

Tuberculosis in San Diego County: By the Numbers

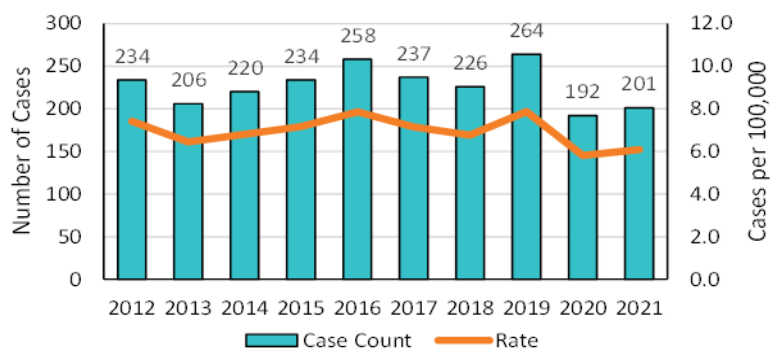
What Is Tuberculosis?

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 2021, San Diego County reported 201 new active TB cases, compared to 192 in 2020.
- In 2021, San Diego County’s annual TB incidence was 6.1 cases per 100,000 persons, slightly higher than in 2020, when a decrease of more than 20% from the prior 5-year average occurred. The rate had previously fluctuated over the past decade, remaining less than 9 per 100,000 (Figure 1).
- Multiple pandemic-related factors likely contributed to the 2020-2021 decrease, including decreased care seeking; decreased detection in care; masking; and changes in travel, migration, and time spent outside the home.
- 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).

Figure 1. Number and incidence of new active TB cases, San Diego County, 2012-2021

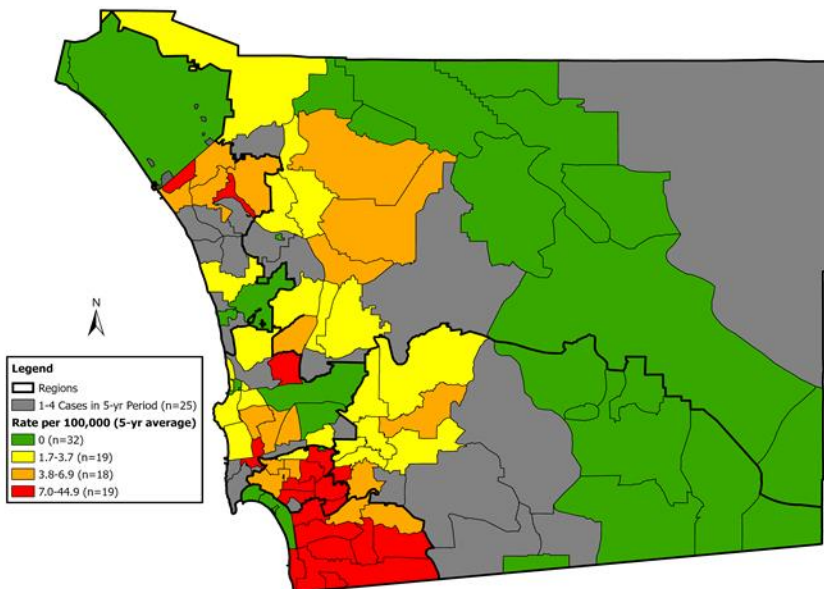


Active TB Cases: 2021 by the Numbers

Age

- The median age of TB cases was 51 and ranged from <1 to 95 years old.
- Four cases of TB occurred among children <5 years old (2% of all cases). Five or fewer cases occurred annually in this age group 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 (30% of all cases).

Figure 2. Active TB incidence by zip code, San Diego County, 2016-2020



Tuberculosis Rates by Zip Code, San Diego County, 2016-2020
 Source: County of San Diego, Health and Human Services Agency, Tuberculosis Control, RVCT Database
 Map Date: December 13, 2021

Figure 3. Proportion of TB cases by birth country, San Diego County, 2021

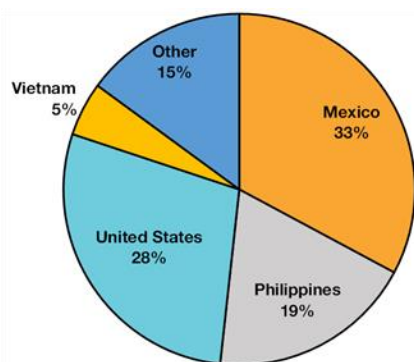
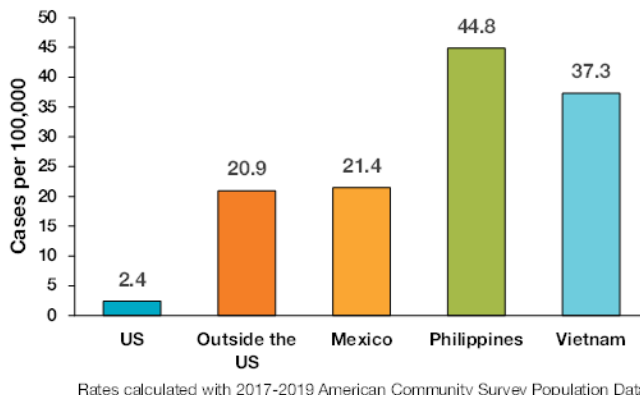


Figure 4. TB incidence by birth country, San Diego County, 2017-2021



Race/Ethnicity

- The highest proportion of cases occurred in Hispanics (60% [121 cases]) and Asian/Pacific Islanders (31% [62 cases]). Non-Hispanic blacks accounted for 5% (10 cases) and non-Hispanic whites represented 4% (7 cases) of the total.
- Of the 121 cases in Hispanics, more than half (77 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 (72%) of TB cases occurred in persons who were born outside the U.S. (Figure 3).
- Of the 57 cases born in the U.S., 77% (44 cases) were Hispanic.
- The TB rate among persons born outside the U.S. was nearly 9 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 (27% of cases). Persons living with HIV, the strongest known medical risk factor, accounted for 8% of cases.
- Other risk factors reported included experiencing homelessness in the past year (8%), drug use in the past year (11%), and incarceration at diagnosis (5%).

Drug Resistance

- Among the 180 culture-proven cases with drug susceptibility results, 17 (9%) had isolates resistant to at least isoniazid, and none had multidrug-resistant TB (MDR TB).
- 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.

TB due to *Mycobacterium Bovis*

- Among the 178 culture-proven cases in 2021 with genotyping results, 13% (24 cases) had disease from *Mycobacterium bovis*. Of the 62 culture-proven cases born in Mexico, 16 (26%) 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.