

DOH 347-350 August 2023

In Washington (WA), sexually transmitted infections (STIs) were the most commonly reported communicable diseases preceding the COVID-19 outbreak. STIs comprised over 80% of notifiable conditions in 2021, excluding COVID-19.<sup>i</sup> Healthcare providers and laboratories are required to report confirmed cases of chlamydia (CT), gonorrhea (GC), syphilis, herpes, lymphogranuloma venereum, chancroid, and granuloma inguinale to their local health departments.

From 2021 to 2022, reported cases of CT decreased, while reported cases of GC and primary & secondary syphilis increased. However, 2021 data should be interpreted with caution due to presumed COVID-19 pandemic impacts on STI testing, treatment, and case reporting. All 2022 rates presented in this report are preliminary, as final 2022 population data has not been released at the time of publication. **Table 1** shows the number of STI cases reported in WA in 2021 and 2022.<sup>i</sup>

**Table 1: Reported STI Cases by Infection, Washington State, 2021-2022**

Disease	2021	2022	Trend
Chlamydia (CT)	30,352	28,708	↓
Gonorrhea (GC)	11,098	11,392	↑
Primary & Secondary Syphilis	1,488	1,915	↑
Early Non-Primary Non-Secondary Syphilis	860	1,051	↑
Unknown Duration or Late Syphilis	929	1,399	↑
Congenital Syphilis	53	52	↓
Genital Herpes, adult initial infection	1,189	1,095	↓
Neonatal Herpes	4	6	↑
Lymphogranuloma Venereum	0	0	-
Chancroid	0	0	-
Granuloma Inguinale	0	0	-

*NOTE: Case counts in this table reflect reported cases only. Trends may be reflective of changes in reporting in addition to true changes in incidence.*

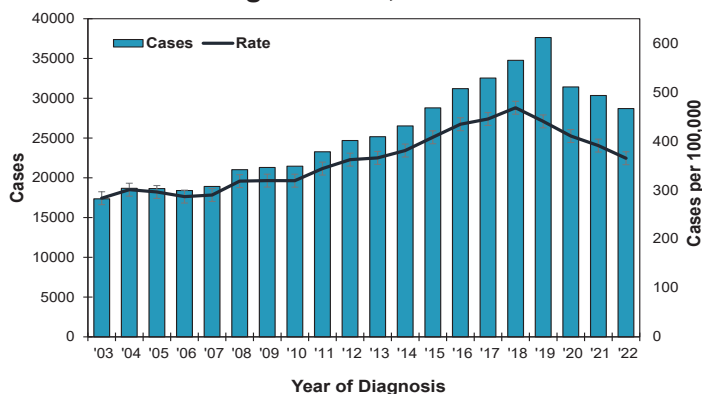
## Chlamydia

Infection with the bacterium *Chlamydia trachomatis* (CT) is the most frequently reported STI statewide and nationally. While many people with CT experience minor discomfort and do not seek testing or treatment, untreated CT in females can lead to pelvic inflammatory disease (PID), infertility, ectopic pregnancy, and other reproductive health issues. Untreated CT may increase the likelihood

of contracting or transmitting HIV and other STIs.

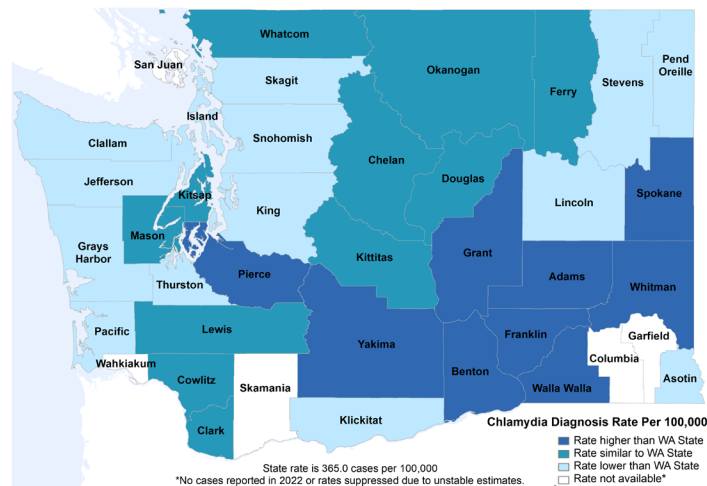
The number of chlamydia cases and incidence rate estimates among persons in WA State from 2003 to 2022 are presented in **Figure 1**. WA reported 365.0 cases of CT per 100,000 persons in 2022. National data for CT has not yet been released for 2022 by the Centers for Disease Control and Prevention (CDC) at the time of publication.<sup>ii</sup>

**Figure 1: Reported Chlamydia Cases and Rates, Washington State, 2003 - 2022<sup>iii</sup>**



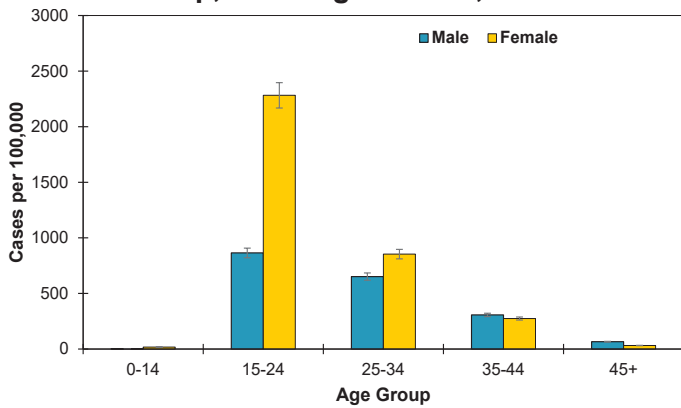
Chlamydia rates for 2022 are mapped by county in **Figure 2**. All counties reported one or more chlamydia cases in 2022.

**Figure 2: Chlamydia Incidence Rate Estimates by County Compared to the WA State Rate, 2022<sup>iii</sup>**



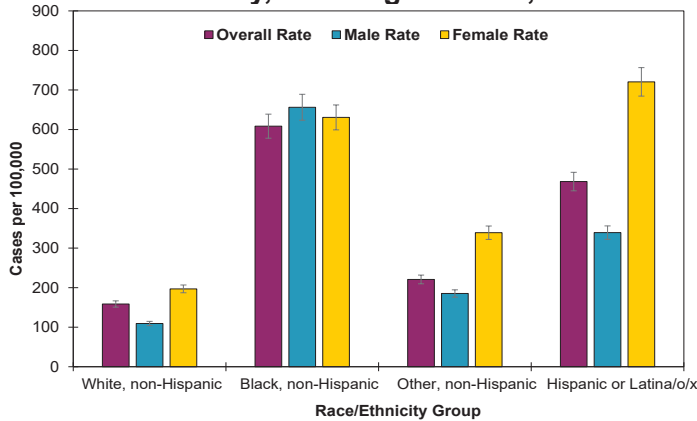
Statewide CT rates for 2022 are presented by gender and age group in **Figure 3**. Women 15-24 years of age have the highest rates of chlamydia, partially due to better detection and screening for CT among women of childbearing age. Transgender and nonbinary persons represented less than 1% of all chlamydia cases in 2022.

**Figure 3: Chlamydia Rates by Gender and Age Group, Washington State, 2022<sup>iii</sup>**



Rates by gender and race/ethnicity are presented in **Figure 4**.<sup>iv</sup> In WA, rates of CT were lowest among White non-Hispanic persons and highest among female Hispanic or Latina/o/x persons. National CT data for comparison has not yet been released by the CDC at the time of publication.<sup>ii</sup>

**Figure 4: Chlamydia Rates by Gender and Race and Ethnicity, Washington State, 2022<sup>v</sup>**



**Summary:**

- Reported CT cases decreased by over 5% in 2022, though it is unclear whether this reflects actual morbidity trends or changes in reporting.
- Chlamydia rates were highest among women, specifically those 15-24 years of age.
- 48% of CT cases reported in 2022 were under the age of 24 years.

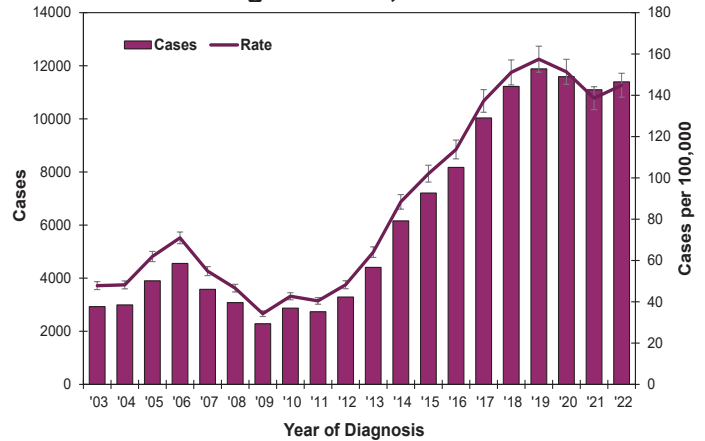
**Gonorrhea**

Infection with the bacterium *Neisseria gonorrhoeae* (GC) is the second most commonly reported STI in the United States. Symptoms include abnormal genital discharge and painful urination. Some people do not notice any symptoms. Untreated GC may lead to PID or infertility, and the infection may spread to the joints or other parts of the body.

Untreated GC may also increase the likelihood of contracting or transmitting HIV and other STIs.

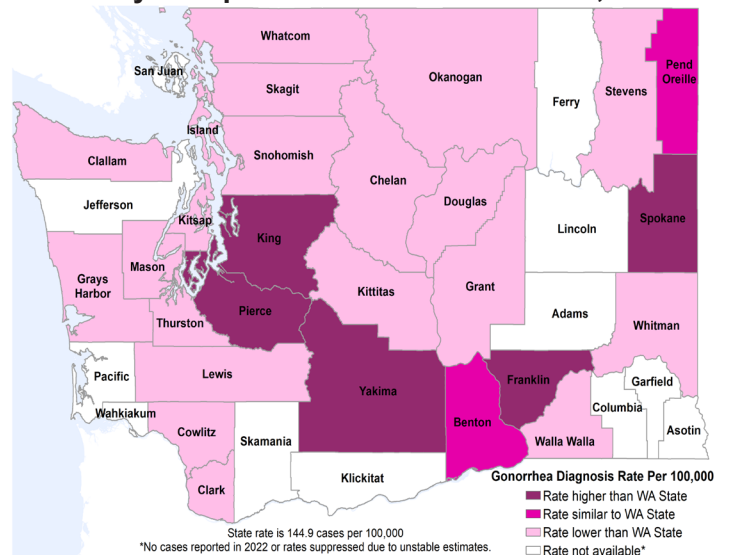
**Figure 5** presents statewide GC cases and rates from 2003 to 2022. After historically steady increases, reported GC cases began declining in 2019 and then increased for the first time again in 2022. In 2022, there were 144.9 cases of gonorrhea per 100,000 people.

**Figure 5: Reported Gonorrhea Cases and Rates, Washington State, 2003-2022<sup>iii</sup>**



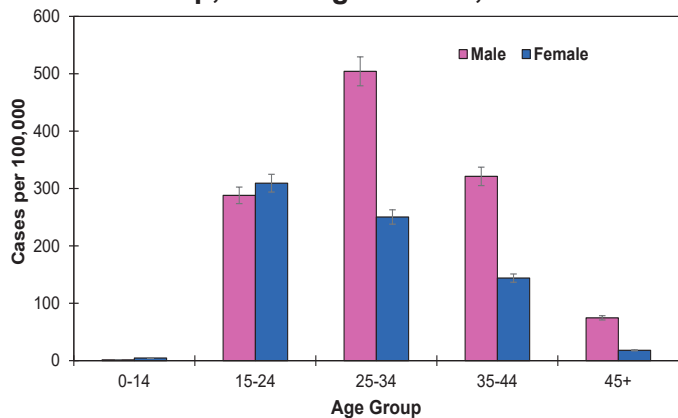
Gonorrhea rates for 2022 are mapped by county in **Figure 6**. All counties reported one or more gonorrhea cases in 2022.

**Figure 6: Gonorrhea Incidence Rate Estimates by County Compared to the WA State Rate, 2022**



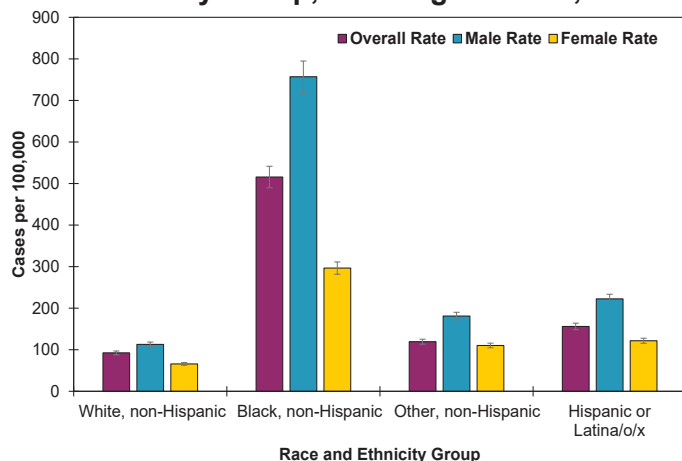
Gonorrhea cases by age and gender are shown in **Figure 7**. Rates were highest among males 25-34 years of age. Males have a higher rate of GC than females in most age groups, partly due to high rates among men who have sex with men (MSM). Over 4% of men in Washington are MSM,<sup>vi</sup> yet MSM represented 44% of male gonorrhea cases in 2022. Transgender and nonbinary persons represented nearly 2% of all 2022 gonorrhea cases.

**Figure 7: Gonorrhea Rates by Gender and Age Group, Washington State, 2022<sup>iii</sup>**



Rates by gender and race/ethnicity are presented in **Figure 8**.<sup>iv</sup> Gonorrhea rates in Washington were highest among Black non-Hispanic males and lowest for White non-Hispanic females in 2022. National data for gonorrhea in 2022 has not yet been released by the CDC for comparison at the time of publication.<sup>ii</sup>

**Figure 8: Gonorrhea Rates by Gender and Race and Ethnicity Group, Washington State, 2022<sup>v</sup>**



**Summary:**

- Reported GC cases increased by 3% in 2022.
- Rates were highest in males aged 25-34 years and Black non-Hispanic females.
- 39% of cases in 2022 were from King County.

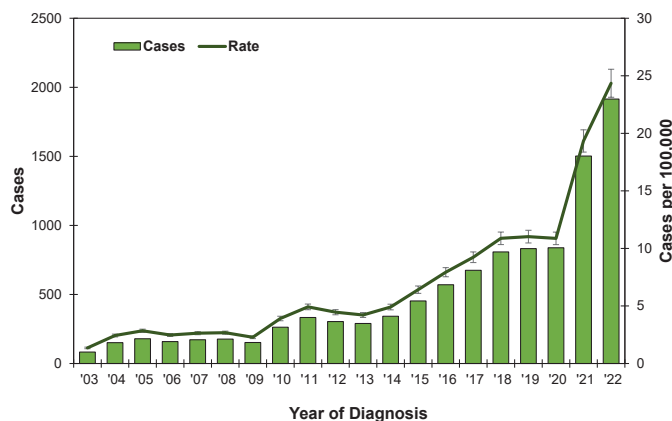
**Syphilis**

Syphilis is caused by the bacterium *Treponema pallidum*. Syphilis progresses through stages of primary, secondary, early non-primary non-secondary, and unknown duration or late. Primary and secondary (P&S) syphilis are the first stages of the disease during which persons are most contagious. P&S syphilis symptoms include pain-

less lesions, rashes, and flu-like symptoms. Untreated syphilis can cause internal organ damage, dementia, hearing loss, and blindness. Syphilis may increase the likelihood of contracting or transmitting HIV and other STIs.

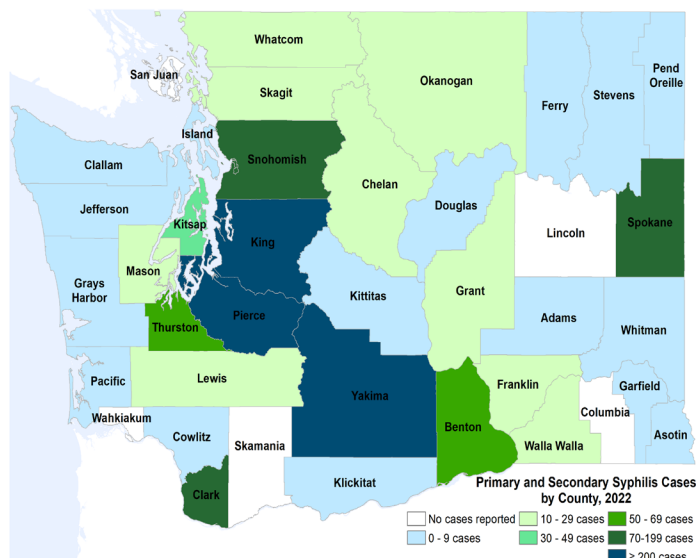
Annual rates of P&S syphilis from 2003 to 2022 are shown in **Figure 9**. Washington State reported a higher rate of P&S in 2022 than in all previous years. There were 24.4 cases of P&S syphilis reported per 100,000 people in WA State in 2022. National data for P&S syphilis in 2022 has not yet been released by the CDC at the time of publication.<sup>ii</sup> Further information regarding rural-urban disparities in syphilis case outcomes is available in this report's "Special Focus" section below.

**Figure 9: Reported Primary and Secondary Syphilis Cases and Rates, WA State, 2003 - 2022<sup>iii</sup>**



In 2022, over 78% of P&S syphilis cases lived in five counties: King, Pierce, Spokane, Snohomish, and Yakima (**Figure 10**).

**Figure 10: Primary and Secondary Syphilis Cases Reported by County, WA State, 2022**



Men had higher rates of P&S syphilis than women in 2022, with the highest rates by age and gender being among 25-34-year-old males (Figure 11). MSM represented 45% of male P&S syphilis cases. Over 1% of all P&S syphilis cases were among transgender and nonbinary persons.

**Figure 11: Primary and Secondary Syphilis Rates by Gender and Age Group, WA State, 2022<sup>iii</sup>**

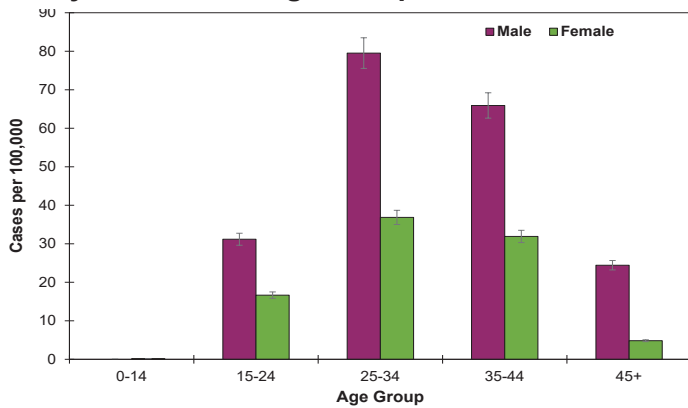
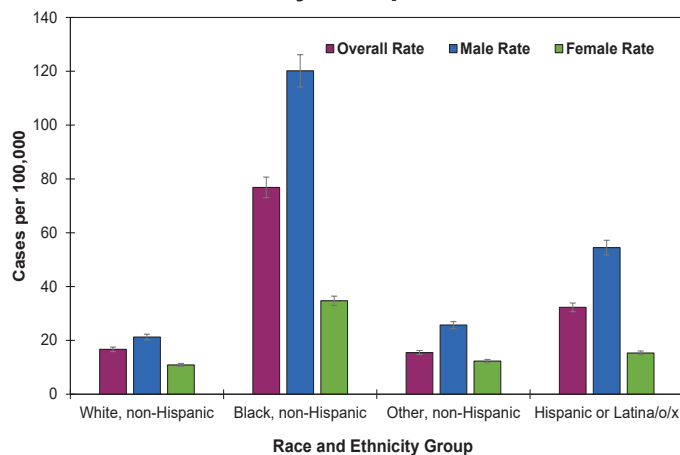


Figure 12 shows rates by race and ethnicity group and gender.<sup>iv</sup> Both overall and among males, rates of P&S syphilis were highest for Black non-Hispanic persons, and rates were lowest for White and Other non-Hispanic persons in 2022. National data for P&S syphilis in 2022 has not yet been released for comparison at the time of publication.<sup>ii</sup>

**Figure 12: P&S Syphilis Rates by Gender and Race and Ethnicity Group, WA State, 2022<sup>v</sup>**



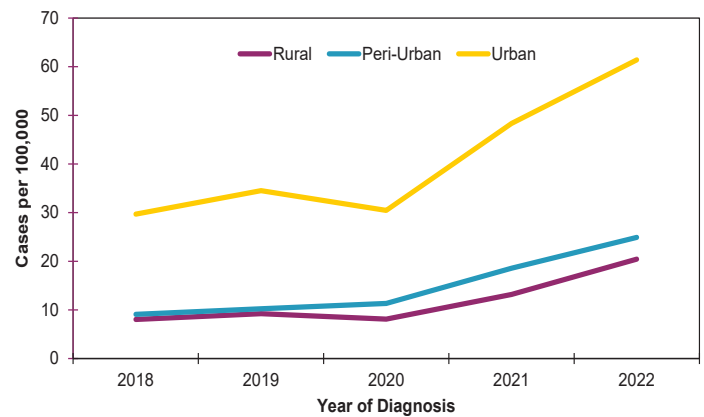
### Summary:

- Reported P&S syphilis case counts increased by 29% in 2022.
- 11% of P&S syphilis cases in 2022 were among people living with HIV.
- P&S cases among pregnancy-capable persons increased by 57% from 2021 to 2022.

## Special Focus: Rural-Urban Disparities in Syphilis

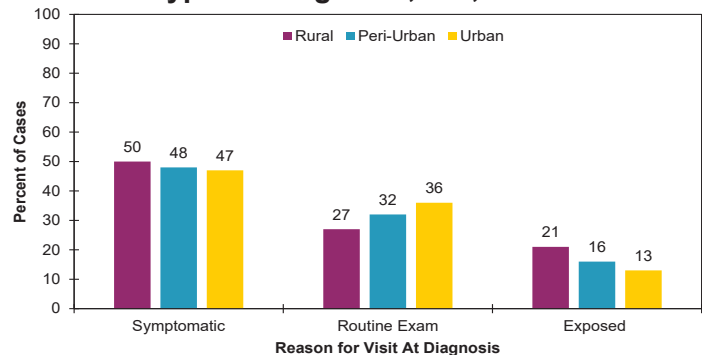
Disparities in syphilis diagnoses and outcomes can be seen when comparing urban versus rural areas in Washington. Urban areas have much higher rates of syphilis than peri-urban or rural areas. This is shown in Figure 13, which presents rates of syphilis by rurality from 2018 to 2022. In 2022, the rate of syphilis in urban areas was three times greater than in rural areas.

**Figure 13: Syphilis Rates by Rurality, Washington, 2018-2022**



When it comes to the reason for visit at the time of syphilis diagnosis, there are differences in rural versus urban areas. Figure 14 shows that in urban areas in 2022, 36% of patient visits were routine exams compared to 27% in rural areas. Patients in rural areas were more likely to visit because of a known exposure (21%) than in urban areas (13%). Through routine screenings when one is sexually active, syphilis infection may be caught earlier and fully treated before possible complications.

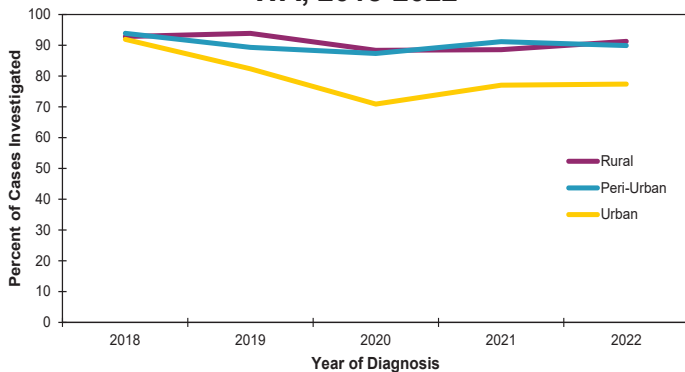
**Figure 14: Patient Reason for Provider Visit at Syphilis Diagnosis, WA, 2022**



After a patient is diagnosed with syphilis, a Disease Intervention Specialist (DIS) may contact them for follow-up. Figure 15 shows the percent of investigated cases each year by rurality. A case is considered 'investigated' if there is one or more

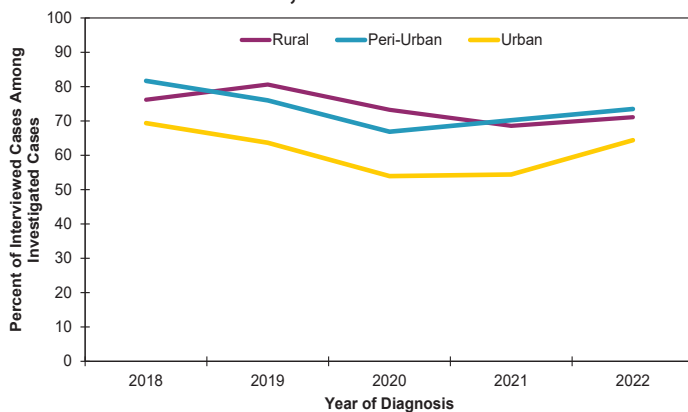
contact attempts and/or a complete or partial patient interview. Investigated cases were lowest in urban areas from 2018 to 2022, likely due to the much higher case burden within urban areas.

**Figure 15: Investigated Syphilis Cases by Rurality, WA, 2018-2022**



After a case is investigated, DIS aim to conduct interviews. These interviews help to gain understanding of the populations impacted by STIs in Washington and to ensure patients and their identified partners receive appropriate care. **Figure 16** shows the percent of investigated cases that were interviewed in Washington by rurality from 2018 to 2022. Each year, urban areas had a significantly lower percent of interviewed cases than rural and peri-urban areas. Due to the higher case burden in urban areas, DIS may need to prioritize certain populations for interview.

**Figure 16: Interviewed Syphilis Cases by Rurality, WA, 2018-2022**



Although there are disparities in syphilis diagnoses and follow-up by rurality, treatment has consistently been very high across the settings. In 2022, the percent of cases with any treatment documented was 97% in rural areas, 94% in peri-urban areas, and 95% in urban areas. This reflects the continuous diligent efforts of providers, Local Health Jurisdictions, and DIS statewide to provide care for patients in Washington.

Although syphilis cases are not distributed equally across Washington, anyone who is sexually active is still at risk of syphilis infection. Detailed screening recommendations for syphilis and other STIs can be found on the [CDC website](https://www.cdc.gov).<sup>vii</sup>

## Notes

<sup>i</sup> 2022 STI counts include cases reported to PHIMS-STD between 01/01/2022 to 12/31/2022, in addition to CT and GC cases reported to WELRS by CDC MMWR year (01/02/2022 to 12/31/2022). The 2022 data for non-STI notifiable conditions is not available at the time of publication; this will be updated when it is available.

<sup>ii</sup> National STI rate estimates are expected to be released by the CDC in 2023. This publication will be updated at that time to provide comparisons of national and WA state data.

<sup>iii</sup> 2022 rate calculations used 2022 population estimates for the denominator, as final 2022 population data was not yet available at the time of publication. This publication will be updated if and when this data is available.

<sup>iv</sup> 'Other races' includes persons of non-Hispanic ethnicity reporting a race other than white or black, including multiple races. Other race, non-Hispanic estimates cannot be directly compared to national estimates.

<sup>v</sup> 2022 rate calculations for race and ethnicity by gender used 2020 population data for the denominator, as neither final nor estimated 2022 population data for race and ethnicity by gender was available at the time of publication. This publication will be updated if and when this data is available.

<sup>vi</sup> Washington State Department of Health, Behavioral Risk Factor Surveillance System (BRFSS), 2020

<sup>vii</sup> Screening Recommendations and Considerations Referenced in Treatment Guidelines and Original Sources: <https://www.cdc.gov/std/treatment-guidelines/screening-recommendations.htm>

## For More Information

Washington State Department of Health:

<http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/SexuallyTransmittedDisease>

U.S. Centers for Disease Control & Prevention:

[www.cdc.gov/std/](http://www.cdc.gov/std/)

To request this document in another format, call 1-800-525-0127. Deaf or hard-of-hearing customers, please call 711 (Washington Relay) or email [civil.rights@doh.wa.gov](mailto:civil.rights@doh.wa.gov).

## Contact Information

**Assessment Unit**

**Office of Infectious Disease**

**Disease Control and Health Statistics**

**Washington State Dept. of Health**

**P.O. Box 47838**

**Olympia, WA 98504-7838**

**Telephone: (360) 236-3445**

**Email: [STD\\_Surveillance@doh.wa.gov](mailto:STD_Surveillance@doh.wa.gov)**