

Tuberculosis (TB) in San Diego County: By the Numbers

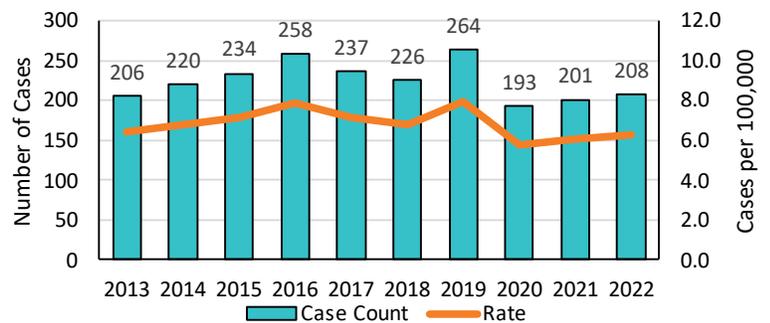
What Is Tuberculosis?

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.

Overview

- In 2022, San Diego County reported 208 new active TB cases, compared to 201 in 2021.
- In 2022, San Diego County’s annual TB incidence was 6.3 cases per 100,000 persons. This rate has fluctuated over the past decade, remaining less than 8 per 100,000 (Figure 1). Multiple pandemic related factors likely contributed to the decrease since 2020.
- The highest numbers of cases and incident rates occur in the South and Central regions of the San Diego County Health and Human Services Agency (Figure 2).
- An estimated 85% of active TB cases are due to progression of long-standing LTBI to active TB.
- About 175,000 San Diegans have LTBI, which can progress to active TB without treatment.

Figure 1. Number and incidence of new active TB cases, San Diego County, 2013-2022

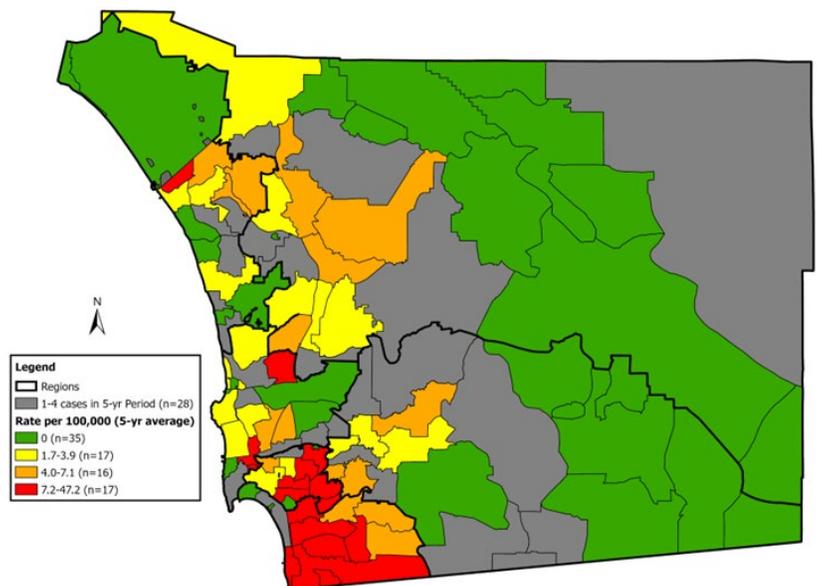


Active TB Cases: 2022 by the Numbers

Age

- The median age of TB cases was 47 and ranged from 2 to 95 years old.
- One case of TB occurred among children <5 years old (<1% of all cases). Five or fewer cases have occurred since 2013, a sustained improvement from the annual average of 15 cases, 2002-2006. TB in very young children is of concern because it often represents recent transmission of infection from adults to children.
- The highest rates occurred in the oldest age group, persons aged 65 years and older (24% of all cases).

Figure 2. Active TB incidence by zip code, San Diego County, 2017-2021



Tuberculosis Rates by Zip Code, San Diego County, 2017-2021
 Source: County of San Diego, Health and Human Services Agency, Tuberculosis Control, RVCT Database
 Map Date: November 13, 2022

Figure 3. Proportion of TB cases by birth country, San Diego County, 2022

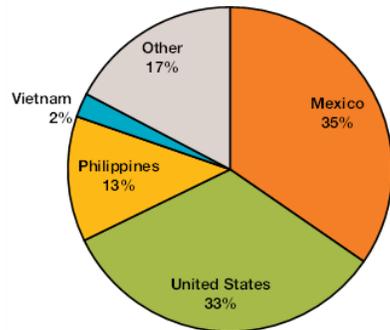
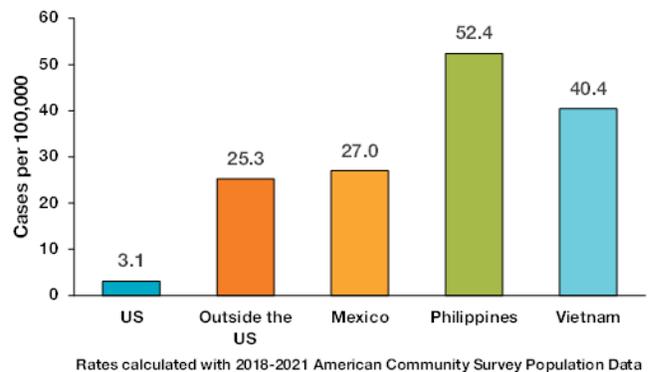


Figure 4. TB incidence by birth country, San Diego County, 2018-2022



Race/Ethnicity

- The highest proportion of cases occurred in Hispanics (66% (137 cases)) and Asian/Pacific Islanders (25% (52 cases)). Non-Hispanic Blacks accounted for 2% (4 cases) and non-Hispanic Whites, 6% (12 cases).
- Of the 137 cases in Hispanics, more than half (83 cases) were born outside the U.S.
- Rates among Asian/Pacific Islanders and Hispanics were more than 10 times that of non-Hispanic Whites.

Birth Country

- The majority (67%) of TB cases occurred in persons who were born outside the U.S. (Figure 3).
- Of the 69 cases born in the U.S., 78% (54 cases) were Hispanic.
- The TB rate among persons born outside the U.S. was more than 8 times higher than the rate among U.S.-born persons and varied by birth country (Figure 4).

TB Risk Factors

- The most common medical risk factor was diabetes (28% of cases). Persons living with HIV, the strongest known medical risk factor, accounted for 6% of cases.
- Other risk factors reported included experiencing homelessness in the past year (13%), drug use in the past year (17%), and incarceration at diagnosis (8%).

Drug Resistance

- Among the 181 culture-proven cases with drug susceptibility results, 11 (6%) had isolates resistant to at least isoniazid, and none had multidrug-resistant TB (MDR TB), defined as resistance to at least isoniazid and rifampin.
- Since 1999, a total of 69 MDR TB cases were reported in San Diego and none were extensively drug-resistant (XDR), defined as MDR TB with resistance to at least one fluoroquinolone and one injectable, or as of 2022, MDR TB with resistance to at least one fluoroquinolone and bedaquiline or linezolid.

TB due to *Mycobacterium Bovis*

- Among the 175 culture-proven cases in 2022 with genotyping results, 13% (23 cases) had disease from *Mycobacterium bovis*. Of the 63 culture-proven cases born in Mexico, 13 (21%) had *M. bovis*.
- Disease due to *M. bovis*, also known as bovine tuberculosis, is usually contracted through the consumption of unpasteurized dairy products. Person-to-person transmission is also believed to occur.