

TUBERCULOSIS FACT SHEET 2017



Tuberculosis (TB) is an infectious disease caused by the bacterium *Mycobacterium Tuberculosis*. TB usually involves the lungs (pulmonary TB) but can infect almost any organ in the body. 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 later develop TB disease. Symptoms of TB depend on the site of TB infection. 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. Both latent TB infection and TB disease can be treated, with specific drug regimens. Treatment can be long and complicated depending on 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 has declined 51.9% over the most recent ten years [Figure 1]. The TB rate in the County has fluctuated by year and was below the State rate in 2017. Both rates have been much higher than the Healthy People 2020 objective rate of 1.0 per 100,000 population. There were 57 new TB cases among County residents in 2017, a decrease from 2016.

TB Case Demographics

Race/ethnicity: About three-fourths (73.7%) of 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 (77.2%) were foreign-born persons, slightly lower than the State value (82.0%) [Table 1]. The most common countries of birth among foreign-born cases were the Philippines (22.8%), Vietnam (14.0%), Laos (10.5%), India (7.0%), and China (5.3%). [data not shown]

Sex: The number of TB cases among males greatly surpassed the number of cases among females in 2017, despite a reversal of this trend in 2014 and 2015 [Figure 3].

Age: Over two-fifths (42.1%) of County TB cases in 2017 were among persons age 65 and older. Less than five percent (3.5%) were pediatric cases with age less than 15 [data not shown].

Figure 1. TB Case and Rates, Sacramento County vs. California, 2008-2017

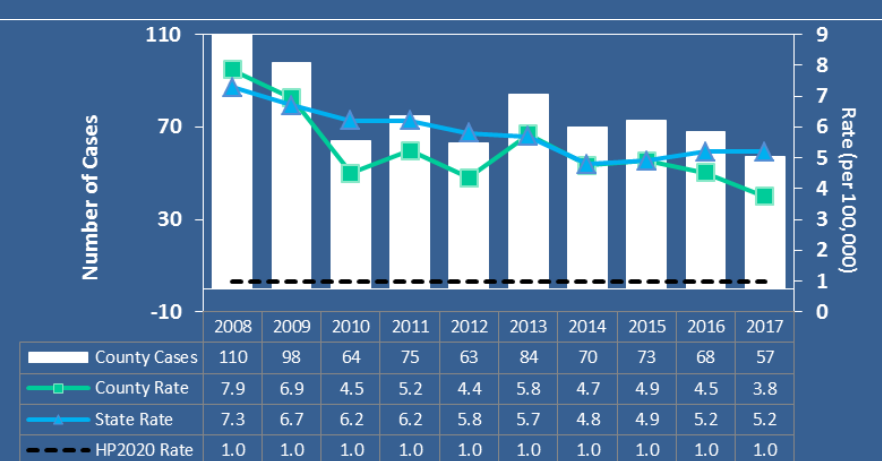


Figure 2. TB Cases by Race/Ethnicity, Sacramento County, 2017

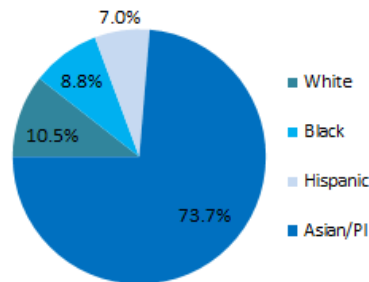
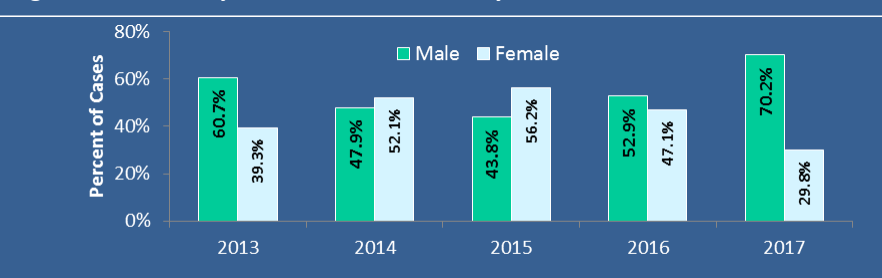


Table 1. TB Cases by Nativity, Sacramento County vs. California, 2017

County/State	Foreign-Born	US-Born
Sacramento	77.2%	22.8%
California	82.0%	18.0%

Figure 3. TB Case by Sex, Sacramento County, 2013-2017



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TB Risk Factors

Co-morbid conditions: The number of TB cases in the County with Diabetes Mellitus (DM) in 2017 remained the same as 2016, but the overall proportion of TB cases with DM increased [Figure 4]. In 2017, roughly one-third (29.8%) of TB cases had DM. There were no TB cases co-infected with HIV and no cases with other documented non-HIV immunosuppressive conditions in 2017 [data not shown].

Close contact: Three (5.3%) 2017 County TB cases had close contact to an infectious TB case. The primary reason for TB disease evaluation was TB symptoms for a majority (64.9%) of cases [data not shown].

Living conditions: Homeless persons and persons living in congregate settings are at increased risk of developing TB, but they account for only seven of the 2017 County TB cases [Table 2]. There were six TB cases amongst homeless individuals and one case amongst individuals residing in a correctional facility in 2017.

Substance use: Substance use also increases the risk of developing TB disease and can complicate TB therapy, but very few County TB cases reported recent substance use [Table 2].

Site of TB Disease

Nearly four-fifths (78.9%) of County TB cases in 2017 had pulmonary disease only [Figure 5]. Of the 12 (21.0%) cases with at least one extrapulmonary site of disease, the most common site of disease was cervical (15.8%).

TB Drug Susceptibility and Resistance

In 2017, 45 (78.9%) of 57 County TB cases were culture-confirmed, and all of these had antimicrobial susceptibility testing performed. The most common type of front-line TB drug resistance among these cases was isoniazid (12.2%), followed by pyrazinamide (4.1%) [Figure 6]. Multi-drug resistance (MDR) is when the TB organism is resistant to at least isoniazid and rifampin. There were two cases of MDR TB in the County in 2017.

Figure 4. TB Cases with Diabetes, Sacramento County, 2013-2017

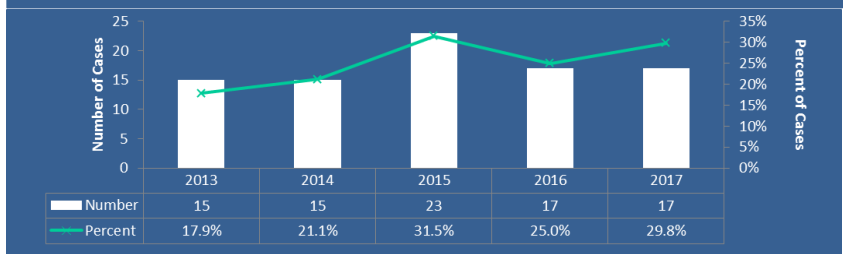


Table 2. Select Risk Factors of TB Cases, Sacramento County, 2017

Place of Residence	Substance Use within Past Year
Long-term care	0 (0.0%)
Corrections	1 (1.8%)
Homeless	6 (10.5%)
	Excess alcohol
	Injection drugs
	Non-injection drugs
	3 (5.3%)
	1 (1.8%)
	0 (0.0%)

Figure 5. TB Cases by General Site of Disease, Sacramento County, 2017

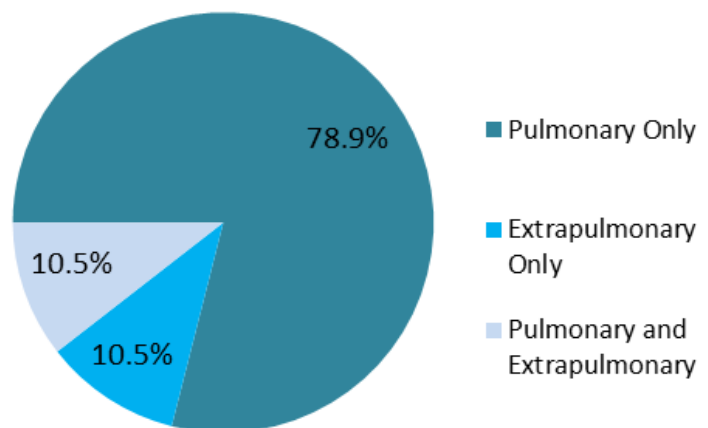
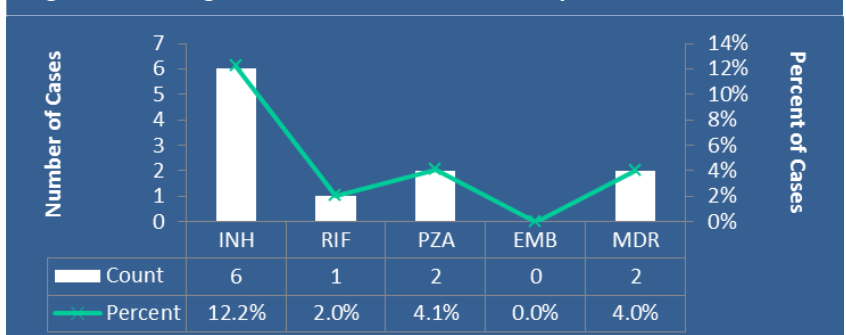


Figure 6. TB Drug Resistance, Sacramento County, 2017



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