

An Updated Tuberculosis Elimination Plan for California (2021-2025)

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Background

The California Tuberculosis Elimination Advisory Committee (CTEAC), together with the California Tuberculosis Control Branch (TBCB), created an updated tuberculosis (TB) elimination plan (TBEP) for California (2021-2025). CTEAC membership includes TB controllers, medical and public health experts, academic partners and TB survivors. The Committee's role is to monitor the implementation of the TBEP and provide recommendations to the state health department on strategies for reaching TB elimination in California.

While the state has made great strides in controlling TB in the last 30 years, disparities among populations have increased, especially among Asian and Pacific Islander populations. The purpose of the TBEP is to outline actions that can be taken to ensure that the more than two million Californians with latent TB infection (LTBI) are diagnosed and successfully treated in order to prevent future cases of active TB as well as to accelerate the time to TB elimination in the state.

Methodology

In 2020, the CTEAC membership and other stakeholders met to update the 2016-2020 TB Elimination Plan. Attendees participated in a comprehensive review of the barriers to elimination and proposed new action steps. TBCB updated these and circulated them to CTEAC members for review and vetting. A final TBEP for California (2021-2025) was published in 2021 and can be accessed at this link: https://ctca.org/wp-content/uploads/CATB_EliminationPlan_2021-25.pdf

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Results

Targets for California TB Elimination Plan, 2021-2025 — TB disease, disparities and death

OUTCOMES	CURRENT STATUS (2019)		TARGETS		
	CASES	RATE	CASES	RATE	YEAR
Reduce TB cases by at least 30%	2,115	53/million	1,500	38/million	2025
Reduce TB disparities — reduce non-U.S.-born case rate by at least 25%	1,772	163/million	1,222	116/million	2025
Reduce TB deaths by at least 25%	200	5.3/million	150	3.8/million	2025

Additional targets

New targets for both TB pre-elimination and elimination were also created:

- Pre-elimination: by 2035 (400 cases, <10/million)
- Elimination: by 2050 (40 cases, <1/million)

Barriers to advancing TB prevention (partial list)

The TBEP outlines the numerous barriers that exist at the individual, provider and health system levels:

- Limited awareness about TB prevention in affected communities
- Insufficient LTBI knowledge among healthcare providers
- Steps for healthcare access needed for those not in care
- Few streamlined paths in primary care to support patients → testing, treatment
- EHR systems lack triggers and tracking options for TB prevention
- No required measure for LTBI testing/treatment in primary healthcare settings
- Cost barriers and lack of incentives for health systems and patients
- Limited resources and research focused on TB prevention

The TBEP is composed of 5 overarching recommendations:

1. Find and engage high risk persons and populations and their providers in CA
2. Apply focused and effective strategies for TB testing/optimize treatment for LTBI
3. Develop and implement a surveillance system for LTBI reporting, tracking, evaluating
4. Secure sufficient resources for implementing the updated TBEP
5. Conduct research to evaluate TB prevention strategies

Discussion

There are several compelling reasons to intensify efforts to eliminate TB in CA at this time, including: 1) CA has experienced a substantial decline in TB cases and TB mortality since the 1980s/1990s resurgence; 2) epidemiologic evidence suggests that recent transmission of *M.tb* is at a nadir and has decreased, in part due to improved overseas TB screening and treatment¹; and 3) availability of improved LTBI tests and new short-course treatments.

To create a TB-free California in the near future, strategic thinking and bold actions are needed. The TBEP provides a roadmap for making substantial progress on TB elimination during 2021-2025. It describes intensified efforts to promote TB-related health equity and promotes an increased focus on outreach to high risk communities.

An example of the disparities that exist in TB is the case rate among Asians born outside the U.S. - in 2020, it was 50 times higher than the case rate of U.S.-born Whites². One strategy for addressing this and other disparities is to strengthen existing partnerships as well as create and sustain new ones (with both high risk communities and their providers). Strategic actions that increase engagement can have an impact on decreasing TB disparities.

TB prevention pays off. Compared to the status quo, if CA reaches TB elimination by 2050, the state can avert 36,000 cases of TB disease and 3,600 deaths with TB, and save \$1billion in medical costs and an additional \$1billion in societal costs. And most importantly, TB kills and disables Californians every year. Through strategic prevention efforts, we can prevent TB and its consequences.

Citations: 1. Centers for Disease Control and Prevention. Tuberculosis Technical Instructions for Civil Surgeons Available at: <https://www.cdc.gov/immigrantrefugeehealth/exams/ti/civil/tuberculosis-civil-technical-instructions.html>

2. Tuberculosis Control Branch. TB in California: 2020 Snapshot. California Department of Public Health, Richmond, CA. 2021. Available at: <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/TBCB-TB-Snapshot-2020.pdf>