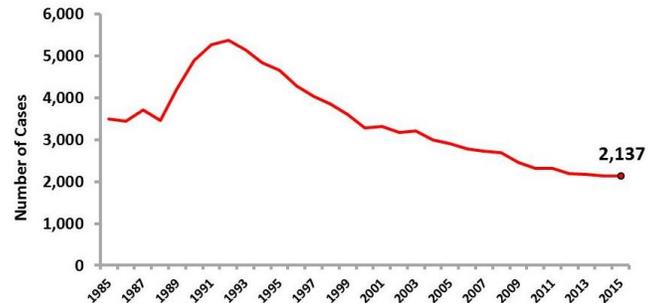


TB in California: A Snapshot

California Overview

- In 2015, California reported 2,137 new tuberculosis (TB) cases, compared with 2,134 cases in 2014.
- The decline in California's TB incidence has slowed over the past decade and has now stopped.
- During 2014–2015, California's annual TB incidence remained at 5.5 cases per 100,000 persons, which is nearly double the national incidence rate.
- An estimated \$72 million was spent on medical management of TB cases in California during 2015.
- TB cases were reported in 42 of California's 61 (69%) local health jurisdictions. Of 24 jurisdictions that reported at least 10 cases in 2015, 11 (46%) experienced an increase from 2014.
- Among California's TB cases, an estimated 7% were imported from outside the United States, 13% resulted from recent transmission, and 80% were due to reactivation of latent tuberculosis infection (LTBI).
- The 80% of cases due to reactivation occur among the estimated 2.4 million (6%) Californians with LTBI, an infection which can progress to active TB disease without diagnosis and treatment.

Reported TB Cases: California, 1985–2015



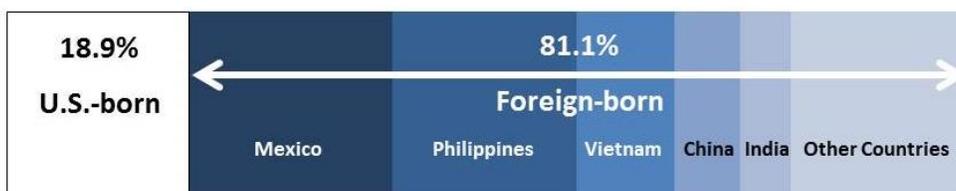
The resurgence of TB began in the 1980s and peaked in 1992. Case counts began decreasing again in 1993, and continued a downward trend through 2014. There was no decline in 2015.

Most Affected Populations

Foreign-Born Persons Bear Significant Burden

- The TB rate among foreign-born persons (16.5 per 100,000) was 12 times higher than among U.S.-born persons (1.4 per 100,000).
- The percentage of California's TB cases occurring in foreign-born persons increased from 78% in 2014 to 81% in 2015.
- Persons from Mexico, the Philippines, Vietnam, China, and India accounted for over 75% of foreign-born TB cases.
- During 2006–2015, the percentage of foreign-born TB patients who have resided in the United States for at least 5 years rose from 64% to nearly 80%

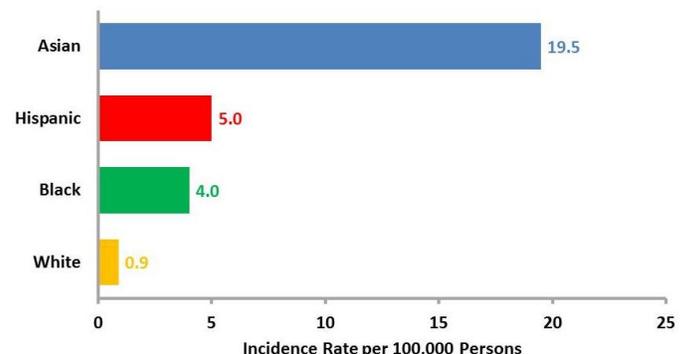
Proportion of TB Cases by National Origin — California, 2015



Racial/Ethnic Disparities Persist

- Racial/ethnic minorities continued to experience higher TB rates compared to whites. Rates among Asians and Pacific Islanders (19.5 per 100,000) were 22 times higher than among whites (0.9 per 100,000), while rates among blacks (4.0 per 100,000) and Hispanics (5.0 per 100,000) were four to five times higher.
- For the second year in a row, Asians and Pacific Islanders accounted for over half of California's TB cases. In 2015, 53% of TB cases occurred in Asians and Pacific Islanders, up from 51% in 2014.

TB Rates by Racial/Ethnic Group — California, 2015



Medical Comorbidities

- In 2015, 37% of adult TB cases had a medical comorbidity such as 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 (28% 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 2015, 86% of patients with TB were tested for HIV. Of those tested, 3.4% were HIV-positive, down from 4.5% in 2014.

Children and Older Adults

- There were 36 TB cases among children less than 5 years of age in 2015, a decrease from 56 cases in the previous year.
- The proportion of TB cases in older adults is growing. In 2015, 32% of TB cases were reported in persons 65 years of age or older, compared to 24% in this age category in 2006.
- Since 2006, the median age of all TB patients rose from 46 to 54 years, driven predominantly by the rising median age of foreign-born TB cases from 47 years in 2006 to 57 years in 2015.

TB Transmission is Occurring in California

- An estimated 13% of TB cases resulted from recent transmission of TB in California.
- In 2015, transmission occurred in 10 new or ongoing confirmed TB outbreaks, each involving at least 4 persons

Deaths Among Persons with TB

- During 2011–2013, 643 persons (10% of TB cases) died with TB. Of persons who died with TB, 23% died before receiving TB treatment.

Drug Resistant TB

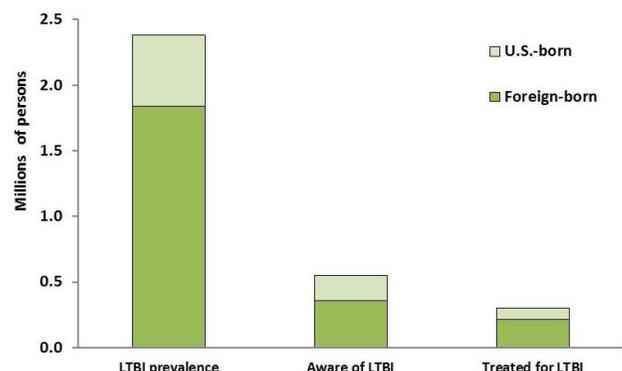
- In 2015, there were 22 (1%) multidrug-resistant (MDR) TB cases in California and no extensively drug-resistant (XDR) TB cases.
- Despite worldwide increase in MDR TB, the proportion of MDR TB cases in California has remained consistent (1–2%) during 1993–2015.
- Thirteen XDR TB cases were reported in California during 2001–2015.
- Patients with MDR and XDR TB generally have poorer outcomes because the most effective TB drugs are ineffective against their disease.

Treating Latent TB Infection is Critical

- Over 6% of California's total population is estimated to have LTBI, including 16.9% of the foreign-born population and 1.9% of the U.S.-born population.
- Among the nearly 2.4 million Californians with LTBI, only 23% are aware of their infection and only 13% have been treated.
- Because an estimated 80% of cases arise from reactivation of LTBI, treating LTBI will prevent many TB cases in California.
- A risk assessment tool is available for use by medical providers to identify adults at risk for LTBI for testing and treatment:

<http://www.cdph.ca.gov/programs/tb/Documents/TBCB-CA-TB-Risk-Assessment-and-Fact-Sheet.pdf>

Estimated Number of persons with latent TB infection (LTBI), awareness of LTBI, and treatment for LTBI —California, 2014



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