2019 Tuberculosis Annual Report

San Mateo County Health System Tuberculosis Control Program
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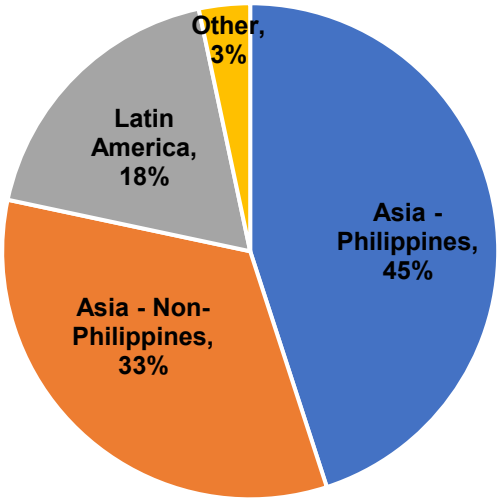
Tuberculosis in San Mateo County

- **65** new active cases
- Incidence: **8.2** cases / 100,000 population
- SMC ranked **4th highest** incidence in CA
- TB-associated deaths: **0**
- No links among US born cases

Cases by Origin

- US Born: **5**
- Foreign Born: **60**

Foreign-born origins of TB cases



Country	Cases
Philippines	27
China	11
Mexico	8
Burma	3
Vietnam	3
India	2
El Salvador	2
Fiji	1
Honduras	1
Italy	1
Laos	1

Figure 1. Almost half of foreign-born cases of active TB were in individuals born in the Philippines.

Patient Demographics

Tuberculosis Cases and Incidence Rates, 2016-2020		2019 Cases	2015-2019 Annual Average Number of Cases	2015-2019 Average Incidence Rate
Sex	Male	51	36	9.4
	Female	14	22.2	5.7
Age Group	0-4 yrs	0	0.2	0.4*
	5-14 yrs	1	0.6	0.6*
	15-24 yrs	4	3	3.8*
	25-44 yrs	9	13.4	6.5
	45-64 yrs	24	20.2	9.2
	65+ yrs	27	20.8	16.2
Race/Ethnicity	Asian	49	43.6	13.7
	Black	1	0.4	2*
	Hispanic	11	10	5.1
	Pacific Islander	1	1.2	10.9*
	White	3	3	1.5

*These values are based on calculations using few cases of disease. Caution should be observed when interpreting rates based on few events and/or small populations.

Table 1. Based on 5-year average incidences, the groups most affected by TB in San Mateo County are: males, individuals 65 years of age and older, and Asians.

Incidence Trends

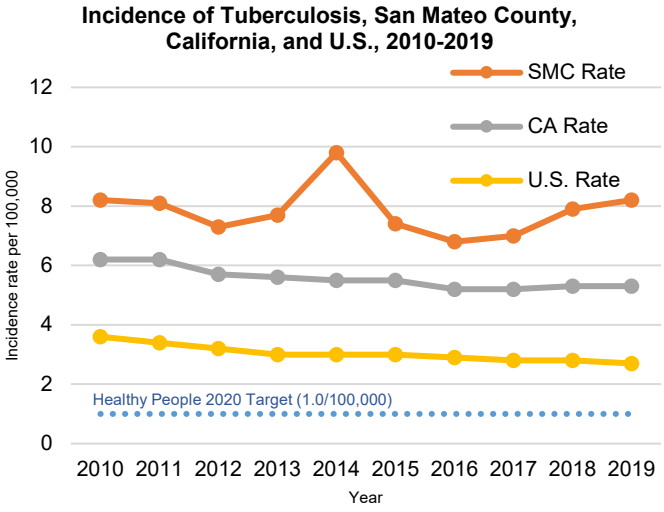
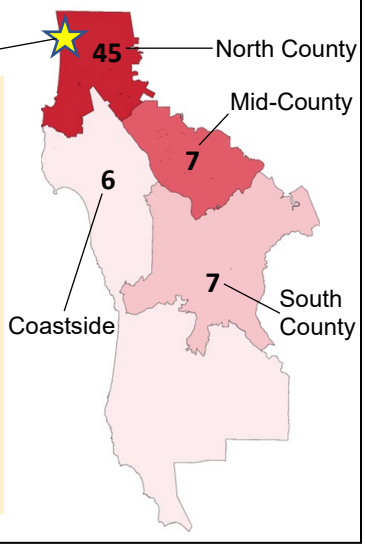


Figure 2. Incidence of TB in San Mateo County remains above the California and U.S. incidence rates.

Cases by Region

Daly City

- **32 cases** (**49%** of all county cases)
- Incidence of **30.1/100,000**
- **52%** of the population is foreign-born individuals
- Incidence of **58/100,000** in foreign-born population



Demographic Highlights

- Median age: **62 years old**
- Age range: **13-91 years old**
- **1** pediatric cases (0-14 years old)

Social Risk Factors

(within past 12 months)

- Homeless: **0**
- Correctional faciltiy: **2**
- Long-term care housing: **0**
- Substance abuse (*including alcohol*): **3**

Clinical Characteristics

Clinical Characteristics of TB Cases, 2019	Feature	Number of cases	Percent
Site of disease	Pulmonary only	43	66.2%
	Extrapulmonary only	17	26.2%
	Both pulmonary and extrapulmonary	5	7.7%
Culture status (sputum cultures from cases with any pulmonary infection) n=48	Culture Positive	40	83.3%
	Clinical Case	8	16.7%
Sputum smear status (for cases with positive sputum cultures) n=40	Positive	17	42.5%
	Negative	23	57.5%
Comorbidities	HIV/AIDS	0	0.0%
	Diabetes mellitus	29	82.9%
	End-stage renal disease	3	8.6%
	Other immunosuppression	3	8.6%

Table 2. Over 55% of culture-positive sputum samples were smear-negative. The most common reported comorbidity was diabetes mellitus.

Microbiological Characteristics

Microbiological Characteristics of TB Cases, 2019		Number of cases	Percent
Culture Status (All)	Culture Positive	57	87.7%
	Clinical Case	8	12.3%
Drug Susceptibility (Culture positive only)	Susceptible	45	78.9%
	Resistant	12	21.1%
Anti-TB Drug Resistance	INH Only	6	-
	PZA Only	4	-
	INH, ETH	1	-
	INH, PZA, ETH, RIF, RIB	1	-

Table 3. Over 85% of TB cases were culture positive; 78.9% of culture positive cases were drug susceptible. Only 12 cases were drug resistant.

For further information

Call **650-573-2346** Visit **smchealth.org/TB**

Additional resources:

- California Department of Public Health: **cdph.ca.gov/Programs/CID/DCDC/Pages/TBCB.aspx**
- Centers for Disease Control: **cdc.gov/tb**

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Data sources:
CA Dept Public Health (2019 CA and US incidence rates, from 'TB in California: 2019 Snapshot'); CA Dept of Finance (population estimates for incidence calculations, from July 2020 P2 data projections); US Census Bureau (city-level population estimates, from American Community Survey 5-Year Estimates)

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TB Control's Work Load

The TB Control team followed up with **79 potential cases** and **412 contacts** in 2019. The treatment of **68 TB cases**, including those confirmed and suspected, were monitored by the TB Control team using directly observed therapy (DOT) and video observed therapy (VOT) methods

B-notifications

The CDC sends B notifications to health departments as follow-up to the screening mandated by U.S. immigration law. In 2019, San Mateo County received **165 B notifications**.

2019 in Summary

Due to the COVID pandemic the TB Annual report for 2019 was delayed.

2019 saw 3.8% increase in incidence of TB in San Mateo County (8.2 cases/100,000 persons) compared to 2018 (7.9 cases/100,000 persons). TB incidence in California (5.3 cases/100,000 persons), and the US (2.7 cases/100,000 persons) remained about the same over the past four years. TB incidence in San Mateo County was the same in 2019 as in 2010. Incidences are still above the Health People 2020 Target (1.0 cases/100,000 persons).

As of October 1, 2018, civil surgeons are required to report latent tuberculosis infection (LTBI) to local health departments. The CDC Division of Global Migration and Quarantine revised its Tuberculosis Technical Instructions for civil surgeons screening applicants for immigration status adjustment. Civil surgeons are required to report tuberculosis (TB) screening outcomes that result in latent TB Infection (LTBI) diagnosis to public health departments. This effort to screen for LTBI and to treat LTBI to prevent future cases is another step toward achieving the US goal of TB elimination. In 2019, 140 cases were reported to our Public Health Department.

Diabetes continues to be the most common comorbidity found in our patients with active TB. In many of our cases diabetes was diagnosed at the time of the tuberculosis diagnosis.

Once again, the highest number of cases occurred in Daly City and most cases were foreign-born with 45% born in the Philippines.

The US born cases were not epidemiologically linked and there was no evidence of ongoing local transmission of TB.