About the Data – Tuberculosis

DATA SOURCES

Reporting Jurisdictions

California has 61 local health jurisdictions that report Tuberculosis (TB) disease. These jurisdictions include 58 counties and the cities of Berkeley, Long Beach, and Pasadena. Reports from Alameda County exclude data from the city of Berkeley, and reports from Los Angeles County exclude data from the cities of Long Beach and Pasadena.

Report of Verified Case of Tuberculosis (RVCT)

Local health jurisdictions have used the Report of Verified Case of Tuberculosis (RVCT) form to report persons with TB disease to the California Department of Public Health's (CDPH) TB Control Branch (TBCB) Registry since 1993. An expanded version of the RVCT form was implemented in California in 2010, which was used for data collection through 2021. The most recent revision of the RVCT was implemented in California in 2022 (2020 Report of Verified Case of Tuberculosis Instruction Manual, August 2021, cdc.gov/tb/media/pdfs/Report-of-Verified-Case-of-Tuberculosis-RVCT.pdf). The RVCT form is available within California's reporting and surveillance system, CalREDIE. TB data are cleaned, compiled, and analyzed for state and local use and reported to the Centers for Disease Control and Prevention (CDC).

Population Data

Population data was derived primarily from the following sources at the State of California, Department of Finance.

- E-2 California County Population Estimates and Components of Change by Year
- E-4 Population Estimates for Cities, Counties, and the State
- P-3 Population Projections Race/Ethnicity and Sex by Individual Years of Age

State and county population totals are from the estimate series. Populations for the cities of Berkeley, Long Beach and Pasadena were estimated by obtaining the ratio of city to county population totals from the E-4 report and applying the ratio to the E-2 county population totals. Population totals for the jurisdiction of Alameda were then calculated by subtracting Berkeley calculated population from Alameda County total; population total for the jurisdiction of Los Angeles was calculated by subtracting Long Beach and Pasadena calculated populations from Los Angeles County total. Demographic populations were estimated by applying the population proportion of each demographic subgroup from the P-3 projection file to the state total in the E-2 estimate totals).

Population denominators used for TB rate calculations of U.S.-born and non-U.S.-born persons, persons born by individual countries, and persons of specific Asian or Native Hawaiian and Pacific Islander races were calculated by applying the proportions of each group from the United States Census Bureau's *American Community Survey* that were made available through the Integrated Public Use Microdata Series (IPUMS) to the

California total population from California Department of Finance, E-2 California County Population Estimates and Components of Change.

DATA DEFINITIONS

TB case: Reports of TB submitted to the TBCB Registry by July 27, 2025, were included as 2024 cases if the person was confirmed to have active TB between January 1 and December 31, 2024. Changes reported after July 27, 2025, will be reflected in future reports.

TB definition and verification criteria: A person is confirmed with active TB by laboratory or clinical evidence of disease caused by *Mycobacterium tuberculosis (Mtb)* complex (excluding disease caused by the BCG [Bacillus Calmette-Guérin] strain of *M. bovis*) for RVCT surveillance purposes.

Persons with culture or nucleic acid amplification test evidence of *Mtb*, or acid-fast bacilli in a smear from a clinical specimen (when a culture cannot be obtained, or culture results are negative or contaminated) are classified as laboratory confirmed. In the absence of laboratory confirmation, persons with a positive tuberculin skin test (TST) or positive interferon gamma release assay (IGRA) for *Mtb*, abnormal chest imaging (in those with pulmonary disease), and treatment with two or more anti-TB medications are classified as clinically confirmed. Reported cases that do not meet one or more of the TB clinical criteria are classified as provider-diagnosed cases because the health care providers and local TB control programs have determined there is sufficient evidence of active TB disease to report the case.

The following hierarchy is applied in determining the verification criteria for active TB disease:

1. Positive culture
2. Positive nucleic acid amplification test
3. Positive acid-fast bacilli test
4. Clinical case confirmation
5. Provider diagnosis

Race and Ethnicity: The RVCT has separate variables for race and ethnicity. Unless otherwise noted, Hispanic includes all persons of Hispanic origin of any race, including Other and Unknown race. Multi-race includes those of non-Hispanic origin who reported more than one race. The remaining groups are of non-Hispanic origin who reported a single race: American Indian or Alaska Native (AIAN), Asian, Black, Native Hawaiian or Other Pacific Islander (Pacific Islander), White, Other or Unknown. For persons of Asian or Native Hawaiian, and Pacific Islander race, detailed information is also collected. Presenting data disaggregated into more detailed groups can illuminate health disparities that may be masked when collapsing data only into general categories.

American Indian/Alaska Native (AI/AN) persons are more likely to be classified as another race resulting in underestimates of TB incidence. The California Data Tables

(Excel tables 2a, 3a, and 4) also present a variation in race and ethnicity disaggregation to address this issue. In these tables, American Indian/Alaska Native includes all persons of AI/AN race regardless of ethnicity or additional race selections. Hispanic includes persons of Hispanic origin of any race (including Other and Unknown race) except AI/AN race. Multi-race includes those of non-Hispanic origin who reported more than one race excluding AI/AN race. The remaining groups are of non-Hispanic origin who reported a single race.

Sexual Orientation and Gender Identity: The California RVCT form has separate fields for sexual orientation and gender identity that reflect standardized data options collected across CDPH's Center for Infectious Disease (CID) programs in CalREDIE. The fields are intended to reflect patient self-identified information. Like all RVCT fields, these data are reported by local health jurisdictions.

Country of birth: Present-day country names are used and may not reflect the name in use when persons were born. People's Republic of China includes Hong Kong and Macau. North and South Korea are combined because separate denominator data is not available.

Birthplace: Persons born in one of the 50 states or the District of Columbia or born abroad to a parent who was a U.S. citizen are considered U.S.-born. Persons born in Puerto Rico, Guam, the Commonwealth of the Northern Mariana Islands, U.S. Virgin Islands, Midway Island, U.S. Minor Outlying Islands, and U.S. Miscellaneous Pacific Islands are also considered U.S.-born. This aligns with the definition used by the CDC Division of Tuberculosis Elimination (DTBE) and U.S. Census Bureau.

Outcomes: The California Data Tables present information on treatment outcomes, deaths with TB, and health care provider (Excel tables 14, 16, and 17). These outcome data may not submitted until many months after TB is initially reported. Outcome information for 2022 and prior years is the most complete in this report. Data provided for more recent years is expected to change in future reports.

Treatment completion may have occurred in the jurisdiction reporting the case, in another California jurisdiction, or another state. Treatment outcomes (completion of therapy, or death during treatment) for patients who were referred to CureTB for follow-up outside the U.S. are also included as results become available.

Age adjusted death proportions are provided as a reference (Excel table 17). Standard weights were calculated using data from the reference year (2018) and applied to the age-specific proportions for each year. The adjusted proportion was calculated by summing the weighted age-specific proportions.

DATA LIMITATION

TB case rates are not calculated when the total number of TB cases is less than five or when "Other", "Unknown", or "Multi-race" categories are specified. Data tables and visualizations are presented in compliance with California Health and Human Services

Data De-Identification Guidelines
(https://chhsdata.github.io/dataplaybook/documents/CHHS-DDG-V1.0-092316.pdf).

SUGGESTED CITATION
California Department of Public Health, Tuberculosis Control Branch, California Tuberculosis Dashboard, Last Modified July 2025.
(cdph.ca.gov/Programs/CID/DCDC/Pages/TBCB-California-TB-Dashboard.aspx)

Tuberculosis Control Branch. July 2025. California Data Tables, 2024. [Excel file]. California Department of Public Health. Retrieved from cdph.ca.gov/Programs/CID/DCDC/Pages/TB-Disease-Data.aspx