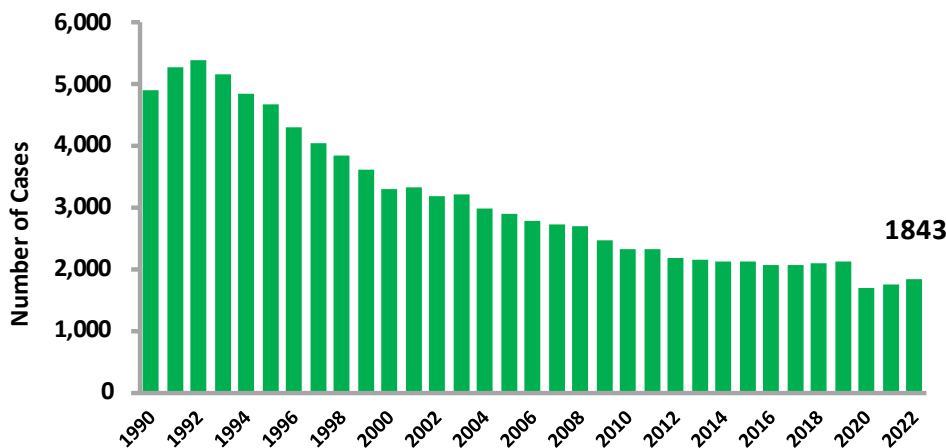


TB in California: 2022 Snapshot

Tuberculosis disease (TB) is an illness caused by the bacteria *Mycobacterium tuberculosis*. TB usually affects the lungs and spreads through the air when a person sick with TB coughs. Not everyone infected with the bacteria becomes sick. People that have been infected but are not sick have latent tuberculosis infection (LTBI). People with LTBI can become sick with TB disease in the future if they do not take treatment for LTBI.

California continues to have a high rate of TB

Reported TB Cases: California, 1990- 2022



- In 2022, **1,843 new TB cases** were reported, a five percent increase compared with 1,750 in 2021.
- California's annual TB incidence was 4.7 cases per 100,000 persons; **nearly double the national incidence rate.**
- Despite case increases

in 2021 and 2022, TB cases remained 13% lower compared with 2019 (before the COVID-19 pandemic) when there were 2,110 TB cases reported.

- Medical and societal **costs of TB reached \$217 million** in California in 2022.
- TB cases were reported in 45 of California's 61 (74%) local health jurisdictions. Of all jurisdictions, 20 (33%) jurisdictions reported 1–4 cases.
- **The vast majority of TB cases (86%) were attributable to progression of LTBI** to active TB, while an estimated 3% of cases were in persons who arrived in California from outside the United States with active TB disease, and another 11% resulted from recent transmission.
- In 2022, there were 4 new TB outbreaks and 14 ongoing outbreaks in 7 jurisdictions, each involving at least 4 persons.
- More than 2 million Californians (6% of the population) have LTBI. Without treatment LTBI can progress to active TB.

TB kills more than 200 Californians each year

- In 2020, **226 (13% of TB cases) people with TB died**; the highest proportion since 1993.
- During 2018–2020, 681 people with TB (12% of TB cases) died. Of those, 22% died before receiving TB treatment.

TB in California: 2022 Snapshot

People born outside the United States bear the largest burden of TB

- The TB rate among people born outside the U.S. (14.4 per 100,000) was **13 times higher** than the rate among U.S.-born persons (1.1 per 100,000).

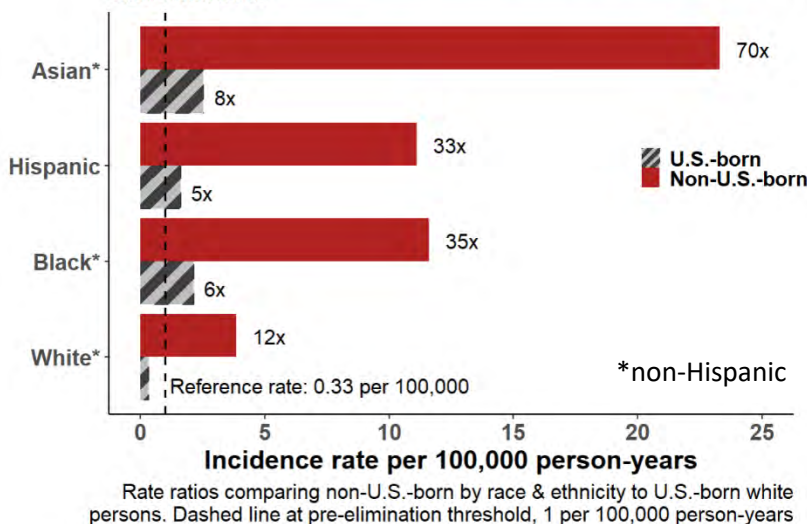
Proportion of TB Cases by National Origin, California, 2022



- Half of cases in non-U.S.-born persons occurred more than 20 years after arrival in the U.S.
- Among the 5 non-U.S. countries of birth with the most TB cases, the TB rate was highest among people born in Vietnam (38.2 per 100,000) and Philippines (35.3 per 100,000), followed by India (17.5 per 100,000), China (17.3 per 100,000) and Mexico (10.9 per 100,000).

Severe disparities by race, ethnicity, and place of birth are increasing

TB Incidence Rates by Place of Birth, Race and Ethnicity California 2022



- Nearly half (49%) of California's TB cases occurred in Asian* persons, and 40% of cases occurred in Hispanic persons.
- Rates of TB among people born outside the U.S. that are Asian,* Black,* or Hispanic were **many times higher** than White* people born in the U.S. These disparities for Asian* and Hispanic people increased in 2022.

▪ Rates in each non-U.S.-born racial and ethnic group were higher than among U.S.-born persons in the same group. Among U.S.-born people, Asian*, Black*, and Hispanic persons had higher rates than White* persons.

Diabetes and other conditions that increase TB risk are common

- 40% of people with TB had diabetes mellitus, end stage renal disease, HIV infection, or another condition that can increase the risk of progression from latent to active TB disease.
- The most common comorbidity was diabetes mellitus, occurring in 31% of cases.
- HIV infection increases the risk for active TB disease, as well as for death with TB.
- In 2022, 89% of patients with TB were tested for HIV. Of those tested, 74 (4.6%) were HIV-positive. The proportion of cases with HIV has ranged from 3.2% to 4.6% since 2013.
- Among 42 people with HIV who had a known CD4 count, 86% had a CD4 count under 200, indicating advanced HIV infection.

TB in California: 2022 Snapshot

TB affects children

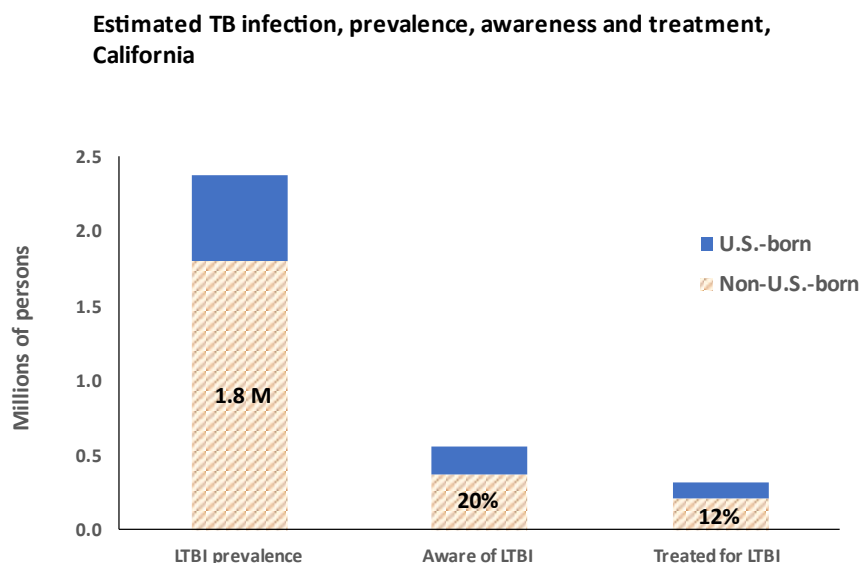
- TB in children is an indication of recent transmission particularly when it involves children under 5 years old. These young children are also vulnerable to the most severe forms of TB such as disseminated TB and TB of the central nervous system (CNS).
- In 2022, there were 29 cases of TB among children under 5 years old.
- During 2016-2020, the most recent period with complete data, 4 children under 5 years died.

Multidrug-Resistant TB continues

- Multidrug-resistant (MDR) TB is TB resistant to the two most potent first line drugs, isoniazid and rifampin. According to CDC, extensively drug-resistant (XDR) TB is MDR TB additionally resistant to fluoroquinolones and injectables, bedaquiline, or linezolid.
- In 2022, there were 16 (0.9%) MDR TB cases in California, an increase from 11 cases (0.6%) during 2021. During 2017-2022, three XDR cases were reported.
- The proportion of TB cases in California that are MDR has remained constant (1–2%) since drug susceptibility data began being systematically collected in 1993.

TB can be prevented with LTBI treatment

- More than 2 million Californians have LTBI. Approximately 1.8 million were born outside the U.S., of whom only 20% are aware of their LTBI and only 12% have been treated.
- Because an estimated 86% of cases occur because of progression from LTBI, treating LTBI will prevent many TB cases in California.



Estimated using National Health and Nutrition Examination Survey, 2011 -2012 applied to the California population.

- The U.S. Preventive Services Task Force recommends testing and treating for LTBI ([USPSTF LTBI Screening webpage](#)).
- Risk assessment tools are available for use by medical providers to identify persons at risk for LTBI for testing and treatment ([CDPH Risk Assessment webpage](#)).
- Guidelines recommending shorter treatment for LTBI are available for California ([CTCA LTBI Guidelines webpage](#)) and the U.S. ([CDC LTBI Guidelines webpage](#)).