

# Tuberculosis

Seattle & King County, Washington, 2015

**The mission of Public Health Seattle & King County's Tuberculosis (TB) Control Program is to interrupt the transmission of TB in Seattle & King County**

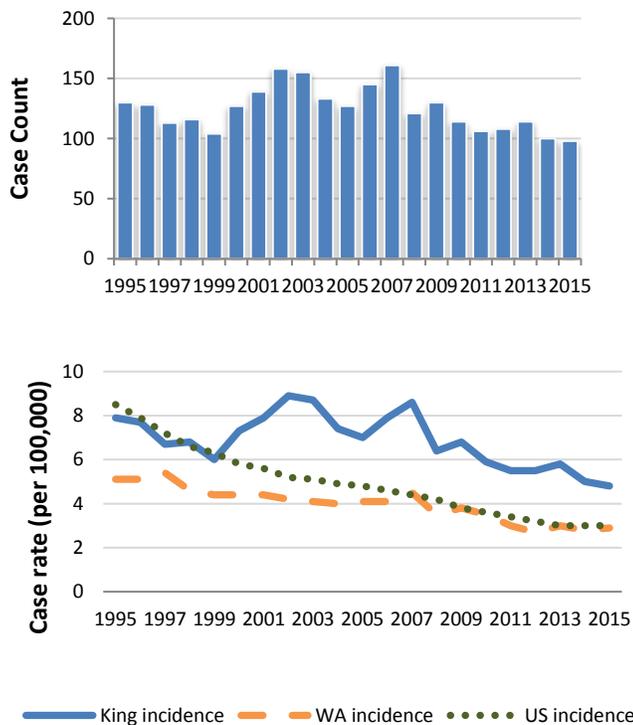
## TAKEAWAYS:

- Tuberculosis continues to disparately affect vulnerable populations in King County.
- On average, two cases of tuberculosis are diagnosed in King County each week. Another 100,000 residents are infected with TB, but the microbe lies dormant.
- Rates are at an all-time low in King County, but as a crossroads for global trade and migration, we have higher rates of TB infection than state and national averages.

## OVERVIEW

In 2015, 98 new cases of TB were reported in King County, for an incidence of 4.8 cases per 100,000 population. This case count is comparable to case counts in 2014, but the rate is still 1.6 times as high as the Washington and United States (US) rate of approximately 3.0 cases per 100,000 population. Over the past five years, there were 1-4 deaths related to TB disease per year in King County. In 2015, there were three deaths related to TB disease in King County.

TB case count and rate per 100,000 population, 1995-2015, King County, WA



## GENDER AND AGE

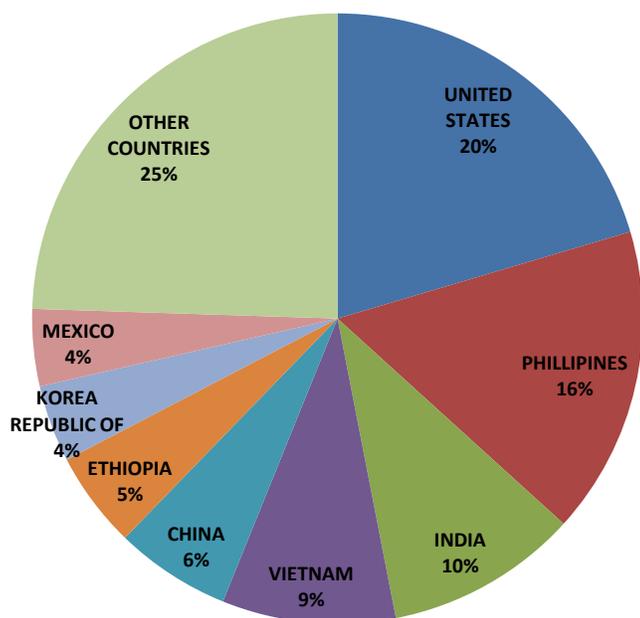
Historically, males comprise 55-65% of TB cases in King County. In 2015, 62% of TB cases were male. Cases ranged from six to 102 years of age with a median age of 44 years. The highest rate of TB was among individuals 65 years of age and older, 11.8 cases per 100,000 population, which is a 37% increase from last year.

Age Group	2011	2012	2013	2014	2015
0-17	2.2	3.1	1.2	1.9	1.4
18-44	5.5	6.0	5.4	5.8	5.3
45-64	5.1	3.8	7.5	4.5	3.3
65+	12.5	12.3	11.0	8.6	11.8

## PLACE OF BIRTH AND RACE/ETHNICITY

A total of 78 (80%) of cases reported in 2015 were born outside the US. These individuals were born in 27 countries. More than half of cases born outside the US came from just five countries: China, India, Ethiopia, Philippines, and Vietnam. In King County, the rate of TB among persons born outside the US was 17.5 per 100,000 population in 2015, which is 15 times the rate of TB in US born individuals in King County of 1.2 per 100,000 population.

Proportion of TB cases by country of origin, 2015, King County, WA



Races and ethnicities other than non-Hispanic white in King County continue to have disproportionately high rates of TB. Asians had the highest proportion of cases in King County (56%) and American Indian or Alaska Native had the highest rate of TB cases in King County with 22.5 cases per 100,000 population.

### COMORBIDITIES

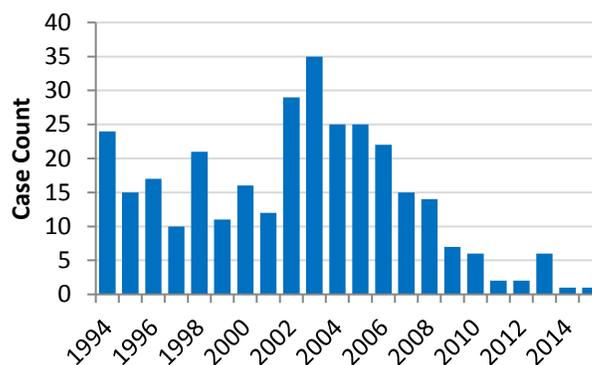
In 2015, 3% of TB cases were also infected with HIV while in the King County population <1% of individuals are presumed living with HIV infection. Of these three co-infected cases, all were born outside the United States. Diabetes mellitus is also a concerning risk factor for tuberculosis. Sixteen percent of TB patients also had a diagnosis of diabetes.

Co-infection with HIV, 2011-2015, King County, WA					
	2011	2012	2013	2014	2015
	N (%)				
Negative	86 (81)	93 (86)	101(89)	78 (78)	81 (83)
Positive	4 (4)	3 (3)	5 (4)	6 (6)	3 (3)
Refused	3 (3)	1 (1)	2 (2)	2 (2)	1 (1)
Other	13 (12)	11 (10)	6 (5)	14 (14)	13 (13)

### HOMELESS

Across the US tuberculosis continues to disproportionately affect those experiencing homelessness. One case of TB was diagnosed in 2015 among this population with the same strain that circulated during the 2002-2003 outbreak among homeless persons. The number of homeless cases with active TB disease has decreased since its peak in 2002-2003 (64 active TB cases in these two years, where a single strain was responsible for 66% of homeless cases).

TB cases among people experiencing homelessness, 1995-2015, King County, WA



### DRUG RESISTANCE

Of the 88 TB cases with drug susceptibility testing 15 (17%) were resistant to at least one TB medication. There were three case diagnosed with multidrug-resistant (MDR) and no cases diagnosed with extensively drug-resistant (XDR) TB. Approximately 5 percent of global TB cases are now MDR.

### WANT TO KNOW MORE?

[Public Health – Seattle & King County Tuberculosis Control Program.](#)

[www.kingcounty.gov/health/TB](http://www.kingcounty.gov/health/TB)

[Centers for Disease Control and Prevention Division of Tuberculosis Elimination.](#)

<http://www.cdc.gov/tb/>

1-In Washington State health care providers, laboratories and health care facilities are legally required to notify public health authorities at their local health jurisdiction of suspected or confirmed cases of tuberculosis. Case counts are calculated using these reports.

2-Rates are calculated with population data from the Washington State Office of Financial Management with the exception of foreign born rate. <http://www.ofm.wa.gov/pop/>

3-Rate of foreign born cases is calculated with population data from the U.S. Census Bureau: State and County QuickFacts. <http://quickfacts.census.gov/>