COMMUNICABLE DISEASES

Why It Is Important:

Communicable diseases are illnesses that spread from one person to another through contact with contaminated objects or surfaces, bodily fluids and blood products, bites from insects or animals, or through the air.[1] Communicable diseases are a serious public health issue, and the prevention and control of these diseases is a major focus for public health departments. There are many ways to prevent the spread of communicable diseases. Vaccinations have helped eliminate or greatly reduce communicable disease threats.[1] Proper handwashing, especially after handling food or using the toilet, making sure the food we eat and water we drink is safe, avoiding people who are sick and practicing safe sex such as using condoms are important components in disease prevention.

Sexually Transmitted infections (STIs)

Factors Contributing to Surge in Sexually Transmitted Infections:

1. Drug use (associated with high-risk behaviors), unstable housing, and stigma along with other social determinants of health (poverty, lack of insurance, or a medical home) might contribute to decreased health care utilization and "reluctance or inability to identify and locate sex partners, resulting in delays in diagnosis and treatment".[2] These likely contribute to an increase in new cases of syphilis in communities.[2]

2. Inconsistent condom use, especially among vulnerable groups has increased the risk of infection.[2]

3. Funding cuts to prevention and treatment programs has led to clinic closures, limited screening, decreases in staff, and reduced follow up for patients, which have also contributed to the increase in STDs.[3]

The following communicable diseases are discussed in this dashboard:

1. Chlamydia
2. Gonorrhea
3. Syphilis
4. Hepatitis C
5. Tuberculosis

What We Do At Sutter County:

The Sutter County Communicable Disease Program works to prevent and control the spread of communicable diseases in our community. It works to contain these diseases by investigating who is sick and who else might get sick, providing vaccines, educating healthcare providers and the community about communicable diseases, and collecting and reporting the data essential to tracking the spread of these diseases.

Targets for Improvement[3]:

1. Improve public education and disease awareness.
2. Increase routine screening for diseases, especially in populations at high risk.
3. Provider education and support to assess risk factors and screen for, diagnose, and treatment.
4. Increase access to prenatal care for pregnant women, including routine third-trimester syphilis testing.

References

1. Communicable Disease. American Public Health Association. Accessed February 7, 2022. https://www.apha.org/topics-and-issues/communicable-disease

2. Kidd SE, Grey JA, Torrone EA, Weinstock HS. Increased Methamphetamine, Injection Drug, and Heroin Use Among Women and Heterosexual Men with Primary and Secondary Syphilis — United States, 2013–2017. MMWR Morb Mortal Wkly Rep 2019;68:144–148. DOI: http://dx.doi.org/10.15585/mmwr.mm6806a4

3. Sexually Transmitted Infections National Strategic Plan for the United States 2021-2025.Accessed October 7, 2024. https://www.hhs.gov/sites/default/files/STI-National-Strategic-Plan-2021-2025.pdf

CHLAMYDIA

Why It Is Important:

Chlamydia infections can have serious health consequences. For women, chlamydia can cause permanent damage to the reproductive system, which can make it difficult or impossible to conceive.[1] Chlamydia also increases the risk of premature birth and can even cause potentially fatal ectopic pregnancies.[1] During childbirth, a mother infected with chlamydia can pass the infection to her child, which can cause serious health problems for the newborn.[1] During 2021 to 2022, nationwide, the rate of chlamydia cases increased by 1.8% among men and the rate among women decreased 1.2%.[2]

Where We Are Now:

Rates of chlamydia infections are much lower in Sutter County compared to California and the US (Table 1). From 2018 to 2019, Sutter County saw a slight increasing trend in chlamydia infections, with approximately 362 new chlamydia diagnoses per year; however, this rate dropped substantially in 2020 (Figure 1). There was a slight increase by 2022, but still lower than 2019 (Figure 1). This decrease is likely attributed to changes in reporting guidelines by the California Department of Public Health (CDPH). As of October 1, 2019, chlamydia infections are no longer required to be reported to local health departments.[6]

Table 1: Chlamydia Infections per 100,000 (2020-2022)[3–4]

Location	Rate per 100k
California	468.9
Sutter County	243.9
United States	323.8

Those Most Affected:

In Sutter County, chlamydia is diagnosed twice as often in women than men (Figure 1). While current sexually transmitted infections (STI) screening guidelines recommend annual chlamydia testing for all sexually active women younger than 25 years or who have an increased risk of contracting chlamydia (e.g., new or multiple sex partners), most men do not receive routine chlamydia testing.[1] In addition, 75% of all chlamydia infections are diagnosed in people younger than 30 years.[5] Black and non-Hispanic White Sutter County residents are also more likely to be diagnosed with chlamydia (Figure 2).[5]

Figure 1: Chlamydia among Sutter County Residents, 2018-2022[5]

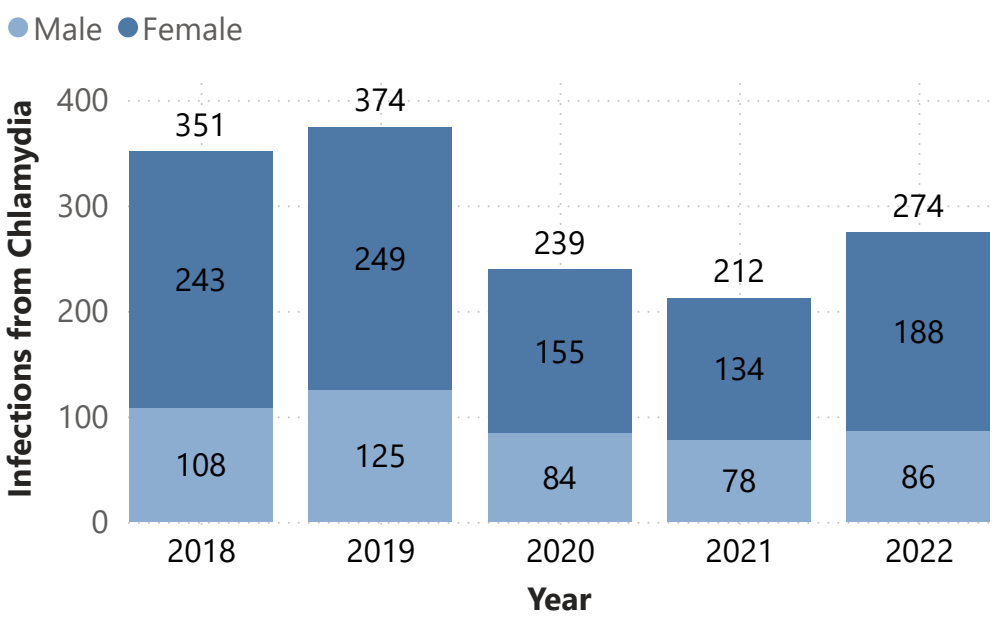
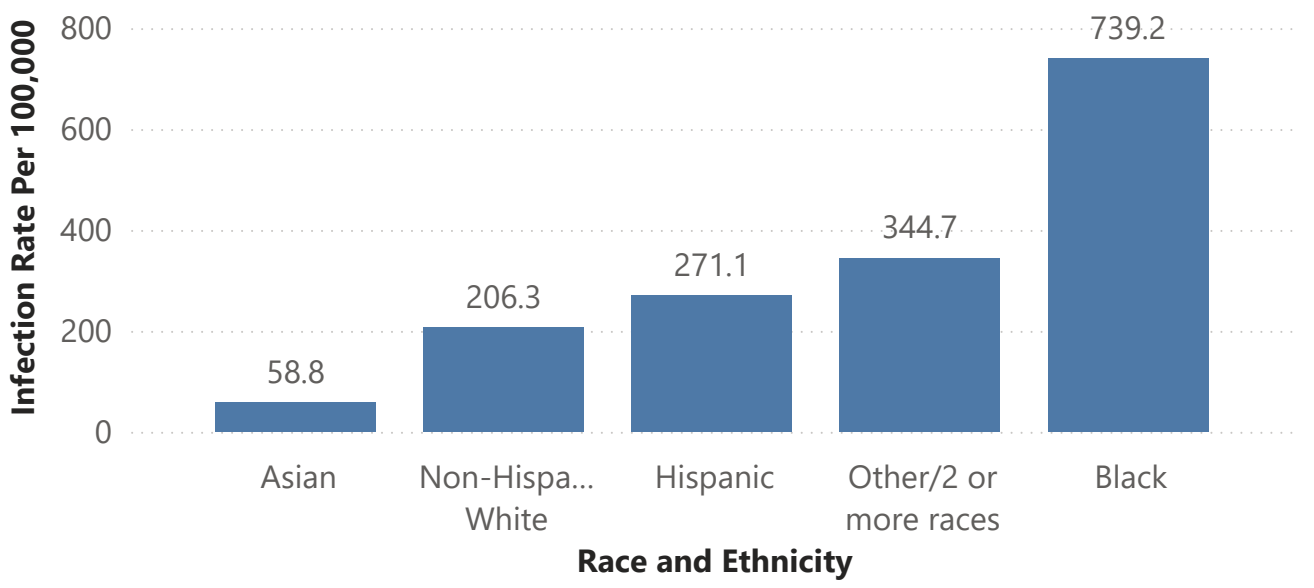


Figure 2: Average Yearly Rates of Chlamydia in Sutter County by Race/Ethnicity, 2018-2022[5]



References

1. About Chlamydia. Centers for Disease Control and Prevention. Published February 20, 2024. Accessed September 16, 2024. https://www.cdc.gov/chlamydia/about/?CDC_AAref_Val=https://www.cdc.gov/std/chlamydia/stdfact-chlamydia.htm

2.Sexually Transmitted Infections Surveillance 2022. Centers for Disease Control and Prevention. Published November 7, 2024. Accessed September 16, 2024. p.19 https://www.cdc.gov/sti-statistics/media/pdfs/2024/11/2022-STI-Surveillance-Report-PDF.pdf

3. County Health Status Profiles. *CHSP 2024 Tables 1-29*. California Department of Public Health, Research and Analytics Branch. Accessed September 12, 2024. https://www.cdph.ca.gov/Programs/CHSI/pages/county-health-status-profiles.aspx

4. Centers for Disease Control and prevention. *Sexually Transmitted Infections Surveillance 2022. Atlanta: US Department of Health and Human Services; 2024. Accessed September 16, 2024.* https://www.cdc.gov/std/statistics/2022/default.htm

5. CalREDIE Data Distribution Portal. California Department of Public Health. Data Accessed September 9, 2024.

6. Reportable Diseases and Conditions. California Department of Public Health. Published August 2022. Accessed October 1, 2024. https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/ReportableDiseases.pdf Accessed September 2, 2024

GONORRHEA

Why It Is Important:

Gonorrhea is a common sexually transmitted infection (STI) that can have many serious health consequences if left untreated, including damage to the reproductive system, serious health problems for babies born to women with untreated gonorrhea, and even infertility.[1] Gonorrhea infections can also increase the risk of getting or transmitting HIV.[1] Gonorrhea is curable with proper treatment, but it is becoming increasingly harder to treat due to emerging drug-resistant strains of the disease.[1] Nationwide, gonorrhea cases increased by 11.1% from 2018 to 2022.[2] Gonorrhea cases declined for the first time in at least a decade from 2021 to 2022.[2] In California, gonorrhea cases increased 20.7% from 2017 to 2021.[3]

Where We Are Now:

Rates of gonorrhea infections appear to be lower in Sutter County compared to California and the US (Table 1).[4] From 2018 to 2019, Sutter County has seen an overall increasing trend in gonorrhea infections; however, this rate dropped in 2020 and continued to drop through 2022 (Figure 1).[5] This decrease in gonorrhea infections in 2020 could be linked to a variety of factors, such as the improvements in the effectiveness of prevention strategies, and/or decreased STI screenings due to the COVID-19 pandemic. However, for Sutter County to continue experiencing reduced rates of infections, providing evidence-based prevention strategies and programs is essential.

Table 1: Gonorrhea Infections per 100,000 (2021)[2–4]

Location	Cases per 100,000
California	230.9
Sutter County	147.8
United States	213.9

Those Most Affected:

In Sutter County, gonorrhea is diagnosed almost equally among men and women (Figure 1).[5] Unlike chlamydia, men with gonorrhea are more likely to have symptoms and thus get tested and diagnosed. Gonorrhea is also very common in younger people. In Sutter County from 2018-2022, 25% of all gonorrhea infections diagnosed were among people younger than 23 years, and 75% of all gonorrhea infections diagnosed were among people younger than 30 years.[5] Black and non-Hispanic White Sutter County residents are also more likely to be diagnosed with gonorrhea.[5]

Figure 1: Gonorrhea among Sutter County Residents, 2018-2022[5]

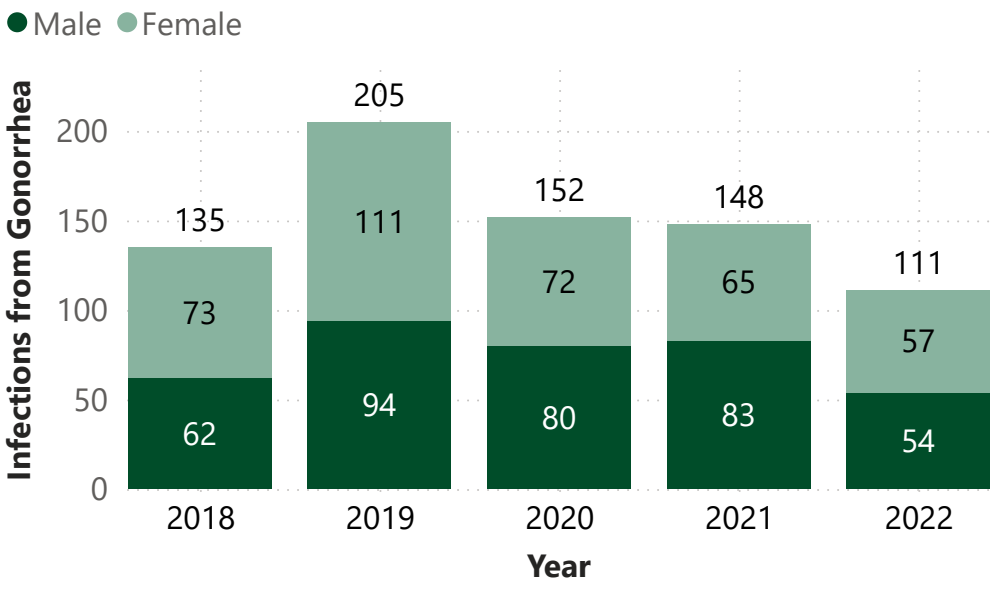
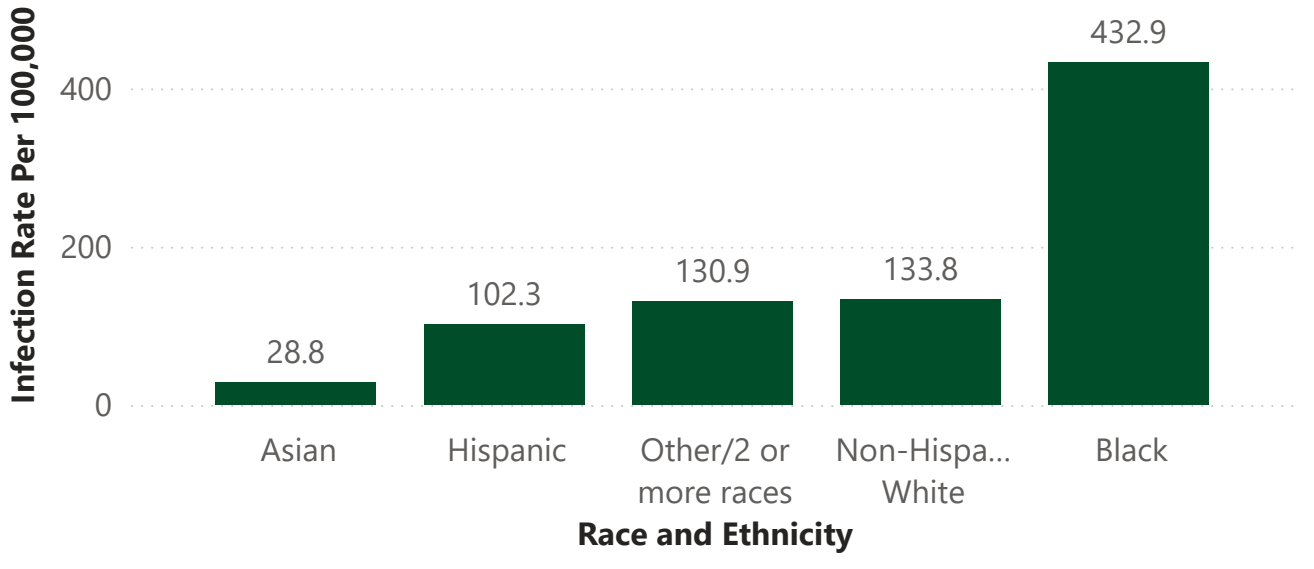


Figure 2: Average Yearly Rates of Gonorrhea in Sutter County by Race/Ethnicity, 2018-2022[5]



References

1. About Gonorrhea. Centers for Disease Control and Prevention. Published February 15, 2024. Accessed September 17, 2024. https://www.cdc.gov/gonorrhea/about/?CDC_AAref_Val=https://www.cdc.gov/std/gonorrhea/stdfact-gonorrhea.htm

2. Sexually Transmitted Infections Surveillance 2022. Centers for Disease Control and Prevention. Published November 7, 2024. Accessed September 16, 2024. https://www.cdc.gov/sti-statistics/media/pdfs/2024/11/2022-STI-Surveillance-Report-PDF.pdf

3. All STIs Summary Table (Excel). 2021 STI surveillance Report. California Department of Public Health, STD Control Branch. Accessed September 11, 2024. https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/STD-Data.aspx

4. Sexually Transmitted Diseases in California 2021 Executive Summary. California Department of Public Health. Accessed September 11, 2024. https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/2021-STD-Surveillance-Executive-Summary.pdf

SYPHILIS

Why It Is Important:

Syphilis is a major public health issue in California and nationwide. Syphilis can affect the heart, brain, and other organs of the body.[1] There are multiple stages of syphilis, including primary, secondary, latent, and tertiary.[1] Syphilis can also be transmitted from mother to child, leading to congenital syphilis.[1] Babies born with syphilis have serious health problems, including premature birth, low birth weight, birth defects, blindness, hearing loss, stillbirth, and death.[1] Nationally, syphilis cases have increased 78.9% from 2018 to 2022.[2] In California, total early syphilis increased 26% and congenital syphilis increased 83% from 2017 to 2021.[3]

Where We Are Now:

Syphilis has increased at an alarming rate in Sutter County (Figure 1).[4] Syphilis diagnoses were 3.3 times higher in 2021, compared to 2018 (Figure 1).[4] Furthermore, 2021 has been the highest year of reported syphilis diagnosis in Sutter County.[4] Sutter County had 41.4 cases of primary and secondary syphilis per 100,000 residents in 2021, which is more than both the U.S. (16.2 cases per 100,000 residents) and California (22.3 cases per 100,000 residents).[2,3] However, in Sutter County, there was a decrease in Syphilis* cases in 2022.[4]

Table 1: Syphilis (All Stages) Infections per 100,000 (2021)[2–3,5–6]

Syp Location	Incidence per 100k
California	79.3
Sutter County	108.1
United States	52.3

Those Most Affected:

In Sutter County, there were more cases of syphilis among women (55 new cases) compared to men (51 new cases) in 2022.[4] Prior to 2020, syphilis was mostly diagnosed in men.[4] From 2018-2022, roughly 8% of women diagnosed with syphilis were pregnant.[4] From 2018 to 2022, Black and non-Hispanic White residents were more likely to be diagnosed with syphilis, and about 60% of all syphilis diagnoses were in people aged 26-42.[4]

Figure 1: Syphilis among Sutter County Residents, 2018-2022[4]*

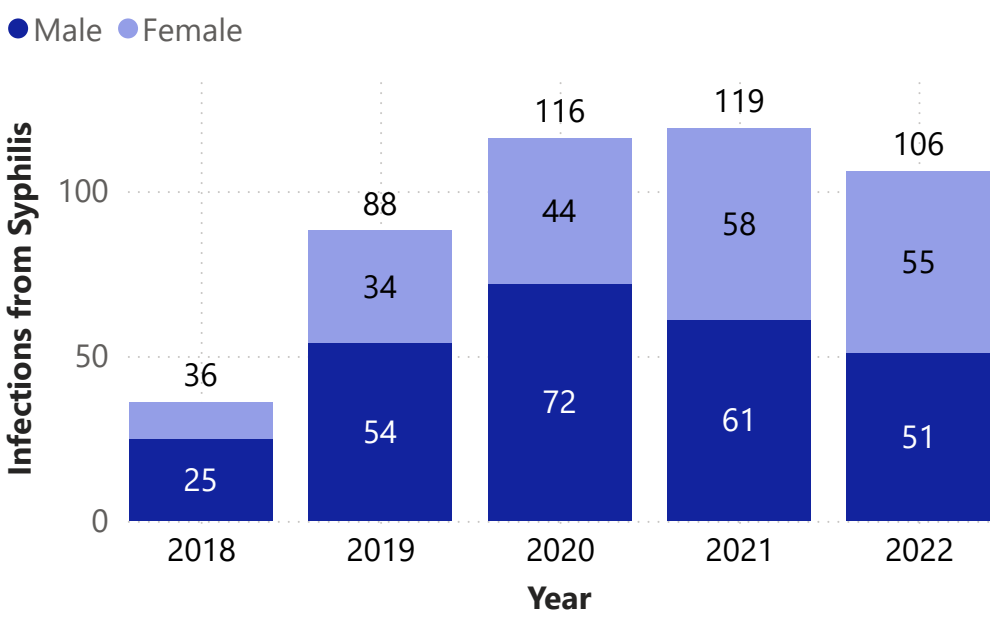
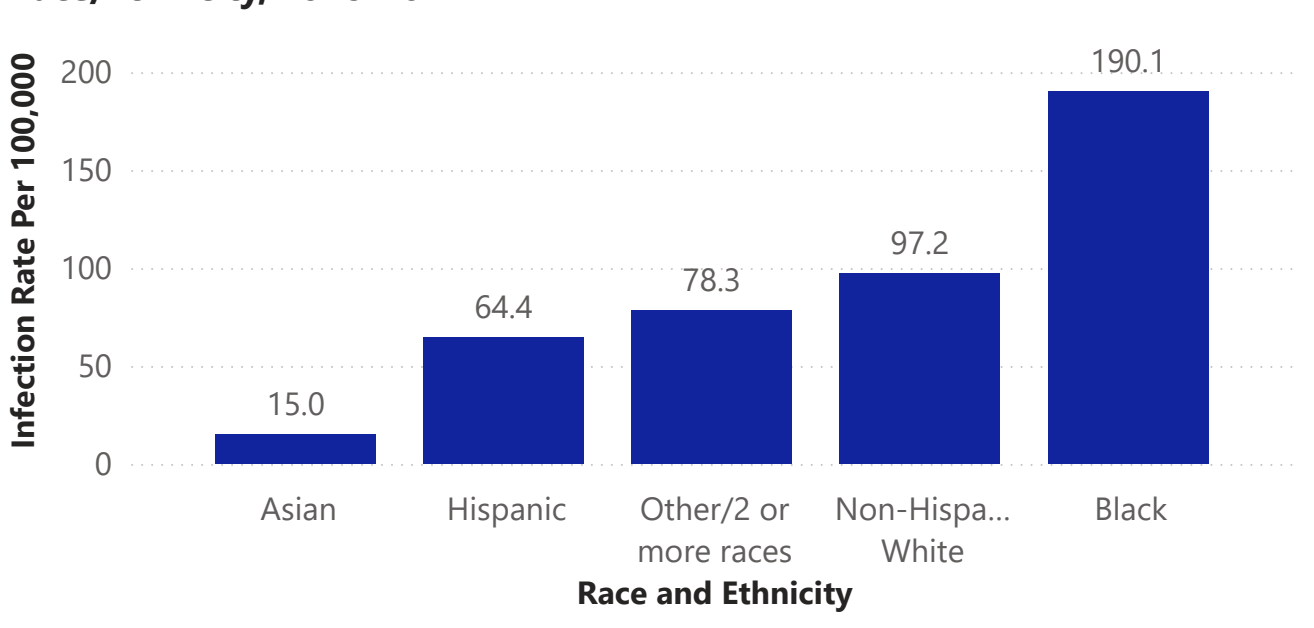


Figure 2: Average Yearly Rates of Syphilis in Sutter County by Race/Ethnicity, 2018-2022[4]*



*Note: Syphilis incidence includes cases classified in CalRedie as: Syphilis (Early non-primary non-secondary), Syphilis (Primary), Syphilis (Secondary), Syphilis (Unknown Duration or Late), and Syphilis Stage Unknown/Reactor.

References

1. STD Facts - Syphilis. Published December 8, 2023. Accessed September 17, 2024. https://www.cdc.gov/syphilis/about/?CDC_AAref_Val=https://www.cdc.gov/std/syphilis/stdfact-syphilis.htm

2. Sexually Transmitted Infections Surveillance 2022. Centers for Disease Control and Prevention. Published November 7, 2024. Accessed September 16, 2024. https://www.cdc.gov/sti-statistics/media/pdfs/2024/11/2022-STI-Surveillance-Report-PDF.pdf

3. All STIs Summary Table (Excel). 2021 STI surveillance Report. California Department of Public Health, STD Control Branch. Accessed September 11, 2024. https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/STD-Data.aspx

4. *CalREDIE Data Distribution Portal.* California Department of Public Health. Data Accessed September 9, 2024.

5. Sexually Transmitted Infections (STIs) reach epidemic levels in California. California Department of Public Health. Accessed September 16, 2024. https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/2021-STI-Snapshot.pdf

6.State of California, Department of Finance, E-6. Population Estimates and Components Change by County - July 1, 2020-2023. Accessed September 16.2024.

CHRONIC HEPATITIS C

Why It Is Important:

Hepatitis C is a liver infection caused by the hepatitis C virus and is spread through contact with blood from an infected person.[1] Today, most people become infected by sharing needles or other equipment used to prepare or inject drugs.[1] Advanced screenings for hepatitis C in blood banks has made the risk of transmission through blood products and transfusions rare, however, people who have had blood transfusions, received blood products, or organ transplants before June 1992 when hepatitis C screenings became available, are at an increased risk of becoming infected with this virus.[2] Hepatitis C infection can range from mild illness lasting a few weeks to lifelong illnesses that can result in serious health problems such as liver cancer, cirrhosis and even death.[2] Getting tested for hepatitis C is important as timely treatment can cure most people with hepatitis C in 8 to 12 weeks.[3] More than half of hepatitis C infections will become chronic.[2] While there is no vaccine for hepatitis C, it can be prevented by avoiding sharing needles or syringes, using personal items that may come into contact with an infected person's blood like razors, nail clippers or toothbrushes and avoiding getting tattoos or body piercings from an unlicensed facility or in an informal setting.[2]

Where We Are Now:

In 2022, nationally, there were a total of 93,805 new chronic hepatitis C cases (a case rate of 40.2 cases per 100,000).[4] In the same year, Sutter County had a chronic hepatitis C case rate of 39.6 per 100,000, which is slightly lower than the national rate.[5]

Those Most Affected:

In Sutter County, men are more likely to be diagnosed with chronic hepatitis C, compared to women (Figure 1).[5] From 2020-2022, Sutter County saw a decrease in chronic hepatitis C. In addition, Sutter County non-Hispanic White residents have the highest rate of hepatitis C, followed by Black residents, other/multiracial, Asian, and Hispanic (Figure 2).[5]

Figure 1: Chronic Hepatitis C among Sutter County Residents, 2018-2022[5]

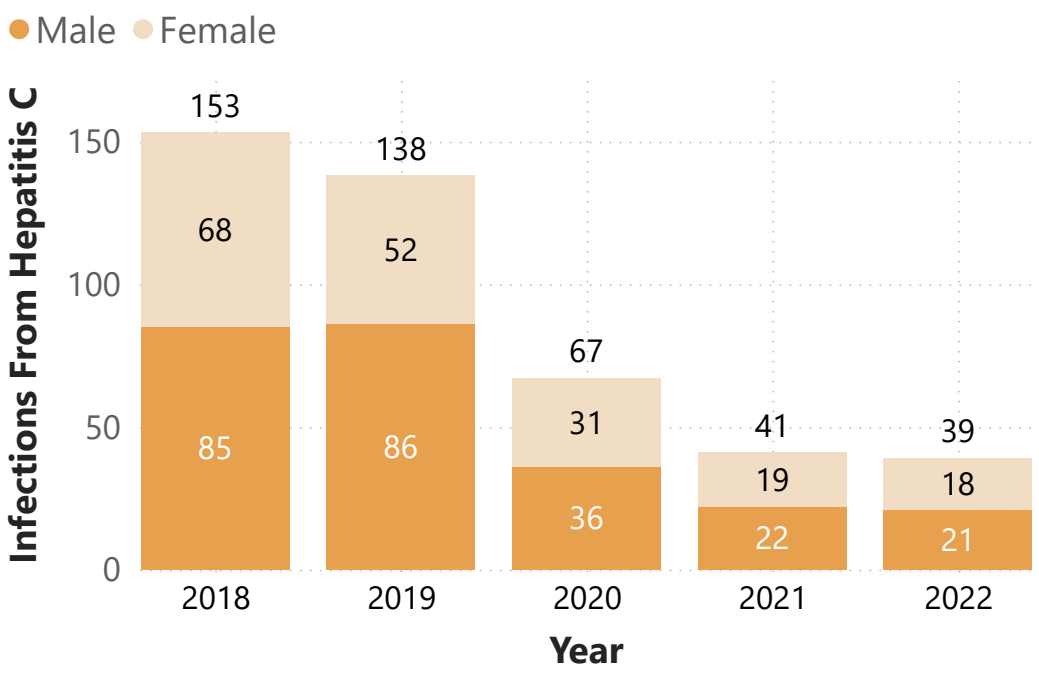
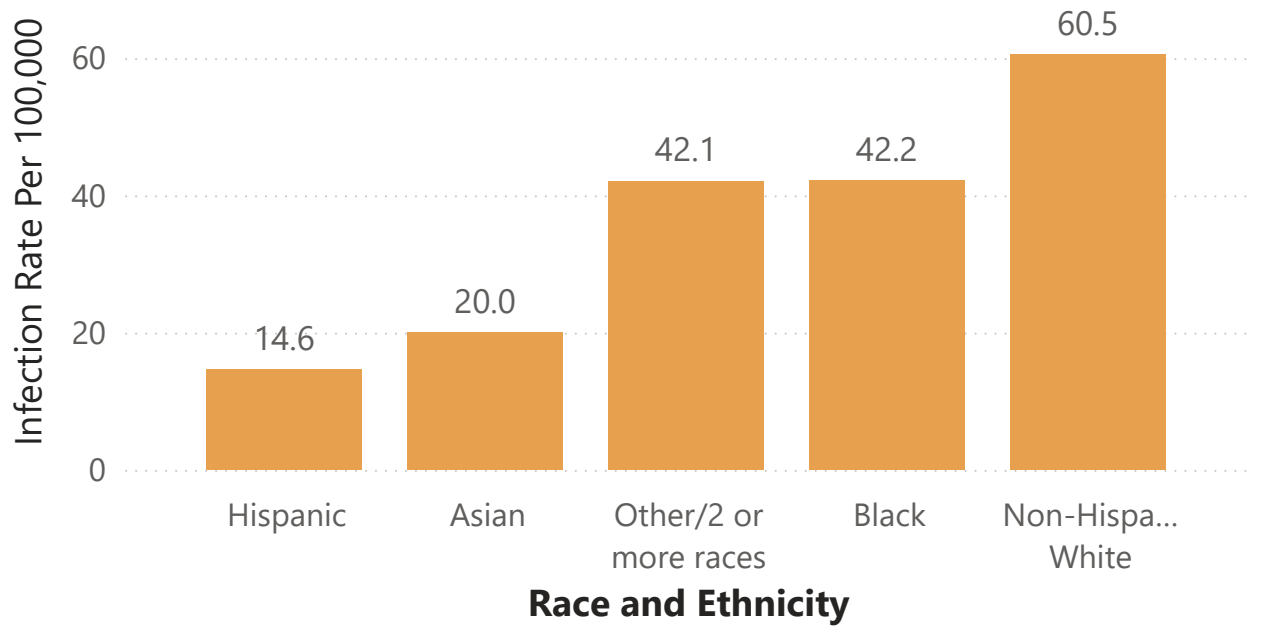


Figure 2: Average Yearly Rates of Chronic Hepatitis C in Sutter County by Race/Ethnicity, 2018-2022[5]



References

1. Hepatitis C. Center for Disease Control and Prevention. Accessed September 16, 2024. https://www.cdc.gov/hepatitis-c/about/index.html
2. Centers for Disease Control and Prevention. *Clinical Overview of Hepatitis C.* Accessed September 17, 2024. https://www.cdc.gov/hepatitis-c/hcp/clinical-overview/?CDC_AAref_Val=https://www.cdc.gov/hepatitis/hcv/hcvfaq.htm
3. California Department of Public Health. Hepatitis C. Accessed March 9, 2022. https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/HepatitisC.aspx
4. Hepatitis C Surveillance 2022. Centers for Disease Control and Prevention. Accessed October 1, 2024. https://www.cdc.gov/hepatitis/statistics/2022surveillance/hepatitis-c/table-3.5.htm
5. *CalREDIE Data Distribution Portal.* California Department of Public Health. Data Accessed September 9, 2024.

TUBERCULOSIS

Why It Is Important:

Tuberculosis (TB) is a lung infection caused by the *Mycobacterium tuberculosis* bacterium.[1] TB is either *latent* or *active*. People with *latent* TB are infected, but the bacterium does not cause symptoms and is not contagious. Someone with *active* TB has symptoms and can spread the disease.[1] TB is very debilitating and may be fatal. Treatment is difficult, taking up to 4 drugs per day, for up to 9 months.[2] TB requires considerable work by a health department with each case requiring daily case management including directly-observed therapy to ensure patients with TB are managed properly, rendered non-infectious, and cured of their disease. Improperly treated TB can become drug resistant, making treatment more difficult and may lead to poor outcomes and increased mortality rates.

Where We Are Now:

From 2020-2022, Sutter County had a lower active TB case rate (1.3 infections per 100,000) than California (4.4 infections per 100,000).[3] Sutter County's case rate was also lower than the U.S. average (2.4 infections per 100,000).[4] From 2018 to 2021, active tuberculosis infections in Sutter County steadily decreased.[5] Then increased slightly in 2022 (Figure 1).[5]

Table 1: Tuberculosis Infections per 100,000 (2020-2022)[3–4]

Location	Cases per 100,000
California	4.40
Sutter County	1.30
United States	2.40

Those Most Affected:

In Sutter County, TB is diagnosed more frequently in women than men; from 2018 to 2022, roughly 58% of all TB cases (both active and latent) were among women.[5] Active TB is usually reactivated from latent TB patients. In addition, 23% of all TB diagnoses were among Asian residents, which is highlighted in Figure 2.[5] There is a higher rates of TB in those born outside the United States.[5] From 2018-2022, Asians were most affected by tuberculosis (latent and active), followed by Blacks, other/multiracial residents, Hispanics, and non-Hispanic White residents.[6]

Figure 1: Active* vs. Latent TB among Sutter County Residents, 2018-2022[5]

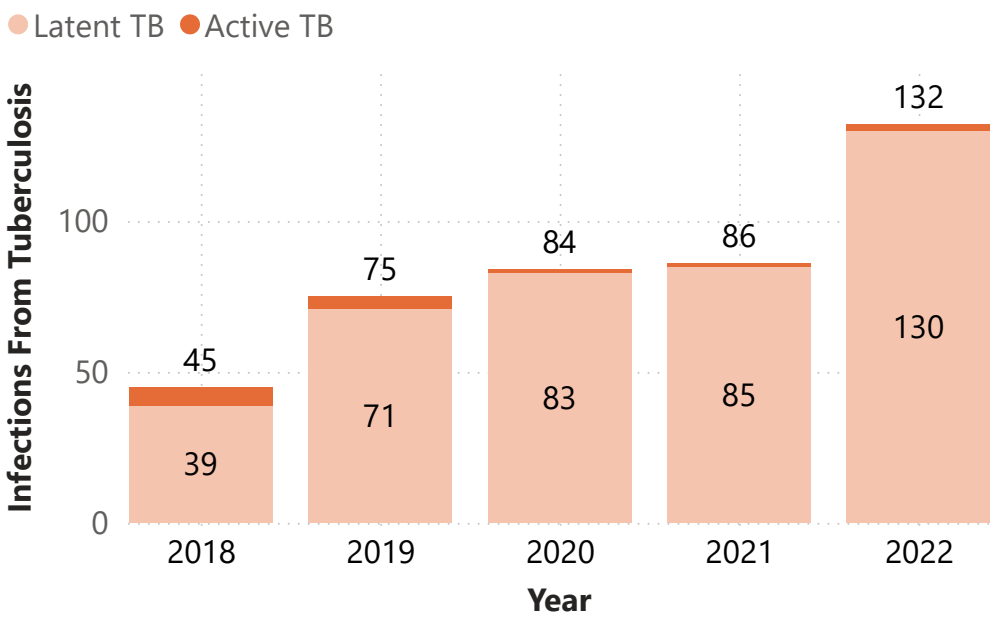
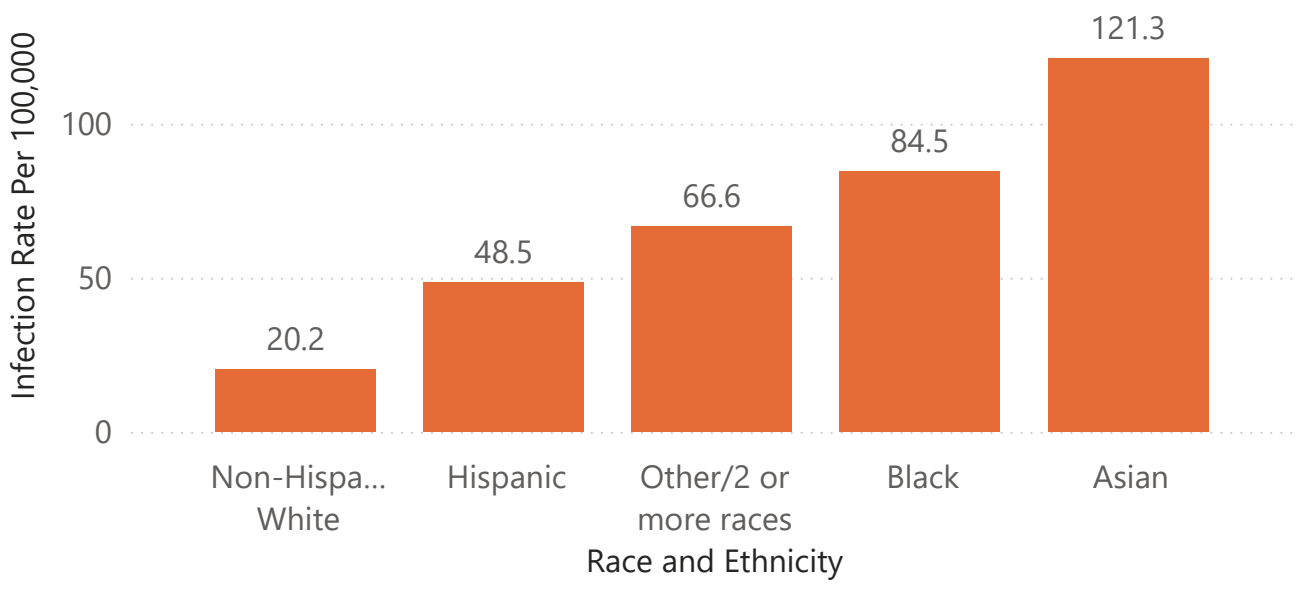


Figure 2: Average Yearly Rates of Tuberculosis (Active and Latent) in Sutter County by Race/Ethnicity, 2018-2022[6]



*Note: Active TB case counts reflect numbers shared publicly by California Department of Public Health, Tuberculosis Control Branch.

References

1. About Tuberculosis. Centers for Disease Control and Prevention. Published June 19, 2019. Accessed September 17, 2024. https://www.cdc.gov/tb/about/?CDC_AAref_Val=https://www.cdc.gov/tb/topic/basics/default.htm

2. Treating Active tuberculosis Disease. Centers for Disease Control and Prevention. Published May 6, 2024. Accessed September 17, 2024. https://www.cdc.gov/tb/treatment/active-tuberculosis-disease.html

3. County Health Status Profiles. *CHSP 2024 Tables 1-29*. California Department of Public Health, Research and Analytics Branch. Accessed September 12, 2024. https://www.cdph.ca.gov/Programs/CHSI/pages/county-health-status-profiles.aspx

4.CDC. Reported Tuberculosis in the United States, 2022. Table 1. Accessed September 16, 2024. https://www.cdc.gov/tb/statistics/reports/2022/table1.htm?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Ftb%2Fstatistics%2Ftbcases.htm

5.California Department of Public Health, Tuberculosis Control Branch, California Tuberculosis Dashboard, Last Modified March 2024. (https://cdph.ca.gov/Programs/CID/DCDC/Pages/TBCB-California-TB-Dashboard.aspx)

6.*CalREDIE Data Distribution Portal.* California Department of Public Health. Data Accessed September 9, 2024.