**PROGRAMMATIC CONCEPT FOR TB PREVENTION**

Public Health receives funding directed at finding, testing and treating active tuberculosis (TB) disease. There is no funding to screen, test, and treat, if positive, inactive or latent TB infection (LTBI).

TB disease is life-threatening. It spreads through the air with profound medical and economic consequences. Every year, about 2,000 Californians are diagnosed with TB disease; half are hospitalized and one in six dies within five years of diagnosis. TB hospitalizations are twice as expensive as and four times longer than hospitalizations for other conditions, usually about 11 days. The direct medical expense of TB disease in California was $76 million in 2020 and, together with the costs of premature death due to TB, the disease cost California more than $180 million.

The burden of TB is borne disproportionately by racial and ethnic minority groups. Asian-Americans born outside the US are diagnosed with TB disease at 50 times the rate of US-born White people. Furthermore, persons living in census tracts with low socio-economic status have higher TB disease incidence rates than those living in high socio-economic status census tracts. In California, people who live in neighborhoods with the lowest education have TB disease rates more than three times that of persons in neighborhoods with highest education. Seventy percent of persons diagnosed with TB disease live in the two least advantaged Healthy Places Index (HPI) quartiles of poverty/education/crowding. Additionally, persons with TB disease who experience homelessness are 30% more likely to die with TB disease than those not experiencing homelessness.

When it comes to TB, treatment is prevention. TB is only contagious when it is in active disease form. When TB is in its inactive or latent (LTBI) form, which can be detected with a TB skin or blood test, it is not contagious. More than two million Californians are infected with TB, of whom only 23% are aware of their infection and just 13% have been treated. TB prevention through identification and treatment of LTBI is far less costly than active TB disease treatment. The cost to prevent TB for one person is low ($857) compared with the costs of diagnosing and treating one person with active TB disease ($43,900). Because TB is contagious, preventing TB also means preventing potential transmission of TB to the patient’s family, friends, and those they interact with closely in the community.

We request funding to support TB prevention efforts in California towards the goal of eliminating the burden of active TB for Californians.

**Expand the TB Free California Model**

Goal is to reduce TB inequities by:

1. conducting focused LTBI education and outreach in high-risk communities
2. educating clinicians in community health centers on the benefits and practice of LTBI testing and treatment
3. increasing screening and testing for LTBI and ensuring linkage to care and treatment completion for those with LTBI
4. evaluating LTBI care cascades and implementing interventions to improve outcomes

Community health centers (CHC), community-based organizations (CBOs), local heath jurisdiction (LHJ) TB programs and the California TB Control Branch (TBCB) work collaboratively to scale-up LTBI outreach, education, screening, testing and treatment in high-risk communities by:

* engaging with high-risk populations to provide education and outreach to increase TB awareness and demand for LTBI screening, testing and treatment
* ensuring appropriate patient referrals/linkage to care and follow-up
* increasing patient adoption of LTBI treatment initiation and completion
* increasing provider awareness, knowledge and adoption of LTBI testing and treatment best practices
* monitoring, evaluating and improving outcomes

LHJ role/activities:

* Create local or regional (for geographic areas with lower TB case numbers) TB Free California teams (e.g., consulting clinician, epidemiologist, health educator) to coordinate CBO and CHC activities surrounding TB prevention
* Provide training and clinical consultation to CHC staff
* Provide epidemiological technical assistance to CHCs
* Report outcomes via LTBI surveillance
* Monitor/evaluate/improve outcomes

CBO role/activities:

* Collaborate with respective local TB program to conduct LTBI awareness and education campaigns in high-risk communities and provide patient navigator services to ensure high-risk patients have access to and complete appropriate prevention activities (i.e., linkage to care for screening, testing, and if appropriate, LTBI treatment initiation and completion)
* Community engagement to increase patient adoption of LTBI treatment initiation and completion
* Hire outreach workers/patient navigators (OW/PNs)

CHC role/activities:

* Scale-up TB prevention services, e.g., LTBI screening, testing and treatment
* Increase patient adoption of LTBI treatment initiation and completion; incentivize as necessary.
* Increase provider adoption of LTBI testing and treatment; incentivize as necessary.
* Via LTBI Care Coordinator(s), track and monitor patients on LTBI treatment and ensure treatment completion
* Collaborate with local TB program epidemiologists to measure steps in the LTBI care cascade and implement iterative quality improvement assessments to maximize LTBI linkage to care and treatment completion

TBCB role/activities:

* Provide overall project coordination to ensure education materials are available for communities and providers with central coordination to prevent duplication of effort at the local level.
* Provide technical assistance (TA) for patient awareness campaign and the provider adoption campaign
* Provide TB prevention training and education to CBO and CHC staff
* Design, coordinate and implement quarterly learning collaboratives or communities of practice for providing training and sharing best practices for partners at the local/regional level
* Analyze barriers to scale-up and mitigate them with partners
* Build/maintain LTBI surveillance

**STAFFING**  
**1. Pie in the sky ask**:

LHJs:

* Each medium and high morbidity LHJ (n=20) has a local TB Free team (full or part-time clinician, epidemiologist and health educator); greater # of staff for Los Angeles County (LAC).
* Regional TB Free teams created for jurisdictions with lower morbidity, # TBD

CBOs:

* At least 2 CBOs in each medium and high morbidity LHJ or regional area each hire/identify up to 3 OW/PNs to work in partnership with TB Free teams and CHCs; greater # of staff for LAC.

CHCs:

* At least 2 CHCs in each medium and high morbidity LHJ or regional area hire/identify physicians (LTBI care experts) and LTBI Care Coordinators (1-2 each); greater # of staff for LAC.

TBCB:

* Project Director to provide TA to all partners, and ensure continuity among partners.
* 0.5 FTE public health medical officer for providing clinical TA and training
* Surveillance epidemiologists (#TBD) to set-up reporting system for LHJs to use
* Health educator to develop materials, implement learning collaboratives/communities of practice, and other training

**2. Scaled-down asks:  
a.** Same model but only high morbidity LHJs (n=14) have own TB Free teams; other interested LHJs create regional teams.

**b.** Same model but only “very high” morbidity LHJs (100+ cases/year) (n=5) participate….more of a pilot project to see how proposed plan can work and assess the benefit or replication throughout the state in the future.