Tuberculosis

This is a data update of the Health of Washington State chapter on Tuberculosis published in 2012.

Time Trends

Incidence rates of TB disease in Washington have declined moderately since 2000. Rate differences between Washington and the U.S. have lessened over this period. In 2014, the TB rate in Washington (2.8 cases per 100,000) was similar to the U.S. rate. Washington continues to make progress toward the Healthy People 2020 goal, although will unlikely meet the goal.

Geographic Variation

From 2012–2014 combined, the TB rate in Washington was 2.8 cases per 100,000. During this period, 13 Washington counties had no TB cases while 13 had fewer than five. Rates are reported here for counties having five or more cases. King County reported 55% of the state’s cases, with a rate higher than the state average. A key factor contributing to King County’s TB rate is its large number of foreign-born residents. Kitsap and Spokane counties each had a rate below the state average for this period.

Age and Gender

From 2012–2014 combined, the TB rate among Washington residents ages 65 and older was higher than in most other age groups. Higher risk of TB disease among those 65 and older may be related to an increased risk of past exposure, along with a greater present risk of chronic disease.

Young children are at greater risk of developing disease after exposure. New cases of TB disease among children under five years of age indicate recent TB transmission in a community. In 2012–
2014 combined, there was about one new case of TB per 100,000 children under five in Washington.

For 2012–2014 combined, males accounted for 56% of all TB cases in Washington. Males experienced a higher TB rate (3.2 cases per 100,000) compared to females (2.5 cases per 100,000) during this period. Higher overall incidence of TB among males has also been observed in other countries, and in U.S. urban centers. Higher risk of TB among males has been linked to several factors. One proposed factor is a greater likelihood of being in places or among groups where risk of exposure to TB is higher. Another factor is males more often engaging in health behaviors that increase risk of developing TB disease if infected. Such factors may help explain the higher risk of TB among males in Washington. Among all TB cases from 2012–2014, males were more likely than females to have experienced homelessness, and to have abused alcohol, prior to diagnosis.

Economic Factors and Education
The Washington State Department of Health has not recently explored the relationship between income and education and the incidence of TB in Washington. Earlier work showed increasing TB rates with increasing proportions of residents living in poverty. Researchers have shown that globally and in the United States, low income and low levels of education are associated with higher rates of TB.

Race, Ethnicity and Origin
For 2012–2014 combined, Washington residents of all other groups experienced a greater risk of TB compared to whites. Asian residents had a TB rate (18.4 cases per 100,000) higher than any of Washington’s larger race or ethnic groups during this period. Black residents had the next highest rate (12.8 cases per 100,000). Native Hawaiian and other Pacific Islander residents experienced the greatest TB risk of any group. It is uncertain, however, whether the rate in this relatively small population is truly greater than the rate among Asian residents.

Foreign-born origin is a persistent risk factor for TB in Washington, as it is in the U.S.. For 2012–2014 combined, 75% of Washington residents diagnosed with TB were foreign-born. Origins from countries where TB is more common is a key factor driving higher risk among many of Washington’s racial and ethnic communities. During this same time period, 94% of TB cases among Asian residents, 83% among black residents and 85% among Hispanic residents were foreign-born.

Data Sources

National tuberculosis data: U.S. Centers for Disease Control and Prevention; National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention; Division of Tuberculosis Elimination.

For More Information
Washington State Department of Health, Tuberculosis
Control Program, (360) 236-3443

Technical Notes
Foreign-born: The term foreign-born refers to any person
born outside of the United States or its territories (e.g.,
Puerto Rico) and protectorates (e.g., Guam and American
Samoa), regardless of U.S. citizenship status.

Acknowledgments
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Endnotes

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