



Sexually Transmitted Infections Annual Surveillance Report 2022

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 6,429 cases of chlamydia (641.6 cases per 100,000 population), 3,169 cases of gonorrhea (316.3 per 100,000), and 261 cases of early syphilis (26.0 per 100,000) diagnosed among St. Louis County residents in 2022. Compared to the previous year, chlamydia incidence increased by 3 percent, gonorrhea incidence decreased by 3 percent, and early syphilis incidence decreased by 11 percent. Since 2018, gonorrhea incidence increased by 14 percent and syphilis incidence increased by 29 percent, whereas chlamydia incidence has remained relatively stable.

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 than among White residents, residents of West County, and people living in low-poverty census tracts.

Syphilis incidence continued to be elevated among women in 2022, contributing to congenital syphilis infections. The 62 cases of primary, secondary, or early latent syphilis diagnosed among women in St. Louis County (11.8 cases per 100,000 women) represent a 17 percent decrease from 2021 (75 cases; 14.3 per 100,000). However, this is still a 100 percent increase from 2018 (31 cases; 5.9 per 100,000) and a 186 percent increase from 2017 (26 cases; 5.0 per 100,000). Eighty-seven percent of the women diagnosed between 2018 and 2022 were of childbearing age (15 to 44 years). Eleven cases of congenital syphilis were reported in 2022 (104.8 cases per 100,000 live births), which is unfortunately identical to last year’s reported numbers.

HIV status was unknown for 35 percent of early syphilis cases in 2022, including 30 percent of cases reported among gay, bisexual, or other men who have sex with men (MSM), while at least 56 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.

Public STI clinics are a critical resource for STI screening and treatment. DPH’s Sexual Health Clinic at North Central Community Health Center diagnosed 2,034 cases of chlamydia, 1,485 cases of gonorrhea, and 194 cases of early syphilis among St. Louis County residents from 2018 to 2022, making the clinic the number one reporter in St. Louis County for all three conditions.

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 2018 through 2021. Data from 2022 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 2017–2021 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. To protect confidentiality, case counts and rates have been suppressed for demographic groups with fewer than five cases of a particular disease in a particular year.

"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 2017 - 2021 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).

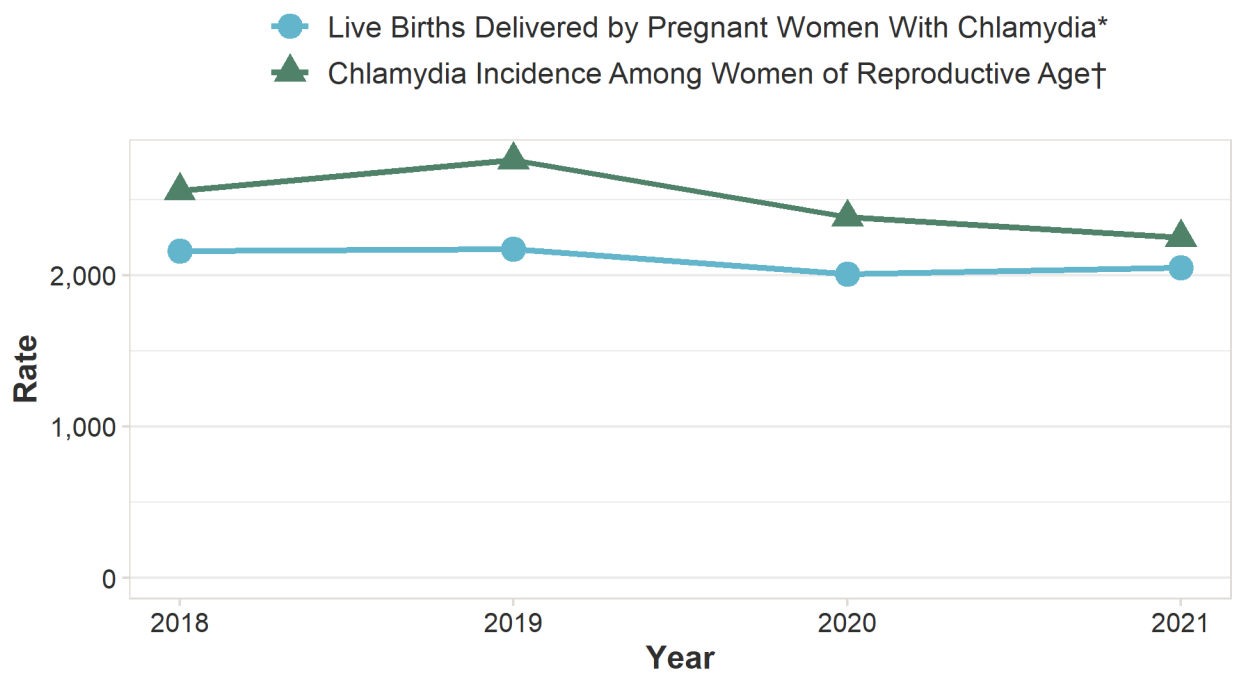
STIs and Pregnancy

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 deafness¹. It’s important to note that STIs acquired during pregnancy can be treated, and therefore pregnant persons should be screened appropriately¹.

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 2018, with a rate of 2,157.4 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 in 2019, with 2,759.4 per 100,000 live births (**Figure 1**). Note that 2022 data was 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, 2018 to 2021

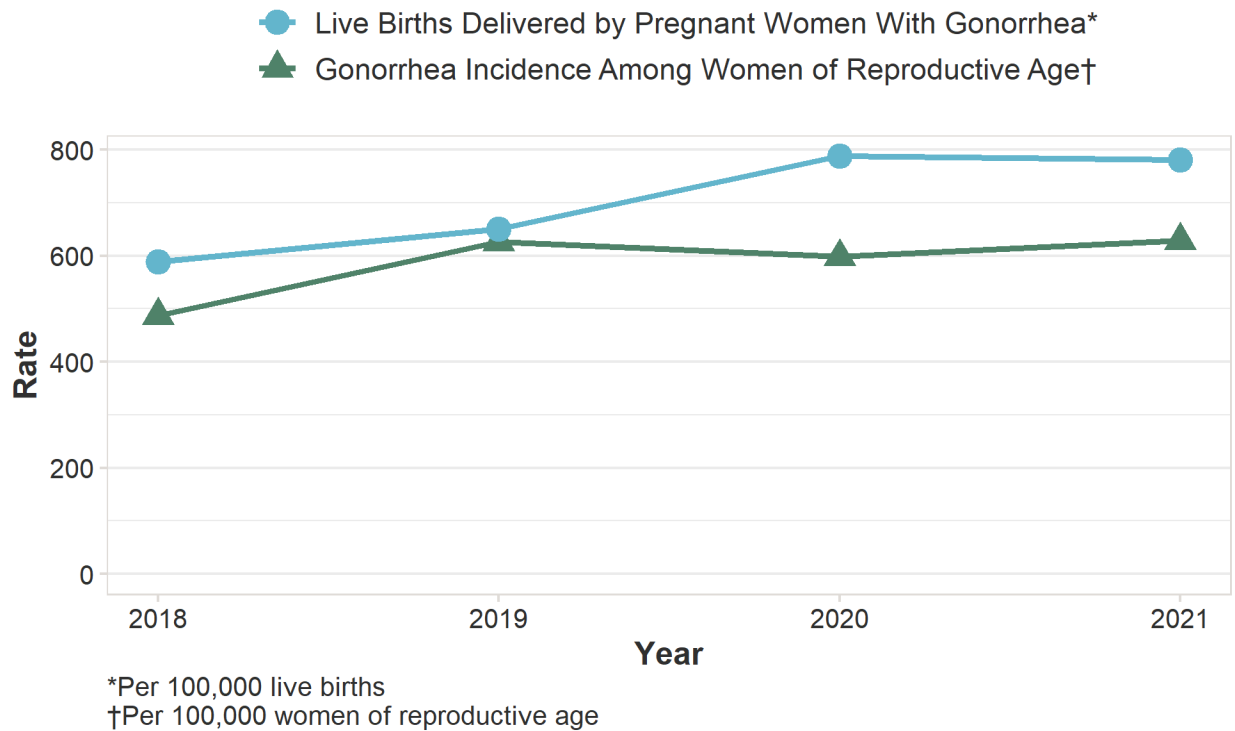


*Per 100,000 live births
 †Per 100,000 women of reproductive age

Gonorrhea

Gonorrhea incidence among women of reproductive age was highest in 2020, with a rate of 787.8 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 2022 data is not available at the time of report.

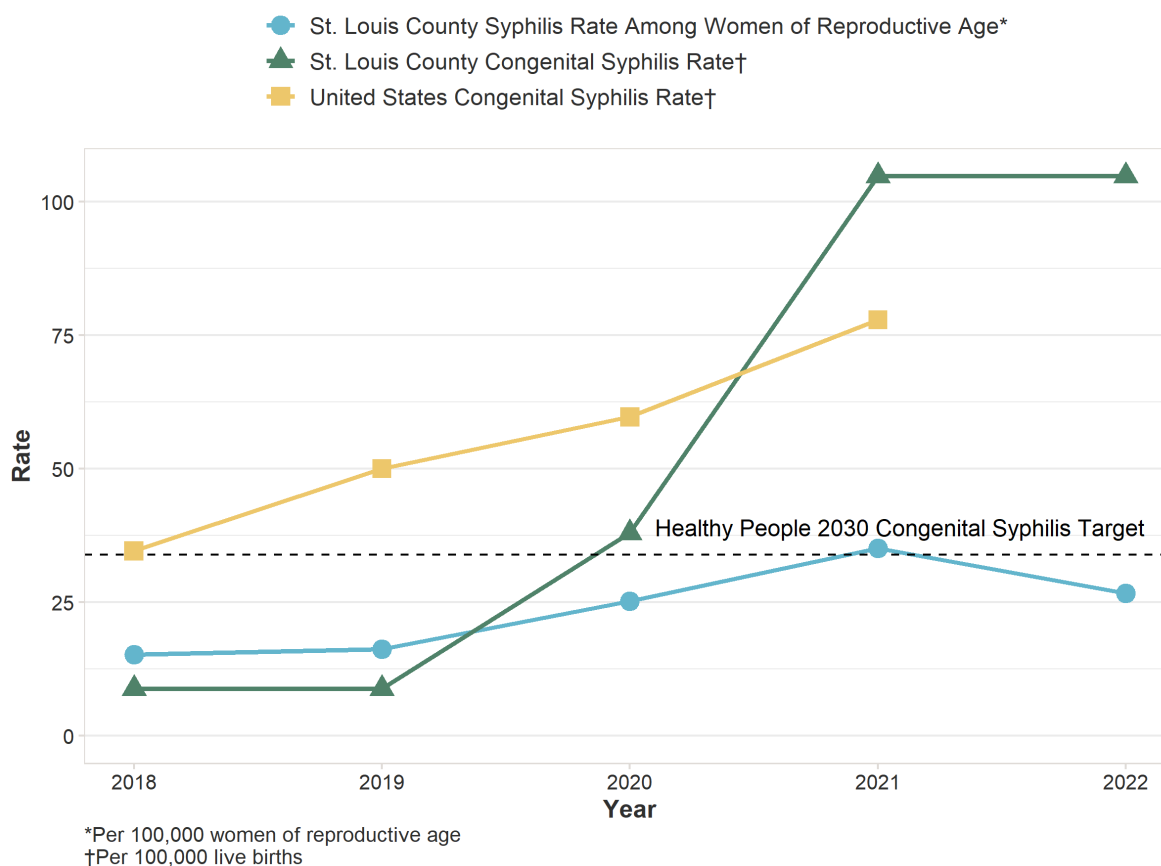
Figure 2. Rates of Gonorrhea among Women of Reproductive Age and Rates of Live Births Among Gonorrhea-Positive Women, St. Louis County, 2018 to 2021



Congenital Syphilis

Eleven total cases of congenital syphilis (104.8 per 100,000 live births) were diagnosed in St. Louis County in 2022, which is 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 2021–2022 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 births², so a considerable decrease must occur in order to meet that target. Although the incidence of early syphilis among women of reproductive age decreased between 2021 and 2022 (from 35.1 to 26.7 cases per 100,000 women of reproductive age), the rate of congenital syphilis stayed the same (**Figure 3**), highlighting the continued need for syphilis screening among pregnant women. Please note that 2022 national data is not available at the time of report.

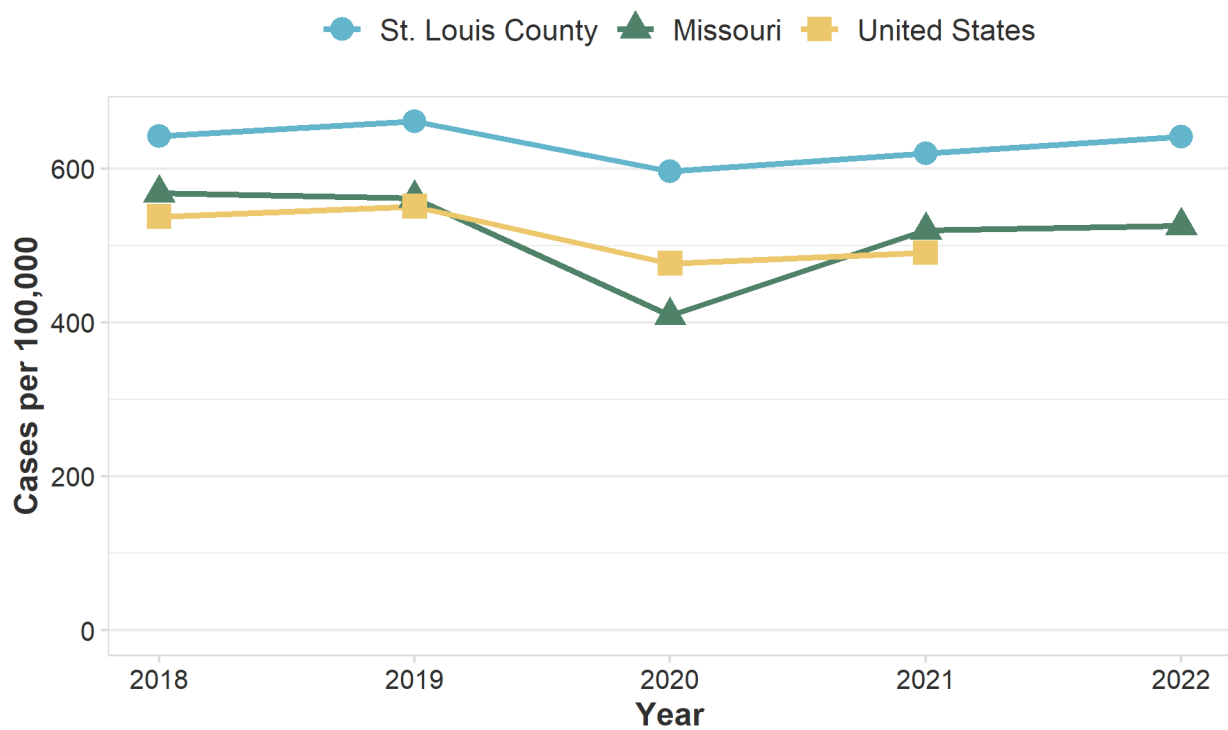
Figure 3. Rates of Early Syphilis among Women of Reproductive Age and Rates of Congenital Syphilis, St. Louis County and United States, 2018 to 2022



Chlamydia in St. Louis County

There were 6,429 *Chlamydia trachomatis* infections diagnosed among St. Louis County residents in 2022, for an incidence rate of 641.6 cases per 100,000 population. This represents a three percent increase from 2021 (620.1 per 100,000). In 2022, 64.3 percent of chlamydia cases were diagnosed among women, and 81.4 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^{3,4}. Please note that 2022 national data is not available at this time.

Figure 4. Chlamydia Rates in St. Louis County, Missouri, and the United States, 2018 to 2022



Chlamydia by Sex and Age Group

Sixty-four percent (n=4,134) of St. Louis County’s chlamydia cases were reported among women in 2022, for a rate of 789.9 cases per 100,000 women – a three percent increase from 2021 (766.2 cases per 100,000) (**Figure 5**). There were 2,295 chlamydia cases reported among St. Louis County males, for a rate of 479.5 per 100,000 men – a four percent increase from the previous year (460.3 cases per 100,000). Between 2018 and 2022, chlamydia incidence decreased by two percent among women (from 806.9 to 789.9 cases per 100,000 women) and increased by four percent among men (from 462.0 to 479.5 cases per 100,000 men).

People aged 15 to 29 years accounted for 81 percent of reported chlamydia cases in 2022, 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 (3,755.7 per 100,000) (**Figure 6**), followed by people aged 15 to 19 years (2,922.0 per 100,000), followed by people aged 25 to 29 years (1,767.6 per 100,000).

Between 2021 and 2022, reported chlamydia incidence increased among people aged 14 and younger (+5%), 15 to 19 (+5%), 25 to 29 (+4%), 30 to 39 (+4%), and 40 and older (+15%). Chlamydia incidence remained stable among people aged 20 to 24 in 2022 (**Figure 6**).

Figure 5. Chlamydia Rates by Sex, St. Louis County, 2018 to 2022

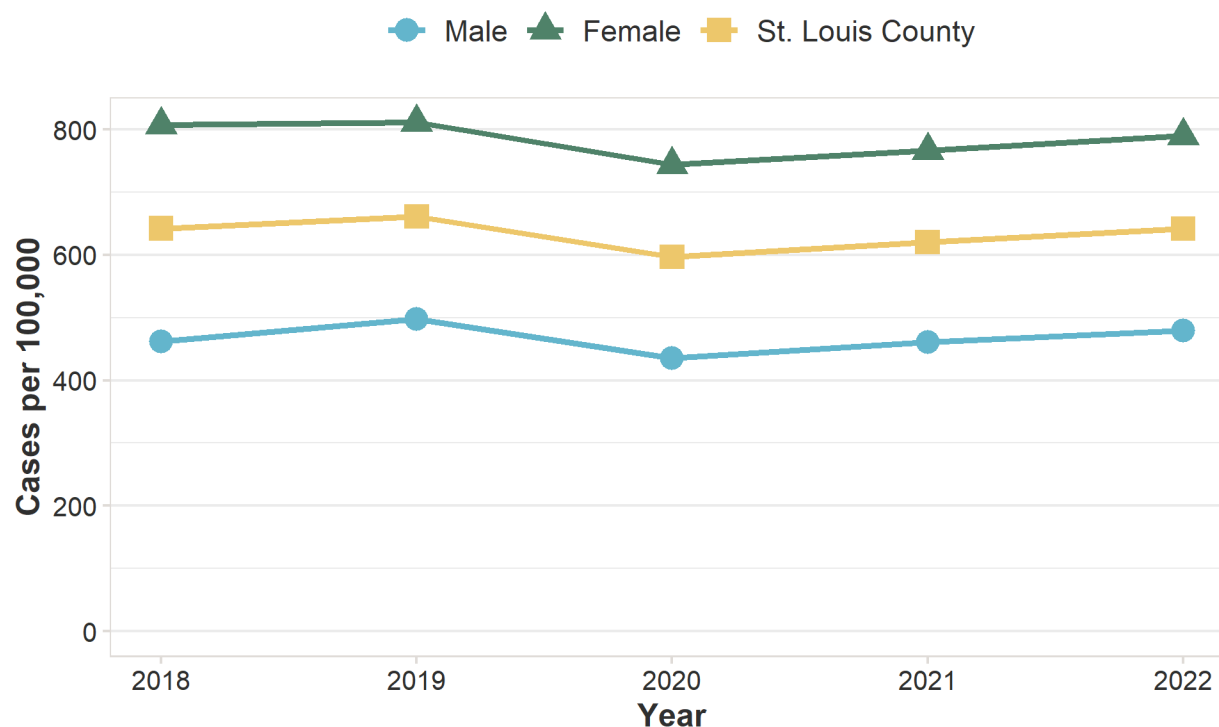


Figure 6. Chlamydia Rates by Age Group, St. Louis County, 2018 to 2022

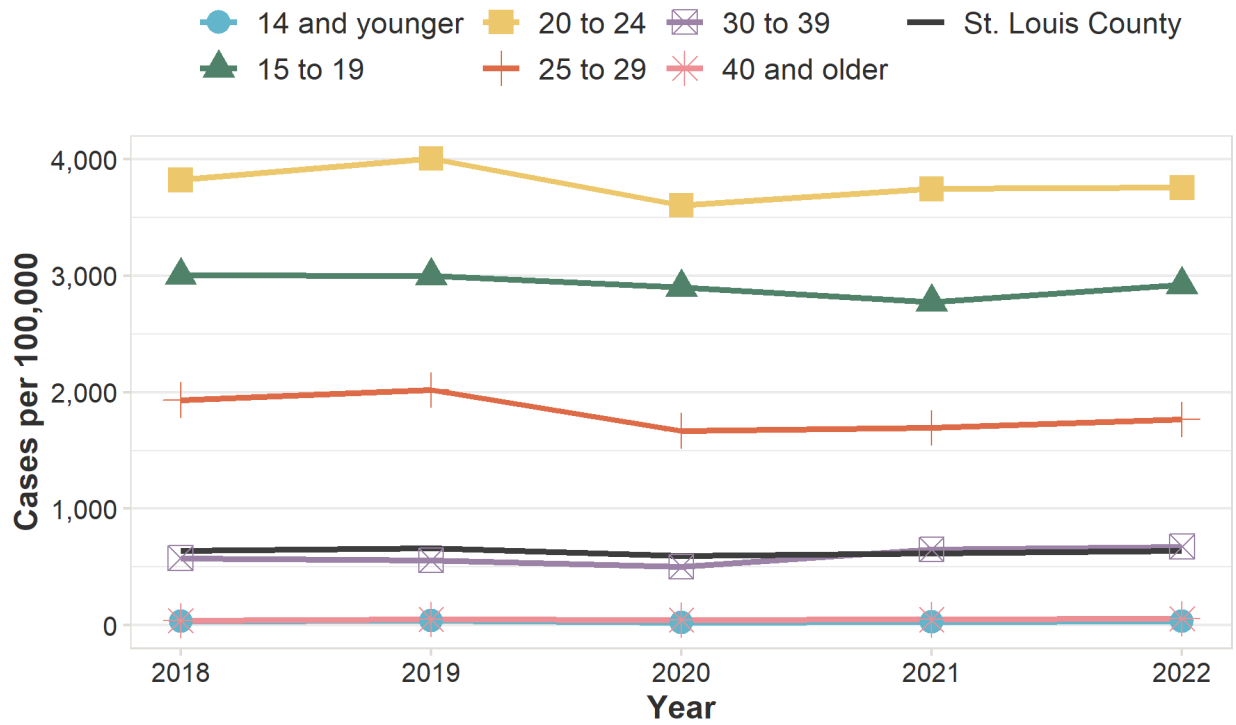
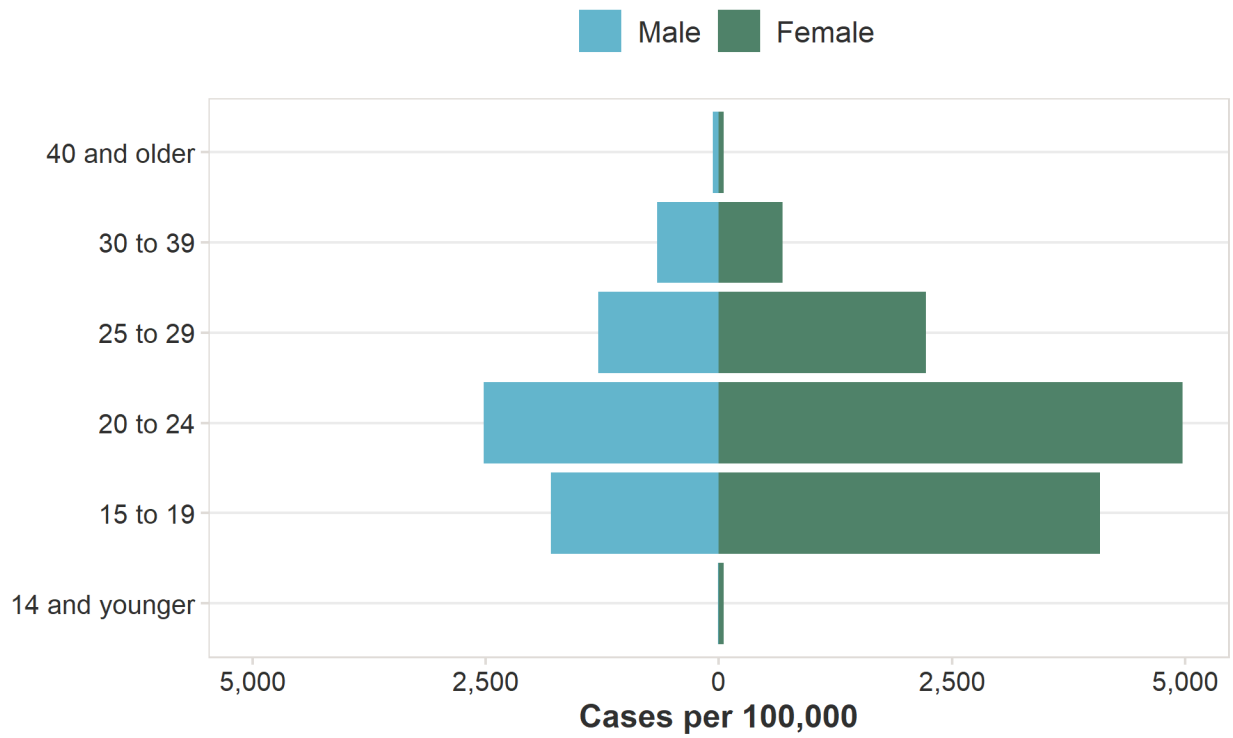
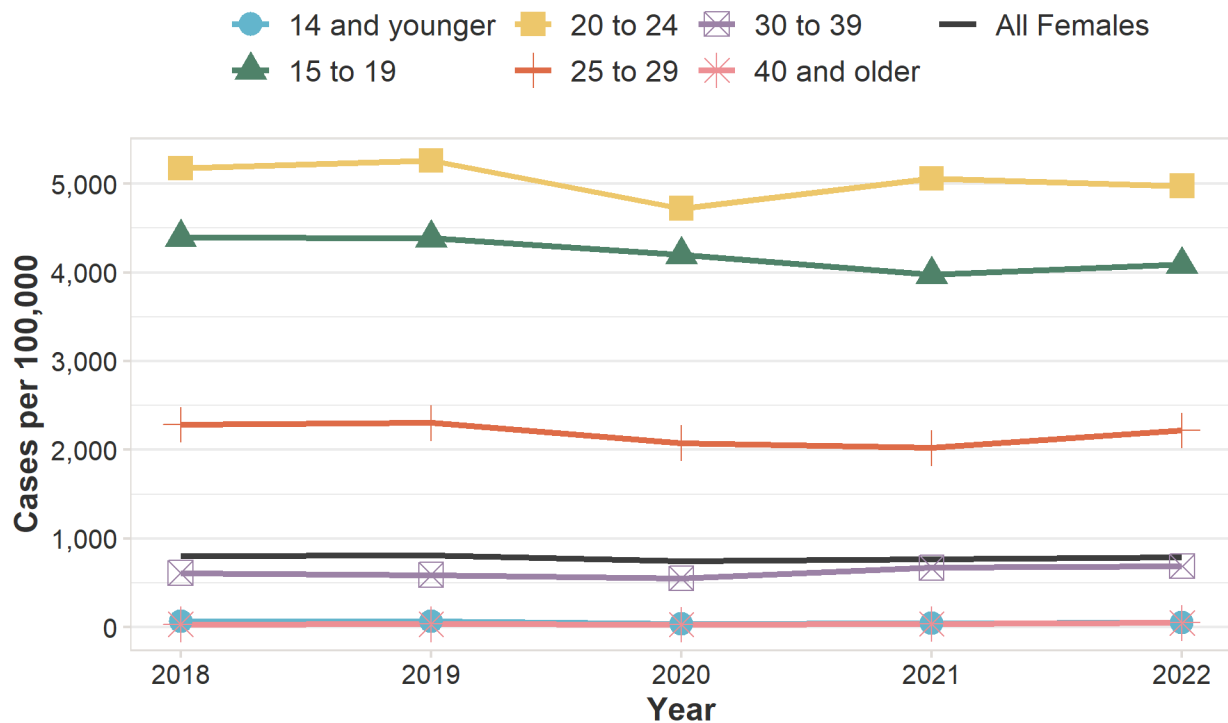


Figure 7. Chlamydia Rates by Sex and Age Group, St. Louis County, 2022



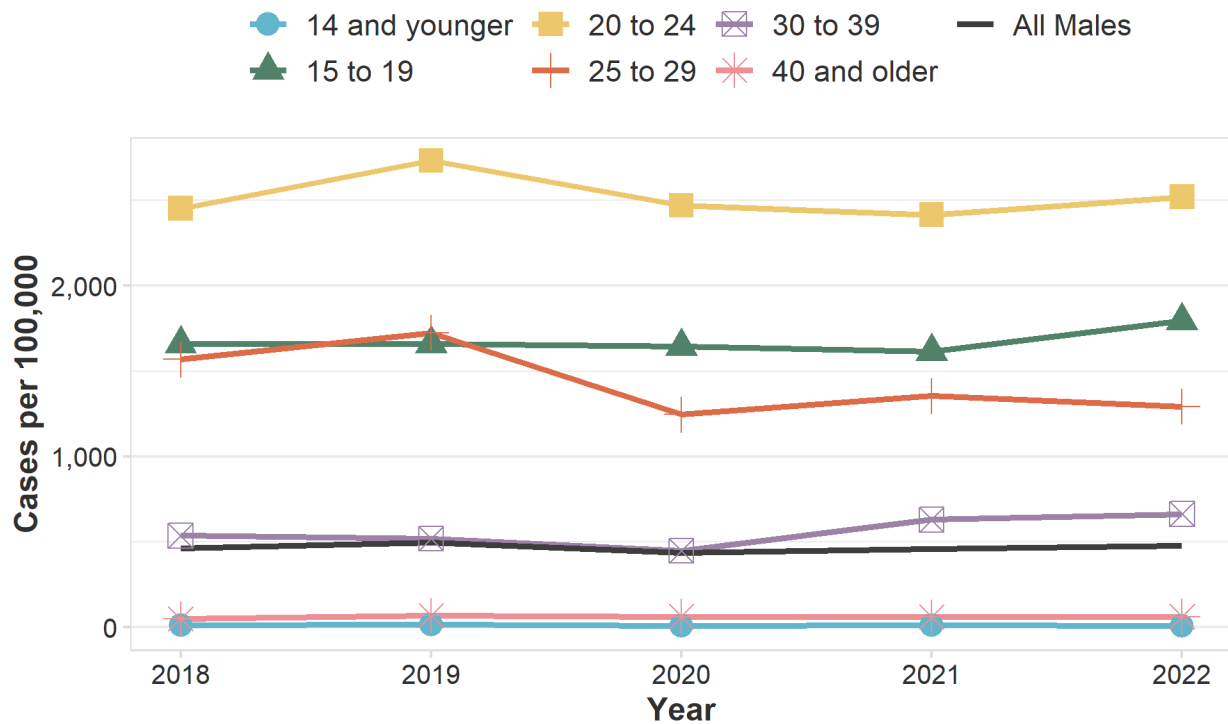
Among women, chlamydia rates were highest among those aged 20 to 24 years (4,974.2 cases per 100,000 women) and 15 to 19 years (4,087.3 per 100,000). These two groups accounted for 44 percent of all reported chlamydia cases in 2022 (**Figure 8**). Between 2021 and 2022, chlamydia incidence increased among females aged 14 and younger (+16%), 15 to 19 (+3%), 25 to 29 (+10%), 30 to 39 (+2%), and those 40 and older (+32%), and remained relatively stable among those aged 20 to 24. Note that while women aged 40 and older had the largest increase in incidence, they only accounted for 3 percent of chlamydia cases among women.

Figure 8. Chlamydia Rates among Women by Age Group, St. Louis County, 2018 to 2022



Among men, chlamydia rates were highest among those aged 20 to 24 years (2,520.7 cases per 100,000 men) and those aged 15 to 19 years (1,796.4 per 100,000), followed by those aged 25 to 29 years (1,354.4 per 100,000) (**Figure 9**). Between 2021 and 2022, chlamydia incidence increased among males aged 15 to 19 (+11%), 20 to 24 (+4%), 30 to 39 (+6%), and those 40 and older (+3%), remained stable among males aged 15 to 19, and decreased among males aged 14 and younger (-31%) and 25 to 29 (-4%). Note that while males aged 14 and younger had the largest decrease in incidence, they accounted for less than 1 percent of chlamydia cases among males.

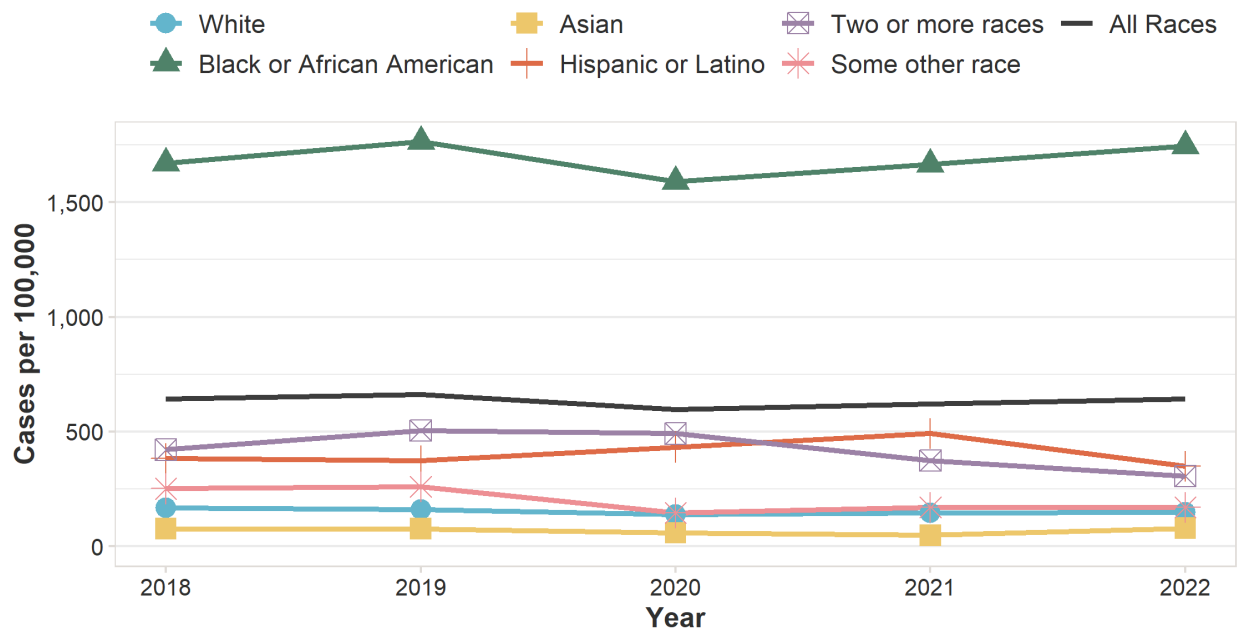
Figure 9. Chlamydia Rates among Men by Age Group, St. Louis County, 2018 to 2022



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 16 percent of reported chlamydia cases in 2022. For cases where race was known, the chlamydia rate among Black residents of St. Louis County (1,746.2 cases per 100,000) was 11.8 times the rate among White residents (147.4 per 100,000) (**Figure 10**). The rate among St. Louis County’s Asian population (79.0 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 (305.8 per 100,000) was 2.1 times the rate among White residents. Between 2021 and 2022, chlamydia incidence increased among those identifying as Asian (+63%) or Black (+4%), remained stable among those identifying as White, and decreased among people identifying as multiracial (-18%).

Figure 10. Chlamydia Rates by Race and Ethnicity, St. Louis County, 2018 to 2022



*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 31 percent of reported chlamydia cases in 2022. For cases where ethnicity was reported, the chlamydia rate among Hispanics and Latinos was 350.2 cases per 100,000 population, which is a 29 percent decrease from 2021 (**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 2022, as shown in Figure 11, the chlamydia rate was highest in the Inner North region of St. Louis County (1,587.6 cases per 100,000), followed by the Outer North (1,051.4 per 100,000), Central (449.6 per 100,000), South (214.9 per 100,000), and West (206.6 per 100,000) regions. Between 2021 and 2022, chlamydia incidence increased in the Inner North (+8%), Central (+16%), Outer North (+3%), and West (+4%) regions, and decreased in the South (-6%) region. Since 2018, chlamydia incidence has increased in the in the Central, Inner North, and Outer North regions, remained stable in the West region, and decreased in the South region.

Figure 11. Chlamydia Rates by Sub-County Region, St. Louis County, 2018 to 2022

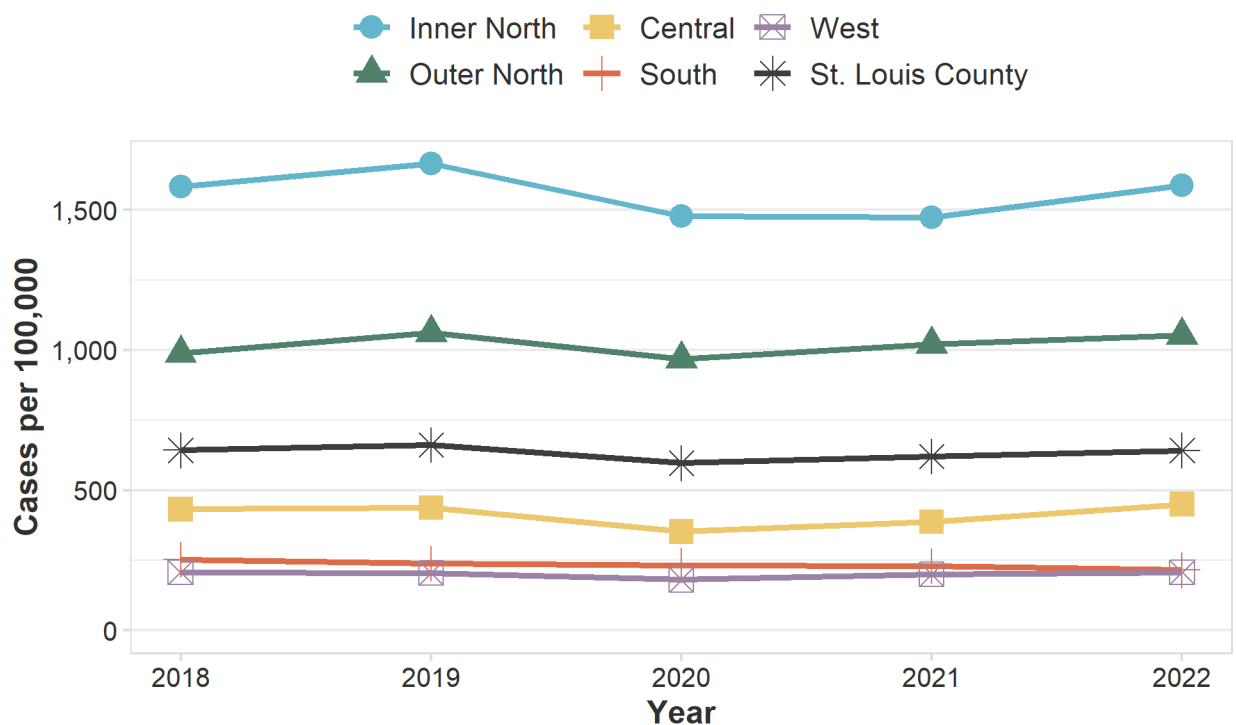
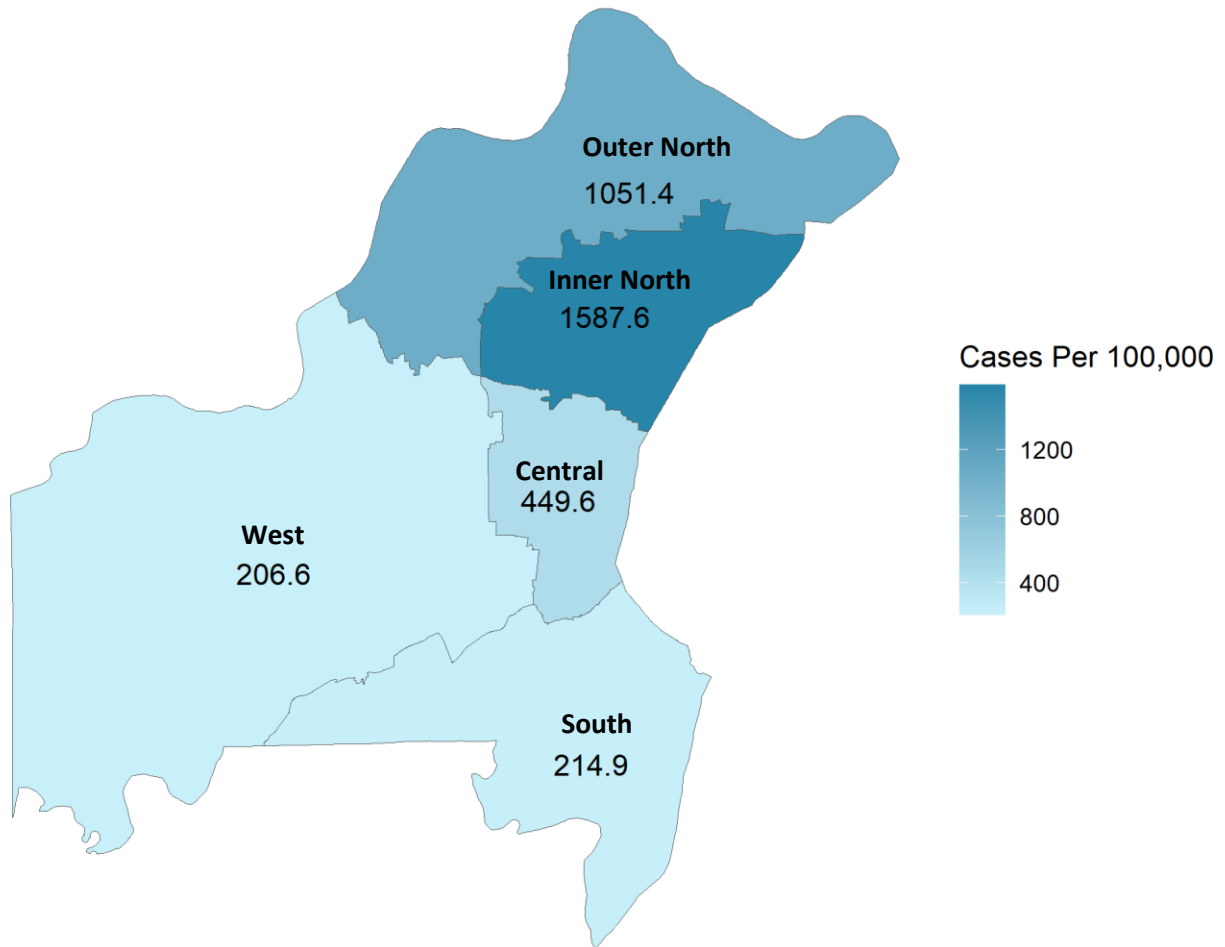
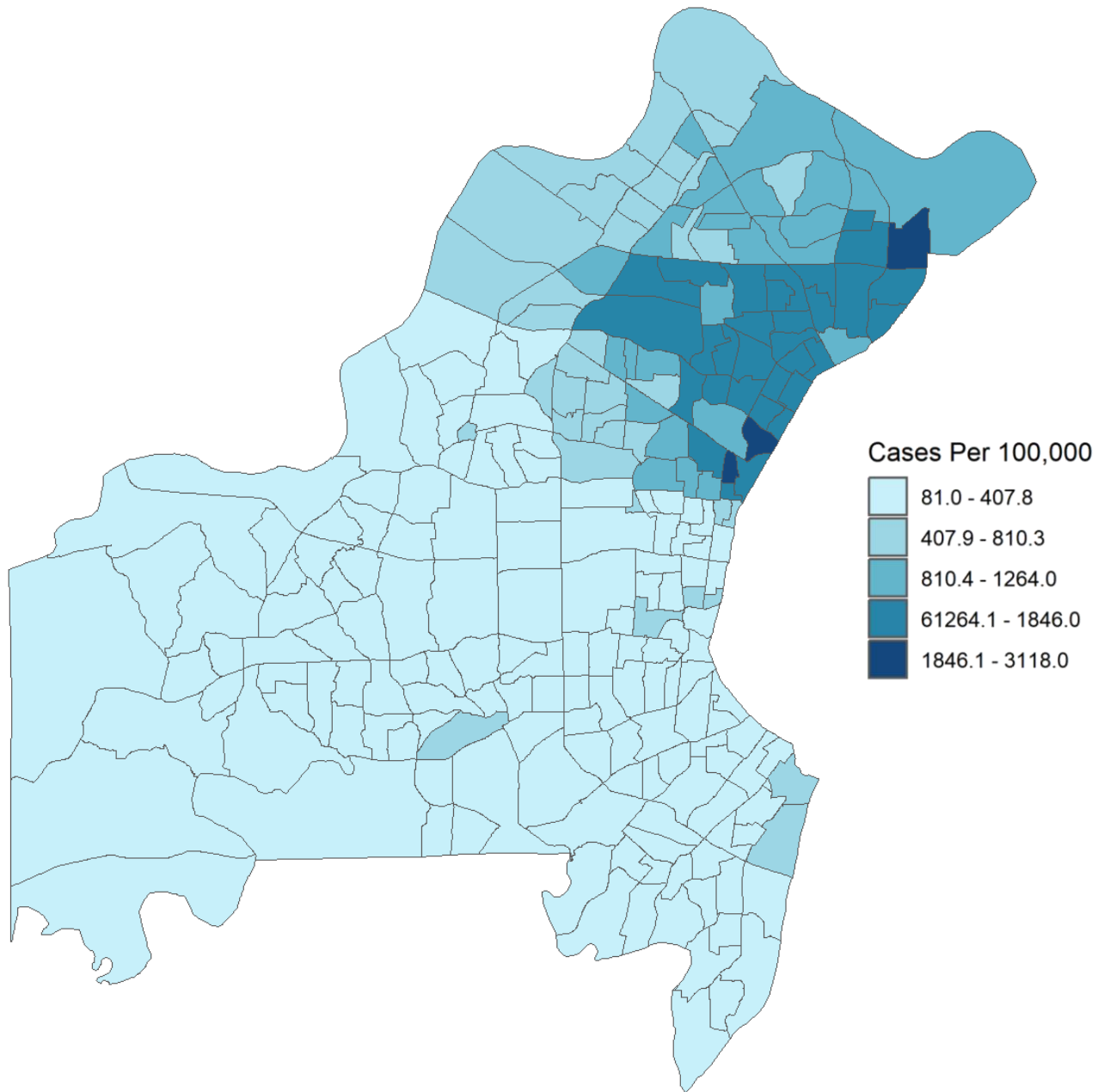


Figure 12. Chlamydia Rates by Sub-County Region, St. Louis County, 2022



As shown in Figure 12, the Inner North sub-county region had the highest rate of chlamydia – 1,587.6 cases per 100,000; this is 2.5 times the overall rate of chlamydia for St. Louis County (641.6 cases per 100,000).

Figure 13. Chlamydia Rates by Census Tract, St. Louis County, five-year average, 2018 to 2022

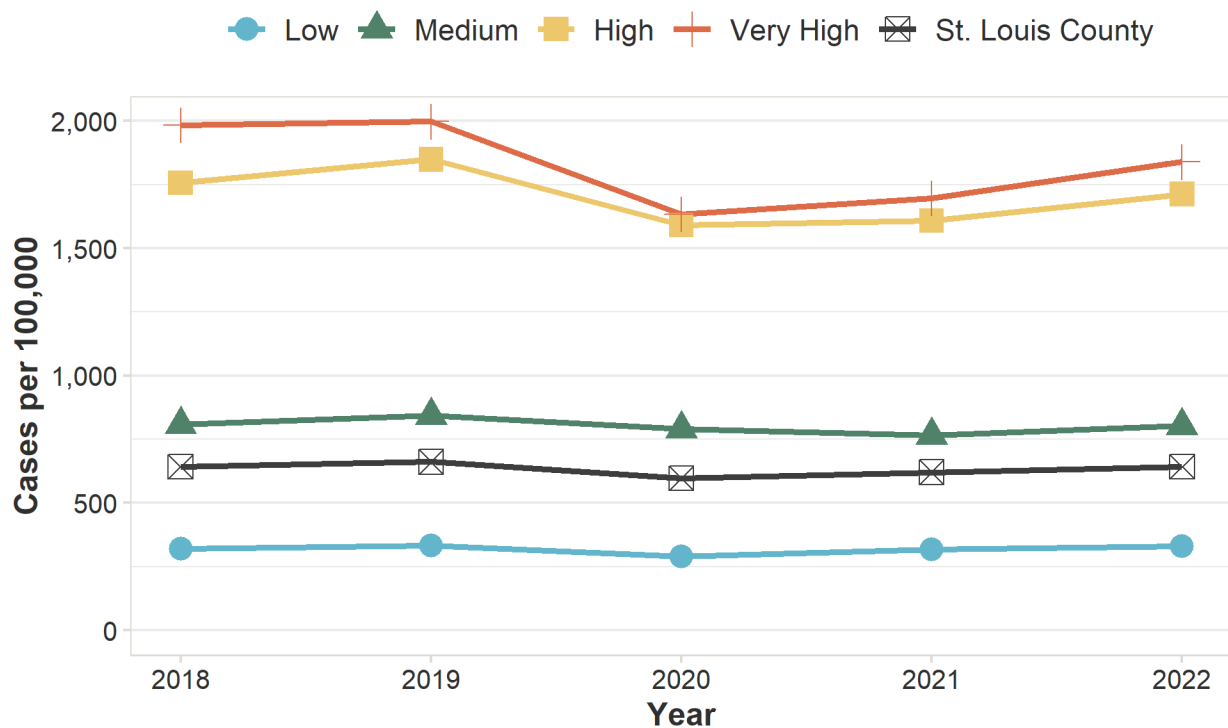


Mapping chlamydia rates by census tracts provides a more granular view of where rates are highest. As shown in Figure 13, census tracts with the highest rates of chlamydia are in the Inner North and Outer North sub-county regions.

Chlamydia by Neighborhood Poverty Level

In 2022, census tracts with very high poverty rates also had the highest chlamydia rates (1,839.0 cases per 100,000), followed by high poverty (1,713.7 per 100,000), medium poverty (803.4 per 100,000) and low poverty (329.2 per 100,000) census tracts. Between 2021 and 2022, chlamydia incidence increased in low poverty (+4%), medium poverty (+5%), high poverty (+7%), and very high poverty (+8%) census tracts. Since 2018, as shown in Figure 14, incidence increased in the low poverty census tract but decreased in all the others, with the largest decrease in the very high poverty census tracts (from 1,983.5 cases per 100,000 in 2018 to 1,839.0 cases per 100,000 in 2022, an 8 percent decrease).

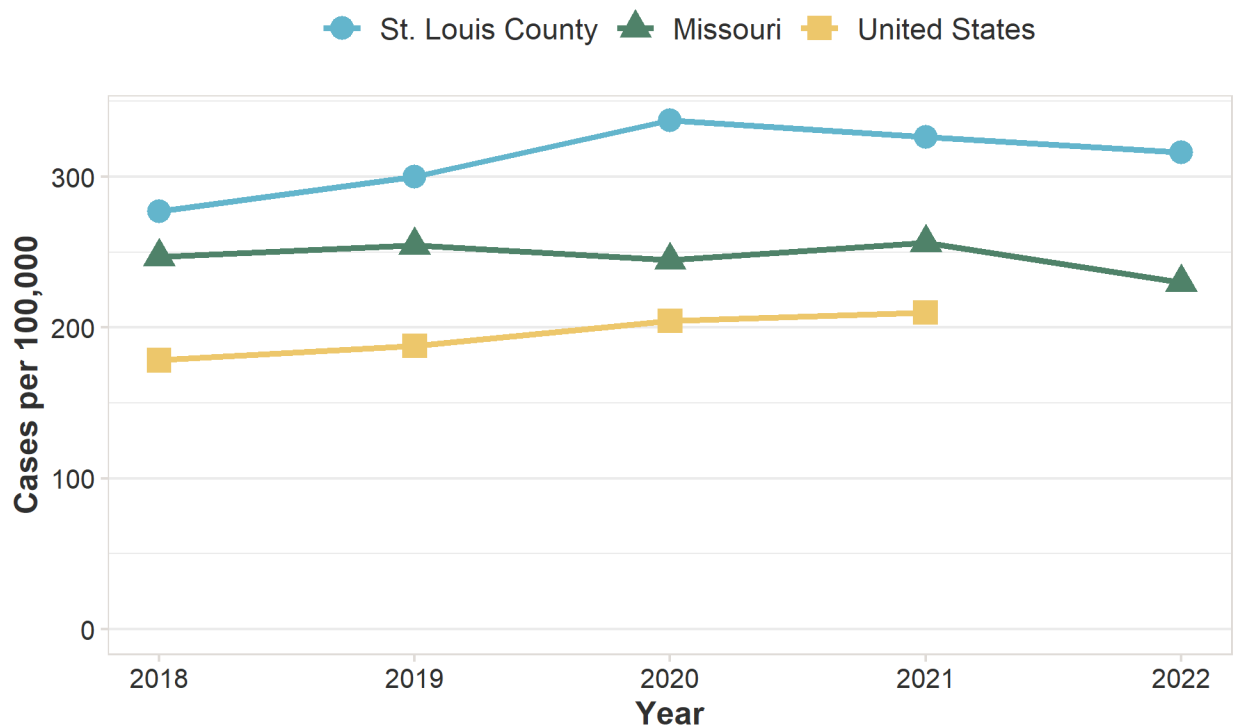
Figure 14. Chlamydia Rates by Neighborhood Poverty Level, St. Louis County, 2018 to 2022



Gonorrhea in St. Louis County

There were 3,169 *Neisseria gonorrhoeae* infections diagnosed among St. Louis County residents in 2022, for an incidence rate of 316.3 cases per 100,000 population. This represents a 3 percent decrease from the previous year (326.2 per 100,000) but a 14 percent increase from 2018 (260.5 per 100,000). In 2022, 54.2 percent of gonorrhea cases were diagnosed among men, and 71.9 percent of cases were diagnosed among people aged 15 to 29 years. Between 2021 and 2022, gonorrhea incidence increased by 5 percent among people aged 24 years and younger and decreased by 11 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^{3,4}. Again, note that 2022 national data is not available at this time.

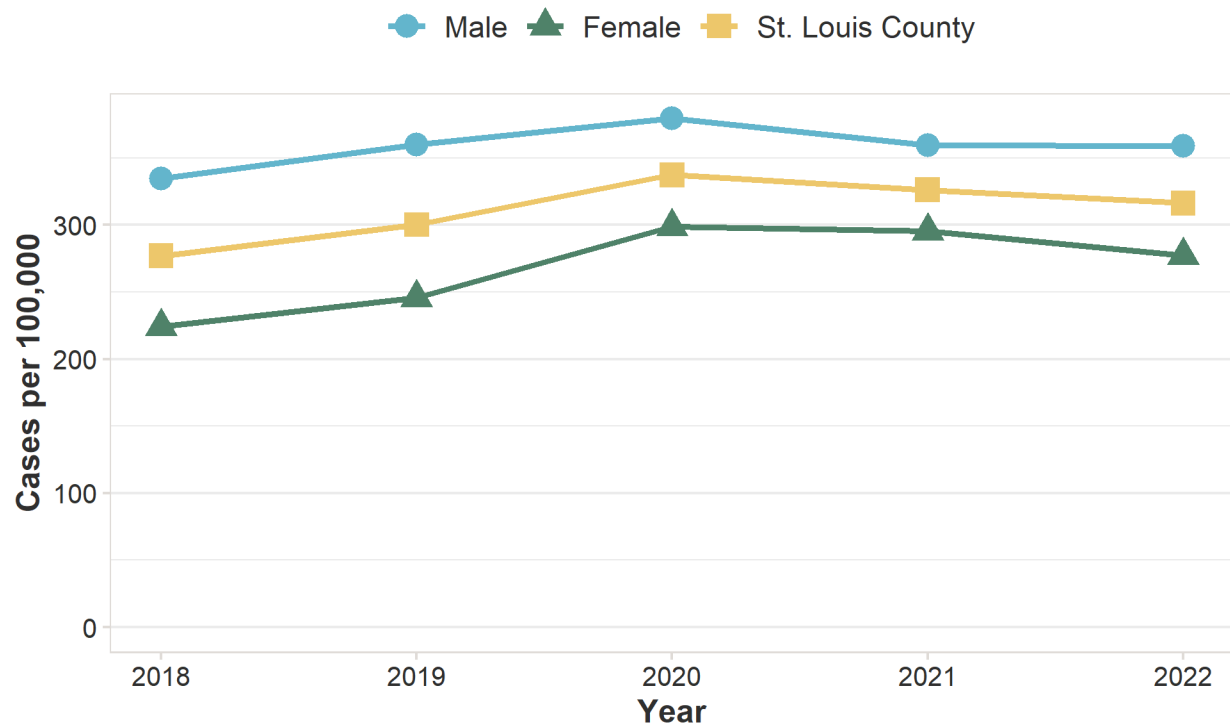
Figure 15. Gonorrhea Rates in St. Louis County, Missouri, and United States, 2018 to 2022



Gonorrhea by Sex and Age Group

In 2022, there were 1,718 gonorrhea cases reported among men and 1,451 cases reported among women. Between 2021 and 2022, gonorrhea incidence decreased by 6 percent among women (from 295.6 to 277.2 cases per 100,000 females) and remained relatively stable among men. Since 2018, gonorrhea incidence has increased by 7 percent among men (from 334.5 to 359.0 cases per 100,000) and by 24 percent among women (from 224.3 to 277.2 cases per 100,000) as shown in Figure 16.

Figure 16. Gonorrhea Rates by Sex, St. Louis County, 2018 to 2022



Just over half of gonorrhea cases were reported among people aged 15 to 24 years in 2022. Rates were highest among people aged 20 to 24 years (1,657.4 per 100,000), followed by those aged 15 to 19 years (1,132.3 per 100,000) and those aged 25 to 29 years (890.8 per 100,000). Between 2021 and 2022, gonorrhea incidence increased by 5 percent among people aged 24 years and younger and decreased by 11 percent among people aged 25 years and older. More narrowly, incidence increased among people aged 15 to 19 years (+5%) and 20 to 24 years (+4%). Incidence decreased among people aged 25 to 29 years (-21%) and 30 to 39 years (-4%) and remained stable among people aged 14 and younger and those 40 and older. Since 2017, 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, 2018 to 2022

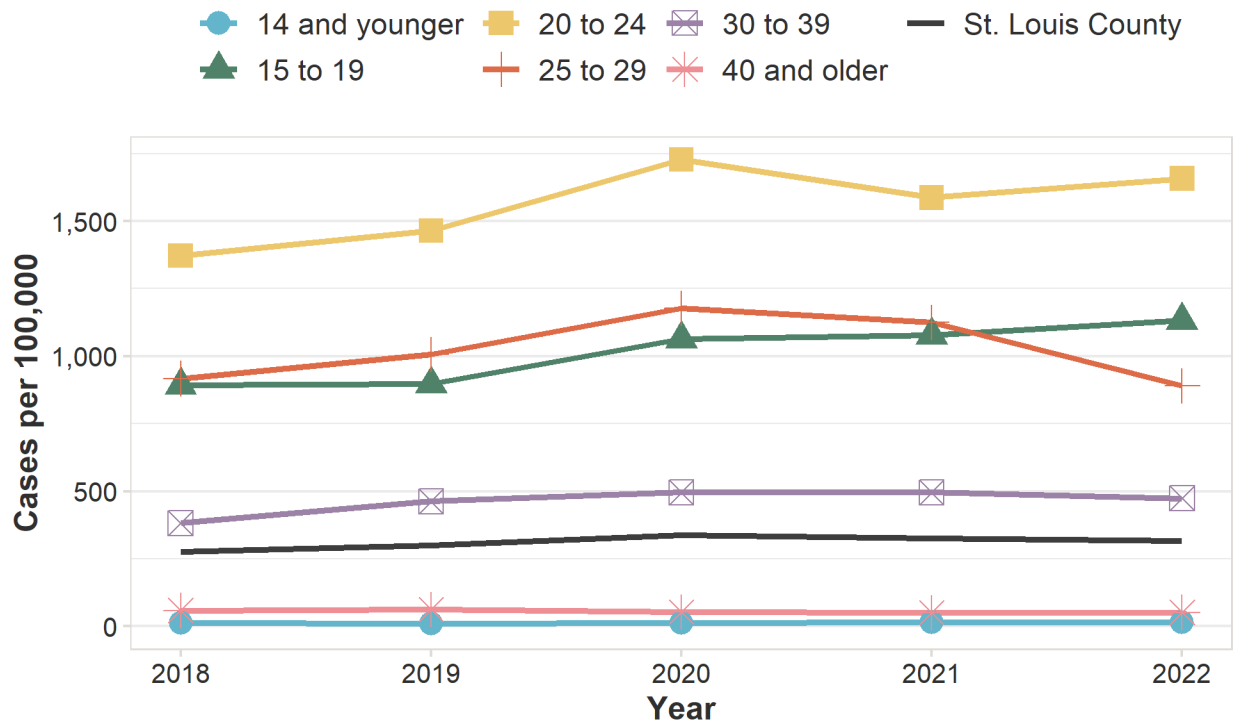
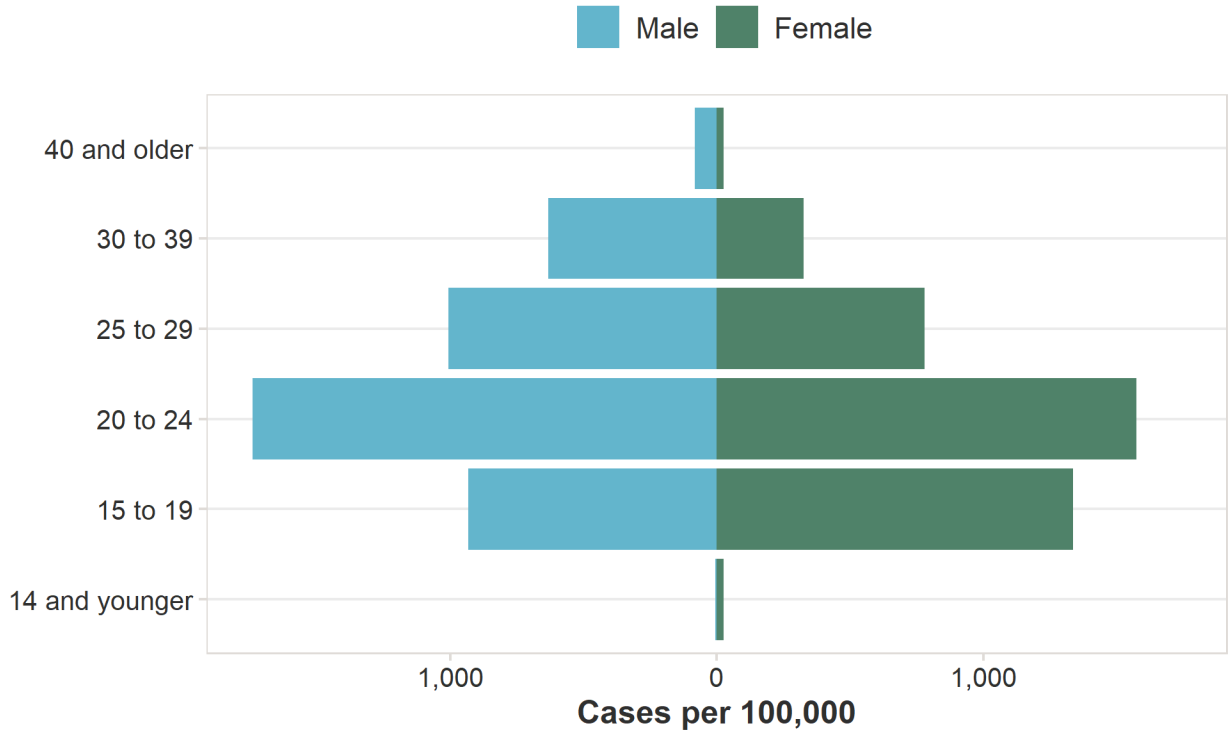


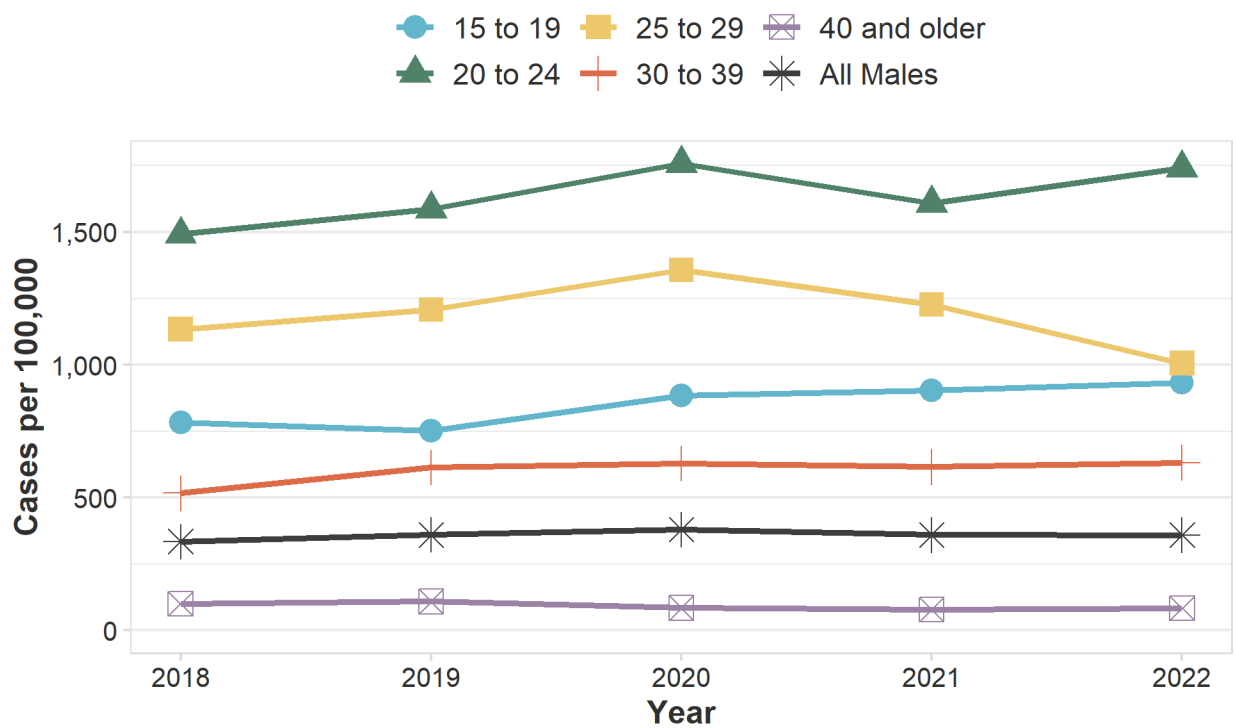
Figure 18. Gonorrhea Rates by Sex and Age Group, St. Louis County, 2022



As demonstrated in Figure 18, both men and women between the ages of 20 and 24 exhibited the highest incidence of gonorrhea in 2022 (1,741.2 cases per 100,000 males and 1,574.8 cases per 100,000 females, respectively).

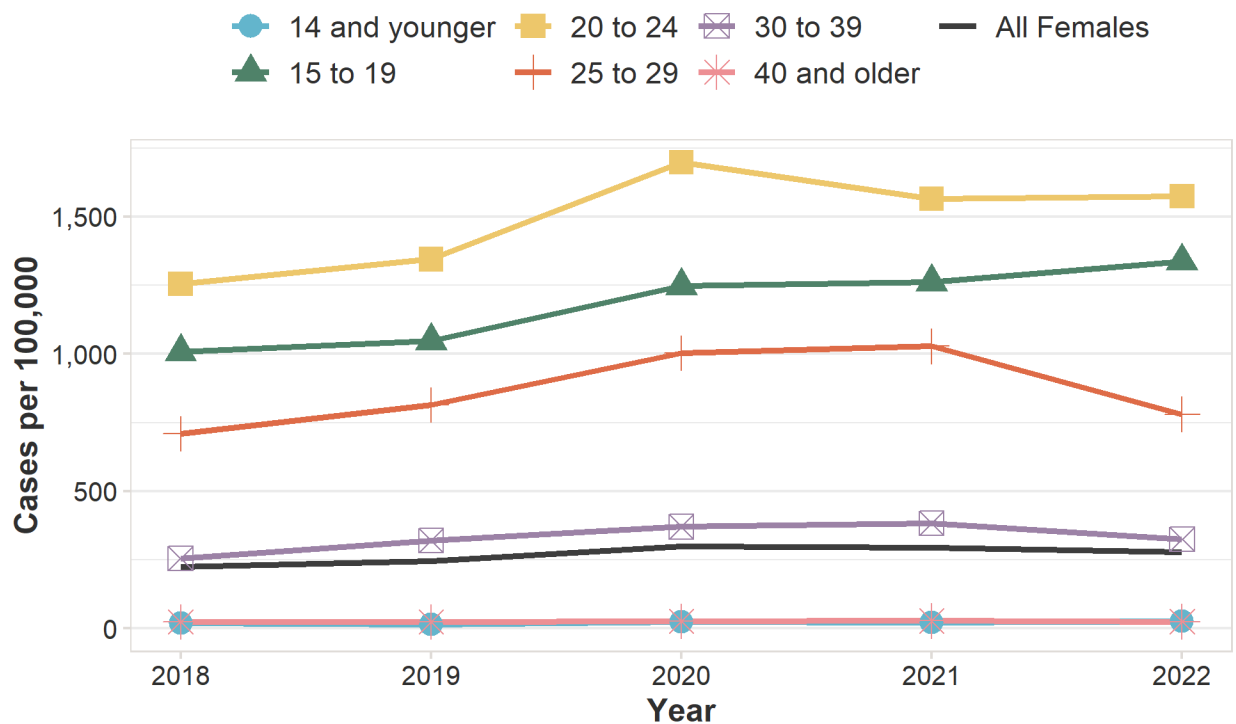
Among men, gonorrhea rates were highest among those aged 20 to 24 years (1,741.2 per 100,000) and 25 to 29 years (1,006.2 per 100,000) in 2022 (**Figure 18**). Between 2021 and 2022, broadly, gonorrhea incidence increased by 6 percent among men aged 24 and younger and decreased by 5 percent among men aged 25 and older. More narrowly, gonorrhea incidence decreased among males aged 25 to 29 (-18%) and increased among males aged 15 to 19 (+3%), 20 to 24 (+8%), 30 to 39 (+3%), and those aged 40 and older (+6%). Since 2018, male gonorrhea incidence has increased among those aged 15 to 19 (+19%), 20 to 24 (+17%), and 30 to 39 years old (+22%) and decreased among those aged 25 to 29 (-11%) and 40 and older (-17%). Rates for 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, 2018 to 2022



Among women in 2022, gonorrhea rates were highest among those aged 20 to 24 years (1,574.8 per 100,000) and 15 to 19 years (1,337.9 per 100,000) (**Figure 20**). Between 2021 and 2022, broadly, gonorrhea incidence increased by 4 percent among women aged 24 years and younger and decreased by 19 percent among women aged 25 years and older. More narrowly, incidence increased among women aged 14 and younger (+20%) and 15 to 19 (+6%), remained stable among women aged 20 to 24 and decreased among women aged 25 to 29 (-24%), 30 to 39 (-15%), and those 40 and older (-10%).

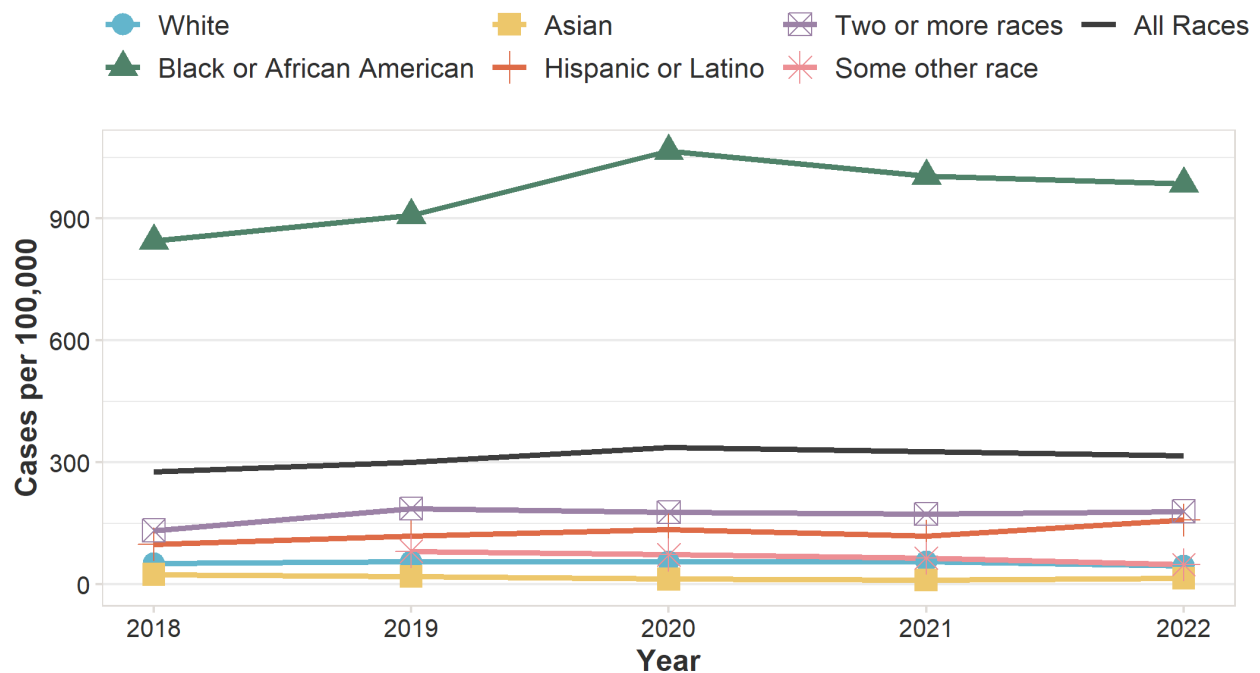
Figure 20. Gonorrhea Rates among Women by Age Group, St. Louis County, 2018 to 2022



Gonorrhea by Race and Ethnicity

Race was unknown for 12 percent of reported gonorrhea cases in 2022. For cases where race was reported, the gonorrhea rate among Black residents of St. Louis County (985.0 cases per 100,000) was 21.6 times the rate among White residents (45.7 per 100,000) (**Figure 21**). The rate among Asians (15.4 per 100,000) was 0.3 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 (179.6 per 100,000) was 3.9 times the rate among people identifying as White. Between 2021 and 2022, gonorrhea incidence increased among people identifying as multiracial (+4%) and decreased among people identifying as White (-19%) and Black (-2%).

Figure 21. Gonorrhea Rates by Race and Ethnicity, St. Louis County, 2018 to 2022



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

Ethnicity was missing or reported as “unknown” for 30 percent of St. Louis County gonorrhea cases in 2022. For cases where ethnicity was known, the gonorrhea rate among Hispanics and Latinos was 158.6 cases per 100,000, which is a 33 percent increase from 2021 (**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 2022, gonorrhea incidence was highest in the Inner North region of St. Louis County (909.5 cases per 100,000), followed by the Outer North (535.4 per 100,000), Central (174.8 per 100,000), South (82.4 per 100,000), and West (58.0 per 100,000) regions (**Figure 22**). Between 2021 and 2022, gonorrhea incidence remained stable in the Inner North and West regions and decreased in the Outer North (-2%), Central (-5%), and South (-18%) regions. Since 2017, gonorrhea incidence has increased in the Inner North, Outer North, and West regions, and decreased in the Central and South regions.

Figure 22. Gonorrhea Rates by Sub-County Region, St. Louis County, 2018 to 2022

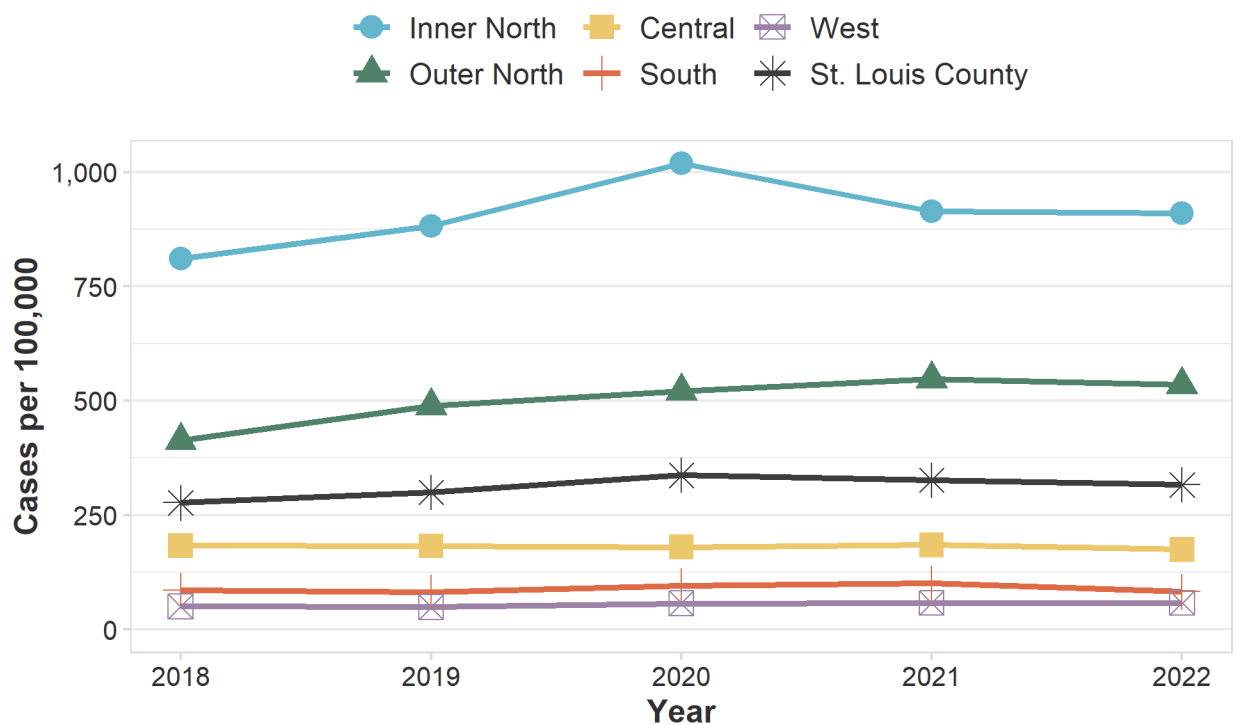
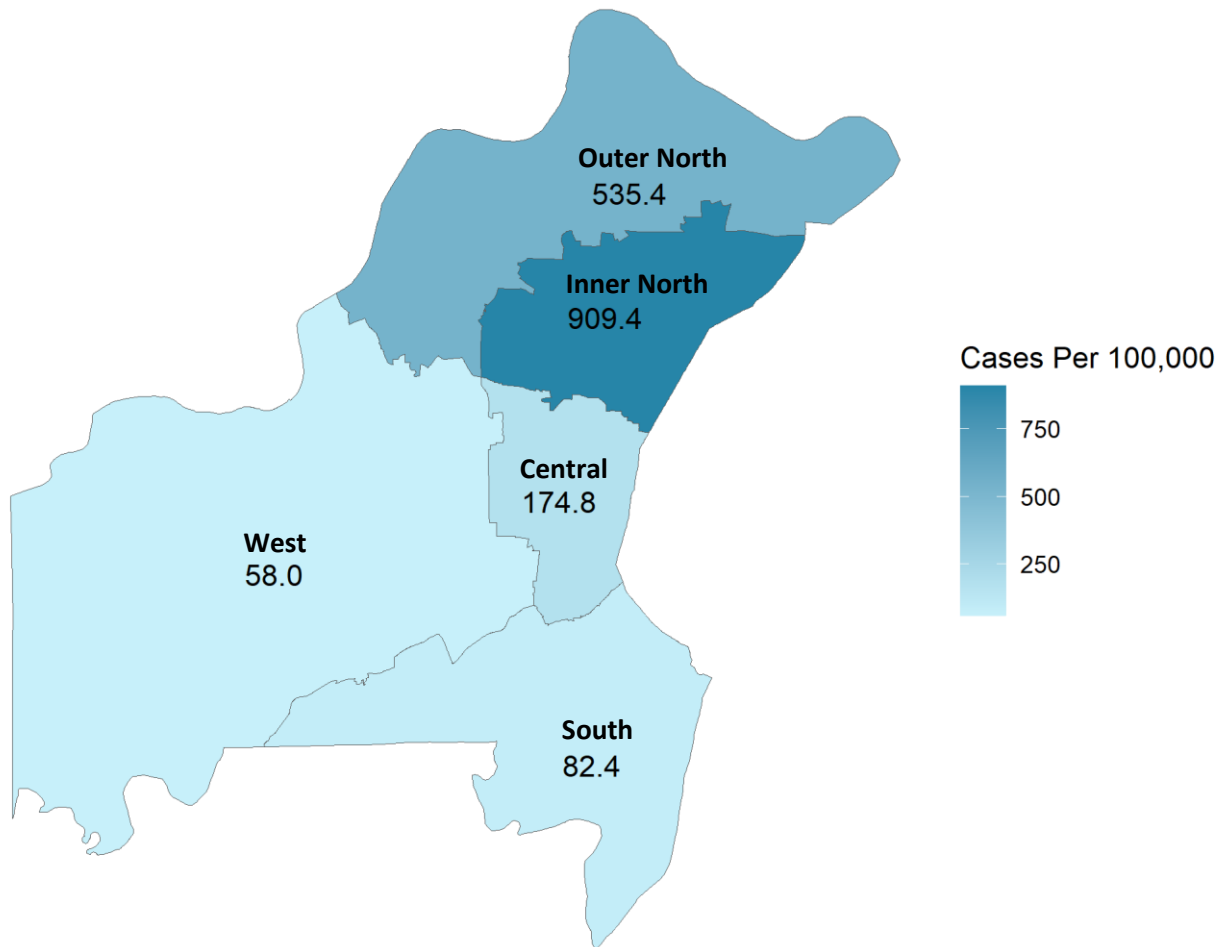
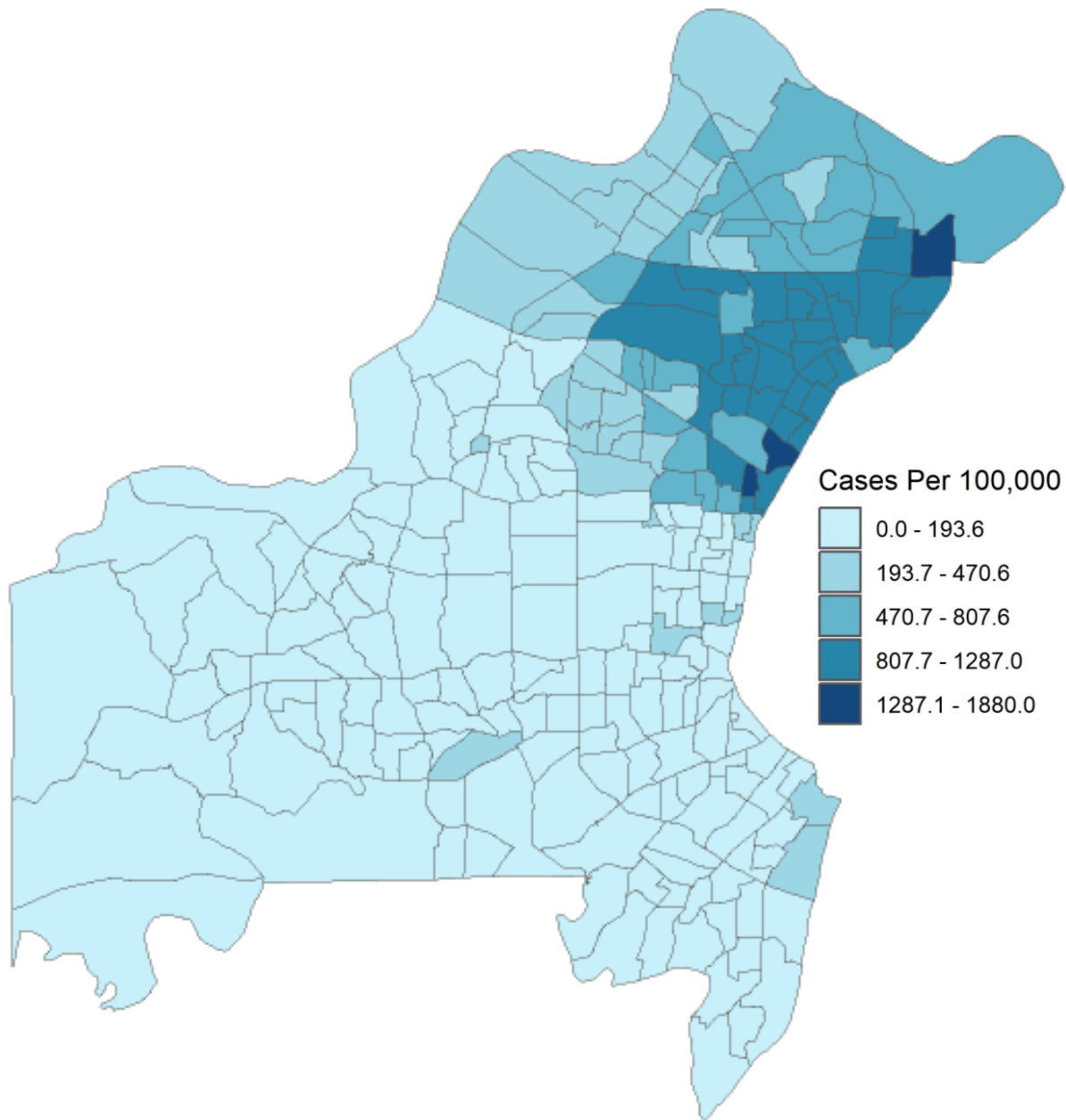


Figure 23. Gonorrhea Rates by Sub-County Region, St. Louis County, 2022



As shown in Figure 23, the Inner North sub-county region had the highest rate of gonorrhea –909.4 cases per 100,000; this is 2.9 times the overall rate of gonorrhea for St. Louis County (316.3 cases per 100,000).

Figure 24. Gonorrhea Rates by Census Tract, St. Louis County, five-year average, 2018 to 2022

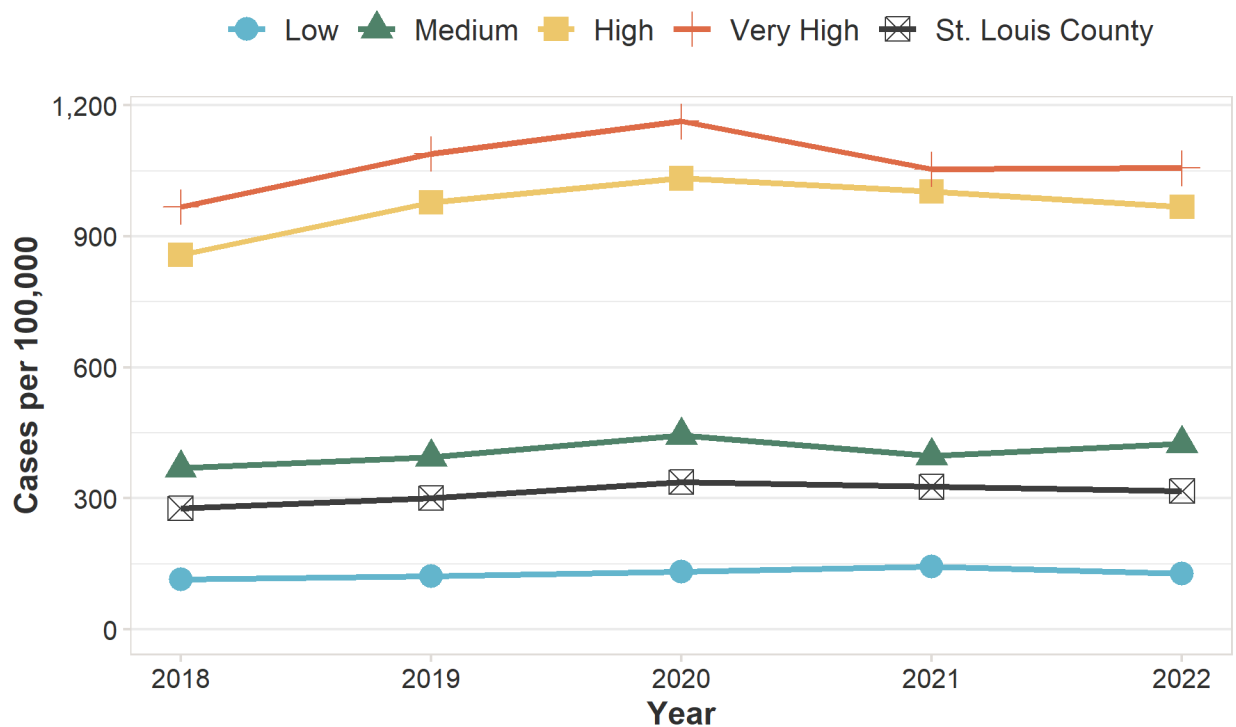


As shown in Figure 24, census tracts with the highest rates of gonorrhea are in the Inner North and Outer North sub-county regions.

Gonorrhea by Neighborhood Poverty Level

In 2022, the highest gonorrhea rates were reported in census tracts with very high poverty rates (1,055.9 cases per 100,000), followed by high poverty census tracts (967.5 per 100,000), medium poverty (425.5 per 100,000) and low poverty (127.4 per 100,000) census tracts (**Figure 25**). Between 2021 and 2022, gonorrhea incidence increased in medium poverty (+7%) census tracts, remained stable in very high poverty census tracts, and decreased in low poverty (-11%) and high poverty (-4%) census tracts. Since 2018, gonorrhea incidence rates have increased across all neighborhood poverty levels.

Figure 25. Gonorrhea Rates by Neighborhood Poverty Level, St. Louis County, 2018 to 2022



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 158 cases of primary and secondary syphilis diagnosed among St. Louis County residents in 2022, for a primary and secondary syphilis rate of 15.8 cases per 100,000 population. With an additional 103 cases of early non-primary non-secondary syphilis, St. Louis County’s early syphilis rate was 26.0 cases per 100,000 population. This represents an 11% decrease from 2021 (23.1 per 100,000), but a 29% percent increase from 2018 (20.1 per 100,000) (**Figure 26**). Although they do not reflect recent infections, the number of diagnosed cases of syphilis of unknown duration or late syphilis rose rapidly from 128 cases in 2018 to 285 cases in 2021, with a slight reduction in cases in 2022 (267 cases) (**Figure 27**).

Figure 26. Early Syphilis Rates in St. Louis County, Missouri, and United States, 2018 to 2022

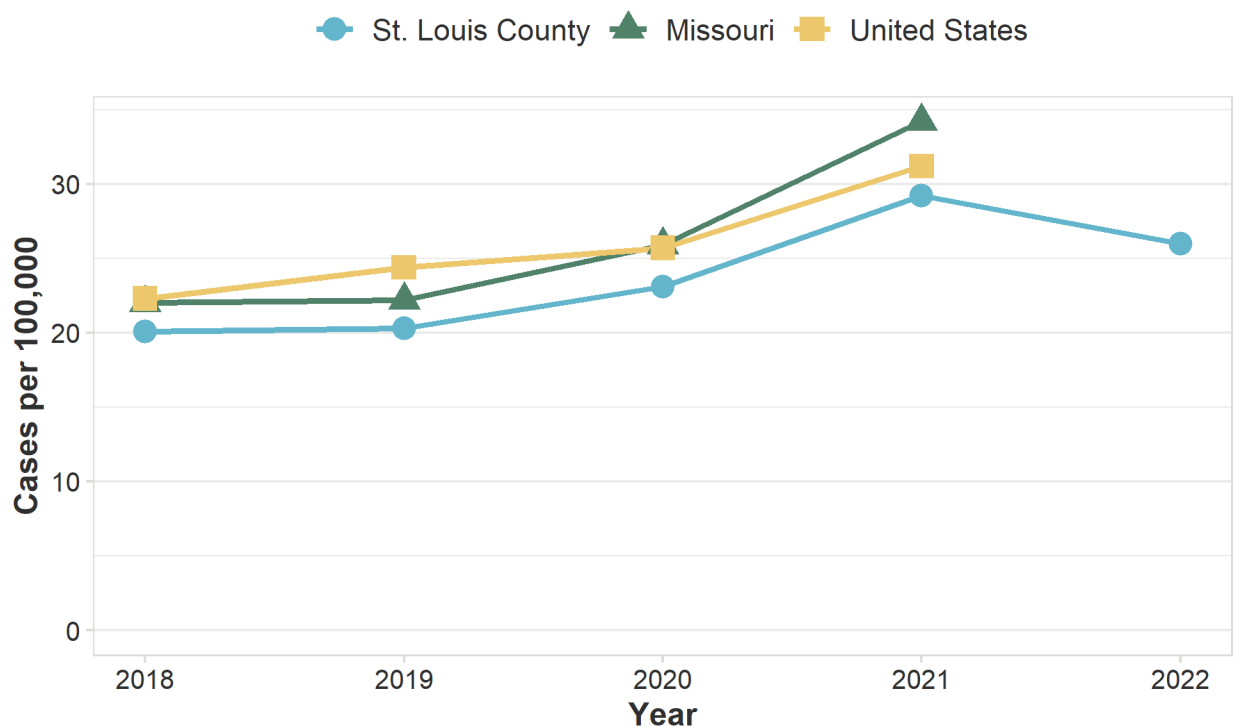
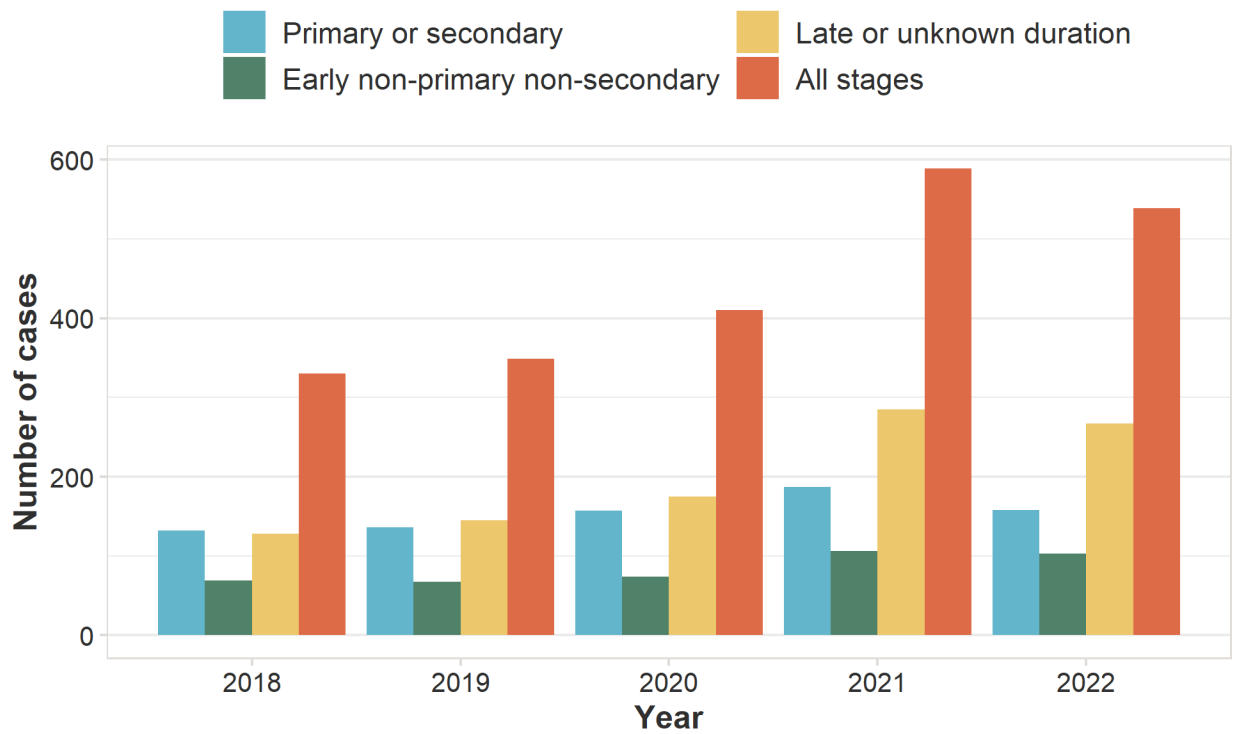


Figure 27. Reported Syphilis Cases by Stage of Disease, St. Louis County, 2018 to 2022

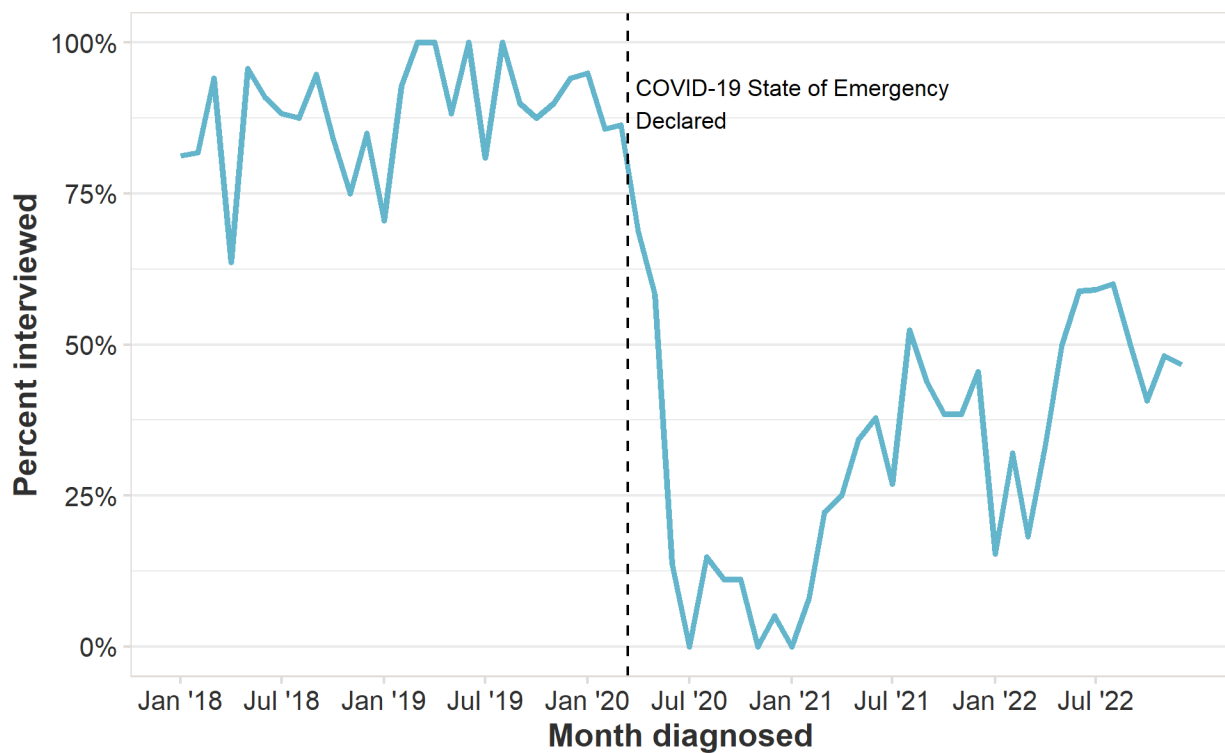


Seventy-six percent of early syphilis cases were diagnosed among men in 2022. From 2020 to 2022, many Disease Intervention Specialists (DIS), who locate, interview, and provide services to people infected with syphilis and other STIs, were diverted to the COVID-19 response. As a result, some syphilis 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 partially recovered in 2022, 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, 2018 to 2022



Early Syphilis by Sex and Age Group

In 2022, the early syphilis rate for men was reported to be 41.6 cases per 100,000 males, and the early syphilis rate for women was reported to be 11.8 cases per 100,000 females. Between 2021 and 2022, syphilis incidence decreased by 9 percent among men (from 45.5 to 41.6 cases per 100,000 males) and decreased by 17 percent among women (from 14.3 to 11.8 cases per 100,000 females). Since 2018, as shown in Figure 31 syphilis incidence has increased by 17 percent among men (from 35.5 to 41.6 cases per 100,000 males) and by 100 percent among women (from 5.9 to 11.8 cases per 100,000 females). Of note, the number and proportion of early syphilis cases reported among women has been increasing since 2017, with a slight dip in cases in 2022 (**Figure 29**). In 2022, early syphilis rates were highest among men aged 30 to 39 years (97.5 cases per 100,000). When compared to 2018, syphilis incidence decreased by 5 percent among men aged 29 years and younger, while increasing by 33 percent among men aged 30 years and older (**Figure 32**).

Syphilis rates were highest among people aged 25 to 29 years (73.5 cases per 100,000) and 20 to 24 years (60.3 cases per 100,000) (**Figure 30**).

Figure 29. Early Syphilis Rates by Sex, St. Louis County, 2018 to 2022

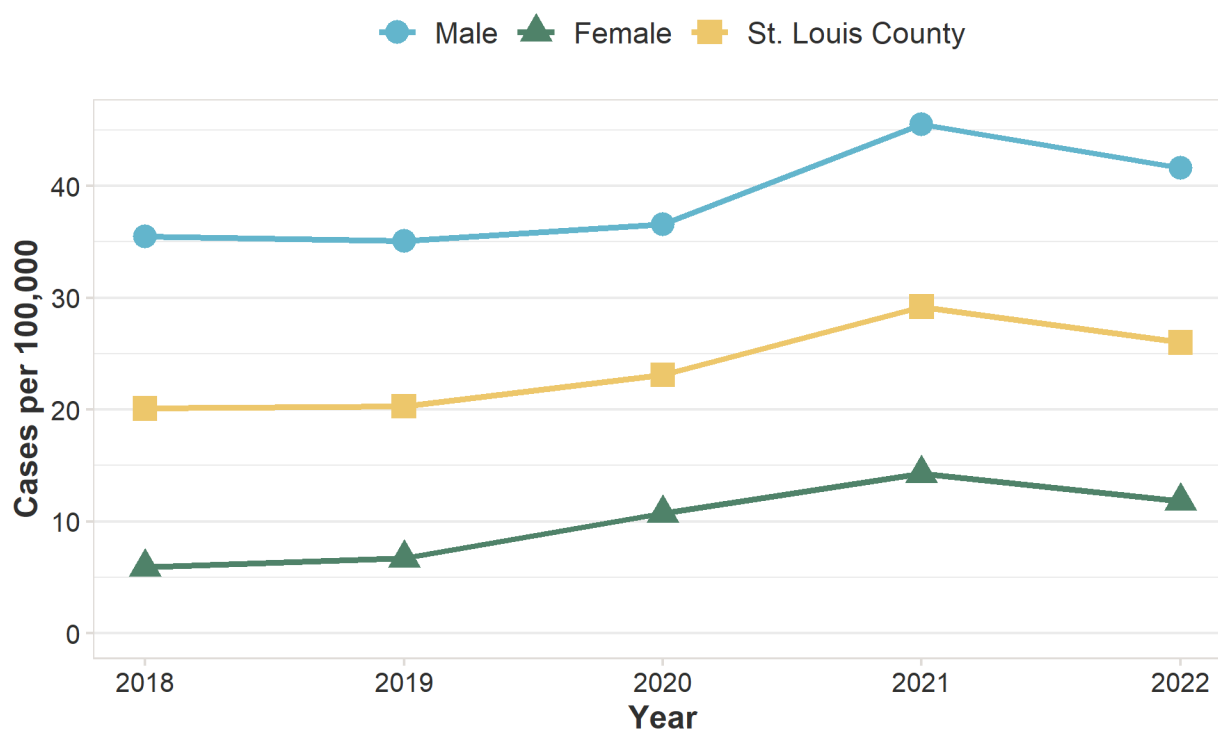


Figure 30. Early Syphilis Rates by Age Group, St. Louis County, 2018 to 2022

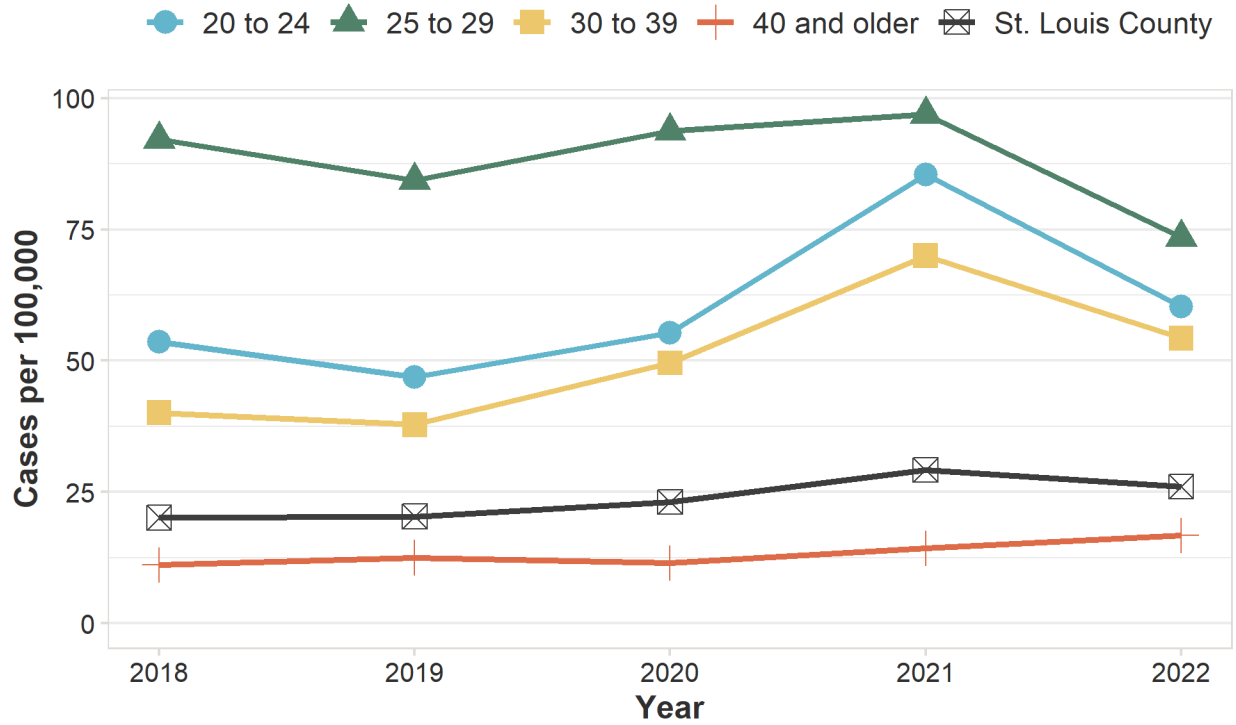
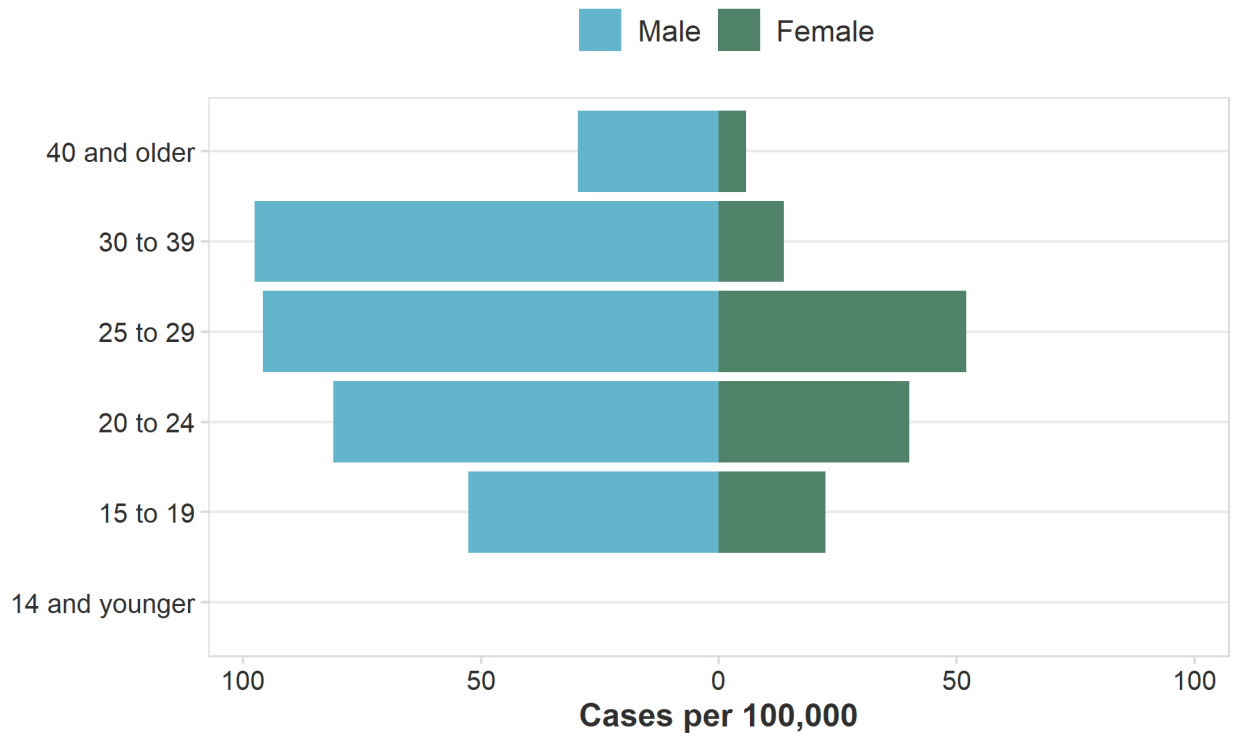
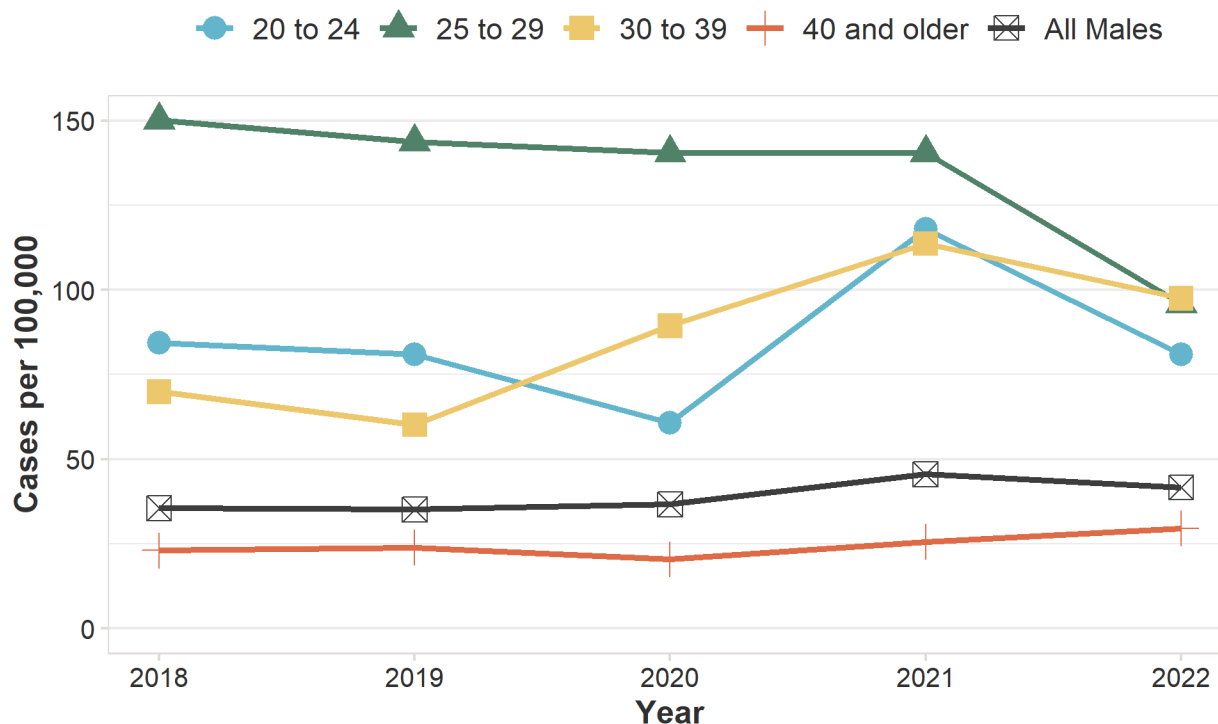


Figure 31. Early Syphilis Rates by Sex and Age Group, St. Louis County, 2022



In 2022, men between the ages of 30 and 39 had the highest incidence rate of early syphilis (97.5 cases per 100,000) (**Figure 31**). Compared with 2021, syphilis incidence decreased by 20 percent among men aged 29 and younger (from 47.6 to 38.0 cases per 100,000 men) and remained stable among men aged 30 and older in 2022. Since 2018, syphilis incidence has decreased among men aged 20 to 24 (-4%) and 25 to 29 (-36%) years old and increased among men aged 30 to 39 (+39%) and 40 and older (+29%) (**Figure 32**).

Figure 32. Early Syphilis Rates among Men by Age Group, St. Louis County, 2018 to 2022



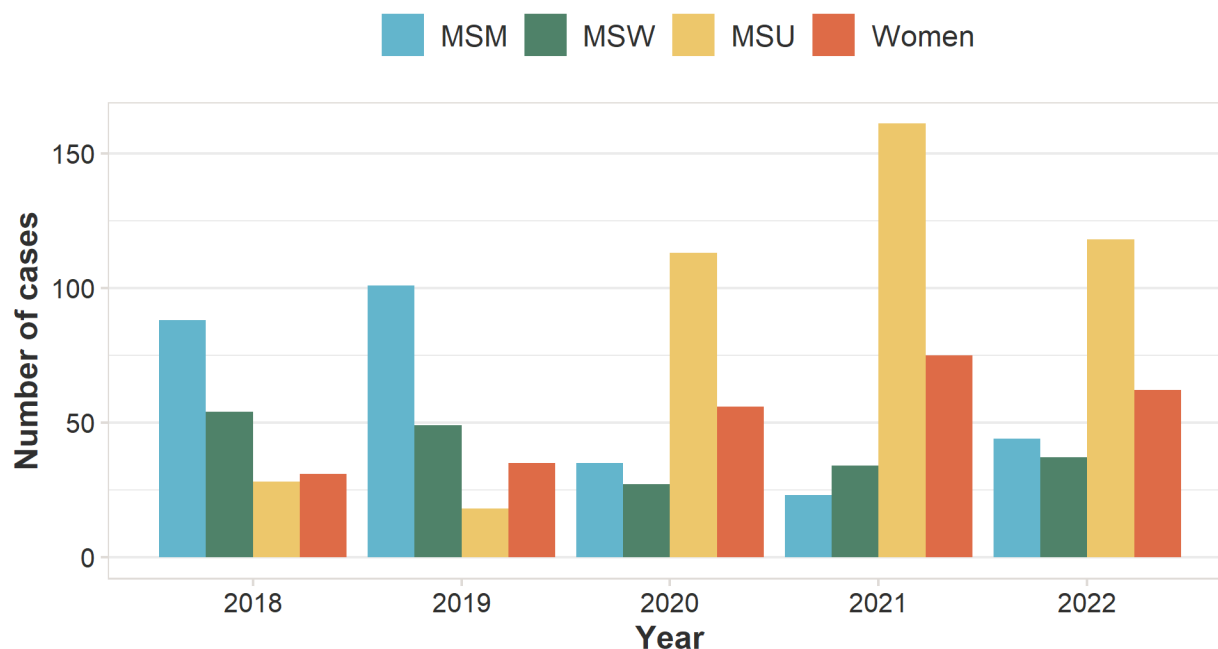
Among women, early syphilis rates were highest among those aged 25 to 29 years (52.0 cases per 100,000), followed by those aged 20 to 24 years (40.0 per 100,000) and 15 to 19 years (22.4 per 100,000) (**Figure 31**). When compared to 2021, early syphilis rates have decreased for women in all age groups except those 40 and older (from 4.7 to 5.8 per 100,000). Overall, early syphilis incidence among women in St. Louis County increased by 100% between 2018 and 2022, and 87 percent of the 259 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 261 early syphilis cases diagnosed among St. Louis County residents in 2023, 44 (17%) were among men who have sex with men (MSM), 37 (14%) were among men who have sex with women only (MSW), 118 (45%) were among men whose sexual partners' sex is unknown (MSU), and 62 (24%) 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 15 percent of cases in 2018 to 24 percent of cases in 2022, 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, 2018 to 2022



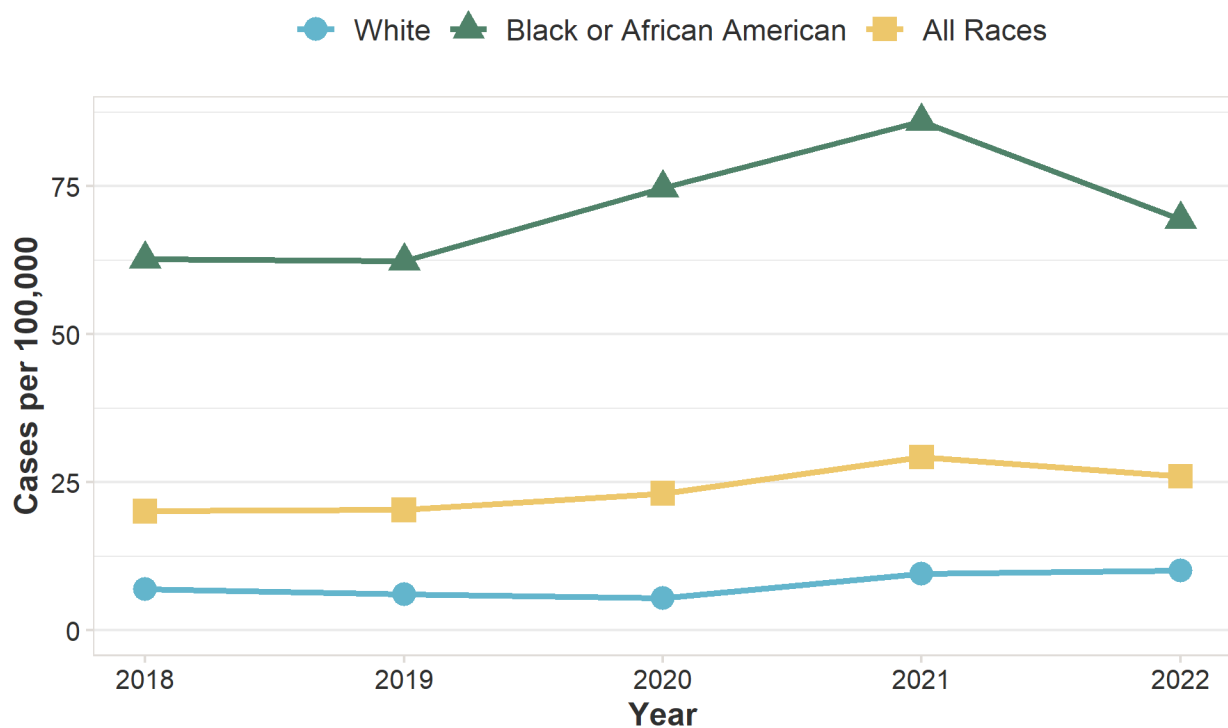
MSM: Men who have sex with men,
MSW: Men who have sex with women only,
MSU: Men, sex of sexual partners unknown

Early Syphilis by Race and Ethnicity

Race was known for 95 percent of reported early syphilis cases in 2022. The early syphilis rate among Black residents of St. Louis County (69.4 per 100,000) was 6.9 times the rate among White residents (10.1 per 100,000) (**Figure 34**). Between 2021 and 2022, syphilis incidence decreased by 19 percent among people identifying as Black and increased by 6 percent among people identifying as White. Since 2018, incidence has increased by 11 percent among Black residents and decreased by 46 percent among White residents. 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 2022. The early syphilis rate among Hispanics and Latinos (33.0 cases per 100,000) was 1.6 times the rate among non-Hispanics (21.0 per 100,000). Syphilis incidence among people identifying as non-Hispanic has increased by 9 percent since 2018.

Figure 34. Early Syphilis Rates by Race, St. Louis County, 2018 to 2022



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 65 percent of reported early syphilis cases. However, completeness varied substantially by sex and sex of sex partners – HIV status was known for 70 percent of MSM with early syphilis, but for only 49 percent of MSW and 52 percent of women (**Figure 35**). Of the 170 early syphilis cases for whom HIV status was known in 2022, 68 (40%) were co-infected with HIV. For the 31 early syphilis cases among MSM where HIV status was known, the HIV co-infection rate was 72 percent (**Figure 35**).

During the 2018 – 2022 period, HIV status at the time of syphilis diagnosis was known for 70 percent of early syphilis cases among MSM, but for just 44 percent of cases among MSW and 47 percent of cases among women. For early syphilis cases where HIV status was known, the HIV co-infection rate was 78 percent among MSM, 11 percent among MSW, and 6 percent among women (**Figure 36**).

Figure 35. Early Syphilis Cases by HIV Status at Time of Report, St. Louis County, 2018 to 2022

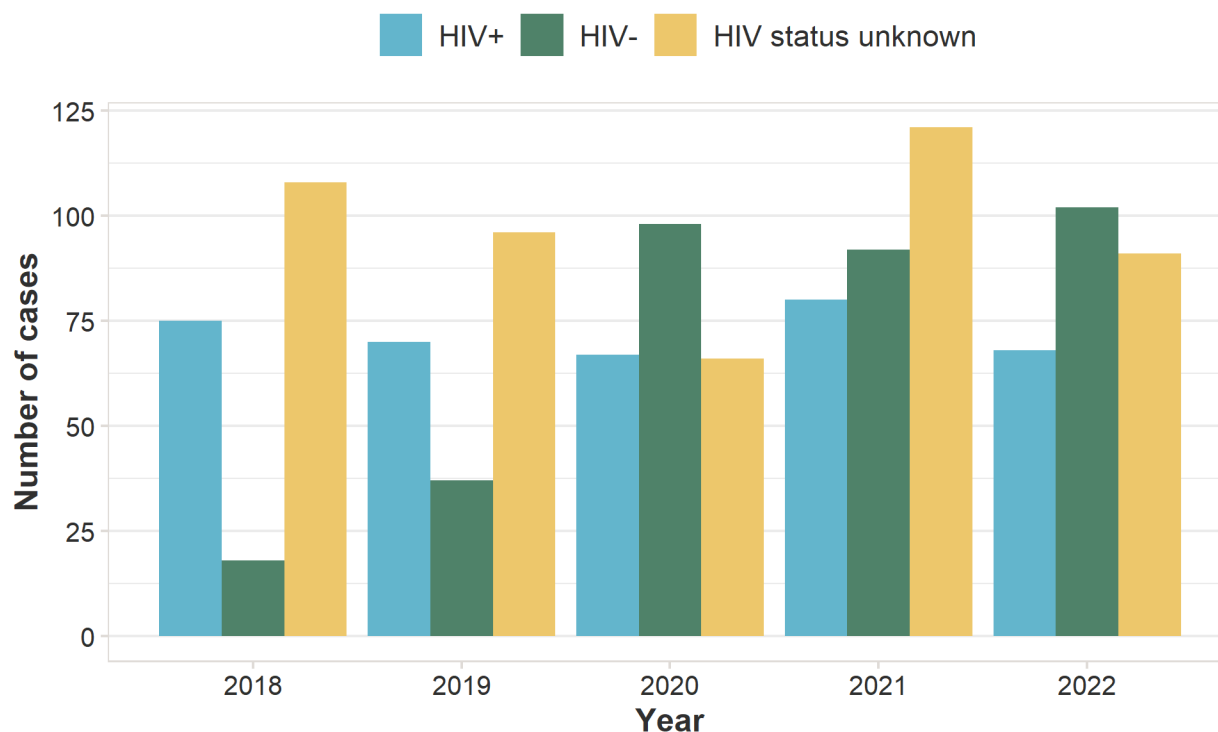
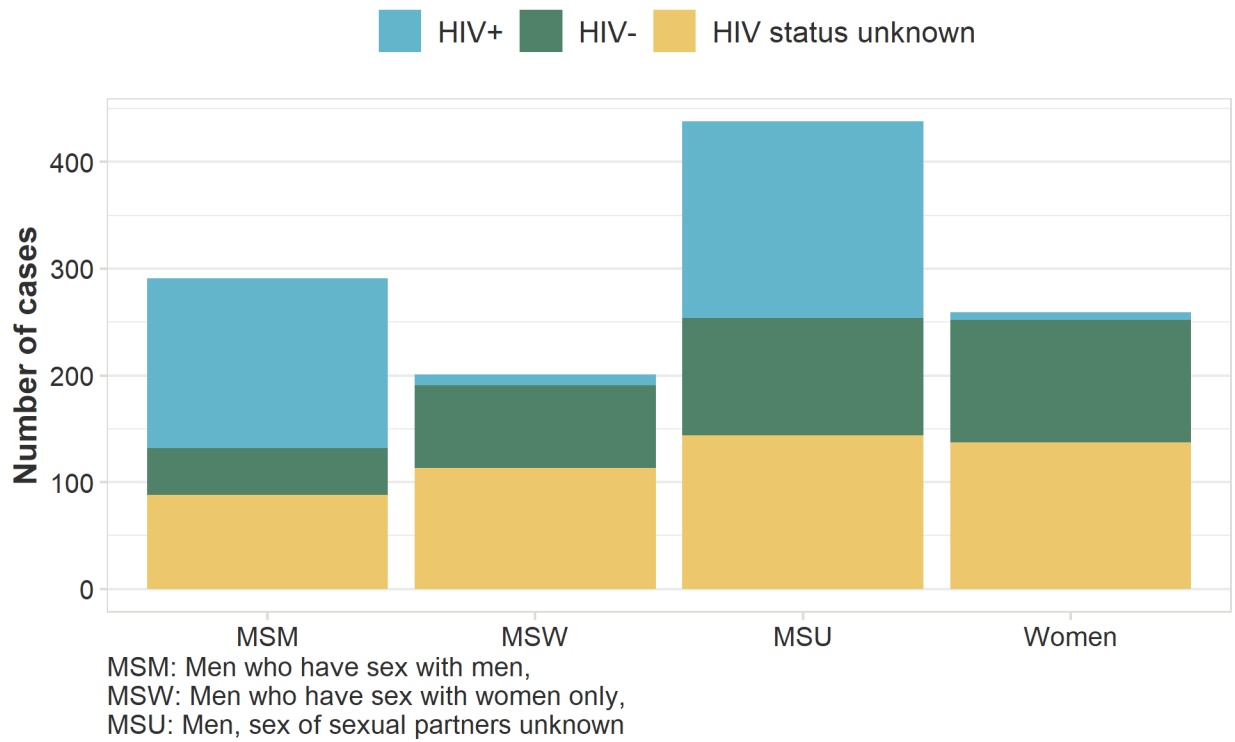


Figure 36. Early Syphilis Cases by Sexual Behavior and HIV Status at Time of Report, 2018 to 2022



Early Syphilis by Region

In 2022, syphilis incidence was highest in the Inner North region of St. Louis County (60.6 cases per 100,000), followed by the Outer North (37.2 per 100,000), Central (22.9 per 100,000), South (13.0 per 100,000), and West (9.4 per 100,000) regions (**Figure 37**). Between 2021 and 2022, syphilis incidence has increased in the Outer North and South regions and decreased in all the other regions. Since 2018, syphilis incidence has increased in all five regions, with the largest increases in the South (+124%), West (+81%), and Central (+44%) regions.

Figure 37. Early Syphilis Rates by Sub-County Region, St. Louis County, 2018 to 2022

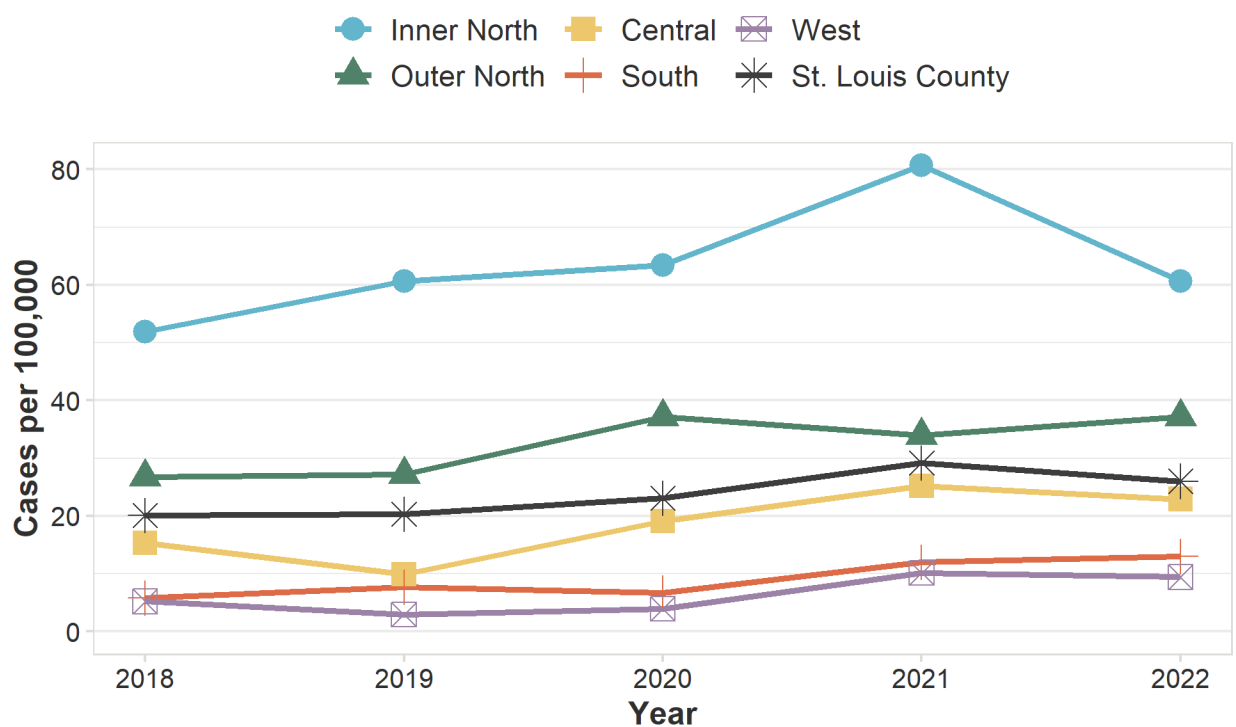
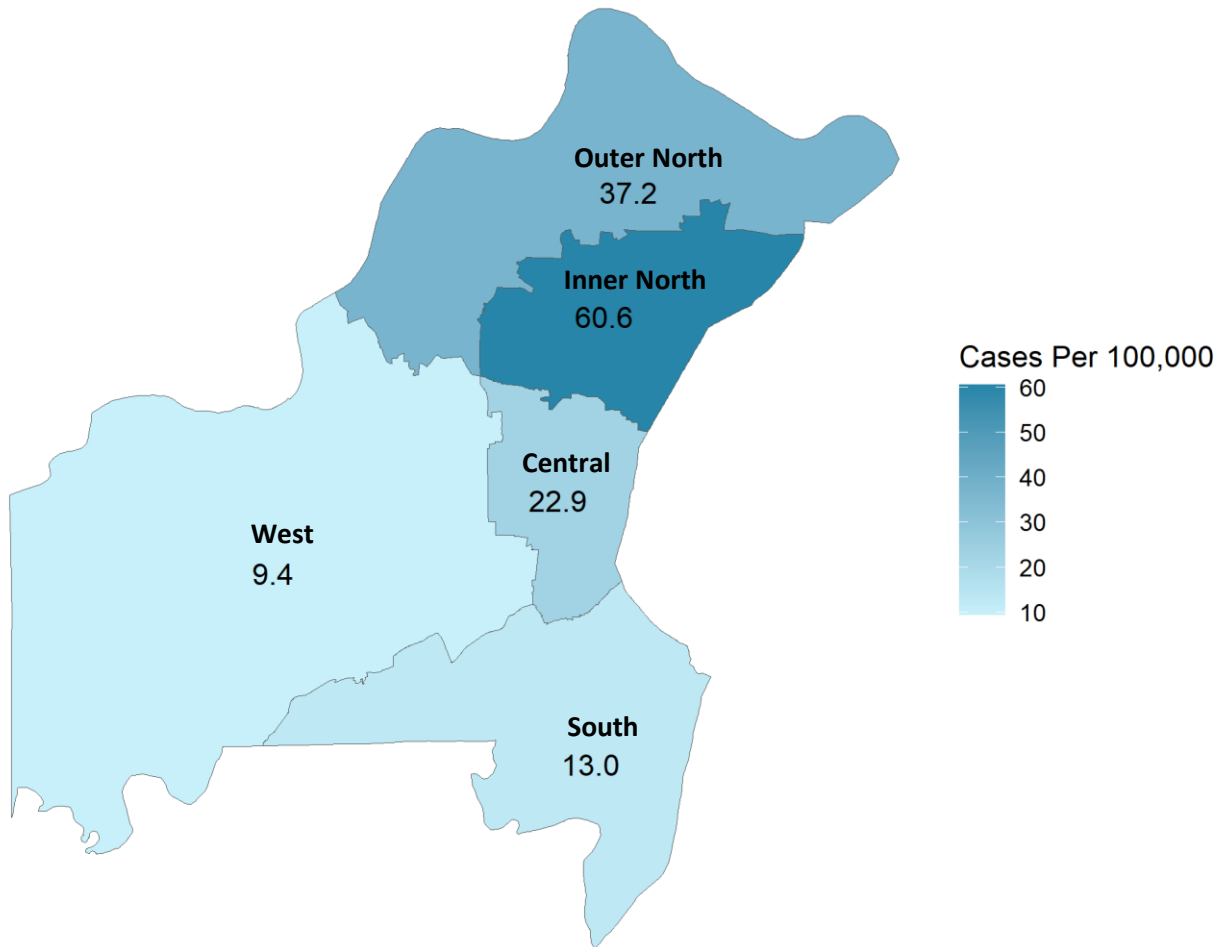
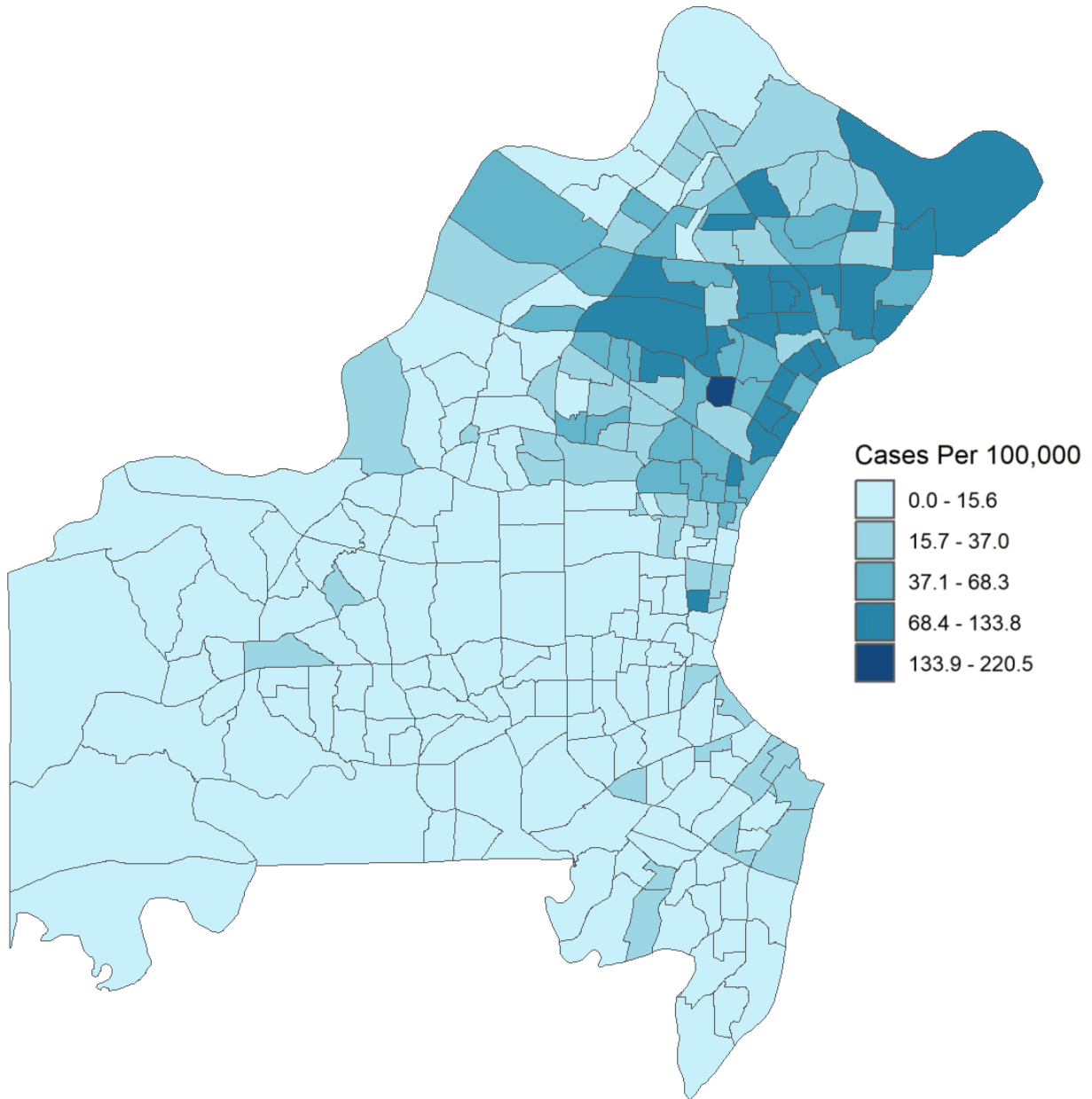


Figure 38. Early Syphilis Rates by Sub-County Region, St. Louis County, 2022



As shown in Figure 38, the Inner North sub-county region had the highest rate of early syphilis – 60.6 cases per 100,000; this is 2.3 times the overall rate of early syphilis in St. Louis County (26.0 cases per 100,000).

Figure 39. Early Syphilis Rates by Census Tract, St. Louis County, five-year average, 2018 to 2022



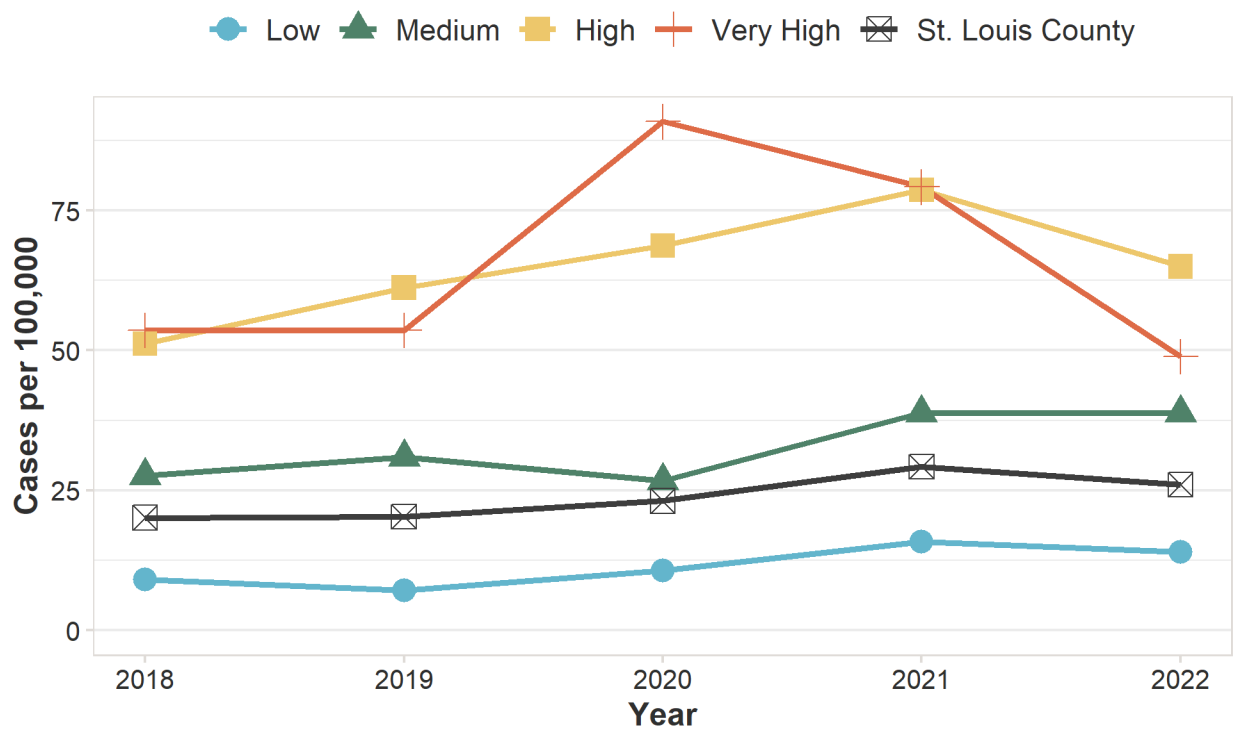
Once again, census tracts within the Inner North and Outer North sub-county regions had the highest rates of early syphilis.

Early Syphilis by Neighborhood Poverty Level

In 2022, syphilis incidence was greatest in high poverty (65.0 cases per 100,000) census tracts, followed by very high poverty (48.9 per 100,000), medium poverty (38.8 per 100,000), and low poverty (14.0 per 100,000) census tracts (**Figure 40**). Between 2021 and 2022, syphilis incidence decreased in low poverty (-11%), high poverty (-17%), and very high poverty (-38%) census tracts and remained stable in medium poverty census tracts.

Since 2018, incidence has increased across all poverty levels except very high poverty level census tracts, which saw a 9 percent decrease in incidence (**Figure 40**).

Figure 40. Early Syphilis Rates by Neighborhood Poverty Level, St. Louis County, 2018 to 2022



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Appendix 1: Data Tables

Table 1. Sexually Transmitted Infections - Counts and Rates of Reported Cases, St. Louis County, 2018 to 2022

	Case Counts					Rates Per 100,000 Population*				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Chlamydia	6,434	6,624	5,979	6,213	6,429	642.1	661.1	596.7	620.1	641.6
Gonorrhea	2,775	3,007	3,380	3,268	3,169	277.0	300.1	337.3	326.2	316.3
Syphilis, All Stages	330	349	410	589	539	32.9	34.8	40.9	58.8	53.8
Primary	40	39	68	77	62	4.0	3.9	6.8	7.7	6.2
Secondary	92	97	89	110	96	9.2	9.7	8.9	11.0	9.6
Early, non-primary non-secondary	69	67	74	106	103	6.9	6.7	7.4	10.6	10.3
Late or unknown duration	128	145	175	285	267	12.8	14.5	17.5	28.4	26.6
Congenital*	1	1	4	11	11	8.8	8.8	38.0	104.8	104.8
P&S† Syphilis	132	136	157	187	158	13.2	13.6	15.7	18.7	15.8
Early‡ Syphilis	201	203	231	293	261	20.1	20.3	23.1	29.2	26.0

*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, 2018 to 2021

	Case Counts				Rates Per 100,000 Population*			
	2018	2019	2020	2021	2018	2019	2020	2021
Chlamydia	4,116	4,141	3,826	3,910	2,157.4	2,170.6	2,005.4	2,049.5
Live Births Delivered by Pregnant Persons with Chlamydia*	289	313	251	236	2,557.5	2,759.4	2,381.6	2,248.9
Gonorrhea	1,122	1,241	1,503	1,490	588.1	650.5	787.8	781.0
Live Births Delivered by Pregnant Persons with Gonorrhea*	55	71	63	66	486.7	625.9	597.8	628.9
Early Syphilis	29	31	48	67	15.2	16.2	25.2	35.1
Congenital Syphilis*	1	1	3	11	8.8	8.8	38.0	104.8

*Rates per 100,000 live births

Table 3. Chlamydia - Case Counts and Rates by Sex and Age Group, St. Louis County, 2018 to 2022

	Case Counts					Rates Per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
St. Louis County	6,434	6,624	5,979	6,213	6,429	642.1	661.1	596.7	620.1	641.6
Female	4,223	4,244	3,895	4,010	4,134	806.9	810.9	744.2	766.2	789.9
14 and younger	58	57	35	43	50	64.8	63.7	39.1	48.1	55.9
15 to 19	1,372	1,370	1,313	1,243	1,277	4,391.4	4,385.0	4,202.5	3,978.5	4,087.3
20 to 24	1,554	1,580	1,418	1,519	1,494	5,174.0	5,260.5	4,721.2	5,057.4	4,974.2
25 to 29	747	753	679	661	726	2,285.9	2,304.2	2,077.8	2,022.7	2,221.6
30 to 39	401	387	362	440	450	611.9	590.6	552.4	671.5	686.7
40 and older	91	97	88	104	137	33.2	35.3	32.1	37.9	49.9
Male	2,211	2,380	2,084	2,203	2,295	462.0	497.3	435.4	460.3	479.5
14 and younger	10	16	9	13	9	10.7	17.1	9.6	13.9	9.6
15 to 19	537	537	532	522	581	1,660.3	1,660.3	1,644.9	1,614	1,796.4
20 to 24	727	810	732	716	747	2,453.2	2,733.3	2,470.1	2,416.1	2,520.7
25 to 29	491	540	390	424	405	1,568.4	1,725.0	1,245.8	1,354.4	1,293.7
30 to 39	330	320	276	388	408	536.1	519.9	448.4	630.4	662.9
40 and older	116	157	145	140	145	50.4	68.3	63.0	60.9	63.0

Table 4. Chlamydia – Case Counts and Rates by Race/Ethnicity, Region, and Poverty Level, St. Louis County, 2018 to 2022

	Case Counts					Rates Per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Total	6,434	6,624	5,979	6,213	6,429	642.1	661.1	596.7	620.1	641.6
Race/Ethnicity										
White	1,100	1,048	913	958	964	168.2	160.3	139.6	146.5	147.4
Black or African American	4,044	4,274	3,850	4,036	4,230	1,669.5	1,764.4	1,589.4	1,666.2	1,746.2
American Indian/Alaskan Native	--	--	--	--	--	--	--	--	--	--
Asian	35	35	27	22	36	76.8	76.8	59.3	48.3	79.0
Native Hawaiian/Other Pacific Islander	--	--	--	--	--	--	--	--	--	--
Some other race	31	32	18	21	21	252.0	260.1	146.3	170.7	170.7
Two or more races	197	236	230	175	143	421.3	504.7	491.9	374.3	305.8
Hispanic or Latino	116	113	131	149	106	383.3	373.4	432.8	492.3	350.2
Region										
Inner North	2,745	2,887	2,563	2,556	2,753	1,583	1,664.9	1,478.1	1,474.0	1,587.6
Outer North	1,781	1,911	1,741	1,839	1,893	989.2	1,061.4	967.0	1,021.4	1,051.4
Central	566	573	461	507	589	432.1	437.4	351.9	387.0	449.6
South	523	494	480	476	446	252.0	238.0	231.3	229.4	214.9
West	634	625	554	612	634	206.6	203.7	180.5	199.4	206.6
Neighborhood Poverty Level										
Low	2,055	2,149	1,867	2,048	2,121	318.9	333.5	289.8	317.9	329.2
Medium	1,730	1,803	1,690	1,638	1,718	809.0	843.1	790.3	766.0	803.4
High	1,405	1,479	1,273	1,287	1,371	1,756.2	1,848.7	1,591.2	1,608.7	1,713.7
Very High	851	857	701	728	789	1,983.5	1,997.5	1,633.9	1,696.9	1,839.0

Table 5. Gonorrhea – Case Counts and Rates by Sex and Age Group, St. Louis County, 2018 to 2022

	Case Counts					Rates Per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Total	2,775	3,007	3,380	3,268	3,169	277.0	300.1	337.3	326.2	316.3
Female	1,174	1,285	1,564	1,547	1,451	224.3	245.5	298.8	295.6	277.2
14 and younger	18	13	22	20	24	20.1	14.5	24.6	22.4	26.8
15 to 19	315	327	390	394	418	1,008.2	1,046.6	1,248.3	1,261.1	1,337.9
20 to 24	377	404	510	470	473	1,255.2	1,345.1	1,698.0	1,564.8	1,574.8
25 to 29	232	266	328	336	255	709.9	814.0	1,003.7	1,028.2	780.3
30 to 39	167	210	243	251	213	254.8	320.5	370.8	383.0	325.0
40 and older	65	65	71	76	68	23.7	23.7	25.9	27.7	24.8
Male	1,601	1,722	1,816	1,721	1,718	334.5	359.8	379.4	359.6	359.0
14 and younger	--	--	--	9	5	--	--	--	9.6	5.3
15 to 19	--	--	286	292	302	--	--	884.3	902.8	933.7
20 to 24	442	470	521	477	516	1,491.5	1,586.0	1,758.1	1,609.6	1,741.2
25 to 29	355	378	425	384	315	1,134.0	1,207.5	1,357.6	1,222.6	1,006.2
30 to 39	318	378	287	379	389	516.6	614.1	628.7	615.7	632.0
40 and older	230	249	--	180	191	100.0	108.2	--	78.2	83.0

Table 6. Gonorrhea – Case Counts and Rates by Race/Ethnicity, Region, and Poverty Level, St. Louis County, 2018 to 2022

	Case Counts					Rates Per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Total	2,775	3,007	3,380	3,268	3,169	277.0	300.1	337.3	326.2	316.3
Race/Ethnicity										
White	339	371	369	371	299	51.8	56.7	56.4	56.7	45.7
Black or African American	2,046	2,199	2,581	2,431	2,386	844.6	907.1	1,065.5	1,003.6	985.0
American Indian/Alaskan Native	--	--	--	--	--	--	--	--	--	--
Asian	11	9	6	5	7	24.2	19.8	13.2	11.0	15.4
Native Hawaiian/Other Pacific Islander	--	--	--	--	--	--	--	--	--	--
Some other race	--	10	9	8	6	--	81.3	73.2	65.0	48.8
Two or more races	62	87	83	81	84	132.6	186.1	177.5	173.2	179.6
Hispanic or Latino	30	36	41	36	48	99.1	118.1	135.5	118.9	158.6
Region										
Inner North	1,405	1,529	1,767	1,584	1,577	810.2	881.8	1,019.0	913.5	909.4
Outer North	745	879	938	985	964	413.8	488.2	521.0	547.1	535.4
Central	240	239	236	242	229	183.2	182.5	180.2	184.7	174.8
South	177	169	199	209	171	85.3	81.4	95.9	100.7	82.4
West	154	150	175	178	178	50.2	48.9	57.0	58.0	58.0
Neighborhood Poverty Level										
Low	738	783	852	925	821	114.5	121.5	132.2	143.6	127.4
Medium	790	844	951	850	910	369.4	394.7	444.7	397.5	425.5
High	686	782	826	803	774	857.5	977.5	1,032.5	1,003.7	967.5
Very High	415	467	499	452	453	967.3	1,088.5	1,163.1	1,053.5	1,055.9

Table 7. Early Syphilis – Case Counts and Rates by Sex and Age Group, St. Louis County, 2018 to 2022

	Case Counts					Rates Per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Total	201	203	231	293	261	20.1	20.3	23.1	29.2	26.0
Female	31	35	56	75	62	5.9	6.7	10.7	14.3	11.8
14 and younger	--	--	--	--	--	--	--	--	--	--
15 to 19	--	--	--	--	--	--	--	--	--	--
20 to 24	7	--	15	16	12	23.3	--	49.9	53.3	40.0
25 to 29	12	9	16	18	17	36.7	27.5	49.0	55.1	52.0
30 to 39	8	11	8	19	9	12.2	16.8	12.2	29.0	13.7
40 and older	--	8	11	13	16	--	2.9	4.0	4.7	5.8
Male	170	168	175	218	199	35.5	35.1	36.6	45.5	41.6
14 and younger	--	--	--	--	--	--	--	--	--	--
15 to 19	--	--	--	--	--	--	--	--	--	--
20 to 24	25	24	18	35	24	84.4	81.0	60.7	118.1	81.0
25 to 29	47	45	44	44	30	150.1	143.7	140.6	140.6	95.8
30 to 39	43	37	55	70	60	69.9	60.1	89.4	113.7	97.5
40 and older	53	55	47	59	68	23.0	23.9	20.4	25.6	29.6

Table 8. Early Syphilis - Case Counts and Rates by Race/Ethnicity, Region, and Poverty Level, St. Louis County, 2018 to 2022

	Case Counts					Rates Per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Total	201	203	231	293	261	20.1	20.3	23.1	29.2	26.0
Race/Ethnicity										
White	45	40	35	62	66	6.9	6.1	5.4	9.5	10.1
Black or African American	152	151	181	208	168	62.7	62.3	74.7	85.9	69.4
American Indian/Alaskan Native	--	--	--	--	--	--	--	--	--	--
Asian	--	--	--	--	--	--	--	--	--	--
Native Hawaiian/Other Pacific Islander	--	--	--	--	--	--	--	--	--	--
Some other race	--	--	--	--	--	--	--	--	--	--
Two or more races	--	7	5	5	7	--	15.0	10.7	10.7	15.0
Hispanic or Latino	6	7	--	8	10	19.8	23.1	--	26.4	33.0
Region										
Inner North	90	105	110	140	105	51.9	60.6	63.4	80.7	60.6
Outer North	48	49	67	61	67	26.7	27.2	37.2	33.9	37.2
Central	20	13	25	33	30	15.3	9.9	19.1	25.2	22.9
South	12	16	14	25	27	5.8	7.7	6.7	12.0	13.0
West	16	9	12	31	29	5.2	2.9	3.9	10.1	9.4
Neighborhood Poverty Level										
Low	58	46	68	102	90	9.0	7.1	10.6	15.8	14.0
Medium	59	66	57	83	83	27.6	30.9	26.7	38.8	38.8
High	41	49	55	63	52	51.2	61.2	68.7	78.7	65.0
Very High	23	23	39	34	21	53.6	53.6	90.9	79.2	48.9

Table 9. Early Syphilis – Case Counts and Percents by Sex and Sexual Behavior, St. Louis County, 2018 to 2022

	2018		2019		2020		2021		2022	
	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)	88	43.8%	101	49.8%	35	15.2%	23	7.8%	44	16.9%
Men who have sex with women only (MSW)	54	26.9%	49	24.1%	27	11.7%	34	11.6%	37	14.2%
Men, sex of sex partners unknown	28	13.9%	18	8.9%	113	48.9%	161	54.9%	118	45.2%
Women	31	15.4%	35	17.2%	56	24.2%	75	25.6%	62	23.8%
Total	201		203		231		293		261	