

Tuberculosis (TB) in San Diego County

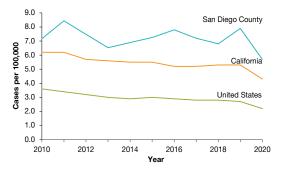
What Is Tuberculosis?

Active tuberculosis (TB) is a disease caused by the bacterium *Mycobacterium tuberculosis*. TB usually affects the lungs and spreads through the air when a person sick with TB coughs. Not everyone infected with the bacteria becomes sick. 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 they are not treated.

The Human Toll of Tuberculosis

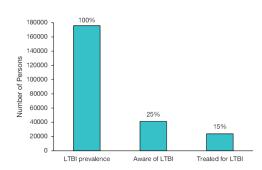
- In 2020, San Diego County reported 192 new active TB cases, representing a case rate of 5.7 cases per 100,000. This substantial decrease of more than 20% from the prior 5-year average may be due to impact of the pandemic, and examination of the decrease is underway.
- Over the past decade, San Diego County's annual TB incidence was consistently higher than the California rate and more than twice the national rate (Figure 1).
- Active TB has a high associated mortality of approximately 10%.
- Children under age five are at the highest risk of severe complications, including brain and spinal involvement that can lead to lifelong disability.
- Isolation from family, friends, and exclusion from the workplace while infectious results in stigma, lost wages and loss of employment putting those with TB at risk for poverty and homelessness.
- An estimated 80% of active TB cases are due to progression of LTBI to active TB.
- About 175,000 San Diegans have LTBI, which can progress to active TB without treatment. This is the equivalent to nearly two thirds the population of Chula Vista.

Figure 1. Incidence of active TB disease in San Diego County, California and the United States



TB incidence in San Diego County remains higher than in California and more than 2 times the overall rate for the United States. Source: County of San Diego

Figure 2. Approximate estimates of LTBI prevalence, awareness and treatment, San Diego County, 2019



Estimated using methodology from the California TB Control Branch Report on Tuberculosis in California, 2019 and associated Data Tables, applying national level data from the National Health and Nutrition Examination Survey, 2011-2012, to the San Diego County population. Source: County of San Diego

The Highest Rates and Numbers of Tuberculosis Are in the South and Central Regions of the County

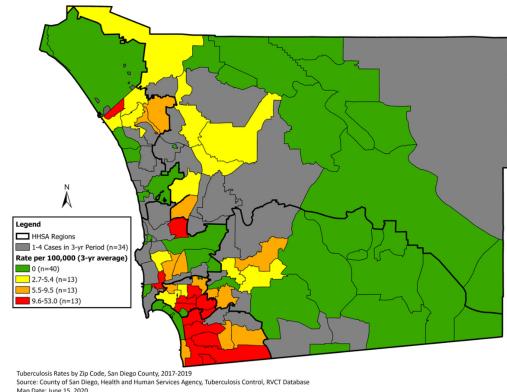
- In 2020, 71% of San Diego County TB cases occurred in persons who were born outside the U.S.
- The TB rate among persons born outside the U.S. (22.6) is nearly 9 times higher than the rate among U.S.-born persons (2.6).
- In 2020, the most common medical risk factor was diabetes (27%).



Why Is Now the Right Time to Strive for TB Elimination?

- TB Elimination is defined as less than 1 case of active TB disease per one million population annually.
- Of the estimated 175,000 San Diego County residents with LTBI, only 25% are aware of their infection and only 15% have been treated (Figure 2).
- Because an estimated 80% of cases arise from reactivation of LTBI, treating LTBI will prevent many TB cases in San Diego County.
- In the last decade, there has been widespread adoption of blood tests to diagnose LTBI which are more specific than the traditional TB skin test, resulting in fewer false positives.
- In 2016, the U.S. **Preventive Services** Task Force – national experts who provide widely accepted evidence-based medical recommendations recommended new targeted screening for LTBI in populations at risk.
- New short-course treatment regimens for LTBI are better tolerated by patients, less expensive, and more likely to be completed by patients.
- San Diego County's TB Elimination Initiative, a public-private partnership, developed key recommendations in 2020, focused on finding

Figure 3. Active TB incidence by zip code, San Diego County, 2017-2019



Map Date: June 15, 2020

and engaging high-risk persons and populations to optimize LTBI treatment, promoting LTBI as a major public health concern, developing an LTBI surveillance system, improving access to testing and treatment, and securing sufficient resources for implementation efforts.

Support for TB Elimination

- San Diego: San Diego TB Survivors Network
- California: California TB Elimination Coalition, California Department of Public Health, TB Control Branch
- National: Centers for Disease Control and Prevention (CDC), Division of TB Elimination (DTBE), We are TB, National TB Controllers Association.
 - 2020 LTBI Treatment Guidelines: Recommendations from the National TB Controllers Association and CDC
- Americas: Americas TB Coalition
- Global: Louder Than TB, Treatment Action Group, Global TB Caucus, Stop TB Partnership