

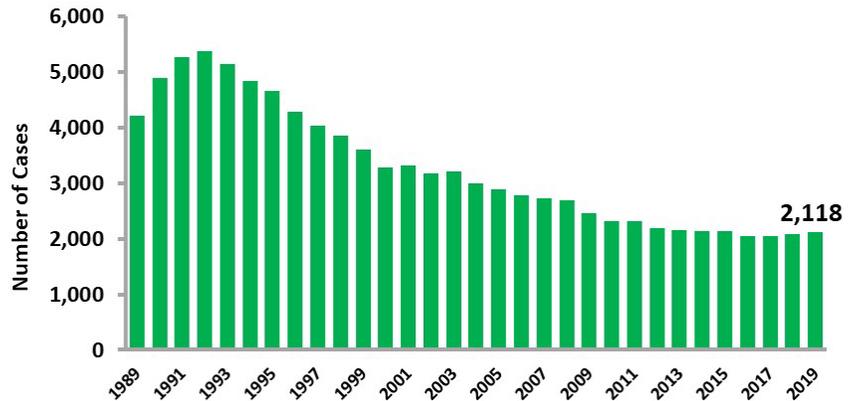
TB in California: 2019 Snapshot

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.

Overview: TB increased in 2019

- In 2019, California reported **2,118** new TB cases, a one percent increase compared with 2,097 cases in 2018 and the most cases reported since 2015.
- California's annual TB incidence was **5.3** cases per 100,000 persons; nearly double the national incidence rate of 2.7.
- Medical and societal costs of TB reached more than **\$210 million** in California in 2019.
- TB cases were reported in 41 of California's 61 (67%) local health jurisdictions. Of those, 11 (18%) jurisdictions reported 1-4 cases.
- An estimated 8% of cases were imported from outside the United States, 12% resulted from recent transmission, and 80% were attributed to progression of LTBI to active TB.
- In 2019, there were 8 new TB outbreaks and 3 ongoing outbreaks reported in 8 jurisdictions, each involving at least 4 persons.
- During 2015-2017, 642 persons (10% of TB cases) died with TB. Of persons who died with TB, 18% died before receiving TB treatment.
- More than **2 million** Californians (6% of the population) have LTBI. Without treatment LTBI can progress to active TB.

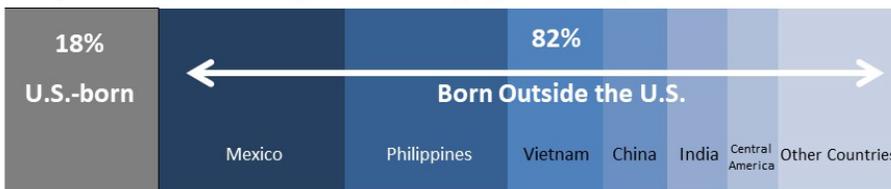
Reported TB Cases: California, 1989–2019



Persons Born Outside the United States

- The TB rate among persons born outside the U.S. (16.0 per 100,000) was **12 times** higher than the rate among U.S.-born persons (1.3 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, 2019



Older Adults and Children

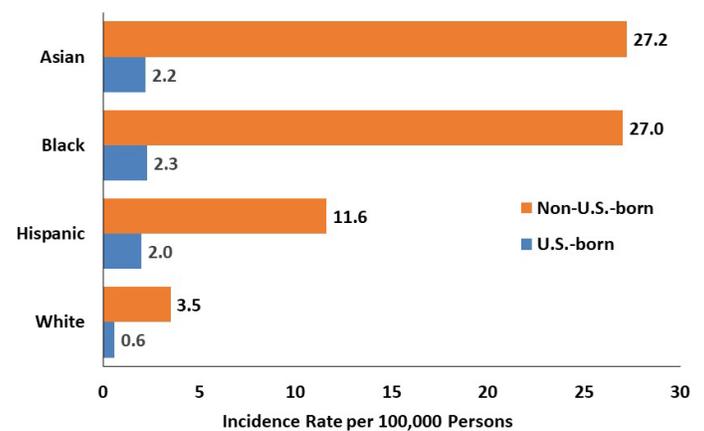
- The proportion of TB cases in older adults is growing. In 2019, 36% of TB cases were reported in persons 65 years of age or older, compared to 25% in this age category in 2010.
- More than **250** persons age 80 or older were diagnosed with TB in 2019.
- There were **29** TB cases among children less than 5 years of age in 2019, a decrease from 55 cases in 2010.

TB in California: 2019 Snapshot

Racial/Ethnic Disparities Persist

- The rates among Asians and Blacks born outside the U.S. were **45 times higher** than of U.S.-born whites. The rate among non-U.S.-born Hispanics was 19 times that of U.S.-born whites.
- Rates in each non-U.S.-born racial and ethnic group were higher than among U.S.-born persons in the same group.
- One half (50%) of California's TB cases occurred in Asians, up from 47% in 2010.

TB Rates by Place of Birth and Race/Ethnicity, 2019



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 (29% of adult cases).
- HIV infection increases the risk of progression from LTBI to active TB disease, as well as for death with TB.
- In 2019, 86% of patients with TB were tested for HIV. Of those tested, 68 (3.7%) were HIV-positive, down from 100 (5.6%) in 2011, the first year these data were reported in California on the TB case report form.

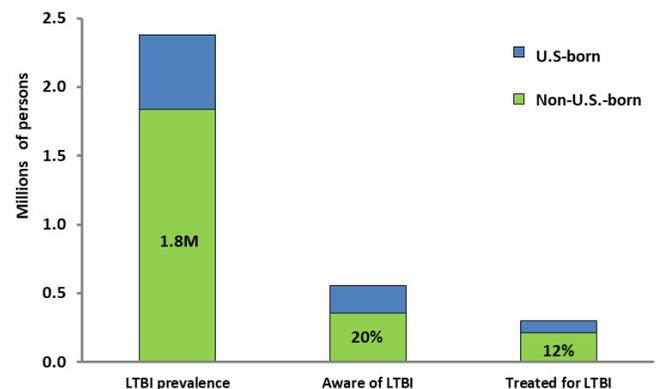
Drug-Resistant TB

- 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 second line drugs, fluoroquinolones and injectables.
- Patients with MDR and XDR TB generally have poorer outcomes.
- In 2019, there were 17 (1.1%) MDR TB cases in California, compared to 23 (1.3%) reported in 2010.
- 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.

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 infection and only 12% have been treated.
- Because an estimated 80% of cases progress from LTBI, treating LTBI will prevent many TB cases in California.
- [Risk assessment tools](#) are available for use by medical providers to identify persons at risk for LTBI for testing and treatment (<https://www.cdph.ca.gov/TBRiskAssessment>).
- New guidelines recommending shorter treatment for LTBI are now available for California (<https://ctca.org/wp-content/uploads/2018/12/LTBI-Guidelines-2018-Revision-FINAL.pdf>) and US (https://www.cdc.gov/mmwr/volumes/69/rr/rr6901a1.htm?s_cid=rr6901a1_x).

Estimated latent TB infection prevalence, awareness and treatment, California, 2019



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