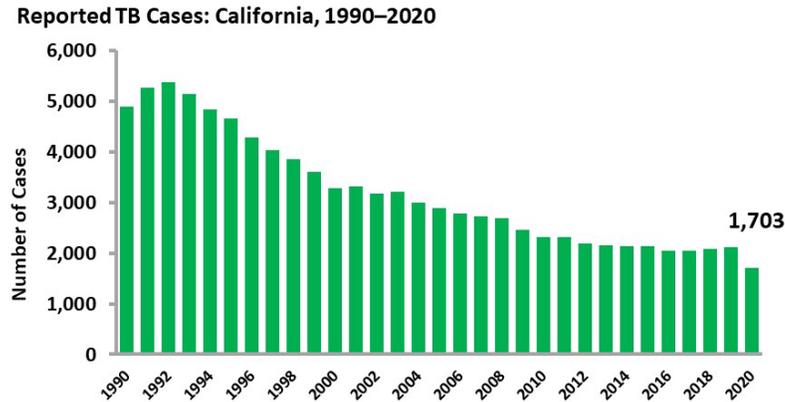


TB in California: 2020 Snapshot

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 decreased in 2020



- In 2020, California reported **1,703** new TB cases, a nineteen percent decrease compared with 2,114 cases in 2019 and the biggest percent decrease since 1981.
- California’s annual TB incidence was **4.3** cases per 100,000 persons.
- Although the specific causes of the single year decline are unknown, it is likely that at least some of the decrease is related to the COVID-19 pandemic. Examples may include decreased detection of TB because of fewer patients seeking care or fewer TB

diagnoses made when they sought care, decreased immigration because of travel restrictions or economic conditions, decreased transmission of TB because of masking and reduced movement outside of households, and changes in TB prevention activities that also lead to TB diagnoses.

- Medical and societal costs of TB reached **\$180 million** in California in 2020.
- TB cases were reported in 43 of California’s 61 (69%) local health jurisdictions. Of all jurisdictions, 12 (19%) jurisdictions reported 1-4 cases.
- The vast majority of TB cases (85%) were attributable to progression of LTBI to active TB while an estimated 5% 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 2020, there were 3 new TB outbreaks and 7 ongoing outbreaks reported in 6 jurisdictions, each involving at least 4 persons.
- During 2016-2018, 661 persons (11% 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.

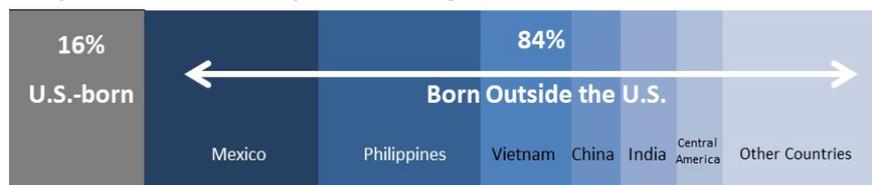
TB and COVID-19

- Among persons with TB disease in 2020, 138 (8.1%) also had COVID-19 infection identified in 2020. TB and COVID-19 occurred within 120 days among 80 cases.
- Most persons who had both TB and COVID-19 in 2020 were Hispanic (n=80, 58.0%) or Asian (n=47, 34.1%), and 117 (84.8%) were born outside of the U.S. This demonstrates overlap of communities disproportionately affected by COVID and TB.

Persons Born Outside the United States

- The TB rate among persons born outside the U.S. (13.2 per 100,000) was **14 times** higher than the rate among U.S.-born persons (1.0 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, 2020

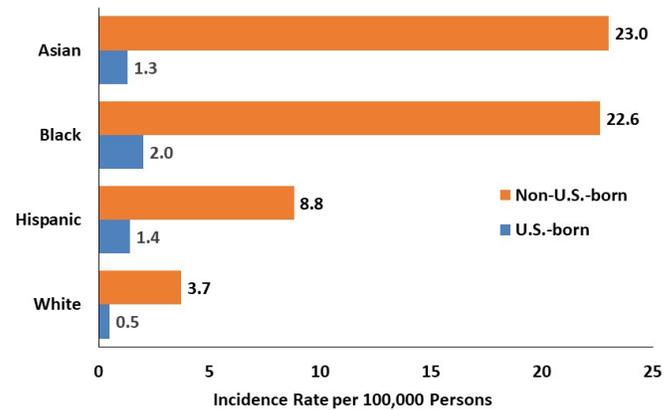


TB in California: 2020 Snapshot

Racial/Ethnic Disparities Persist

- The rates among Asians and Blacks born outside the U.S. were **50 and 51 times higher** than of U.S.-born whites respectively. The rate among non-U.S.-born Hispanics was 20 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.
- More than half (52%) of California's TB cases occurred in Asians, up from 47% in 2010.

TB Rates by Place of Birth and Race/Ethnicity, 2020



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, 50 (3.4%) 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.

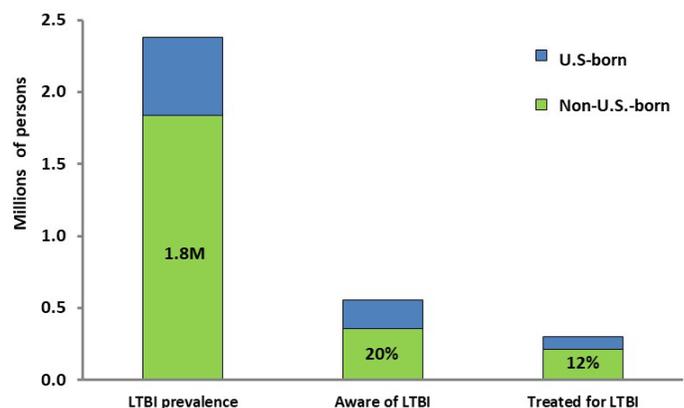
Multidrug-Resistant TB

- 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 second line drugs, fluoroquinolones and injectables.
- Patients with MDR and XDR TB generally have poorer outcomes.
- In 2020, there were 11 (1.0%) MDR TB cases in California, compared to 25 (1.4%) 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 LTBI and only 12% have been treated.
- Because an estimated 85% of cases occur because of progression 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 the U.S. (https://www.cdc.gov/mmwr/volumes/69/rr/rr6901a1.htm?s_cid=rr6901a1_x).

Estimated latent TB infection prevalence, awareness and treatment, California, 2020



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