

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

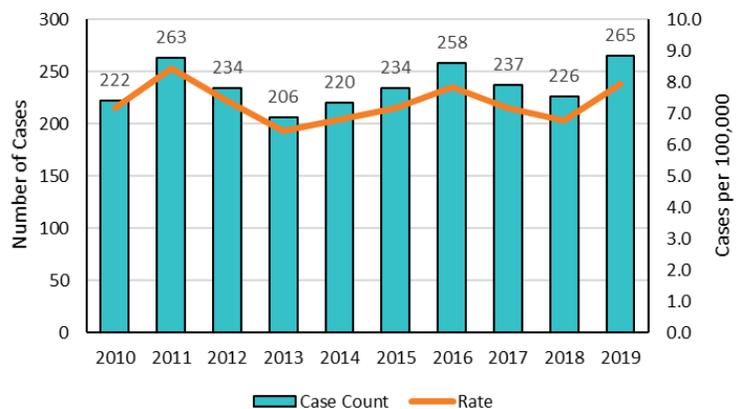
What Is Tuberculosis?

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 2019, San Diego County reported 265 new active TB cases, compared with 226 in 2018.
- In 2019, San Diego County’s annual TB incidence was 7.9 cases per 100,000 persons. This rate has fluctuated over the past decade, remaining less than 9 per 100,000 since 2008 (Figure 1).
- 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 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.

Figure 1. Number and incidence of new active TB cases, San Diego County, 2010-2019

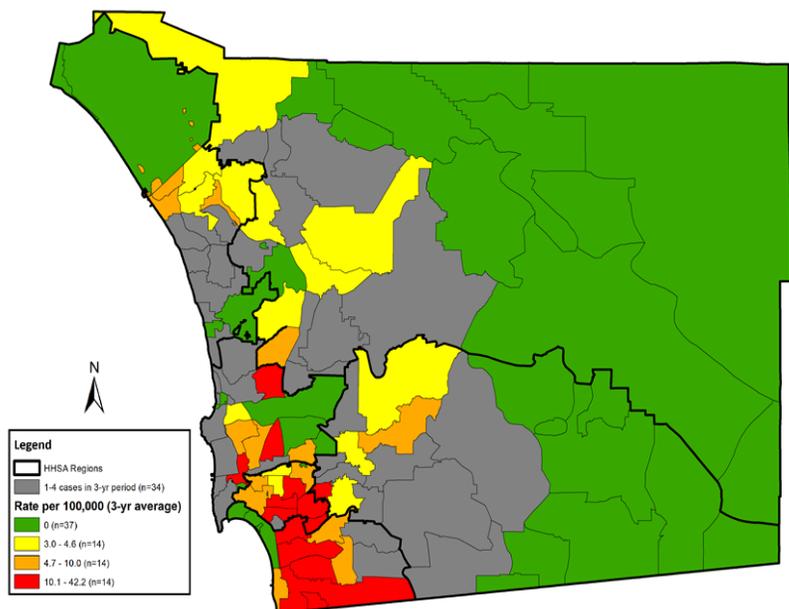


Active TB Cases: 2019 by the Numbers

Age

- The median age of TB cases in San Diego County was 51 and ranged from 1 to 95 years old.
- Five cases of TB occurred among children <5 years old (2% 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 (26% of all cases).

Figure 2. Active TB incidence by zip code, San Diego County, 2016-2018



Tuberculosis Rates by Zip Code, San Diego County, 2016-2018
 Source: County of San Diego, Health and Human Services Agency (HHS), Tuberculosis Control, RVCT Database
 Map Date: September 27, 2019

Figure 3. Number and proportion of TB cases by birth country, San Diego County, 2019

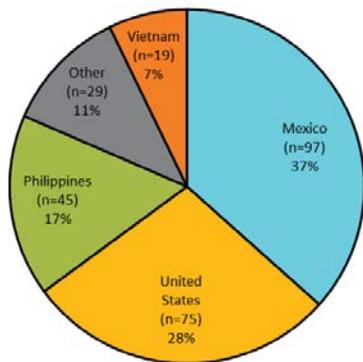
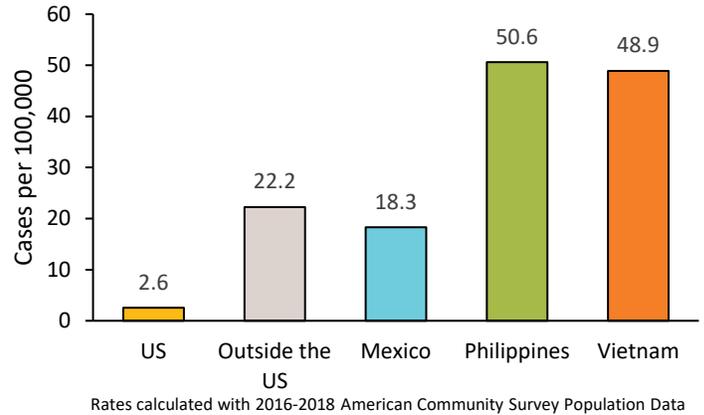


Figure 4. TB incidence by birth country, San Diego County, 2016-2018



Race/Ethnicity

- The highest proportion of cases occurred in Hispanics (59% [157 cases]) and Asian/Pacific Islanders (29% [78 cases]). Non-Hispanic whites accounted for 7% (18 cases) and non-Hispanic blacks for 4% (11 cases).
- Of the 157 cases in Hispanics, nearly two thirds (103 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 75 cases born in the U.S., 72% (54 cases) were Hispanic.
- The TB rate among persons born outside the U.S. was 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 (29% 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 (12%), drug use in the past year (11%), and incarceration at diagnosis (7%).

Drug Resistance

- Among the 228 culture-proven cases with drug susceptibility results, 21 (9%) had isolates resistant to at least isoniazid, and 2 (0.9%) had multidrug-resistant TB (MDR TB).
- Since 1999, a total of 66 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 224 culture-proven cases in 2019 with genotyping results, 11% (24 cases) had disease from *Mycobacterium bovis*. Of the 81 culture-proven cases born in Mexico, 17 (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.