

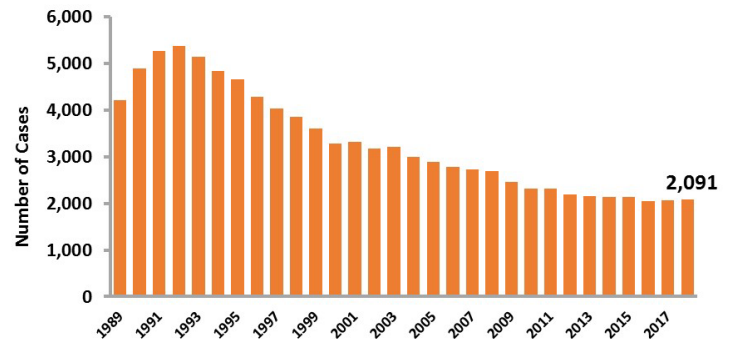
TB in California: 2018 Snapshot

Active tuberculosis (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 active TB in the future if they are not treated.

Overview

- In 2018, California reported **2,091** new active TB cases, compared with 2,059 cases in 2017.
- California's annual TB incidence was **5.3** cases per 100,000 persons, which is nearly double the national incidence rate of 2.8.
- Medical and societal costs of TB reached more than **\$200 million** in California in 2018.
- TB cases were reported in 44 of California's 61 (72%) local health jurisdictions. Of those, 14 (23%) jurisdictions reported 1-4 cases.
- An estimated 6% of cases were imported from outside the United States, 13% resulted from recent transmission, and **81%** were due to progression of LTBI to active TB.
- In 2018, there were **1** probable TB outbreak and **3** ongoing TB outbreaks.
- During 2014-2016, **625** persons (10% of TB cases) died with TB. Of persons who died with TB, 19% died before receiving TB treatment.
- More than **2 million** Californians (6% of the population) have LTBI which can progress to active TB without diagnosis and treatment.

Reported TB Cases: California, 1989–2018

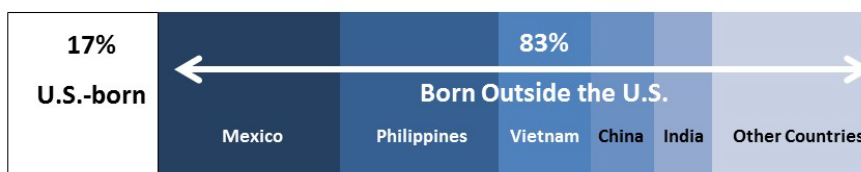


The resurgence of TB began in the 1980s and peaked in 1992. Case counts began decreasing again in 1993, but the decline has stalled in recent years.

Persons Born Outside the United States

- The TB rate among persons born outside the U.S. (16.1 per 100,000) was **13 times** higher than the rate among U.S.-born persons (1.2 per 100,000).
- Half** of TB cases in non-U.S.-born persons occurred 18 years or more after arrival in the U.S.

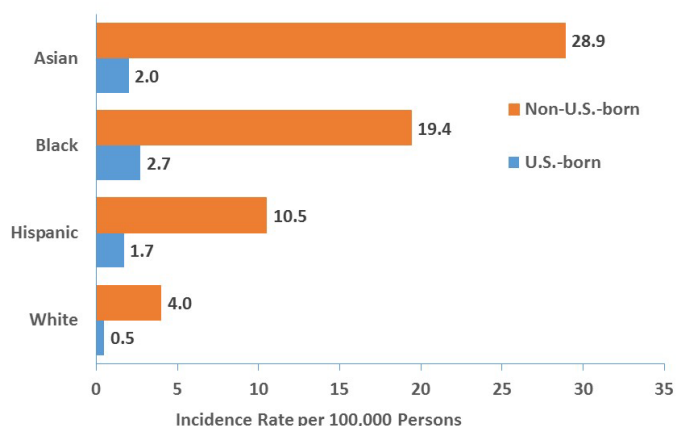
Proportion of TB Cases by National Origin — California, 2018



Racial/Ethnic Disparities Persist

- The rate among Asians, Blacks and Hispanics born outside the U.S. were **58**, **39** and **21** times higher, respectively, than 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.
- Over half (53%) of California's TB cases occurred in Asians, up from 45% in 2009.

TB Rates by Place of Birth and Race/Ethnicity, 2018



TB in California: 2018 Snapshot

Comorbidities

- **36%** 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 (27% of adult cases).
- HIV infection greatly increases a patient's risk for progression from LTBI to active TB disease, as well as for TB-related death.
- In 2018, 86% of patients with TB were tested for HIV. Of those tested, 59 (**3.4%**) were HIV-positive, down from 100 (5.6%) in 2011, the first year these data were reported on the TB case report form.

Older Adults and Children

- The proportion of TB cases in older adults is growing. In 2018, 34% of TB cases were reported in persons 65 years of age or older, compared to 25% in this age category in 2009.
- More than **250** persons age 80 or older were diagnosed with TB in 2018.
- There were **28** TB cases among children less than 5 years of age in 2018, a decrease from 70 cases in 2009.

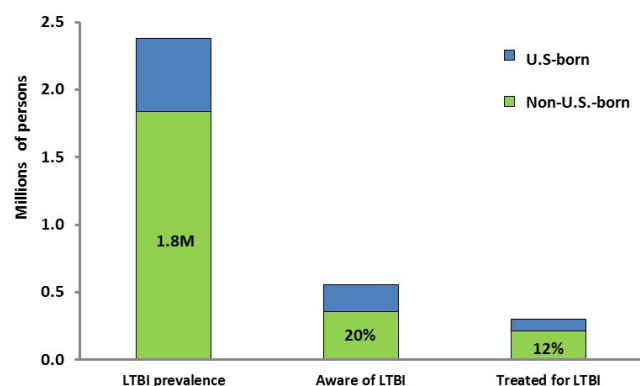
Drug-Resistant TB

- 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 because the most effective TB drugs are ineffective against their disease.
- In 2018, there were **19** (1.2%) MDR TB cases in California, compared to 30 (1.8%) reported in 2017.
- 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, **24** XDR TB cases have been reported in California.

Treating Latent TB Infection is Critical

- 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 81% of cases arise from reactivation of LTBI, treating LTBI will prevent many TB cases in California.
- [Risk assessment tools](https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/TB-Risk-Assessment.aspx) are available for use by medical providers to identify persons at risk for LTBI for testing and treatment (<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/TB-Risk-Assessment.aspx>).

Estimated latent TB infection prevalence, awareness and treatment, California, 2018



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