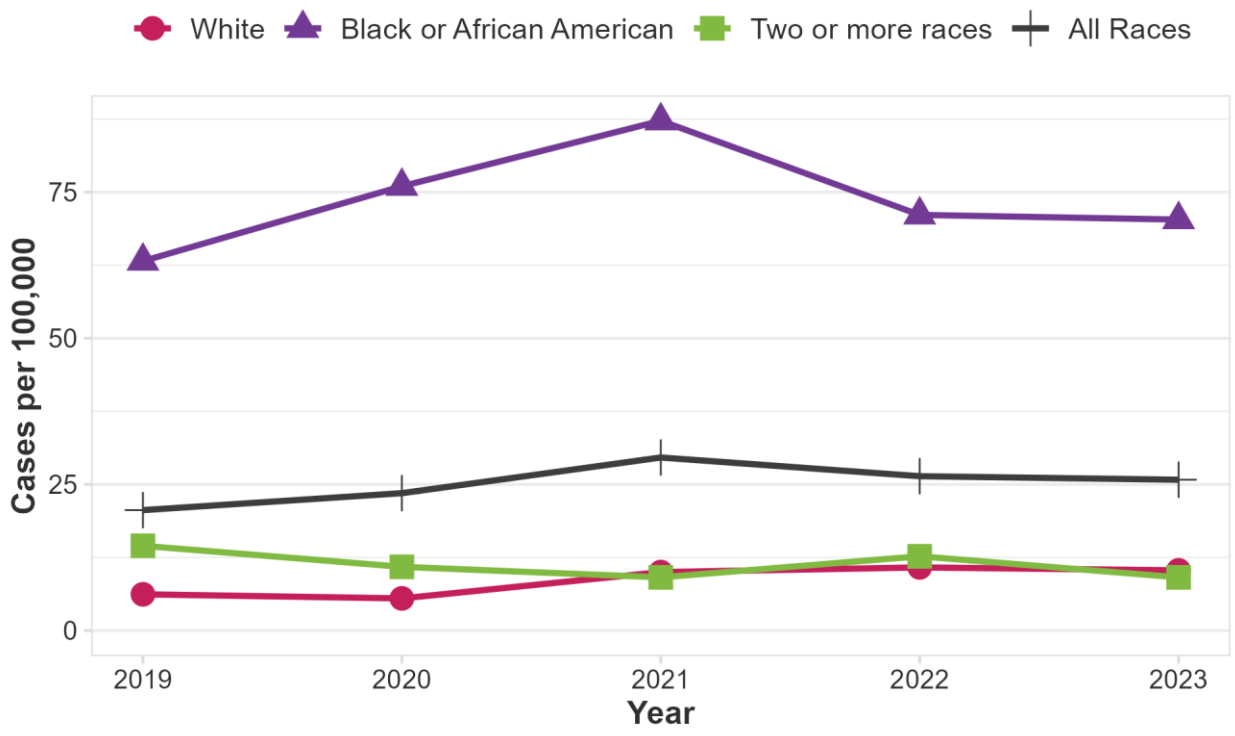


Early Syphilis by Race and Ethnicity

Race was known for 95 percent of reported early syphilis cases in 2023. The early syphilis rate among Black residents of St. Louis County (70.3 per 100,000) was 6.8 times the rate among White residents (10.3 per 100,000) (**Figure 34**). Between 2022 and 2023, syphilis incidence remained stable among people identifying as Black, decreased by five percent among people identifying as White, and decreased by 28 percent among people identifying as multiracial. Since 2019, incidence has increased by 11 percent among Black residents, increased by 66 percent among White residents, and decreased by 37 percent among those identifying as multiracial. Too few early syphilis cases were reported among other racial and ethnic groups to calculate rates for those groups.

Ethnicity was known for 82 percent of early syphilis cases in 2023. The early syphilis rate among Hispanics and Latinos (32.2 cases per 100,000) was 1.5 times the rate among non-Hispanics (20.9 per 100,000). Syphilis incidence among people identifying as non-Hispanic has increased by 22 percent since 2019.

Figure 34. Early Syphilis Rates by Race, St. Louis County, 2019 to 2023



Early Syphilis and HIV Co-infection

Information about HIV co-infection among early syphilis cases in St. Louis County is incomplete. In 2022, HIV status at the time of syphilis diagnosis was known for just 77 percent of reported early syphilis cases. However, completeness varied substantially by sex and sex of sex partners – HIV status was known for 90 percent of MSM with early syphilis, but for only 63 percent of MSW and 67 percent of women (**Figure 35**). Of the 198 early syphilis cases for whom HIV status was known in 2023, 82 (41%) were co-infected with HIV. For the 65 early syphilis cases among MSM where HIV status was known, the HIV co-infection rate was 78 percent (**Figure 35**).

During the 2019 – 2023 period, HIV status at the time of syphilis diagnosis was known for 77 percent of early syphilis cases among MSM, but for just 54 percent of cases among MSW and 54 percent of cases among women. For early syphilis cases where HIV status was known, the HIV co-infection rate was 75 percent among MSM, 10 percent among MSW, and five percent among women (**Figure 36**).

Figure 35. Early Syphilis Cases by HIV Status at Time of Report, St. Louis County, 2019 to 2023

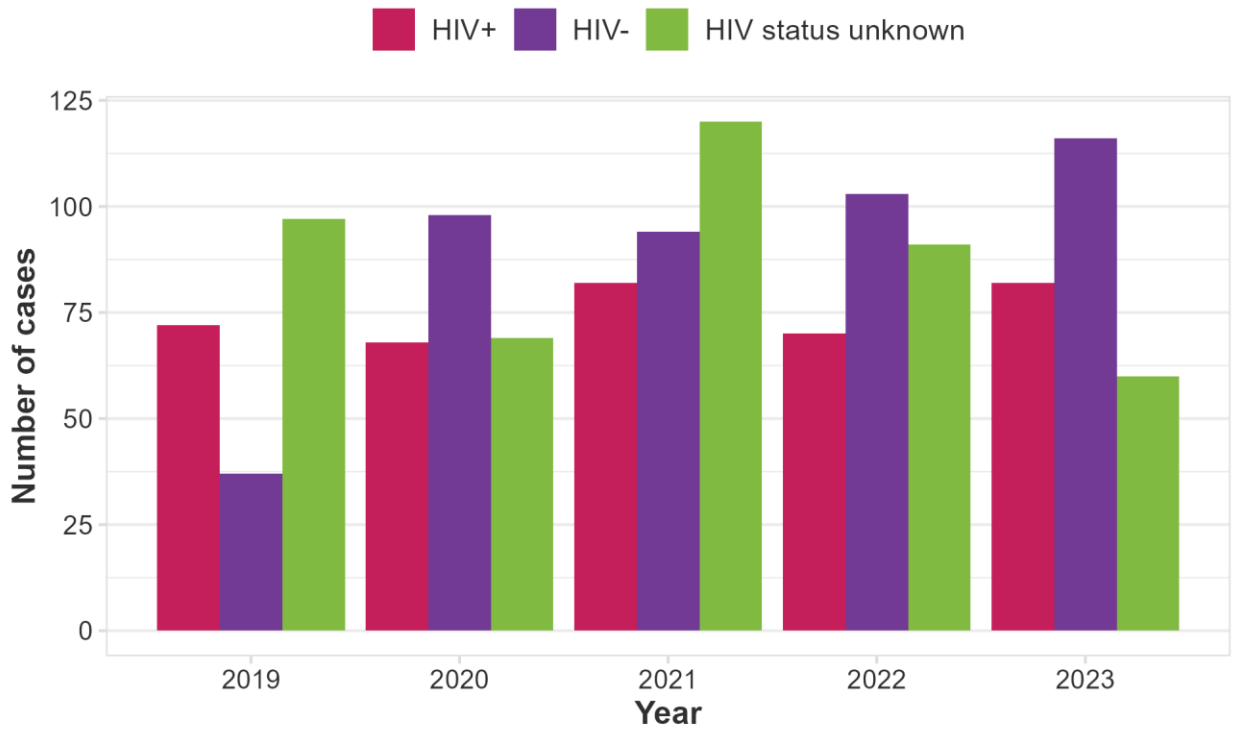
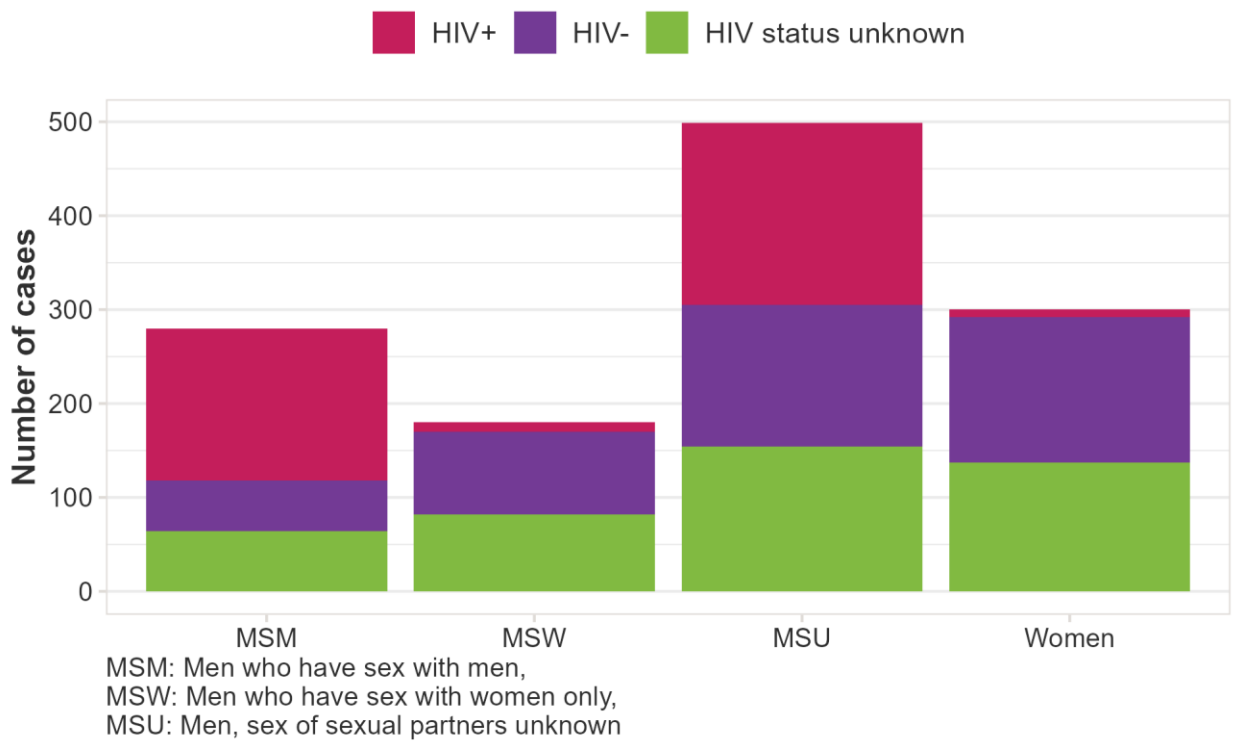


Figure 36. Early Syphilis Cases by Sexual Behavior and HIV Status at Time of Report, 2019 to 2023



Early Syphilis by Region

In 2022, syphilis incidence was highest in the Inner North region of St. Louis County (60.8 cases per 100,000), followed by the Outer North (35.0 per 100,000), Central (27.5 per 100,000), South (13.9 per 100,000), and West (7.5 per 100,000) regions (**Figure 37**). Between 2022 and 2023, syphilis incidence has increased in the South region and decreased in all the other regions. Since 2019, syphilis incidence has decreased in the Inner North region but increased in all the other regions, with the largest increases in the Central (+178%) and West (+159%) regions. Note that while these regions had the largest increases, they account for 20 percent of all early syphilis cases from 2019 to 2023.

Figure 37. Early Syphilis Rates by Sub-County Region, St. Louis County, 2019 to 2023

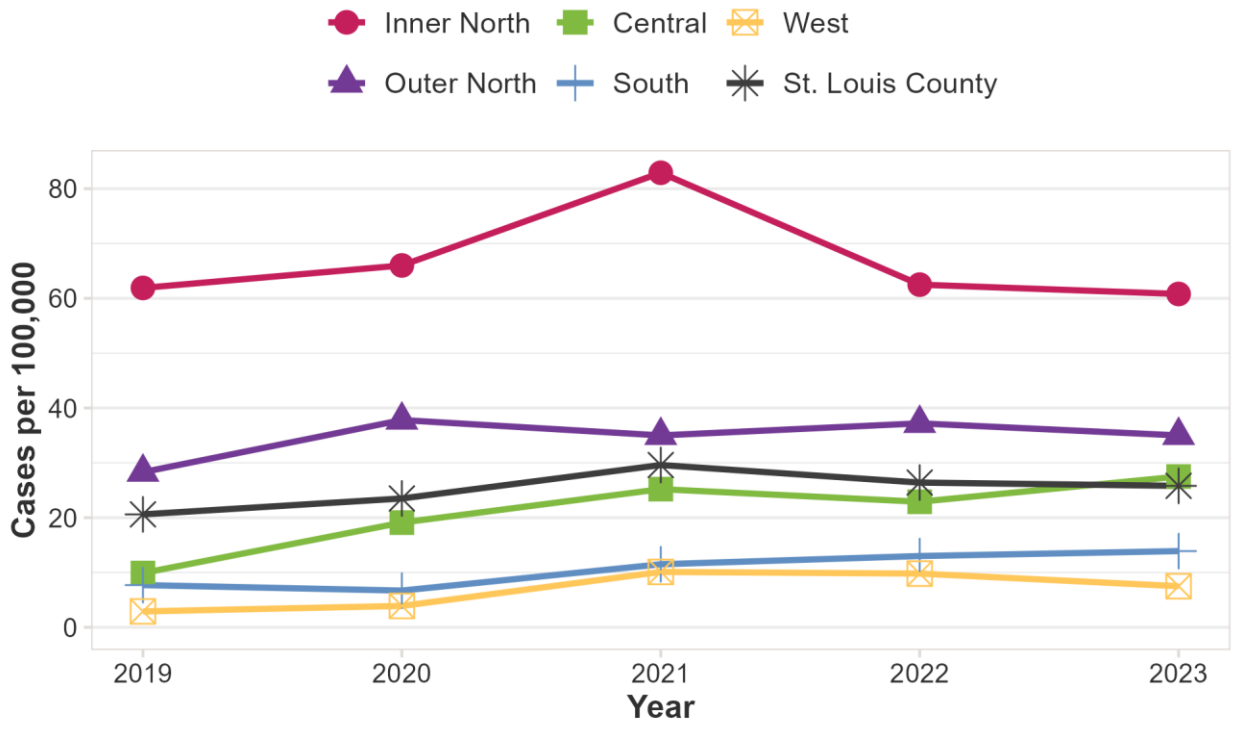
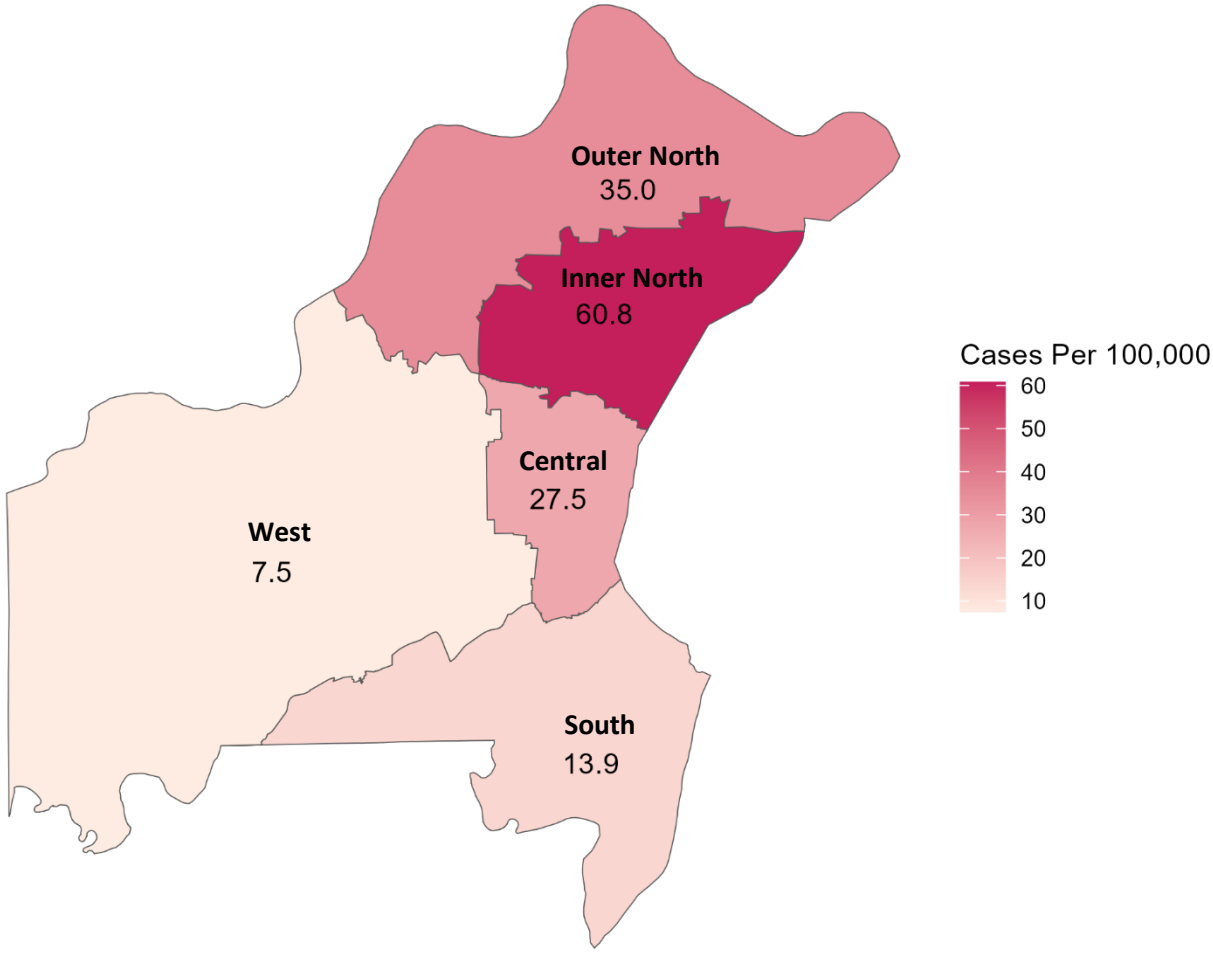
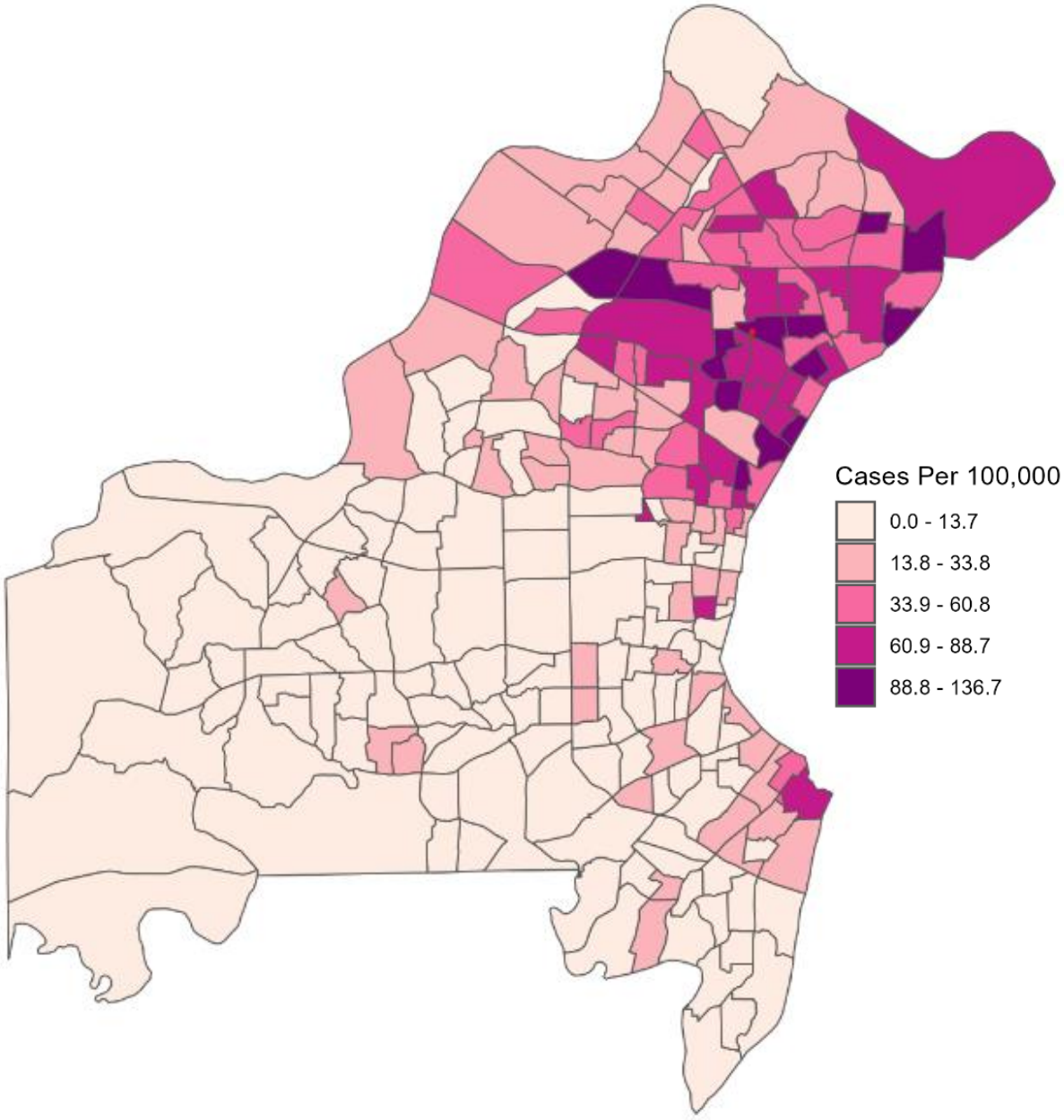


Figure 38. Early Syphilis Rates by Sub-County Region, St. Louis County, 2023



As shown in Figure 38, the Inner North sub-county region had the highest rate of early syphilis – 60.8 cases per 100,000; this is 2.4 times the overall rate of early syphilis in St. Louis County (25.8 cases per 100,000).

Figure 39. Early Syphilis Rates by Census Tract, St. Louis County, five-year average, 2019 to 2023



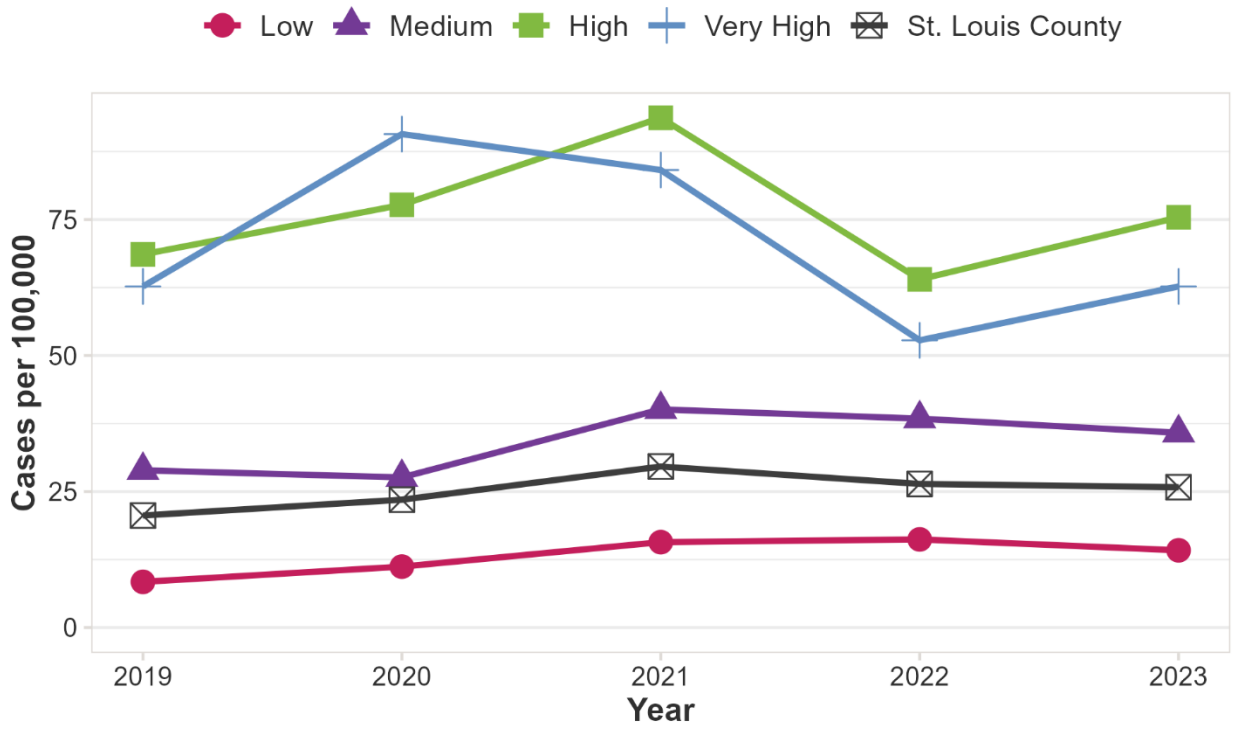
Once again, census tracts within the Inner North and Outer North sub-county regions had the highest rates of early syphilis.

Early Syphilis by Neighborhood Poverty Level

In 2023, syphilis incidence was greatest in high poverty (75.4 cases per 100,000) census tracts, followed by very high poverty (62.7 per 100,000), medium poverty (35.8 per 100,000), and low poverty (14.2 per 100,000) census tracts (**Figure 40**). Between 2022 and 2023, syphilis incidence decreased in low poverty (-12%) and medium poverty (-7%) census tracts and increased in high poverty (+18%) and very high poverty (+19%) census tracts.

Since 2019, incidence has increased across all poverty levels except very high poverty level census tracts, which remained steady (**Figure 40**).

Figure 40. Early Syphilis Rates by Neighborhood Poverty Level, St. Louis County, 2019 to 2023



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3. Centers for Disease Control and Prevention. Table 1. Sexually Transmitted Diseases – Reported Cases and Rates of Reported Cases, United States, 1941-2022. Last Reviewed January 30, 2024. Accessed October 1, 2024. https://www.cdc.gov/std/statistics/2022/tables/1.htm
4. Centers for Disease Control and Prevention. Table 22. Primary and Secondary Syphilis – Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2018-2022. Last Reviewed January 30, 2024. Accessed October 1, 2024.
5. Centers for Disease Control and Prevention. Table 29. Early Non-Primary Non-Secondary Syphilis – Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2018-2022. Last Reviewed January 30, 2024. Accessed October 1, 2024.

Appendix 1: Data Tables

Table 1. Sexually Transmitted Infections - Counts and Rates of Reported Cases, St. Louis County, 2019 to 2023

	Case Counts					Rates Per 100,000 Population*				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Chlamydia	6,624	5,979	6,214	6,429	6,318	662.6	598.1	621.6	643.1	632.0
Gonorrhea	3,007	3,380	3,268	3,169	2,927	300.8	338.1	326.9	317.0	292.8
Syphilis, All Stages	349	410	594	542	563	34.9	41.0	59.4	54.2	56.3
Primary	39	69	77	63	70	3.9	6.9	7.7	6.3	7.0
Secondary	97	90	112	97	90	9.7	9.0	11.2	9.7	9.0
Early, non-primary non-secondary	70	76	107	104	98	7.0	7.6	10.7	10.4	9.8
Late or unknown duration	142	171	287	267	295	14.2	17.1	28.7	26.7	29.5
Congenital*	1	4	11	11	10	8.8	38.0	104.8	105.6	96.0
P&S† Syphilis	136	159	189	160	160	13.6	15.9	18.9	16.0	16.0
Early‡ Syphilis	206	235	296	264	258	20.6	23.5	29.6	26.4	25.8

*Rates of congenital syphilis are per 100,000 live births
†Primary and secondary cases
‡Primary, secondary, and early latent cases

Table 2. Sexually Transmitted Infections Among Women of Reproductive Age and Live Births Delivered by Pregnant Persons with STIs – Counts and Rates of Reported Cases, St. Louis County, 2019 to 2022

	Case Counts				Rates Per 100,000 Population*			
	2019	2020	2021	2022	2019	2020	2021	2022
Chlamydia	4,141	3,825	3,910	4,020	2,160.2	1,995.4	2,039.7	2,097.1
Live Births Delivered by Pregnant Persons with Chlamydia*	313	251	236	208	2,759.4	2,381.6	2,248.9	1,996.9
Gonorrhea	1,241	1,503	1,488	1,401	647.4	784.1	776.2	730.9
Live Births Delivered by Pregnant Persons with Gonorrhea*	71	63	66	68	625.9	597.8	628.9	652.8
Early Syphilis	32	48	68	53	16.7	25.0	35.5	27.6
Congenital Syphilis*	1	4	11	11	8.8	38.0	104.8	105.6

*Rates per 100,000 live births

Table 3. Chlamydia - Case Counts and Rates by Sex and Age Group, St. Louis County, 2019 to 2023

	Case Counts					Rates Per 100,000 Population				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Total	**6,624**	**5,979**	**6,214**	**6,429**	**6,318**	**662.6**	**598.1**	**621.6**	**643.1**	**632.0**
Female	**4,244**	**3,894**	**4,010**	**4,134**	**4,036**	**814.6**	**747.4**	**769.7**	**793.5**	**774.7**
14 and younger	57	35	43	49	82	64.9	39.8	48.9	55.8	93.3
15 to 19	1,370	1,312	1,244	1,277	1,389	4,307.0	4,124.6	3,910.8	4,014.6	4,366.7
20 to 24	1,580	1,418	1,519	1,495	1,361	5,107.5	4,583.8	4,910.8	4,832.7	4,399.5
25 to 29	753	679	660	726	635	2,338.5	2,108.7	2,049.3	2,254.7	1,972.0
30 to 39	387	362	440	450	443	596.9	558.3	678.6	694.0	683.2
40 and older	97	88	104	137	126	35.5	32.2	38.0	50.1	46.1
Male	**2,380**	**2,085**	**2,204**	**2,295**	**2,251**	**497.2**	**435.5**	**460.4**	**479.4**	**470.2**
14 and younger	16	9	13	9	20	17.3	9.8	14.1	9.8	21.7
15 to 19	537	533	522	582	625	1,635.6	1,623.5	1,590.0	1,772.7	1,903.7
20 to 24	810	732	716	746	697	2,626.7	2,373.8	2,321.9	2,419.2	2,260.3
25 to 29	540	390	425	405	397	1,711.8	1,236.3	1,347.2	1,283.8	1,258.5
30 to 39	320	276	388	408	368	517.5	446.4	627.5	659.9	595.2
40 and older	157	145	140	145	144	68.4	63.2	61.0	63.2	62.8

Table 4. Chlamydia – Case Counts and Rates by Race/Ethnicity, Region, and Poverty Level, St. Louis County, 2019 to 2023

	Case Counts					Rates Per 100,000 Population				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Total	**6,624**	**5,979**	**6,214**	**6,429**	**6,318**	**662.6**	**598.1**	**621.6**	**643.1**	**632.0**
Race/Ethnicity										
White	1,051	911	963	967	688	163.8	142.0	150.1	150.7	107.3
Black or African American	4,288	3,869	4,050	4,258	3,830	1,772.0	1,598.8	1,673.6	1,759.6	1,582.7
American Indian/Alaskan Native	6	--	--	--	--	699.3	--	--	--	--
Asian	35	28	22	36	23	74.5	59.6	46.8	76.6	49.0
Native Hawaiian/Other Pacific Islander	0	--	--	--	--	0.0	--	--	--	--
Some other race	32	17	16	19	15	245.8	130.6	122.9	146.0	115.2
Two or more races	234	227	176	146	142	423.9	411.2	318.9	264.5	257.3
Hispanic or Latino	115	125	141	100	81	370.8	403.0	454.6	322.4	261.2
Region										
Inner North	2,887	2,563	2,556	2,753	2,790	1,686.4	1,497.1	1,493.1	1,608.1	1,629.7
Outer North	1,911	1,741	1,840	1,893	1,911	1,062.0	967.5	1,022.5	1,052.0	1,062.0
Central	573	461	507	589	497	437.6	352.1	387.2	449.9	379.6
South	494	480	476	446	455	237.2	230.5	228.6	214.2	218.5
West	625	554	612	634	587	204.0	180.8	199.8	207.0	191.6
Neighborhood Poverty Level										
Low	2,304	2,022	2,206	2,300	2,190	359.1	315.1	343.8	358.5	341.3
Medium	1,983	1,799	1,811	1,889	1,955	854.7	775.4	780.6	814.2	842.6
High	837	765	735	780	769	1,912.7	1,748.2	1,679.7	1,782.5	1,757.4
Very High	1,194	993	1,013	1,106	1,107	1,968.7	1,637.3	1,670.2	1,823.6	1,825.2

Table 5. Gonorrhea – Case Counts and Rates by Sex and Age Group, St. Louis County, 2019 to 2023

	Case Counts					Rates Per 100,000 Population				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Total	**3,007**	**3,380**	**3,268**	**3,169**	**2,927**	**300.8**	**338.1**	**326.9**	**317.0**	**292.8**
Female	**1,285**	**1,564**	**1,545**	**1,450**	**1,298**	**246.6**	**300.2**	**296.6**	**278.3**	**249.1**
14 and younger	13	22	20	24	30	14.8	25.0	22.8	27.3	34.1
15 to 19	327	389	394	418	380	1,028.0	1,222.9	1,238.6	1,314.1	1,194.6
20 to 24	404	511	469	473	427	1,306.0	1,651.9	1,516.1	1,529.0	1,380.3
25 to 29	266	328	335	254	209	826.1	1,018.6	1,040.4	788.8	649.1
30 to 39	210	243	251	213	203	323.9	374.8	387.1	328.5	313.1
40 and older	65	71	76	68	49	23.8	26.0	27.8	24.9	17.9
Male	**1,722**	**1,816**	**1,723**	**1,719**	**1,612**	**359.7**	**379.3**	**359.9**	**359.1**	**336.7**
14 and younger	--	--	9	5	15	--	--	9.8	5.4	16.3
15 to 19	--	287	292	302	279	--	874.2	889.4	919.9	849.8
20 to 24	470	520	478	516	441	1,524.1	1,686.3	1,550.1	1,673.3	1,430.1
25 to 29	378	425	385	316	328	1,198.3	1,347.2	1,220.4	1,001.7	1,039.8
30 to 39	378	387	379	389	366	611.4	625.9	613.0	629.1	591.9
40 and older	249	--	180	191	183	108.5	--	78.5	83.2	79.8

Table 6. Gonorrhea – Case Counts and Rates by Race/Ethnicity, Region, and Poverty Level, St. Louis County, 2019 to 2023

	Case Counts					Rates Per 100,000 Population				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Total	**3,007**	**3,380**	**3,268**	**3,169**	**2,927**	**300.8**	**338.1**	**326.9**	**317.0**	**292.8**
Race/Ethnicity										
White	375	371	373	305	249	58.5	57.8	58.1	47.5	38.8
Black or African American	2,205	2,588	2,437	2,400	2,103	911.2	1,069.5	1,077.1	991.8	869.0
American Indian/Alaskan Native	--	--	--	--	--	--	--	--	--	--
Asian	10	8	5	6	7	21.3	17.0	10.6	12.8	14.9
Native Hawaiian/Other Pacific Islander	--	--	--	--	0	--	--	--	--	0.0
Some other race	11	7	6	5	--	84.5	53.8	46.1	38.4	--
Two or more races	87	78	80	83	71	157.6	141.3	144.9	150.4	128.6
Hispanic or Latino	35	37	35	43	31	112.8	119.3	112.8	138.6	99.9
Region										
Inner North	1,529	1,767	1,584	1,577	1,528	893.1	1,032.2	925.3	921.2	892.6
Outer North	879	938	985	964	842	488.5	521.3	547.4	535.7	467.9
Central	239	236	242	229	225	182.5	180.3	184.8	174.9	171.9
South	169	199	209	171	138	81.1	95.6	100.4	82.1	66.3
West	150	175	178	178	163	49.0	57.1	58.1	58.1	53.2
Neighborhood Poverty Level										
Low	847	936	986	908	819	132.0	145.9	153.7	141.5	127.6
Medium	941	1,030	992	997	935	405.6	443.9	427.6	429.7	403.0
High	456	504	454	452	416	1,042.1	1,151.8	1,037.5	1,032.9	950.7
Very High	647	691	643	633	609	1,066.8	1,139.3	1,060.2	1,043.7	1,004.1

Table 7. Early Syphilis – Case Counts and Rates by Sex and Age Group, St. Louis County, 2019 to 2023

	Case Counts					Rates Per 100,000 Population				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Total	**206**	**235**	**296**	**264**	**258**	**20.6**	**23.5**	**29.6**	**26.4**	**25.8**
Female	**36**	**56**	**75**	**64**	**69**	**6.9**	**10.7**	**14.4**	**12.3**	**13.2**
14 and younger	0	0	0	--	--	0.0	0.0	0.0	--	--
15 to 19	--	6	10	--	--	--	18.9	31.4	--	--
20 to 24	--	15	16	13	12	--	48.5	51.7	42.0	38.8
25 to 29	9	16	18	18	16	28.0	49.7	55.9	55.9	49.7
30 to 39	12	8	19	9	19	18.5	12.3	29.3	13.9	29.3
40 and older	8	11	12	16	15	2.9	4.0	4.4	5.9	5.5
Male	**170**	**179**	**221**	**200**	**189**	**35.5**	**37.4**	**46.2**	**41.8**	**39.5**
14 and younger	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
15 to 19	7	11	10	17	8	21.3	33.5	30.5	51.8	24.4
20 to 24	25	20	35	23	21	81.1	64.9	113.5	74.6	68.1
25 to 29	45	44	44	30	40	142.6	139.5	139.5	95.1	126.8
30 to 39	38	55	72	62	59	61.5	89.0	116.4	100.3	95.4
40 and older	55	49	60	68	61	24.0	21.4	26.2	29.6	26.6

Table 8. Early Syphilis - Case Counts and Rates by Race/Ethnicity, Region, and Poverty Level, St. Louis County, 2019 to 2023

	Case Counts					Rates Per 100,000 Population				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Total	**206**	**235**	**296**	**264**	**258**	**20.6**	**23.5**	**29.6**	**26.4**	**25.8**
Race/Ethnicity										
White	40	35	64	69	66	6.2	5.5	10.0	10.8	10.3
Black or African American	153	184	211	172	170	63.2	76.0	87.2	71.1	70.3
American Indian/Alaskan Native	0	0	--	0	0	0.0	0.0	--	0.0	0.0
Asian	0	--	0	--	5	0.0	--	0.0	--	9.1
Native Hawaiian/Other Pacific Islander	--	0	0	--	0	--	0.0	0.0	--	0.0
Some other race	--	--	--	--	0	--	--	--	--	0.0
Two or more races	8	6	5	7	5	14.5	10.9	9.1	12.7	9.1
Hispanic or Latino	8	--	10	10	10	25.8	--	32.2	32.2	32.2
Region										
Inner North	106	113	142	107	104	61.9	66.0	82.9	62.5	60.8
Outer North	51	68	63	67	63	28.3	37.8	35.0	37.2	35.0
Central	13	25	33	30	36	9.9	19.1	25.2	22.9	27.5
South	16	14	24	27	29	7.7	6.7	11.5	13.0	13.9
West	9	12	31	30	23	2.9	3.9	10.1	9.8	7.5
Neighborhood Poverty Level										
Low	54	72	101	104	91	8.4	11.2	15.7	16.2	14.2
Medium	67	64	93	89	83	28.9	27.6	40.1	38.4	35.8
High	30	34	41	28	33	68.6	77.7	93.7	64.0	75.4
Very High	38	55	51	32	38	62.7	90.7	84.1	52.8	62.7

Table 9. Early Syphilis – Case Counts and Percents by Sex and Sexual Behavior, St. Louis County, 2019 to 2023

	2019		2020		2021		2022		2023	
	Case Counts	Percent of Total	Case Counts	Percent of Total	Case Counts	Percent of Total	Case Counts	Percent of Total	Case Counts	Percent of Total
Men who have sex with men (MSM)	103	50.0%	36	15.3%	26	8.8%	43	16.3%	72	27.9%
Men who have sex with women only (MSW)	49	23.8%	28	11.9%	34	11.5%	37	14.0%	32	12.4%
Men, sex of sex partners unknown	18	8.7%	115	48.9%	161	54.4%	120	45.5%	85	32.9%
Women	36	17.5%	56	23.8%	75	25.3%	64	24.2%	69	26.7%
Total	**206**		**235**		**296**		**264**		**258**	