

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

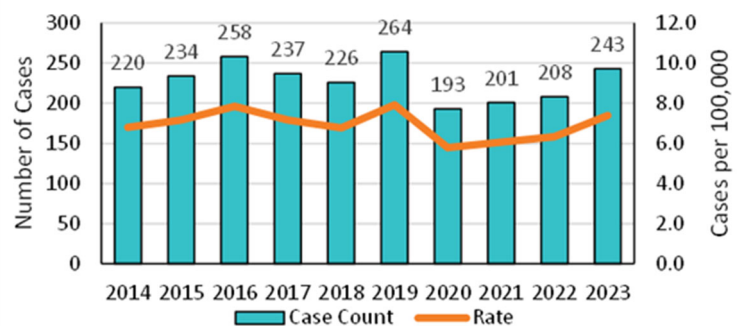
What Is Tuberculosis?

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 2023, San Diego County reported 243 new active TB cases, a 17% increase compared to 208 in 2022 (**Figure 1**).
- In 2020, the number of cases in San Diego dropped more than 20% below the 5-year pre-pandemic annual average (244 cases), likely reflecting multiple pandemic related factors that reduced transmission, detection and diagnosis of active TB, testing and treatment for TB infection, and travel and migration. Return to pre-pandemic levels of activities, including health care seeking, may explain the increase in 2023.
- In 2023, TB incidence in San Diego County was 7.4 cases per 100,000 persons. The highest incidence, as well as the largest numbers of cases, occur in the South and Central regions of the San Diego County Health and Human Services Agency (**Figure 2**).

Figure 1. Number and incidence of new active TB cases, San Diego County, 2014-2023

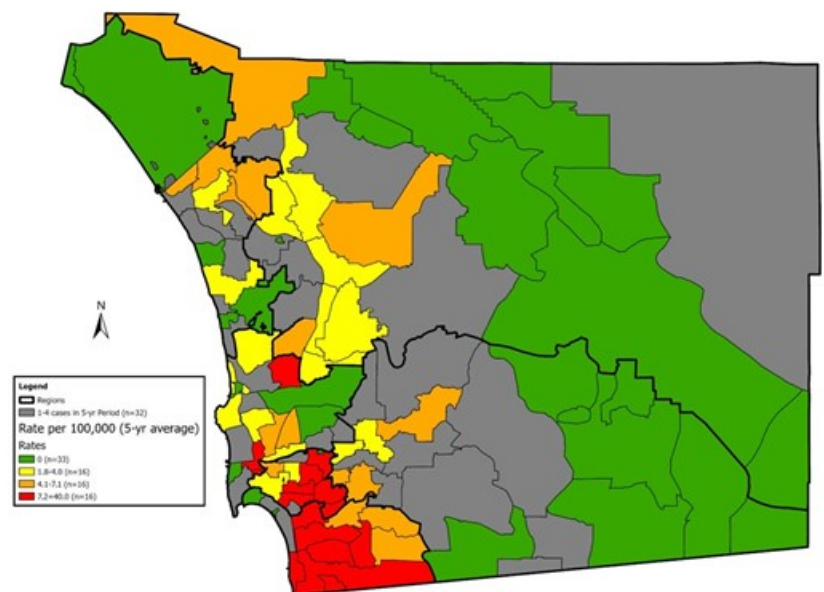


Active TB Cases: 2023 by the Numbers

Age

- The median age of TB cases was 55 and ranged from 1 to 91 years old.
- Since 2013, five or fewer cases in children less than 5 years old have occurred annually, 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 (34% of all cases).

Figure 2. Active TB incidence by zip code, San Diego County, 2018-2022



Tuberculosis Rates by Zip Code, San Diego County, 2018-2022
Source: County of San Diego, Health and Human Services Agency, Tuberculosis Control, RVCT Database
Map Date: November 28, 2023

Figure 3. Proportion of TB cases by birth country, San Diego County, 2023

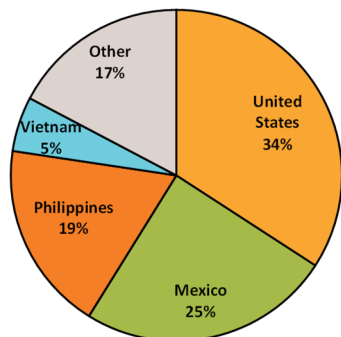
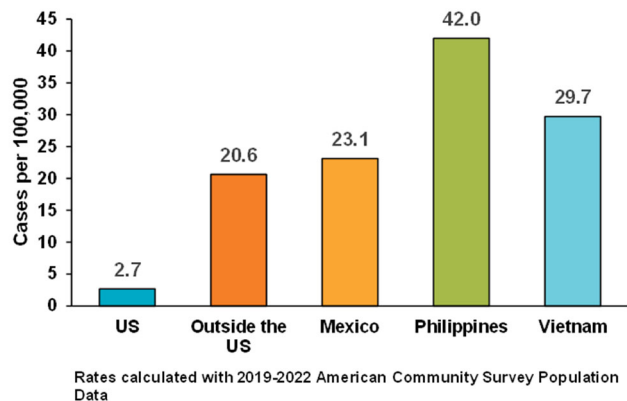


Figure 4. TB incidence by birth country, San Diego County, 2019-2023



Race/Ethnicity

- The highest proportion of cases occurred in Hispanics (51% [123 cases]) and Asian/Pacific Islanders (30% [72 cases]). Non-Hispanic Blacks accounted for 5% (12 cases) and non-Hispanic Whites, 8% (34 cases).
- Of the 123 cases in Hispanics, more than half (68 cases) were born outside the U.S.
- Rates among both Asian/Pacific Islanders and Hispanics were more than 4 times that of non-Hispanic Whites.

Birth Country

- The majority (66%) of TB cases occurred in persons who were born outside the U.S. (**Figure 3**).
- Of the 83 cases born in the U.S., 66% (55 cases) were Hispanic.
- The TB rate among persons born outside the U.S. was more than 7 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 (30% of cases). Persons living with HIV, the strongest known medical risk factor, accounted for 9% of cases.
- Other identified risk factors included experiencing homelessness in the past year (13%), drug use in the past year (19%), and incarceration at diagnosis (6%).

Drug Resistance

- Among the 191 culture-proven cases with drug susceptibility results, 3 (12%) had isolates resistant to at least isoniazid, and 2 (1%) had multidrug-resistant TB (MDR TB), defined as resistance to at least isoniazid and rifampin.
- Since 1999, a total of 71 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 189 culture-proven cases in 2023 with genotyping results, 6% (12 cases) had disease from *Mycobacterium bovis*. Of the 51 culture-proven cases born in Mexico, 5 (10%) 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.