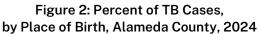
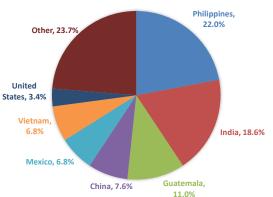


# Tuberculosis Fact Sheet — Alameda County, 2024

#### **OVERVIEW**

During 2024, 118 tuberculosis (TB) cases were reported to Alameda County (excluding the City of Berkeley, which has its own local health department). The 2024 TB case rate in Alameda County was 7.8 cases per 100,000 residents. The 2024 rate ranks fourth among all jurisdictions in California and is 1.4 times higher than the California state rate of 5.4 cases per 100,000 residents and 2.6 times higher than the national rate of 3.0 cases per 100,000. The 2024 rate for Alameda County is higher than most other Bay Area counties, including Santa Clara (7.4 per 100,000), San Mateo (6.3 per 100,000), and Contra Costa (5.1 per 100,000) counties; however, the 2024 rate is lower than San Francisco County (10.8 per 100,000).





# **PATIENT DEMOGRAPHICS**

Similar to previous years, the majority of TB cases were male (61%). During 2024, the largest proportion of TB cases occurred among adults aged 65 years old and older (37%), and no cases occurred among children 0 to 4 years old. The majority of 2024 TB cases occurred among Asian and Hispanic or Latino/a/x residents (Table 1). The most frequent birthplaces for TB patients outside of the U.S. were the Philippines, India, Guatemala,

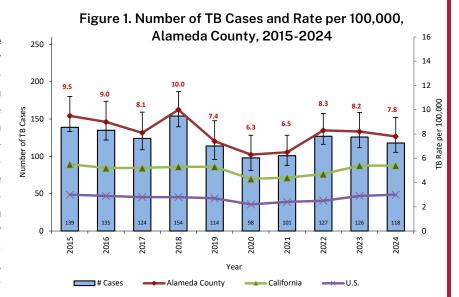


Table 1. Number of TB Cases and Rates per 100,000, Alameda County, 2022-2024

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		Number of		Case Rate
		2024 Cases		per 100,000
		(N=118)	Percent	(2022-2024)
Gender	Males	71	61%	9.7
	Females	47	39%	6.1
Age Group	0-4 yrs	0	0%	*
	5-24 yrs	10	8.5%	2.7
	25-44 yrs	35	29.7%	7.1
	45-64 yrs	29	24.6%	7.0
	65-74 yrs	21	17.6%	16.9
	75+ yrs	23	19.5%	28.3
Race /	Black or African American	< 10		*
Ethnicity	Asian	73	61.9%	15.8
	Filipino	25	34.7%	
	Asian Indian	23	31.9%	
	Chinese	13	18.1%	
	Other Asian**	12	16.4%	
	Native Hawaiian or Pacific Islander	0	0.0%	*
	American Indian or Native Alaskan	< 10		*
	Middle Eastern or North African	< 10		*
	Hispanic or Latino/a/x	28	23.7%	6.3
	Multiracial	< 10		*
	White	< 10		*
Birthplace	United States	4	3.4%	*
·	Outside of United States	114	96.6%	20.8

<sup>\*</sup> Categories with <10 average annual cases are unstable and not presented

China, Mexico, and Vietnam (Figure 2). Of the 2024 cases born outside of the U.S., 50% resided in the U.S. for ten or more years before being diagnosed with TB, and 61% resided in the U.S. for five or more years before diagnosis.

The largest proportions of 2024 TB cases occurred among residents of Oakland (31%), Fremont (14%), and Hayward (13%). (Figure 3). Almost two-thirds (65%) of 2024 TB patients lived in zip codes that were in the two lower quartiles of the <a href="Healthy Places Index">Healthy Places Index</a> in Alameda County—a measurement in which higher values indicate greater presence of health-promoting social, environmental, and economic factors.

<sup>\*\*</sup>Includes Vietnamese, Burmese, Korean, Laotian, Nepalese, and Taiwanese

#### **CLINICAL CHARACTERISTICS**

Of all 2024 TB cases, 80% had pulmonary involvement and 20% were extrapulmonary only (Table 2). Of all pulmonary cases, a majority (53%) were acid-fast bacilli (AFB) smear-positive and 45% had evidence of cavitary disease on chest radiography. Eighty-nine patients (75%) reported having a usual source of care in the past two years, which was defined as a place where the patient usually went when sick or needing health advice. This was lower than the 82% reported in 2023. Eight (7%) patients reported being current smokers, while 26 (22%) reported being former smokers, and 83 (70%) reported never smoking.

### **DRUG RESISTANCE**

A smaller proportion of drug-resistant isolates were identified among culture-positive cases in 2024 than 2023 (12% and 23%, respectively). During 2024, all 12 drug-resistant TB cases were mono-resistant to one of the first-line TB medications (i.e., isoniazid, rifampin, ethambutol or pyrazinamide). No 2024 cases were multidrug-resistant TB (Table 2).

#### **DIAGNOSTIC TESTING**

Among 2024 TB cases with any pulmonary disease that had a sputum smear performed, 95% received a nucleic acid amplification (NAA) test at diagnosis, higher than 2023 cases (82%). Like 2023, more 2024 cases with positive sputum AFB smears received NAA tests compared to patients with negative sputum AFB smears (100% and 87%, respectively). The number of cases with negative sputum AFB smears receiving a NAA test increased from 2023 to 2024 (70% and 87%, respectively).

## **SUMMARY**

TB remains an important public health problem in Alameda County. While the case rate reported in 2024 was lower than the 2023 case rate, Alameda County remains a high-TB-burden county with a rate 2.6x higher than the national aver-

Figure 3: Average Annual TB Rates per 100,000, by Zip Code, Alameda County, 2020-2024

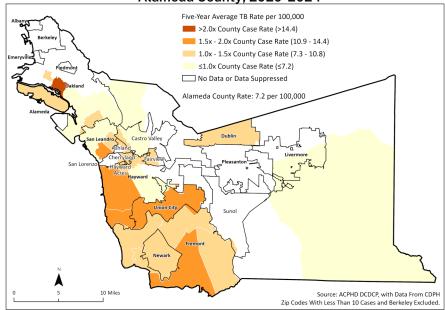


Table 2. Clinical and Laboratory Characteristics of TB Cases, Alameda County, 2024

Atameda County, 2024							
			Number	Percent			
Site of disease	Pulmonary only		84	71.2%			
Site of disease	Extrapulmonary only		23	19.5%			
	Both		11	9.3%			
	Among cases with any pulmonary disease (N=95)						
	Sputum smear	Positive	50	52.6%			
		Negative	38	40.0%			
		Not done/Indeterminate	7	7.4%			
	Cavitary disease*	Present	43	45.3%			
		Absent	52	54.7%			
Comorbidities	HIV/AIDS		4	3.4%			
	Diabetes		31	26.3%			
	End-stage renal disease		5	4.2%			
Other immunosuppression**			5	4.2%			
	Hepatitis B		7	5.9%			
	No TB-related comorbidities***		72	61.0%			
Usual Source of Patient Had Usual Source of Care in 2 Years Prior to Diagnosis  Care			89	75.4%			
Drug resistance	Orug resistance Resistance to any TB medications		12	12.0%			
among culture-	Resistance to INH only		10	10.0%			
positive cases	Resistance to PZA only****		1	1.0%			
(N=100)	Resistance to RIF only		1	1.0%			
(	Multidrug resistance (i.e., resis	stant to at least isoniazid and rifampin)	0	0.0%			
Nucleic Acid	Among cases with any pulmonary disease and sputum smear performed (N=87)						
Amplification	Sputum smear positive (N=50)	NAAT performed	50	100.0%			
Test (NAAT) on		NAAT positive	50	100.0%			
Pulmonary	Sputum smear negative (N=38)	NAAT performed	33	86.8%			
Specimen at TB	. ,	NAAT positive	17	51.5%			
diagnosis		r · · · ·					

\*Per X-ray, CT, or other chest imaging; \*\*Due to a medical condition, such as hematologic or reticuloendothelial malignancies or immunosuppressive therapy, such as prolonged use of high-dose adrenocorticosteroids; \*\*\*TB-related comorbidities include those listed in the table in addition to Hepatitis C, organ transplant, and being a TNF antagonist recipient; \*\*\*\*pncA mutation testing was conducted on 36 cases, and no mutations were detected

age. Reports have indicated that 80%-86% of all TB cases are due to LTBI reactivation, and 76% of Alameda County TB patients reported engaging with a usual source of care. Therefore it is important for providers to screen for and treat LTBI to prevent the reactivation and spread of TB. Alameda County TB Control continues to encourage early diagnosis through the use of NAA tests regardless of sputum smear results, as this practice may facilitate earlier TB treatment initiation and reduce disease transmission.