# Tuberculosis

Seattle & King County, Washington, 2013

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

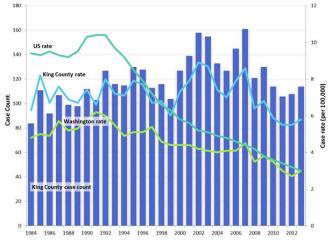
### TAKEAWAYS:

- Tuberculosis continues to disparately affect vulnerable populations in King County.
- On average, more than two cases of tuberculosis are diagnosed in King County each week. Another 100,000 residents are infected with TB, but the microbe lies dormant.
- As a crossroads for global trade and migration, the greater Seattle area has higher rates of TB infection than the national average.

### **OVERVIEW**

In 2013, 114 new cases of TB were reported in King County, for an incidence of 5.8 cases per 100,000 population. This represents a six percent increase from 2012 and a rate almost twice as high at the Washington and United States (US) rate of 3.0 cases per 100,000 population.

### TB case count and rate per 100,000 population, 1984-2013, King County, WA



### **GENDER AND AGE**

Historically, males comprise 55-65% of TB cases in King County. In 2013, 59% of TB cases were male. Cases ranged from two to 91 years of age with a median age of 50 years. The highest rate of TB was among individuals 65 years of age and older, 11.0 cases per 100,000 population.

### **RACE/ETHNICITY AND PLACE OF BIRTH**

All non-white races and ethnicities in King County continue to have disproportionately high rates of TB. Asians had the highest proportion and rate of TB cases in King County, 68% and 26.9 cases per 100,000 population, respectively.

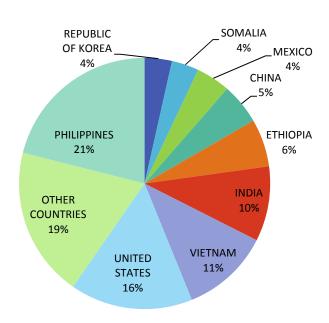
	2009	2010	2011	2012	2013
Am Indian or AK Native	16.5	12.4	6.2	18.6	4.9
Asian	24.5	20.2	17.4	19.5	26.9
Black or African Am	32.0	25.9	29.2	24.2	13.7
Native Hawaiian or Pl	32.5	48.3	13.8	20.7	13.1
White	1.1	1.1	1.4	1.3	1.1
Hispanic	9.3	3.5	4.1	5.2	4.6

A total of 96 (84%) of cases reported in 2013 were born outside the US. These individuals were born in 24 countries. Half of cases born outside the US came from just three countries: Philippines, India, and Vietnam. The rate of TB among persons born outside the US in King County reached 23.1 per 100,000 population in 2013.

## TB case rate per 100,000 population by race and ethnicity, 2009-2013, King County, WA



### Proportion of TB cases by country of origin, 2013, King County, WA



#### **COMORBIDITIES**

In 2013, 4% of TB cases were also infected with HIV. Of these five co-infected cases, four were born outside the United States. Diabetes mellitus is also a concerning risk factor for tuberculosis. Almost one quarter of TB patients (23%) also had a diagnosis of diabetes.

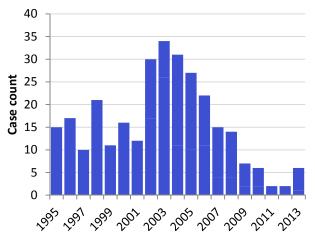
#### Co-infection with HIV, 2009-2013, King County, WA

	2009 N (%)	2010 N (%)	2011 N (%)	2012 N (%)	2013 N (%)
Negative	107 (82)	89 (78)	86 (81)	93 (86)	101 (89)
Positive	3 (2)	3 (3)	4 (4)	3 (3)	5 (4)
Refused	3 (2)	1 (<1)	3 (3)	1(1)	2 (2)
Other	17 (13)	20 (18)	13 (12)	11 (10)	6 (5)

### **HOMELESS**

Tuberculosis continues to disproportionately affect those experiencing homelessness. Six cases of TB were diagnosed in 2013 among this population. One of the six was infected 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, 1995-2013, King County, WA $\,$



#### **DRUG RESTISTANCE**

Of the 95 TB cases with drug susceptibility testing 17 (18%) were resistant to at least one TB medication. There were no cases diagnosed with multidrug-resistant (MDR) or extensively drug-resistant (XDR) TB. This is the first time since 2009 that there were no reports of MDR TB in King County.

#### WANT TO KNOW MORE?

Public Health - Seattle & King County Tuberculosis Control Program, www.kingcounty.gov/health/TB

Centers for Disease Control and Prevention Division of Tuberculosis Elimination, http://www.cdc.gov/tb/

<sup>1-</sup>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.

<sup>2-</sup>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/

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