

Case Rates

In 2011, the rate of new cases increased to 2.6 cases per 100,000 persons (N=13).¹ This is the first notable increase in case rates since 2002-2004 (Figure 1).

With the 2011 rate of 2.6 cases per 100,000 persons, Sonoma County has relatively low incidence when compared to the California rate of 5.8 cases/100,000.² This rate, however, is consistently higher than Healthy People 2020 goal of 1.0 case per 100,000 population.³

Demographics

Age

Because the absolute number of cases is small, it is difficult to evaluate changing trends in age groups. In 2011, the group most affected by TB infection in Sonoma County were those aged >65 years, followed by those aged 25-44. Since 2002, these same age groups have had the highest age-specific rates of TB with an average rate of 4.0 cases per 100,000 persons in both those aged >65 years and those aged 25-44.

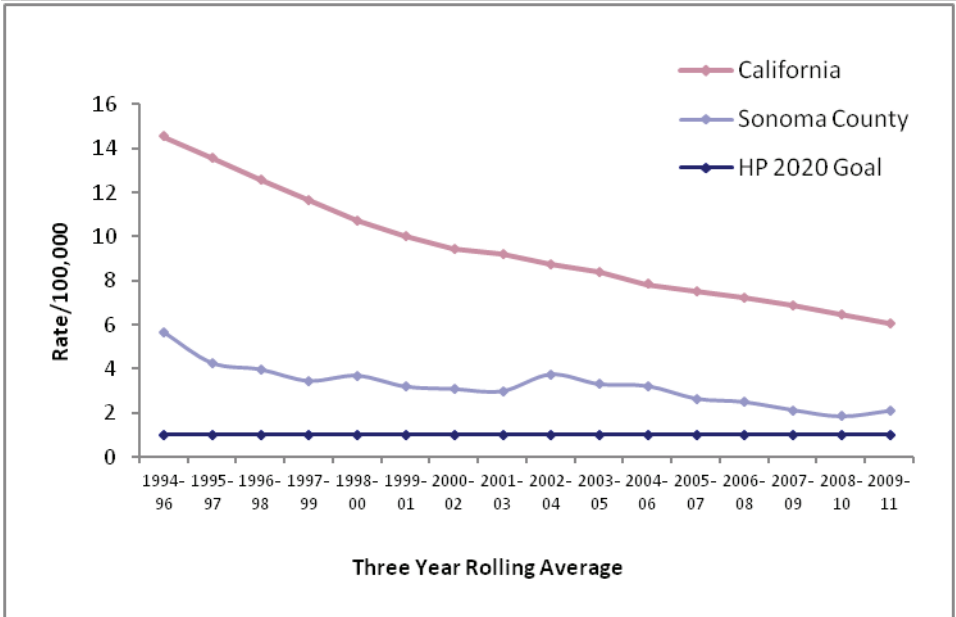
In California, persons aged 65 and older had the highest age specific-rate of TB in 2011 (13.5 cases/100,000 persons).²

Race/Ethnicity

In 2011, the majority of persons with TB in Sonoma County were either Latino or White, non-Latino. Persons who are Asian/Pacific Islander or report Hispanic ethnicity, however, have a much higher rate of disease compared to Whites.

The ten year average rate of TB among Asian/Pacific Islanders was

Figure 1—Rate of TB Diagnosis, Three-Year Rolling Average
California and Sonoma County 1994-2011 including HP 2020 Goal



Source: California Department of Public Health, Tuberculosis Control Branch

19 cases/100,000 persons compared to a rate of 5 cases/100,000 among Latinos and <1 case per year among non-Latino Whites during the same time period.

In California in 2010, Asian/Pacific Islanders had the highest rate of TB with 21.3 cases/100,000, followed by Latinos (5.7 cases/100,000) and African Americans (5.5/100,000).²

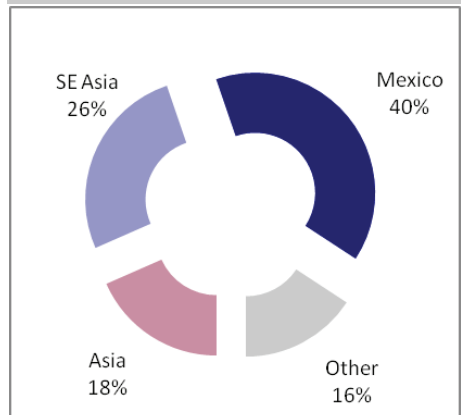
Birth Country

Over the past five years, an average of 72% of Sonoma County's TB cases occurred in foreign-born individuals (range 62-89%). In 2011, 62% of cases reported a non-US birth country (N=8; 4 Mexico, 2 Southeast Asia, 2 Asia).

As shown in Figure 2, between 2007 and 2011, the most common coun-

try of origin reported for Sonoma County TB cases was Mexico, (40%), followed by countries in South-east Asia (26%) and Asia (18%).

Figure 2—Country/Region of Origin of Foreign-born TB Cases, 2007-2011 (N=38)



Other includes two cases from EU, one from Pacific Islands, one from the Caribbean, and two from South America



In California in 2011, 77% of all reported tuberculosis cases occurred in persons born outside of the United States.²

Clinical Characteristics

Of the TB cases reported in 2011, one was diagnosed at or near death (Table 1). Two thirds of cases in 2011 were pulmonary. The majority of 2011 cases were culture positive (77%) and only one thus far has shown any resistance (INH and EMB). The most recent cases resistant to both isoniazid and rifampin (MDR-TB) in 2006 (2). To date, no cases of XDR-TB have been found in Sonoma County.

**Table 1 - Selected Clinical Characteristics of TB Cases
Sonoma County - 2007 - 2011**

Clinical	2011		2007-2011	
	N	%	N	%
Total Cases	13	--	53	--
Deaths				
Diagnosed at or near death	1	8	2	4
Died while on treatment	0	0	0	0
Site of Disease				
Pulmonary	6	46	26	49
Extrapulmonary	4	31	20	38
Both	3	23	7	13
Sputum Smear (pulmonary only)				
Positive	3	33	15	45
Negative	5	56	16	48
Not done	1	11	2	6
Culture Result (any source)				
Positive	10	77	45	85
Negative	1	8	5	9
Not done	2	15	2	4
Unknown	0	0	1	2
Drug Sensitivity (culture positive)				
Susceptible	5	50	34	76
Resistant				
INH only	0	0	2	4
INH and Other	1	10	2	4
MDR (INH & RIF)	0	0	0	0
Other	0	0	3	7
Not Done/Pending	4	40	4	9

REFERENCES

1. All Sonoma County Tuberculosis data was provided by the State of California, Department of Public Health, Tuberculosis Control Branch.
2. California Department of Public Health, Tuberculosis Control Branch. California Tuberculosis Case County and Case Rate Data through 2011, Provisional. Available at <http://www.cdph.ca.gov/programs/tb/Pages/default.aspx>. Accessed March 21, 2012.
3. U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at <http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=23>. Accessed August 20, 2011.
4. All population data for the years 2000-2005 taken from: State of California, Department of Finance, *Race/Ethnic Population with Age and Sex Detail, 2000-2050*. Sacramento, CA, May 2004.

