



TUBERCULOSIS (TB) CONTROL & REFUGEE HEALTH BRANCH REVENUES AND TB ELIMINATION INITIATIVE (TBEI) IMPLEMENTATION PLAN

Health Services Advisory Board

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TUBERCULOSIS



LIVE WELL
SAN DIEGO

- Tuberculosis (TB) is a communicable disease caused by a bacterium called *Mycobacterium tuberculosis*.
- TB bacteria usually attack the lungs but can attack any part of the body such as the kidney, spine, and brain.
- TB bacteria spreads through the air from one person to another when a person with TB disease of the lungs coughs, speaks, or sings.
- Active TB has a high associated mortality of approximately 10%.
- Those who have been infected, but are not sick, have latent tuberculosis infection (LTBI). Persons with LTBI can become sick with active TB in the future if not treated.



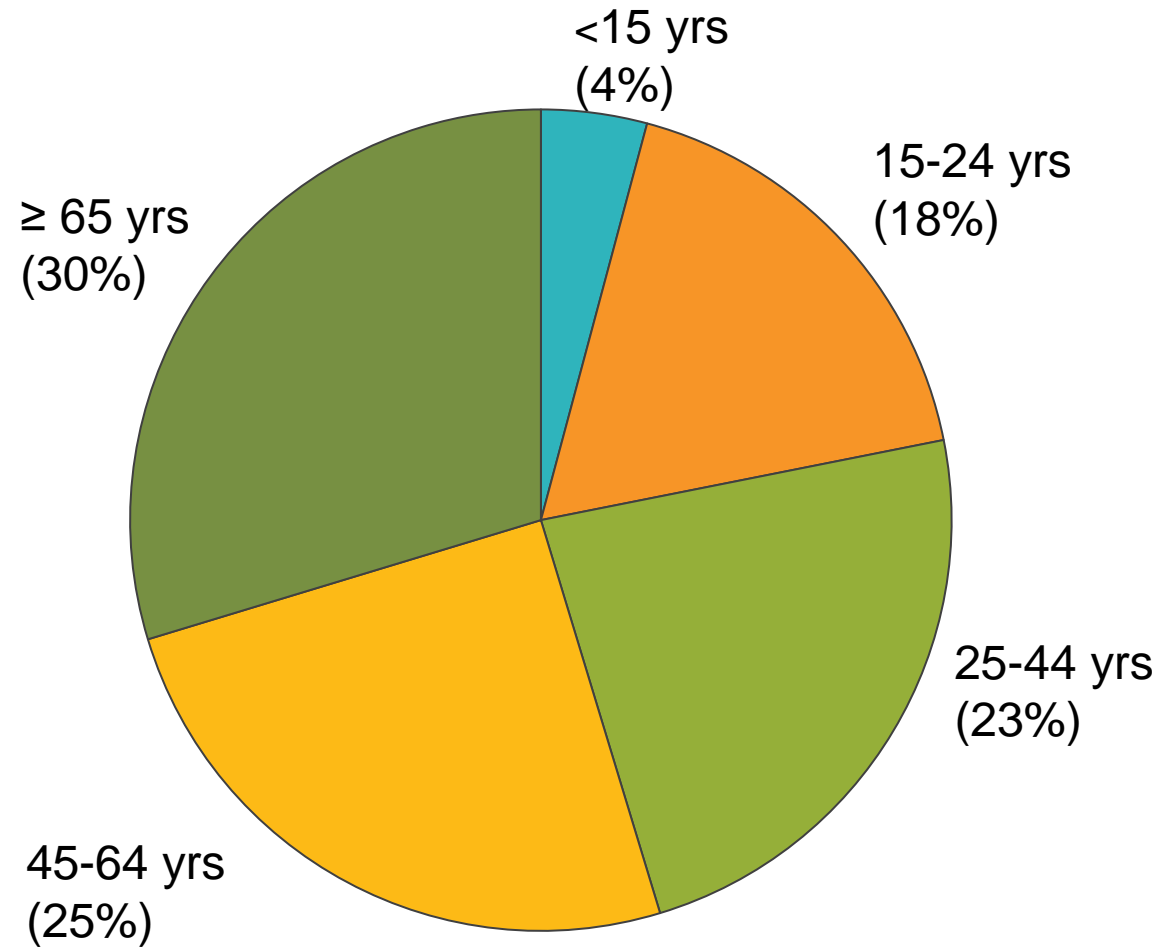
EPIDEMIOLOGY

In 2020 San Diego County reported 192 new active TB cases. The County's annual TB incidence, 5.7 cases per 100,000 persons, was higher than the California rate of 4.3, and more than twice the national rate of 2.2.

71% of San Diego County active TB cases occurred in persons who were born outside the U.S. The most common medical risk factors were diabetes and HIV.

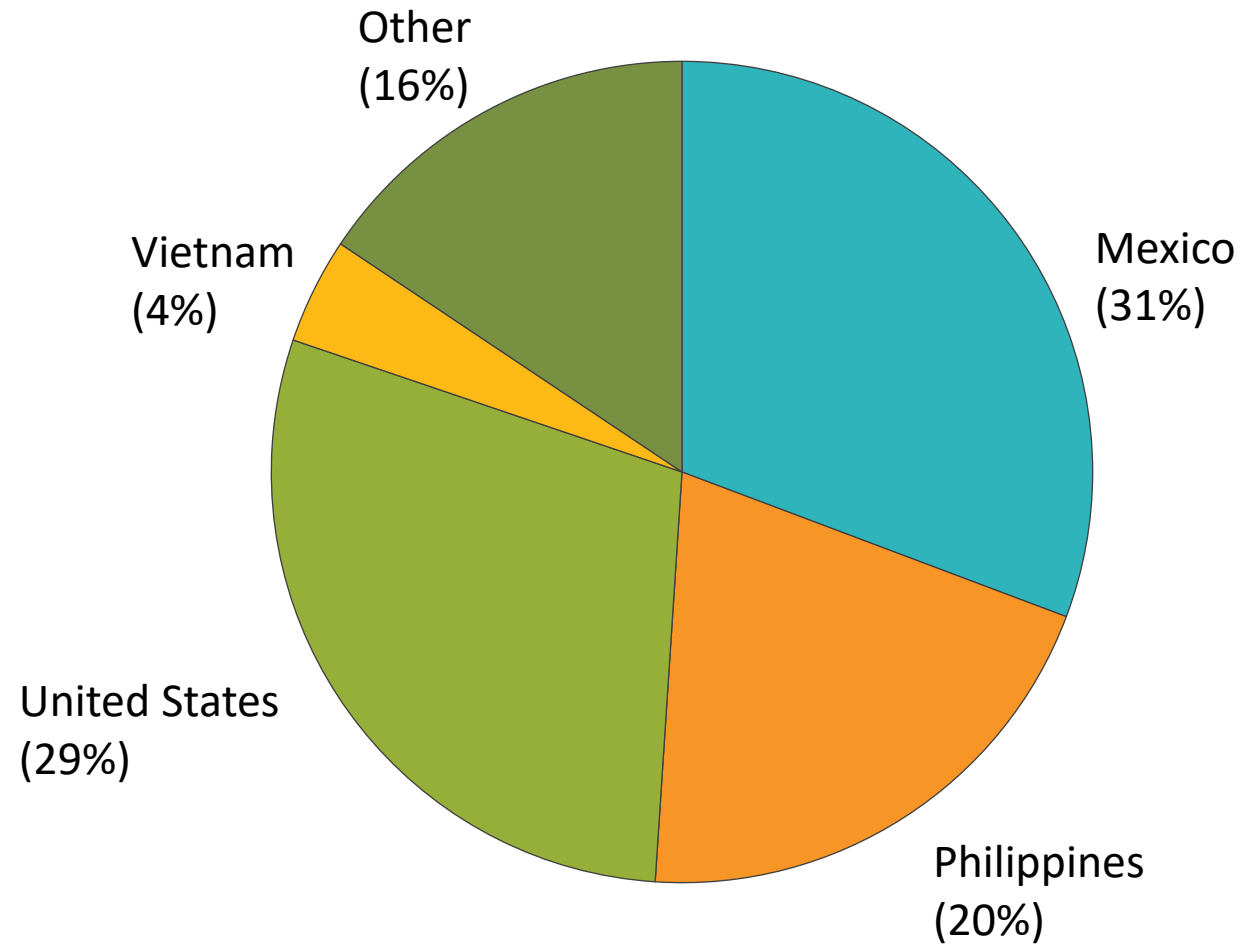
An estimated 80% of active TB cases are due to progression of long-standing LTBI to active TB. Approximately 175,000 San Diegans have LTBI, which can progress to active TB without treatment.

TB CASES BY AGE GROUP, SAN DIEGO COUNTY, 2020



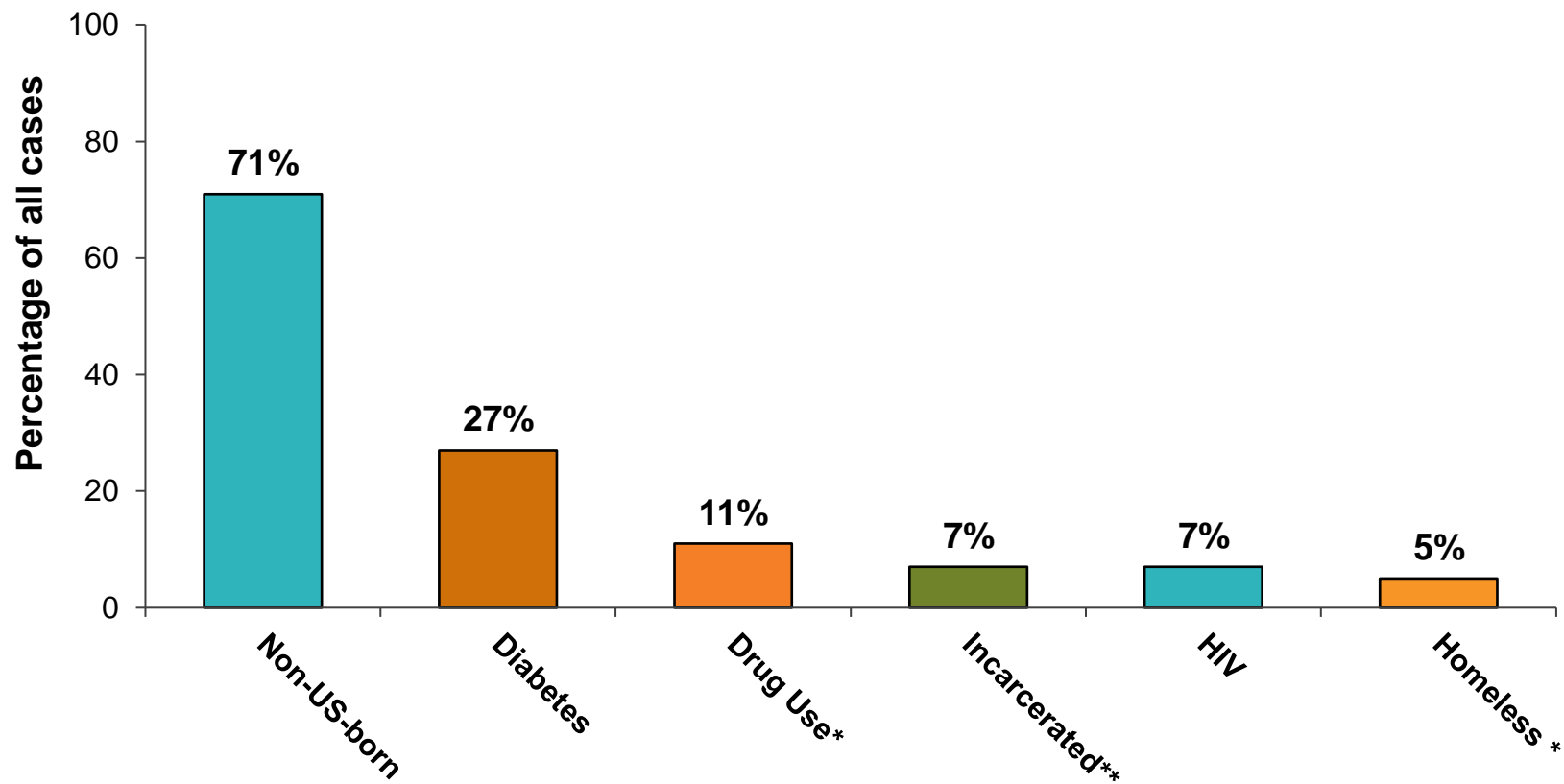
Source: County of San Diego

TB CASES BY BIRTH COUNTRY, SAN DIEGO COUNTY, 2020



Source: County of San Diego

RISK FACTORS AMONG TB CASES, SAN DIEGO COUNTY, 2020

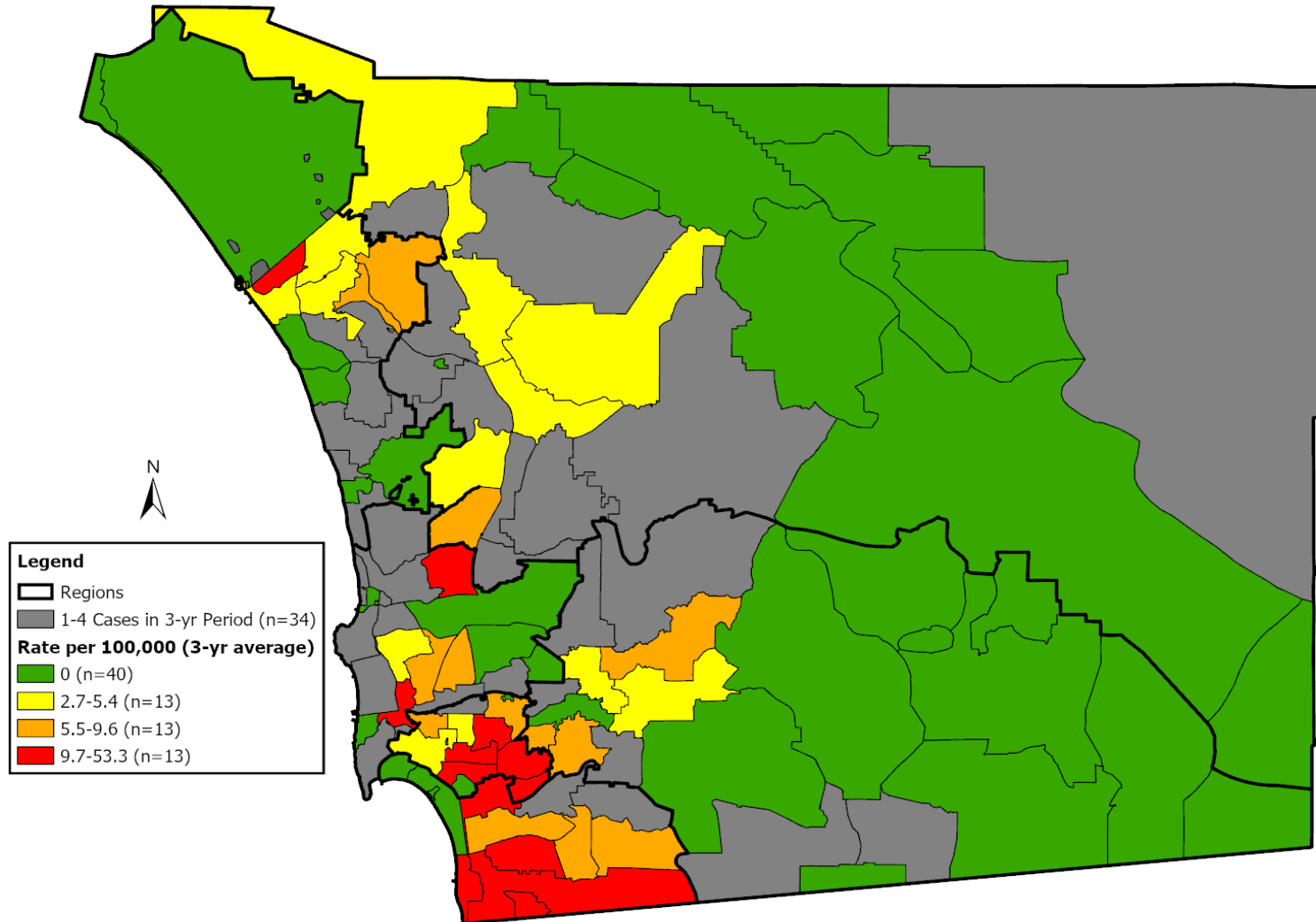


* In year prior to TB diagnosis

** At TB diagnosis

Source: County of San Diego

TB INCIDENCE RATES BY ZIP CODE SAN DIEGO COUNTY, 2017-2019



Source: County of San Diego



2 PURPOSES

- To accept revenue through the combination of Federal and State grants to further enhance TB Control and Refugee Health within the region
- To accept the Tuberculosis Elimination Initiative (TBEI) Implementation plan



To accept revenue through the combination of Federal and State grants to further enhance TB Control and Refugee Health within the region

Source	CA Dept. of Public Health (CDPH)	CDPH Refugee Health Assessment Program	Centers for Disease Control & Preventions (CDC)
Amount	\$886,920	\$1,750,000	\$2,000,000
Period	Jul 1, 2021 – Jun 30, 2022	Oct 1, 2021- Sept 30, 2022	Jan 1, 2022– Dec 31,2022

TBCRH REVENUE



Source	CDPH	CDC
Amount	\$ 2,636,920	\$2,000,000
Programs	<ul style="list-style-type: none">- Contact Investigation- Binational Education- Refugee Health Screening- Transitional Housing & Support- Treatment- Direct Observed Therapy (DOT)- Epidemiologic Studies	<ul style="list-style-type: none">- Contact Investigation- TB Testing- Latent TB Infection Screening (LTBI)- Treatment- Direct Observed Therapy (DOT)- Laboratory Analysis



- **Increase Community Outreach and Education to HealthCare Providers, Schools, and Community Organizations on Latent Tuberculosis Infection**
 - 80% of active TB is from reactivation of latent TB. Coordinate with local community providers and organizations to provide virtual education and resources for patients and staff
- **Identify Temporary Housing for Infectious Clients**
 - Partner with Covid-19 infectious housing sites once pandemic has resolved to convert for TB infectious housing

OPPORTUNITIES FOR COLLABORATION AND IMPROVEMENT



LIVE WELL
SAN DIEGO

- **Promote TB Elimination Initiative**

- Public-private partnership with advisory and steering committees who have developed recommendations for ways to eliminate TB in San Diego County and now working on implementation of recommendations

- **Increase Multinational Communication**

- Collaborate with Health Ministry of Mexico and other health jurisdictions to build channels of communication for the care of TB patients

- **Continue to Enhance Cultural Understanding of Refugee Population**

- Collaborate with Refugee Resettlement Agencies to promote latent TB treatment

2019-2020 ACCOMPLISHMENTS

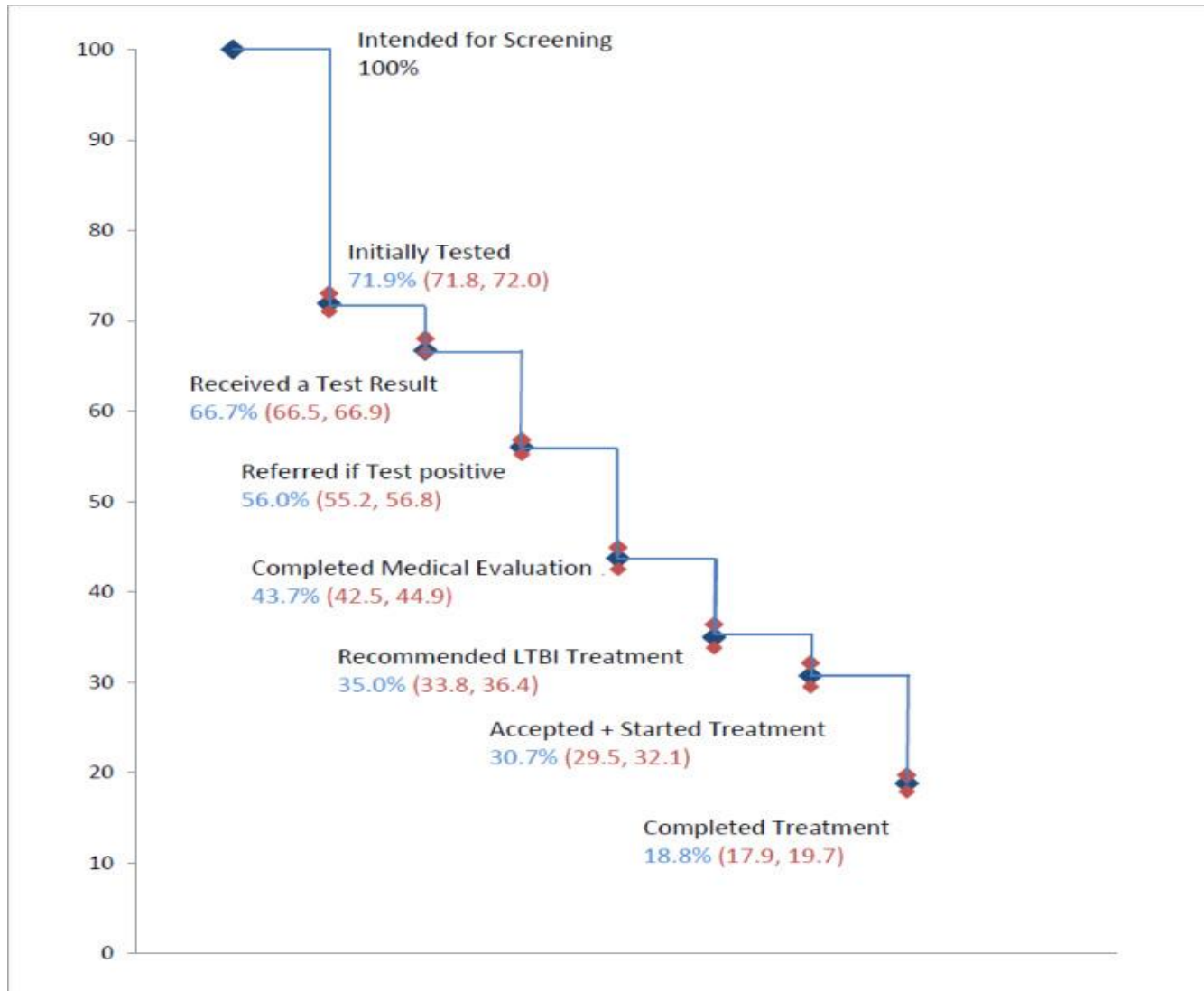


- A total of **192** newly active TB cases were reported in the county, reflecting a decrease of 20% from 265 cases reported in 2019. This is related to the pandemic.
- Expansion of video Directly Observed Therapy (DOT) program using EMOCHA mobile app in order to serve more individuals and improve medication adherence especially during the pandemic, increased from 50% to 80% use since the start of the pandemic
- Adapted our LTBI in person clinics at our main TB clinic and Regional clinics to telehealth visits in order to continue LTBI services during the pandemic and increase/expand services for regional clinics.
- Recognized as CDC's 2021 TB Elimination Champion based on the work we have done thus far on the TB Elimination Initiative



- 1** Improve LTBI care cascade outcomes
- 2** Promote awareness of LTBI as a major public health concern which is preventable and curable
- 3** Develop a LTBI surveillance system to describe the burden of LTBI and monitor improvement of the LTBI cascade of care
- 4** Implement TB screening in educational systems
- 5** Improve access to treatment for LTBI and active TB
- 6** Secure sufficient resources for implementing TBEI strategies

LTBI CASCADE OF CARE



Source: Alsdurf Hannah, Menzies Dick, Identifying gaps in the quality of latent tuberculosis infection care, Journal of Clinical Tuberculosis and Other Mycobacterial Diseases, Volume 18, 2020



Obtained input from over 35 TBEI Committee stakeholders to:

- Better understand barriers and local needs
- Identify key activities and tactics that would have high impact on improving screening, testing, treatment, and metrics for populations at highest risk for LTBI
- Obtain feedback on what practices are working well, as well as opportunities for improvement and partnership
- Evaluated impact, feasibility and funding required for activities identified

PHASED APPROACH



- The TB Elimination Initiative identified a phased approach to implementation based on assessment of impact, feasibility and funding required for implementing activities identified.
- The activities and timing are scalable pending available funding streams, resources and COVID-19 impact.

Phase A	Phase B	Phase C
June 2021 Start	June 2022 Start	June 2023 Start



1

Improve LTBI care cascade outcomes

Activities	Phase
1.1 Create TB/LTBI Community of Practice	A
1.2 Engage community providers in demonstration projects for LTBI Care Cascade development and enhancement	A
1.3 Develop toolkit and best practices repository (ongoing for LTBI care cascade and models for access, screening, testing and treatment)	A



2

Promote awareness of LTBI as a major public health concern which is preventable and curable

Activities	Phase
2.1 Engage and educate providers about LTBI care cascade value and strategies	A
2.2 Identify and address gaps in patient education materials and resources for San Diego County populations at high risk for LTBI	A/B
2.3 Develop effective, culturally competent community and patient outreach communication campaign (non-US born populations at highest risk for LTBI)	C
2.4 Explore partnership opportunities to target binational, cross-border, and migrant worker populations	C



3

Develop a LTBI surveillance system to describe the burden of LTBI and monitor improvement of the LTBI cascade of care

Activities	Phase
3.1 Develop standard LTBI reporting measures for San Diego County community providers	A
3.2 Establish a system to share LTBI patient data across healthcare and social services systems	B/C
3.3 Develop reporting system for sharing of metrics by County community providers	C



4

Implement TB Screening in educational systems

Activities	Phase
4.1 Offer TB screening (risk assessment) as a resource in admissions or registration process for community colleges in San Diego County	B/C
4.2 Screen high school seniors for TB risk factors in high-risk districts	B/C
4.3 Establish a centralized web-based tool for the LTBI risk assessment questionnaire and electronic linkage to follow-up care for usage by colleges	A
4.4 Provide culturally and linguistically appropriate linkage to care materials for students	B/C



5

Improve access to treatment for LTBI and active TB

Activities	Phase
5.1 Leverage existing vaccination and testing infrastructure that targets similar high-risk populations	A/B
5.2 Expand access to County discounted and no cost TB/LTBI testing and treatment program	A
5.3 Encourage telehealth options for LTBI screening and treatment	A/B
5.4 Address cost of IGRA testing and short-course treatment options for uninsured, self-pay and insured patients	B/C



6 Secure sufficient resources for implementing TBEI strategies

Activities	Phase
6.1 Collaborate with national, state, county and local community stakeholders and partners to apply for relevant funding for TBEI strategies	A/B/C



- We are returning to the Board of Supervisors on June 8, 2021 to submit the proposed **TBEI Implementation Plan**.
- Through strong collaboration and multi-sector support, as well as national and statewide partnership, San Diego County is ready to begin implementing the locally developed recommendations for TB elimination.

Questions/ Feedback





TB CONTROL AND REFUGEE HEALTH BRANCH

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