

# TUBERCULOSIS FACT SHEET 2021



**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 the intimacy and duration of contact, ventilation in the shared environment, and degree of infectiousness of the person with TB. About 5-10% of infected persons who do not receive treatment for latent TB infection (LTBI), a form of TB without clinical manifestation, will later develop TB disease. 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 cough lasting at least three 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 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 2020 to 2021 [Figure 1]. The TB rate in the County was above the State rate in 2021. Both rates have been much higher than the Healthy People 2030 objective rate of 1.4 per 100,000 population. There were 77 new TB cases among County residents in 2021, a dramatic increase compared to 2020.

## TB Case Demographics

**Race/ethnicity:** About three-fourths (76.6%) of 2021 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 (89.6%) were foreign-born persons, higher than the State value (84.0%) [Table 1]. The most common countries of birth among foreign-born cases were the Philippines (27.3%), India (14.3%), Vietnam (9.1%), Afghanistan (7.8%), China (3.9%), and Mexico (3.9%) [data not shown].

**Sex:** Over half (51.9%) of TB cases in 2021 occurred in females. The proportion of male cases declined compared to 2020 [figure 3]. The former is a departure from trends observed from 2017 to 2020.

**Age:** About two-thirds (66.0%) of County TB cases in 2021 were among persons age 65 and older. Less than one in twenty (3.9%) were pediatric cases with age less than 15 [data not shown].

Figure 1. TB Case and Rates, Sacramento County vs. California, 2012-2021

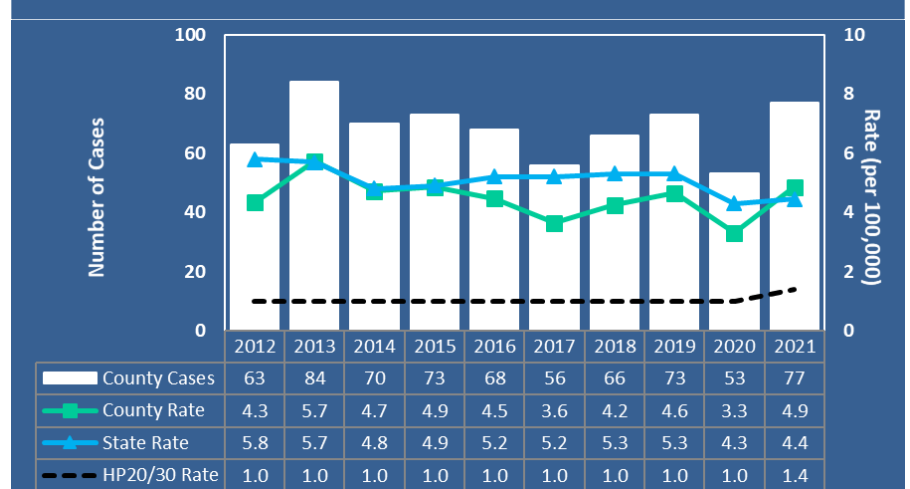


Figure 2. TB Cases by Race/Ethnicity, Sacramento County, 2021

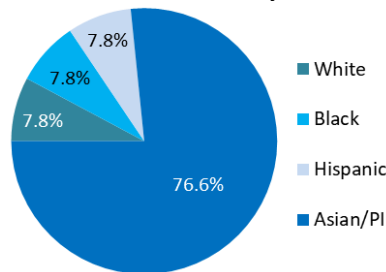
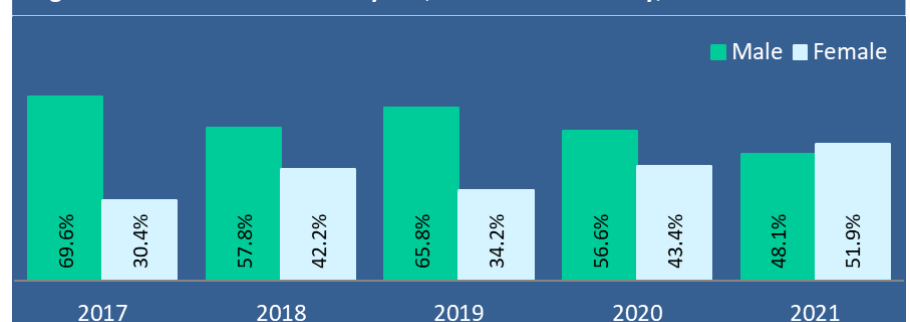


Table 1. TB Cases by Nativity, County vs. California, 2021

County/State	Foreign-Born	US-Born
Sacramento	89.6%	10.4%
California	84.0%	16.0%

Figure 3. Percent of TB Cases by Sex, Sacramento County, 2017-2021



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## TB Risk Factors

**Co-morbid conditions:** In 2021, TB cases with diabetes mellitus (DM) increased when compared to 2020, but the overall proportion of TB cases with DM decreased [Figure 4]. In 2021, roughly one-fourth (27.3%) of TB cases had DM. There were no TB cases co-infected with HIV and no cases with documented non-HIV immunosuppressive conditions in 2021 [data not shown].

**Close contact:** Two (2.6%) 2021 County TB cases had close contact to an infectious TB case. The primary reason for TB disease evaluation was TB symptoms for a majority (72.7%) 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. Notably, these groups do not account for any 2021 County TB cases [Table 2].

**Substance use:** Substance use also increases the risk of developing TB disease and can complicate TB therapy. Neither excess alcohol use nor injection or non-injection drug use were reported in the last year among 2021 County TB cases [Table 2].

## Site of TB Disease

Roughly three-fourths (74.0%) of County TB cases in 2021 had pulmonary disease only [Figure 5]. Of the twenty (26.0%) cases with at least one extrapulmonary site of disease, the most common sites of disease were cervical and pleural.

## TB Drug Susceptibility and Resistance

In 2021, 60 (77.9%) County TB cases were culture-confirmed, and all but four (93.3%) had antimicrobial susceptibility testing performed. The most common type of front-line TB drug resistance among these cases was isoniazid (10.3%) [Figure 6]. Multi-drug resistance (MDR) is when the TB organism is resistant to at least isoniazid and rifampin. There were no cases of MDR TB in the County in 2021.

Figure 4. TB Cases with Diabetes, Sacramento County, 2017-2021

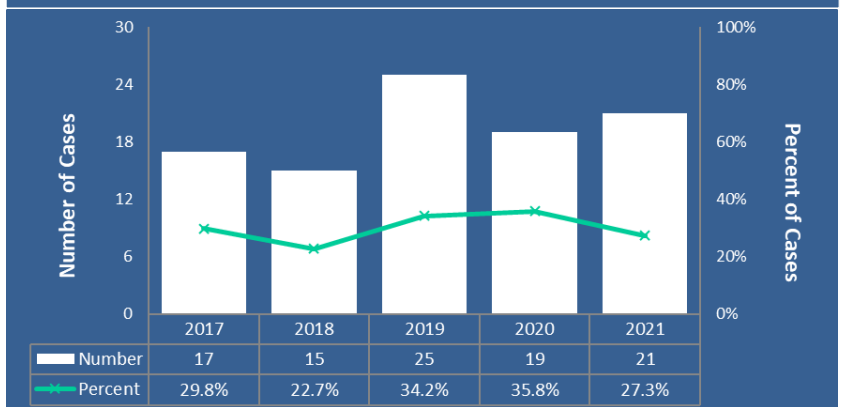


Table 2. Select Risk Factors of TB Cases, Sacramento County, 2021

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

Figure 5. TB Cases by General Site of Disease, Sacramento County, 2021

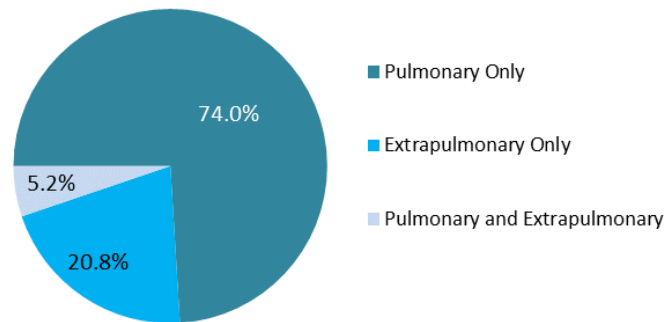
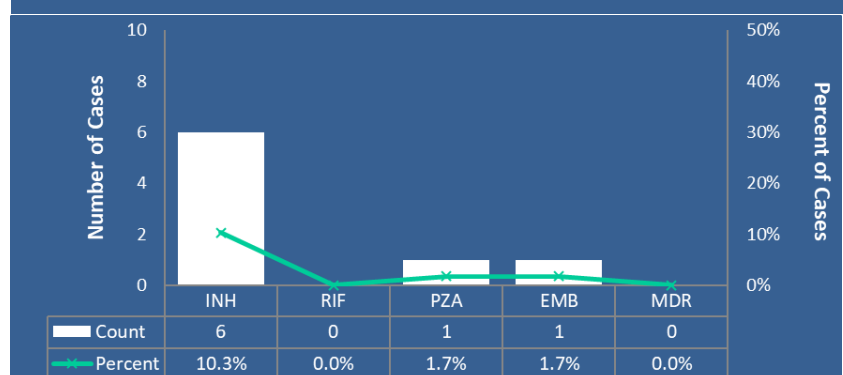


Figure 6. TB Drug Resistance, Sacramento County, 2021



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