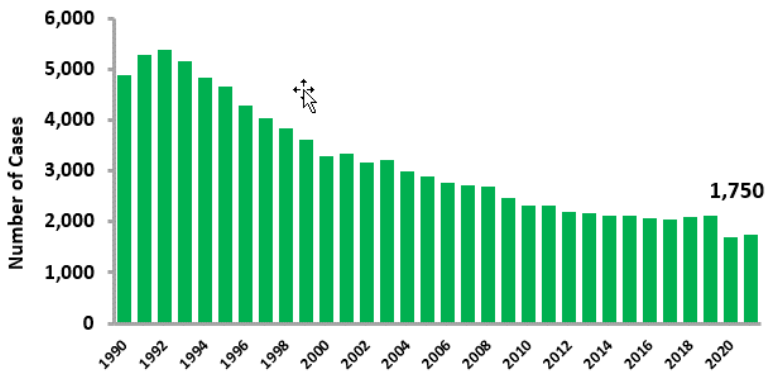


TB in California: 2021 Snapshot

Tuberculosis (TB) disease 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 are not treated.

California continues to have a high rate of TB

Reported TB Cases: California, 1990–2021



- In 2021, California reported **1,750** new TB cases, a three percent increase compared with 1,706 in 2020.
- California’s annual TB incidence was **4.4** cases per 100,000 persons; nearly double the national incidence rate.
- The overall decrease in TB cases since 2019 is likely at least partially due to the COVID-19 pandemic. Possible reasons include fewer cases in persons born outside the U.S. because of decreased international travel and immigration during the pandemic, fewer patients seeking care or receiving a diagnosis of TB, and decreased transmission of TB due to masking and other COVID

restrictions. CDPH expects further increases in TB cases as pandemic conditions recede.

- Medical and societal costs of TB reached **\$203 million** in California in 2021.
- TB cases were reported in 42 of California’s 61 (69%) local health jurisdictions. Of all jurisdictions, 15 (25%) jurisdictions reported 1-4 cases.
- The vast majority of TB cases (87%) were attributable to progression of LTBI to active TB while an estimated 3% of cases were in persons who arrived in California with active TB disease from outside the United States, and another 10% resulted from recent transmission.
- In 2021, there were 2 new TB outbreaks and 12 ongoing outbreaks in 8 jurisdictions, each involving at least 4 persons.
- During 2017-2019, 657 persons (10.5% of TB cases) died with TB. Of those, 20% died before receiving TB treatment.
- More than **2 million** Californians (6% of the population) have LTBI. Without treatment LTBI can progress to active TB.

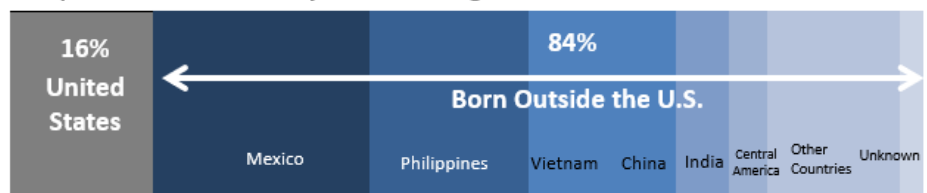
TB and COVID-19

- Among 2210 persons with TB disease during September 2019-December 2020, 225 (10%) also had COVID-19 infection identified in 2020. TB and COVID-19 occurred in close succession (within 120 days) among 91 cases.
- Among the 91 people with TB/COVID-19, 60% were Hispanic and 45% resided in low health equity census tracts, highlighting health disparities in both COVID-19 and TB. People with TB and COVID-19 had higher mortality than those with either disease alone.

Persons Born Outside the United States

- The TB rate among persons born outside the U.S. (13.5 per 100,000) was **12 times** higher than the rate among U.S.-born persons (1.1 per 100,000).
- **Half** of TB cases in non-U.S.-born persons occurred more than 20 years after arrival in the U.S.

Proportion of TB Cases by National Origin, California, 2021

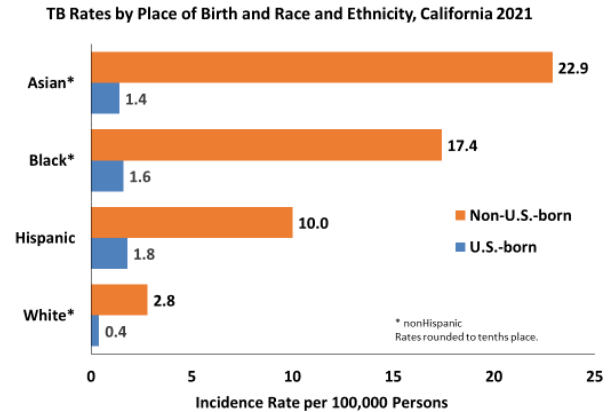


TB in California: 2021 Snapshot

Severe Racial and Ethnic Disparities

- The rates among people born outside the U.S. that are Asian* and Black* were **52 and 40 times higher** respectively than White* people born in the U.S. The rate among non-U.S.-born Hispanic people was 23 times that of U.S.-born White* people.
- Rates in each non-U.S.-born racial and ethnic group were higher than among U.S.-born persons in the same group.
- Nearly half (49%) of California's TB cases occurred in Asian* persons, and 41% of cases occurred in Hispanic persons.

* nonHispanic



Comorbidities

- **40%** of adult TB cases 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 (30% of adult cases).
- HIV infection increases the risk of progression from LTBI to active TB disease, as well as for death with TB.
- In 2021, 87% of patients with TB were tested for HIV. Of those tested, 57 (**3.7%**) were HIV-positive, continuing a decline from 101 (5.4%) in 2011, the first year these data were reported in California on the TB case report form.

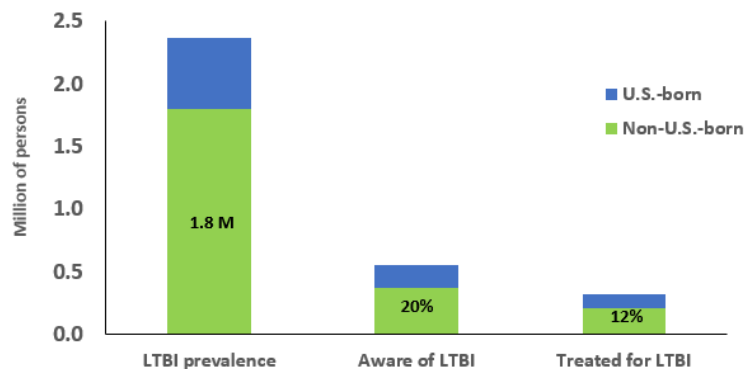
Multidrug-Resistant TB

- Multidrug-resistant (MDR) TB is TB resistant to the two most potent first line drugs, isoniazid and rifampin. Extensively drug-resistant (XDR) TB is MDR TB additionally resistant to two classes of drugs, fluoroquinolones and injectables.
- Patients with MDR and XDR TB generally have poorer outcomes.
- In 2021, there were **11 (0.6%)** MDR TB cases in California, compared to 35 (1.5%) reported in 2011.
- Despite a worldwide increase in MDR TB, 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.
- Since 1993, the start of routine tracking of drug resistance, 25 XDR TB cases have been reported in California. During 2017-2021, three XDR cases were reported.

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 87% of cases occur because of progression from LTBI, treating LTBI will prevent many TB cases in California.
- The U.S. Preventive Services Task Force recommends testing and treating for LTBI ([USPSTF LTBI Screening](#)).
- [Risk assessment tools](#) are available for use by medical providers to identify persons at risk for LTBI for testing and treatment.
- New guidelines recommending shorter treatment for LTBI are now available for California ([CTCA LTBI Guidelines](#)) and the U.S. ([CDC LTBI Guidelines](#)).

Estimated TB infection, prevalence, awareness and treatment, California, 2021



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