

HEALTH MATTERS

Riverside University Health System — Public Health
Epidemiology & Program Evaluation



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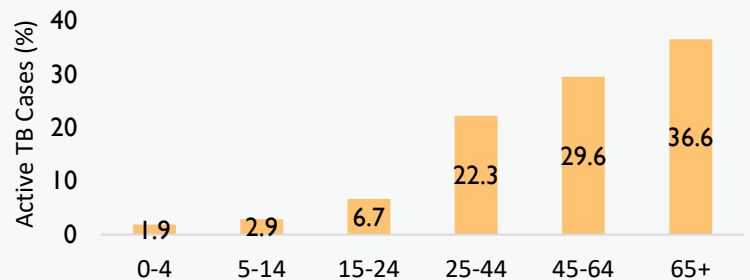
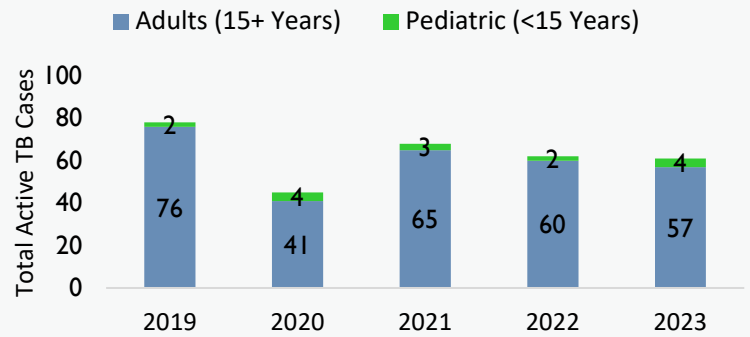
Tuberculosis in Riverside County (2019-2023)

**All data represents years 2019-2023 unless indicated.*

Tuberculosis (TB) is an infectious disease caused by the bacterium *Mycobacterium tuberculosis*. Transmission occurs through airborne droplets, typically when a person with active disease in their upper or lower respiratory system coughs. It is important to distinguish between latent TB infection (LTBI) and active TB disease. Individuals with LTBI are infected with the bacteria but do not exhibit symptoms and are not contagious. However, without appropriate treatment, LTBI can progress to active TB disease, at which point the individual can become infectious depending on the site of infection. Treatment for LTBI is recommended for high-risk populations to mitigate the risk of developing active TB disease.

Tuberculosis cases have decreased 28% since 2019

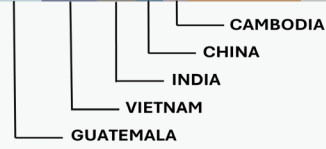
- TB cases decreased 28% since 2019.
- In 2023, TB incidence rate was 2.7 cases per 100,000 compared to 3.2 cases per 100,000 in 2019.
- The lowest number of active TB cases was in 2020. The COVID-19 pandemic, masking, social distancing, reduced traveling, and delayed access to medical services may have resulted in reduced transmission and delayed detection of TB.
- 59% of all active TB cases were male.
- Highest percentage of active TB cases were among residents 65+ years (37%); pediatric cases (<15 years) made up 5% of all cases.
- 11% (34/314) of cases died with active TB and of those who died, 18% (6/34) died before receiving treatment for TB.
- 76% of TB deaths were among cases 40 years and older.
- Two cases of multidrug-resistant TB and one extensively drug-resistant case (resistant to first and second-line treatment) were reported.



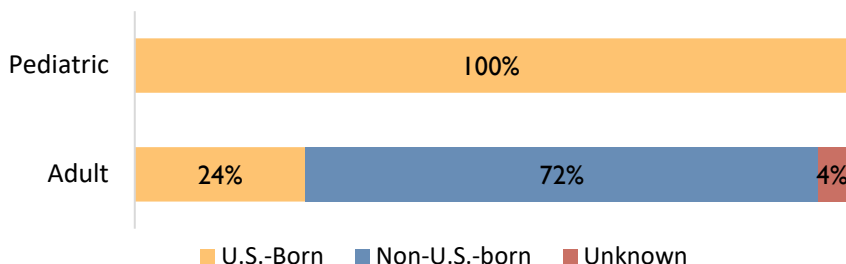
Majority of TB cases were born outside of the United States



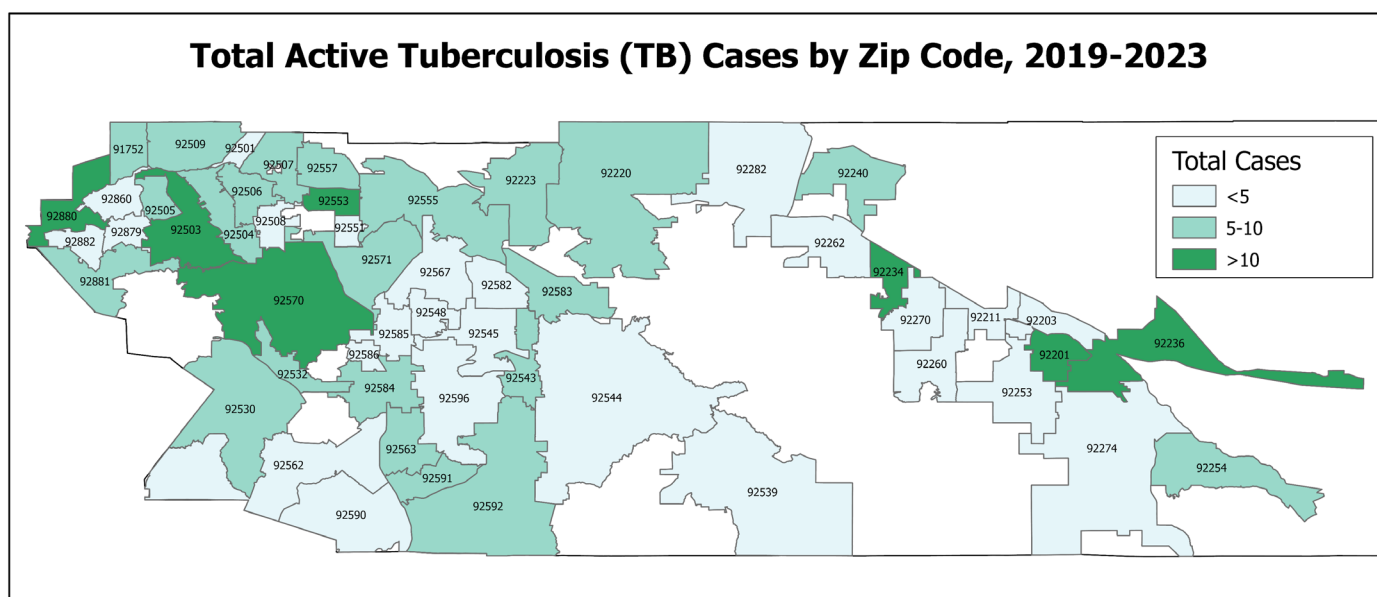
- TB incidence rate among non-U.S.-born (8.3 per 100,000) was 9 times higher than the rate among U.S.-born (0.9 per 100,000).
- Of the five countries with the highest number of non-U.S.-born TB cases, rates were the highest among people born in Vietnam (23.1 per 100,000), Philippines (22.5 per 100,000), India (20.9 per 100,000), Guatemala (18.9 per 100,000), and Mexico (6.7 per 100,000).



- Among U.S.-born tuberculosis cases, 62% were Hispanic (0.9 cases per 100,000 population), 21% were White (0.39 cases per 100,000 population), 8% were Asian (0.93 cases per 100,000 population), and 5% were Black/African-American (0.54 cases per 100,000 population).
- All pediatric TB cases (<15 years) were U.S.-born while 24% of adult TB cases were born in the United States.
- Of the cases with known U.S. arrival dates, 53% were diagnosed with active TB twenty years or more after U.S. arrival and 24% diagnosed with TB five or less years after arrival.



Zip codes with TB cases >10 had lower median household income



- Numbers of active TB cases varied greatly by zip code. However, among zip codes with greater than 10 cases, 71% had household median incomes below the County average.
- Areas with more TB cases could be considered for additional outreach regarding targeted testing and treatment to prevent activation of TB and reduce risk of spread to others.

Certain comorbidities and conditions increase risk of TB

- 52% of cases had one or more comorbidities/conditions that can increase risk of progression from LTBI to TB disease (e.g., diabetes, immune conditions, HIV/AIDS, Hepatitis B, Hepatitis C).
- Among all TB cases, 36% had diabetes at diagnostic evaluation.
- 8% of active TB cases were current or former smokers.
- 4% of active TB cases were among people living with HIV.

References

- Centers for Disease Control and Prevention. Tuberculosis. 2024. <https://www.cdc.gov/tb/index.html>. Accessed August 2024.
- California Department of Public Health TB Control Branch. TB in California: 2023 Snapshot; 2024.
- California Reportable Disease Information Exchange (CalREDIE), Report of Verified Case of Tuberculosis (RVCT); 2019-2023.
- United States Census Bureau, American Community Survey (ACS); 2018-2022.

Riverside County Public Health has established a Latent Tuberculosis Infection (LTBI) initiative with the goal of expanding the number of health care providers involved in identifying patients who are at risk for TB, providing testing and treatment of individuals with latent TB infection when appropriate. Increased participation and intervention will prevent progression of individuals with LTBI to active TB, thus reducing morbidity and mortality from this preventable disease.

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