

California Tuberculosis Performance Measures Technical Notes on Data Sources and Calculations

This document presents information on data sources and calculations for tuberculosis (TB) performance measures used by the California Tuberculosis Control Branch (TBCB). The TBCB generates reports specific to California local health jurisdictions (LHJs), and distributes them bi-annually together with the Division of Tuberculosis Elimination's (DTBE) National TB Indicator Project (NTIP) reports, to LHJs reporting at least 15 TB cases annually. The California reports are intended to supplement NTIP reports. All performance measures are calculated for each full year of reported data.

TB Case Rates

- **Total**
- **Pediatric**
- **NATIVITY: United States (U.S.)-Born, Non-U.S.-Born**
- **RACE/ETHNICITY: African-American (U.S.-Born Black), Asian/Pacific Islander, Hispanic/Latinx, White**

Data sources. Population denominators used to calculate case rates are drawn from the Department of Finance (DOF), for consistency across other state disease reports. For subpopulations not available from DOF at the LHJ level, TBCB calculates subpopulation proportions for California and each LHJ based on the Integrated Public Use Microdata Series (IPUMS) and applies those proportions to the total DOF population.

Calculation. The numerator is the number of TB cases reported in each population of interest. The denominator is the population of interest multiplied by 100,000, to give a case rate per 100,000 population.

Nucleic Acid Amplification Test (NAAT) Use

- **NAAT Use among Smear-Positive Cases**
- **NAAT Use among Smear-Negative Cases**

Data source. RVCT

Calculations.

Smear-Positive: The numerator is the number of cases with a NAAT result reported prior to a culture result. The denominator is the number of smear-positive, pulmonary, culture-confirmed TB cases.

Smear-Negative: The numerator is the number of cases with a NAAT result reported prior to a culture result. The denominator is the number of smear-negative, pulmonary, culture-confirmed TB cases.

B Notifications Evaluated

Data source. Data on immigrants and refugees entering the United States (U.S.) with A/B notifications are drawn from the Electronic Disease Notification (EDN) system.

Calculation. The numerator is the number of immigrants and refugees with a completed medical evaluation to an ATS classification for TB. The denominator is the number of immigrants and refugees arriving in California with a B classification for a TB condition who were not reported to have moved out of California or to have died before they could undergo domestic TB evaluation.

Self-Administered Therapy (SAT)

Data source. Data on people with TB on self-administered therapy is drawn from the Report of Verified Case of TB (RVCT), including the Follow Up-1 (FU-1) and Follow Up-2 (FU-2). Data in a given count year are considered complete when FU-2 data are submitted for at least 95% of case reports showing a status of alive at diagnosis, and an initial treatment regimen of at least two drugs.

Calculation. The numerator is the number of TB cases recommended for DOT that were reported as receiving “SAT only” on the FU-2. The denominator is the number of TB cases recommended for directly observed therapy (DOT) under California guidelines and with data available from RVCT, FU-1 and FU-2: persons <18 years old, homeless within the past year, resident of a correctional facility or a long-term care facility at the time of diagnosis, injection or non-injection drug user, excess alcohol consumption within the past year, history of active TB disease, initial resistance to isoniazid or rifampin, sputum smear-positive, or lack of documented culture conversion ≤60 days among sputum culture-positive cases who are alive for ≥60 days after starting treatment.

Deaths with TB

Data source. Data on people who die with TB disease is drawn from the RVCT (those dead at diagnosis, or died prior to starting treatment) and FU-2 (those who die before completing treatment). Data in a given count year are considered complete for deaths during treatment when FU-2 data are submitted for at least 95% of case reports showing a status of alive at diagnosis, and an initial treatment regimen of at least two drugs.

Calculation. The numerator is the number of TB cases with a status at diagnosis of “dead,” or with a reason that TB therapy was stopped or never started of “died.” The denominator is all TB cases.