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Tuberculosis in Alaska, 2010–2014

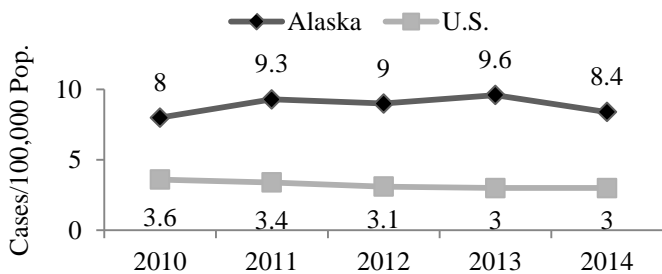
Background

Alaska continues to have one of the highest tuberculosis (TB) rates in the United States, and considerable disparities remain. The Alaska Section of Epidemiology (SOE) is responsible for statewide TB control.¹ This *Bulletin* presents a snapshot of TB trends in Alaska during 2010–2014.

Incidence of TB

Sixty-two cases of TB were reported in Alaska in 2014, a rate of 8.4 cases per 100,000 population. This rate was over 150% greater than the national average (Figure 1).² In 2014, Alaska had the second highest rate of TB in the nation.

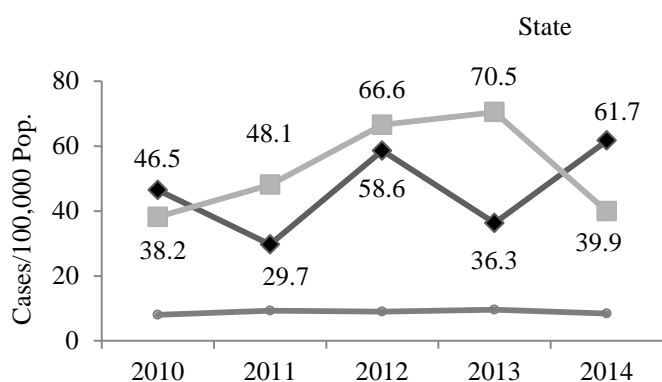
Figure 1. Alaska TB Incidence by Year, 2010–2014



Geographic Variation

The incidence of TB is not evenly distributed throughout the state. In 2014, rates in the Northern and Southwest (SW) regions were nearly 7 and 5 times higher (respectively) than the statewide rate of 8.4 cases per 100,000 population (Figure 2).

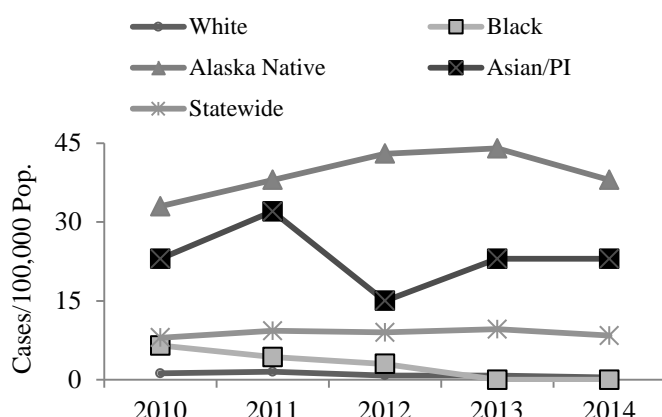
Figure 2. Alaska TB Incidence by Region, 2010–2014



Racial Disparity

Alaska Native people continue to bear a disproportionate burden of TB; however, Asian/Pacific Islanders (Asian/PI) also have elevated rates (Figure 3). The incidence rates among whites and blacks are equal to or less than the U.S. average.

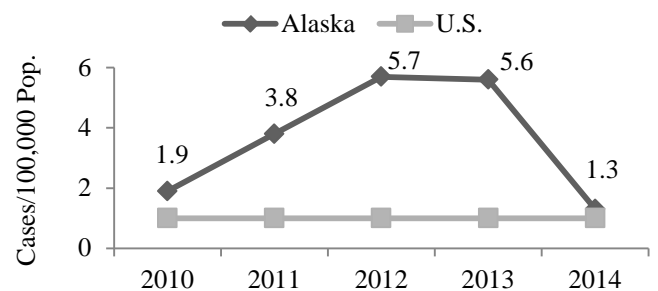
Figure 3. Alaska TB Incidence by Race, 2010–2014



TB among Children Aged 0–14 Years

During 2010–2014, TB rates among children aged 0–14 years were higher than in the U.S. overall; TB rates in Alaska children ranged from 1.2 to 5.7 cases per 100,000 population (Figure 4). Higher pediatric TB rates are frequently seen during community outbreaks, as was seen in 2012 and 2013.

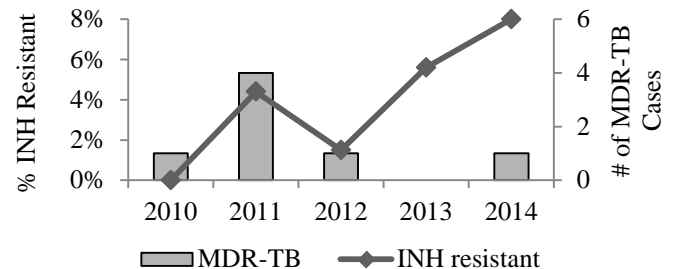
Figure 4. Alaska and U.S. TB Incidence in Children Aged 0–14 Years, 2010–2014



Drug Susceptibility Patterns

During 2010–2014, 0–8% of *Mycobacterium tuberculosis* (*Mtb*) isolates demonstrated isoniazid (INH) resistance each year, and a total of seven cases of multidrug resistant TB (MDR-TB) were identified (Figure 5). No cases of extensively drug resistant TB (XDR-TB) have ever been reported in Alaska.

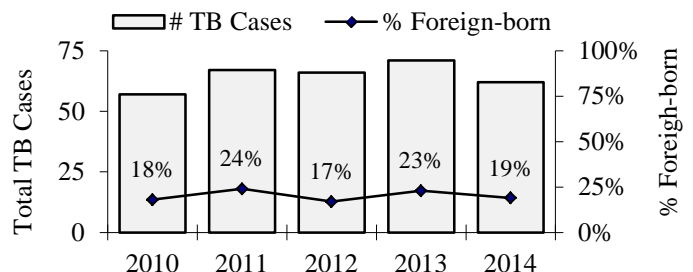
Figure 5. *Mtb* Drug Resistance in Alaska, 2010–2014



Foreign-born Persons with TB

During 2010–2014, on average, 20% of Alaska TB cases were in foreign-born persons (Figure 6). By comparison, over two-thirds of TB cases nationwide are in foreign-born individuals.

Figure 6. Alaska TB Cases by % Foreign-Born, 2010–2014



Summary

Tuberculosis remains a major public health challenge in Alaska, particularly in the Northern and Southwest regions of the state, and among Alaska Native and Asian/Pacific Islander people. A detailed 2014 annual TB report, including discussion of control measures, is available at: http://www.epi.alaska.gov/pubs/webtb/TB_Report_2014.pdf

References

- Alaska SOE TB webpage; available at: <http://epi.alaska.gov/id/tb.stm>
- CDC. Reported Tuberculosis in the United States, 2013. Atlanta, GA: U.S. Department of Health and Human Services, CDC, October 2014. Available at: <http://www.cdc.gov/tb/statistics/reports/2013/>