

2015 Tuberculosis Annual Report

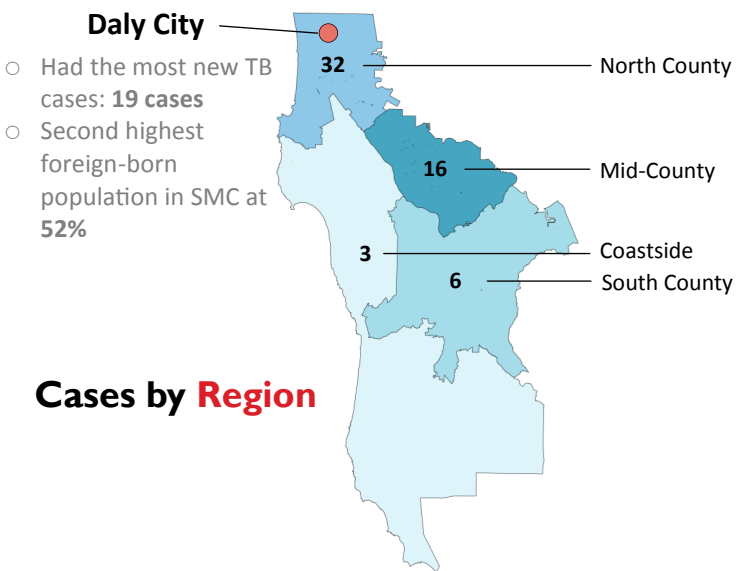
San Mateo County Health System

Tuberculosis Control Program

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Tuberculosis in San Mateo County

- ⇒ 57 new active cases (7.5 cases/100,000 population)
- ⇒ SMC ranked 7th highest incidence in CA
- ⇒ Majority of cases: 45+ years old
- ⇒ Median age: 59 years old
- ⇒ Pediatric¹ cases: 1
- ⇒ Deaths associated with TB: 3
- ⇒ Female: 24 (42.1%) ⇒ Male: 33 (57.9%)



Foreign-born Cases

- ⇒ US Born: 5
- ⇒ Foreign Born: 52

Figure 3 Foreign-Born Country of Birth among TB Cases, San Mateo County, 2015

Country	Percentage
Burma	3.8%
China	7.7%
El Salvador	5.8%
Fiji	1.9%
Guatemala	1.9%
Hong Kong	3.8%
India	1.9%
Indonesia	5.8%
Lebanon	1.9%
Mexico	11.5%
Peru	1.9%
Philippines	46.2%
Tonga	1.9%
Vietnam	3.8%

Figure 3. The Philippines continues to be the highest foreign-born country of birth among active TB cases in 2015.

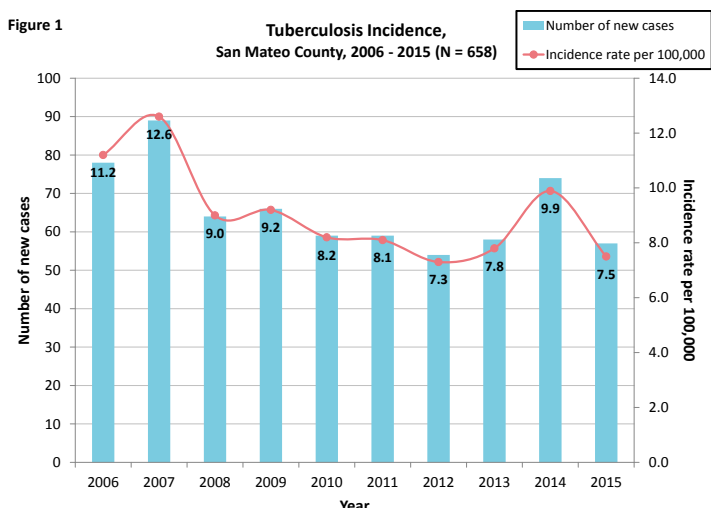


Figure 1. After a period of a gradually decreasing incidence and an increase in 2014, 2015 went back down to previous incidence levels.

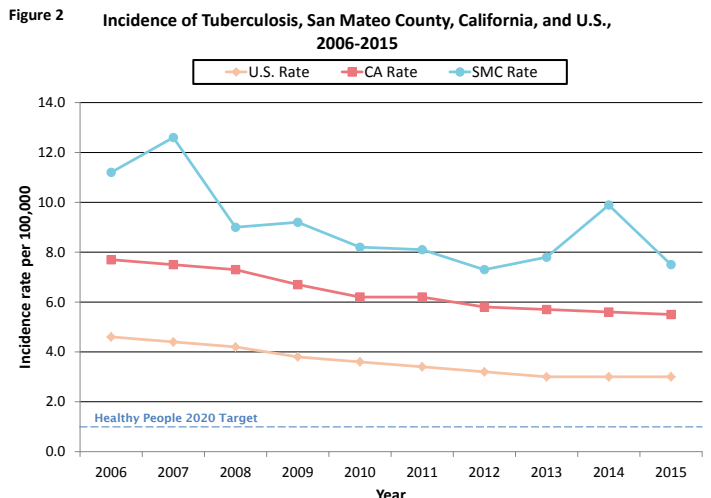


Figure 2. San Mateo County remains above the state and U.S. incidence rate. The Healthy People 2020 Target is 1.0/100,000.

Table 1 Tuberculosis Incidence and Case Rates 2011-2015

	2015		'11-'15 Avg.		
	Incidence	Inc. Rate	Incidence	Inc. Rate	
Age Group	0-4 yrs	-	1.2	2.6	
	5-14 yrs	1	10.9	0.1	0.9
	15-24 yrs	3	3.5	3.6	4.3
	25-44 yrs	19	9.6	17.0	8.4
	45-64 yrs	16	7.5	17.4	8.4
	65+ yrs	18	15.1	20.4	18.4
Race/Ethnicity	White	6	2.0	6.2	2.0
	Black	-	-	1.0	5.3
	Hispanic/Latino	12	6.1	10.6	5.6
	Asian	37	19.2	39.8	21.4
	Pacific Islander	2	17.6	2.0	18.4
	American Indian	-	-	0.2	17.2
	Multiple Race	-	-	0.6	2.5

Table 1. The cases in 2015 were similar in age to the five year average. The incidence within the Asian population saw a decrease from the previous year but still account for the majority of cases.

Social Risk Factors

- ⇒ Homeless: **0**
- ⇒ Correctional facility: **0**
- ⇒ Long-term care housing: **2**
- ⇒ Substance abuse²: **2**

Medical Risk Factors

- ⇒ Immunosuppression: **2**
- ⇒ End Stage Renal Disease: **2**
- ⇒ Diabetes mellitus (DM): **19**

From the TB Controller

For the first time in 23 years the annual number of reported TB cases in the United States has increased. The CDC reported that there were 157 more TB cases reported in 2015 compared to 2014 (9,563 vs. 9,406). After two decades of annual declines, TB incidence in the United States has leveled at approximately 3.0 new cases per 100,000 persons. The reasons for this leveling in TB incidence are not yet clear and further evaluation of the data will be required to understand the causes of this trend.

The annual number of reported TB cases in California also increased from 2,134 to 2,137. The decline in California's TB incidence had slowed over the past decade and has now stopped.

After an increase in annual cases in San Mateo in 2014, incidence levels returned to previous levels in 2015. The majority of cases were in the foreign-born population and Philippine-born persons have continued to represent the majority of foreign-born cases. There was one case of multiple drug resistant (MDR) TB in San Mateo County in 2015.

Of the 5 domestic cases, three were clinical cases without microbiologic confirmation and there was no evidence that they were epidemiologically or genotypically linked. We have no evidence of ongoing local transmission of TB. However, without continued aggressive vigilance and control measures, that could easily change.

In 2015, San Mateo TB Control implemented the use of Video Observed Therapy (VOT). VOT allows staff to communicate with and observe patients taking their TB medications via a live video connection. This strategy eliminates the need for a TB Control Program staff person to perform in-person visits to patients' homes. As a result, staff members are able to provide observational therapy to a greater number of TB patients. VOT therapy cannot replace all DOT as there are some patients who do not have access to necessary technology, may not be able to reliably use the technology, and/or require a higher level of interaction in order to remain adherent.

B-notifications

The CDC sends B notifications to health departments as follow-up to the screening mandated by U.S. immigration law. This year, San Mateo County received **239 B notifications**.

Whew!

The TB Control team, with a staff of nine, followed up with **75 potential cases** and **396 contacts** in 2015. Directly observed therapy (DOT) was performed on **46 of the 57 active cases** and staff provided directly observed preventative therapy (DOPT) to **13 contacts** to active cases.

Table 2: Clinical Characteristics

	2015		2011-2015	
	Count	%	Count	%
Site of Disease (All)				
Pulmonary	36	63.2%	209	69.2%
Extrapulmonary	19	33.3%	71	23.5%
Both	2	3.5%	22	7.3%
Culture Status (Pulmonary Only)				
Culture Positive	32	88.9%	173	82.8%
Clinical Case	4	11.1%	36	17.2%
Sputum Smear Status (Pulmonary Culture Positive Only)				
Positive	12	37.5%	92	53.2%
Negative	19	59.4%	78	45.1%
Unknown/Not Done	1	3.1%	3	1.7%

Table 3: Microbiological Characteristics

	2015		2011-2015	
	Count	%	Count	%
Culture Status (All)				
Culture Positive	45	78.9%	231	76.5%
Clinical Case	12	21.1%	71	23.5%
Drug Susceptibility (Culture Positive Only)				
Susceptible	33	73.3%	193	83.5%
Resistant	12	26.7%	37	16.0%
Unknown	0	0.0%	1	0.4%
Anti-TB Drug Resistance				
INH Only*	6	50.0%	19	51.4%
MDR (INH & RIF)*	1	8.3%	5	13.5%
INH+Others*	3	25.0%	3	8.1%
Other*	2	16.7%	10	27.0%

*Percentages are out of All Resistant Strains

¹ Pediatric: 0-14 years old

² Substance abuse: Includes alcoholism

For further information about TB or our services, please visit our web page at <http://smchealth.org/TB> or call us at **650-573-2346**.

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