

TUBERCULOSIS FACT SHEET 2023



Tuberculosis (TB) is an infectious disease caused by the bacterium *Mycobacterium tuberculosis*. TB is spread through the air from person to person. The risk of exposure and subsequent infection is linked with duration of contact, ventilation in the shared environment, site of TB disease, and degree of infectiousness of the person with TB. About 86% of active TB cases in California are related to progression of disease from untreated latent TB infection. Symptoms of TB depend on the site of infection, often the lungs (pulmonary TB), but TB infection can occur outside the lungs (extrapulmonary TB). Common symptoms of pulmonary TB include a prolonged cough without alternative explanation for > 2 weeks, chest pain, and coughing up blood or sputum (phlegm in lungs). TB skin tests (TST) and TB blood tests are used to detect TB bacteria in the body. Other tests, such as a chest x-ray and a sample of sputum, are needed to see if a person has active TB disease. LTBI and TB disease are treatable with specific drug regimens. Treatment can be long and complicated depending on the characteristics of the patient (e.g., HIV co-infection) and infection (e.g., drug resistance).

Source: Centers for Disease Control and Prevention (CDC)

Trends in TB Disease

The rate of TB disease in Sacramento County increased from 2022 to 2023 [Figure 1]. The TB rate in the County was above the State rate in 2023. Both rates have been much higher than the Healthy People 2030 objective rate of 1.4 per 100,000 population. There were 91 new TB cases among County residents in 2023, a large increase compared to 2022.

TB Case Demographics

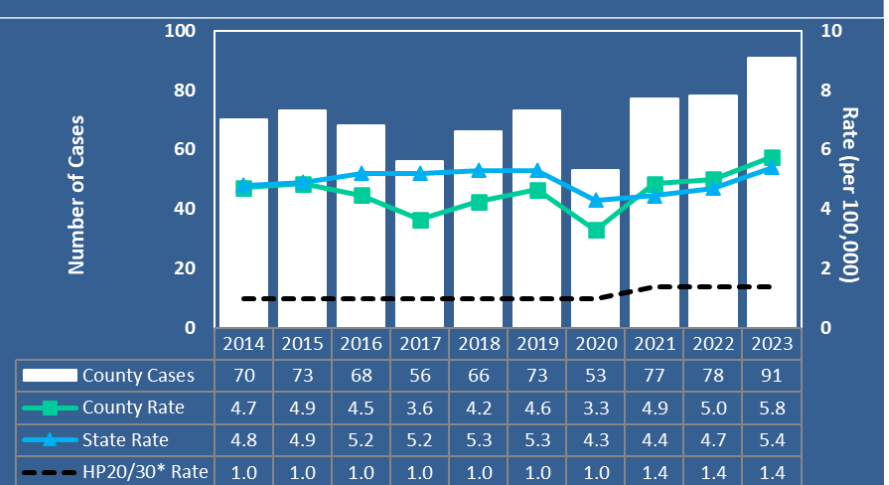
Race/ethnicity: A little over half (58.2%) of 2023 TB cases in the County were Asian/Pacific Islander despite comprising only about 15% of the County population [Figure 2].

Nativity: Most TB cases in the County (87.9%) were foreign-born persons, higher than the State value (83.0%) [Table 1]. The most common countries of birth among foreign-born cases were Vietnam (18.7%), the Philippines (16.5%), Afghanistan (15.3%), Mexico (8.8%), and India (6.6%) [data not shown].

Sex: Over two-thirds (73.6%) of TB cases in 2023 occurred in males. The proportion of male cases increased compared to 2022 [Figure 3]. The latter is a departure from the trend observed in 2019 to 2021.

Age: About a third (34.1%) of County TB cases in 2023 were among persons age 65 and older. Roughly one in ten (12.1%) were pediatric cases with age less than 15 [data not shown].

Figure 1. TB Case and Rates, Sacramento County vs. California, 2014-2023



*Healthy People 2020/2030

Figure 2. TB Cases by Race/Ethnicity, Sacramento County, 2023

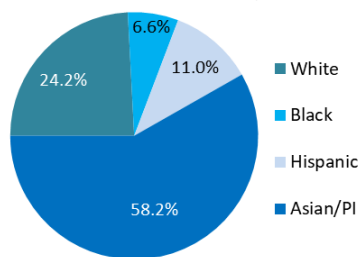
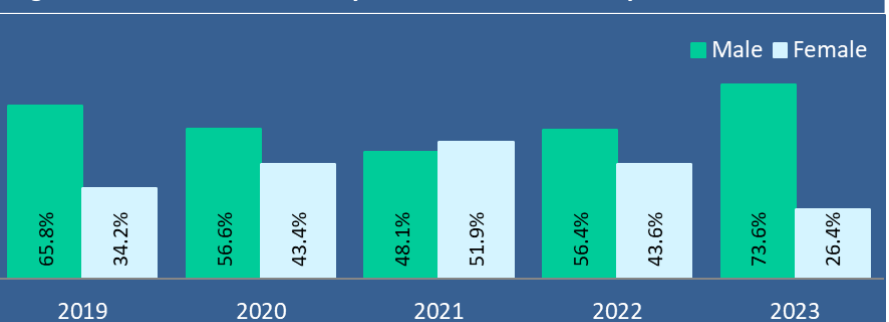


Table 1. TB Cases by Nativity, County vs. California, 2023

County/State	Foreign-Born	US-Born
Sacramento	87.9%	12.1%
California	83.0%	17.0%

Figure 3. Percent of TB Cases by Sex, Sacramento County, 2019-2023



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TB Risk Factors

Co-morbid conditions: In 2023, TB cases with diabetes mellitus (DM) increased slightly when compared to 2022 in both count and proportion of total cases [Figure 4]. In 2023, roughly one-fifth (19.8%) of TB cases had DM. There was one TB case co-infected with HIV and five cases with documented non-HIV immunosuppressive conditions in 2023 [data not shown].

Close contact: Five (5.5%) 2023 County TB cases had close contact to an infectious TB case. The primary reason for TB disease evaluation was TB symptoms for a majority (54.4%) of cases [data not shown].

Living conditions: Homeless persons and persons living in congregate settings (such as correctional or long-term care facilities) are at increased risk of developing TB. These groups account for two 2023 County TB cases [Table 2].

Substance use: Substance use also increases the risk of developing TB disease and can complicate TB therapy. Injection drug use was reported by one 2023 County TB case. Excess alcohol use was reported by two cases. [Table 2].

Site of TB Disease

Roughly three-fourths (73.3%) of County TB cases in 2023 had pulmonary disease only [Figure 5]. Of the 24 (26.7%) cases with at least one extrapulmonary site of disease, the most common sites of disease were pleural, cervical, CNS, and genitourinary.

TB Drug Susceptibility and Resistance

In 2023, 58 (63.7%) County TB cases were culture-confirmed, and 55 (94.8%) had antimicrobial susceptibility testing performed. The most common type of front-line TB drug resistance among these cases was isoniazid (9.1%) [Figure 6]. Multi-drug resistance (MDR) is when the TB organism is resistant to isoniazid and rifampin. There was one MDR TB case in the County in 2023.

Source: California Reportable Diseases Information Exchange

Figure 4. TB Cases with Diabetes, Sacramento County, 2019-2023

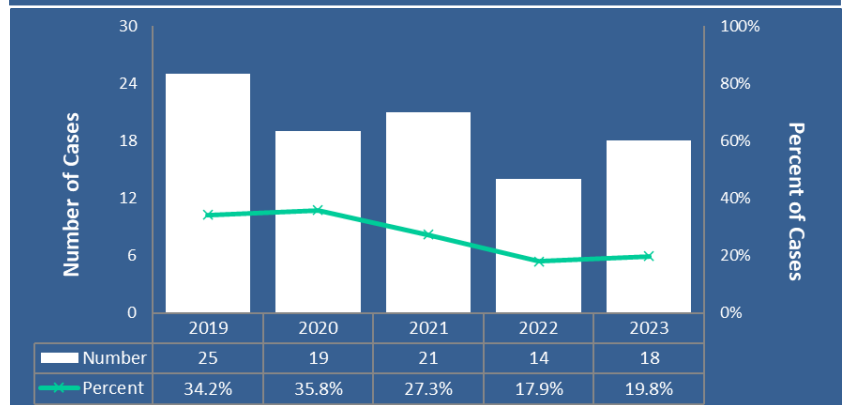


Table 2. Select Risk Factors of TB Cases, Sacramento County, 2023

Place of Residence		Substance Use within Past Year	
Long-term care	1 (1.1%)	Excess alcohol	2 (2.2%)
Corrections	0 (0.0%)	Injection drugs	1 (1.1%)
Homeless	1 (1.1%)	Non-injection drugs	0 (0.0%)

Figure 5. TB Cases by General Site of Disease, Sacramento County, 2023

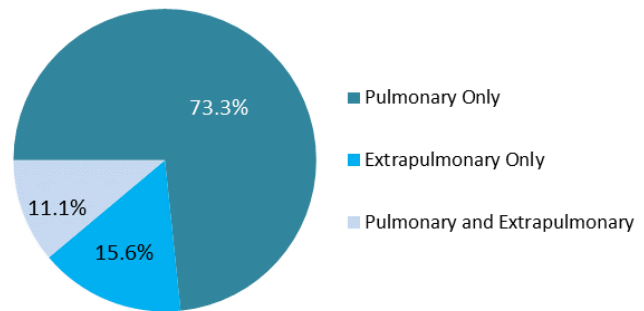
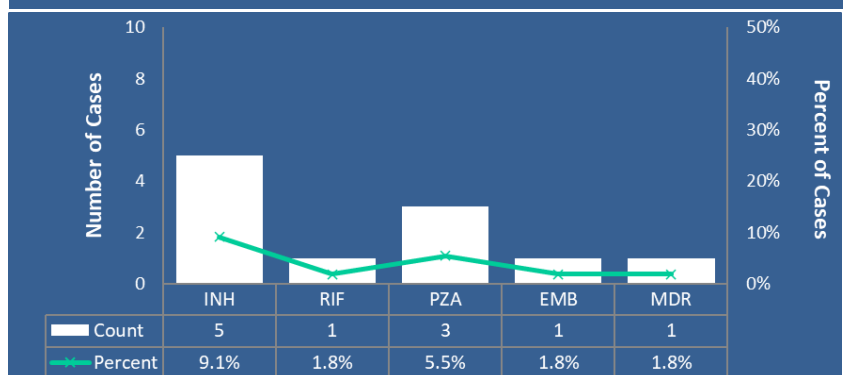


Figure 6. TB Drug Resistance, Sacramento County, 2023



INH = isoniazid; RIF = rifampin; PZA = pyrazinamide; EMB = ethambutol; MDR = multi-drug resistant