

TUBERCULOSIS

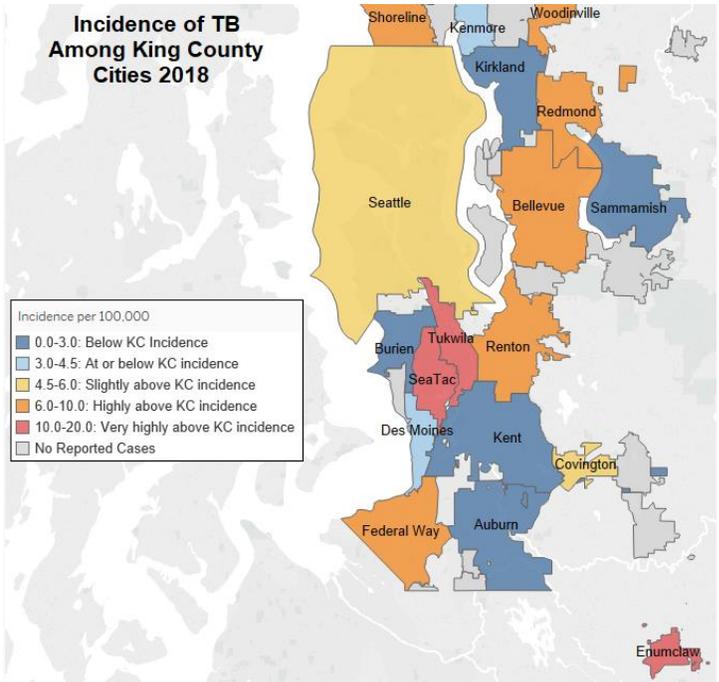
Seattle & King County, Washington, 2018

MISSION: Interrupt the transmission of TB In Seattle & King County

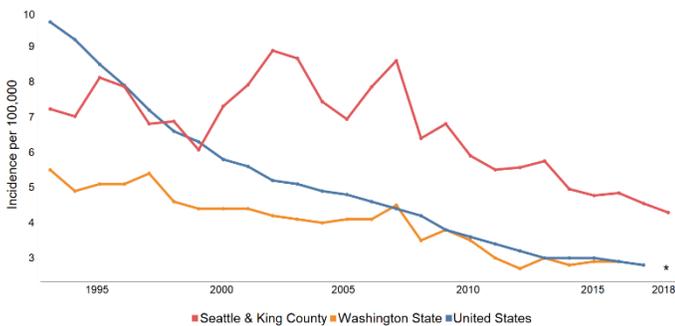
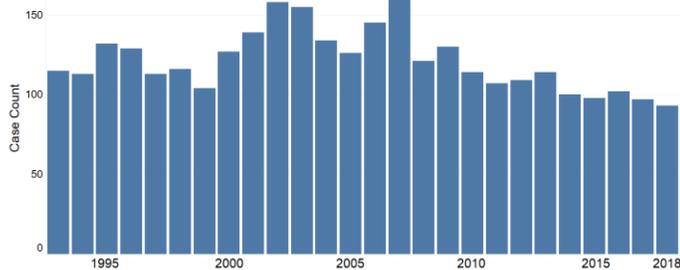
VISION: TB-free King County

OVERVIEW

In 2018, 93 new cases of TB were reported in King County, for an incidence of 4.2 cases per 100,000. In 2017, 97 new cases were reported. In 2018, there were five deaths related to TB disease in King County. Over a third of cases (35) were reported in the county's most populous city, Seattle. Another third (33) was reported in South King County, including cases in Renton, Federal Way, SeaTac, Tukwila, and Enumclaw. These cities had some of the highest incidence rates (range: 7.7-17.2 per 100,000 population). Twenty-three cities did not report any TB cases in 2018.



TB Case Count and Rate per 100,000 population, 1993-2018, King County, WA



*US and WA State incidence for 2018 not yet available

GENDER AND AGE

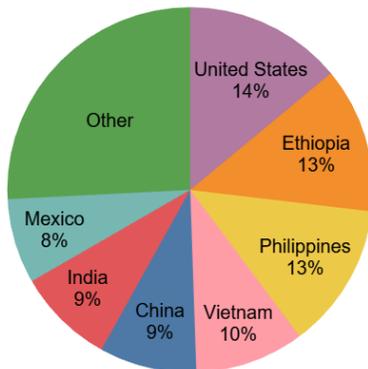
Historically, males comprise 55-65% of TB cases in King County. In 2018, 58% of TB cases were male. Cases ranged from 1 to 92 years of age, with a median age of 53 years. The highest rate of TB was among individuals 65 years of age and older (11.7 cases per 100,000 population).

| TB case rate per 100,000 population by age group, 2014-2018, King County, WA | | | | | |
|--|------|------|------|------|------|
| | 2014 | 2015 | 2016 | 2017 | 2018 |
| 0-17 | 1.9 | 1.4 | 1.6 | 0.9 | 0.4 |
| 18-44 | 5.8 | 5.3 | 5.3 | 4.8 | 4.1 |
| 45-64 | 4.5 | 3.3 | 4.6 | 5.0 | 3.8 |
| 65+ | 8.5 | 11.8 | 8.8 | 8.6 | 11.7 |

PLACE OF BIRTH AND RACE/ETHNICITY

A total of 80 (86%) cases reported in 2018 were born outside the US. These individuals were born in 24 countries. More than half of cases born outside the US came from six countries: Mexico, India, China, Vietnam, Philippines, and Ethiopia. In King County, the rate of TB among persons born outside the US was 17.5 per 100,000 population in 2018, which is 25 times the rate of TB in US-born individuals in King County (0.7 cases per 100,000 in 2018).

Proportion of TB cases by country of origin, 2018, King County, WA



Races and ethnicities other than non-Hispanic White in King County continue to have disproportionately high rates of TB. In 2018, Asians had the highest proportion of cases in King County (58%) and also had the highest rate of TB cases in King County with 14.7 cases per 100,000 population.

COMORBIDITIES

In 2018, 5% of TB cases were also infected with HIV whereas 0.32% of King County residents have been diagnosed with HIV. All five co-infected TB cases were born outside the US. Diabetes mellitus is also a concerning risk factor for TB. 16 percent of TB patients (15 cases) also had a diagnosis of diabetes.

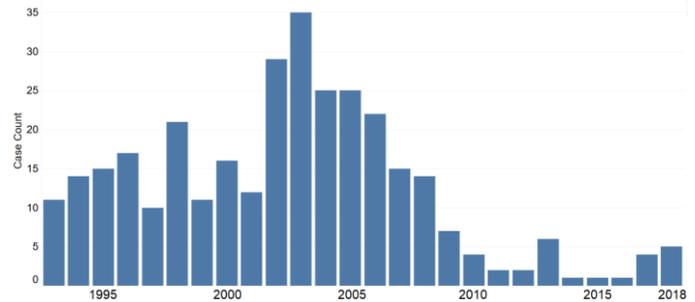
INSTITUTIONAL INVESTIGATIONS

In 2018 the TB program investigated 17 congregate setting exposures. Congregate setting investigations can result in full on-site screenings, consultations, or investigations that involve a more individualized approach. Congregate settings included healthcare, retail, tech, schools, shelters, and supportive housing.

TB AND HOMELESSNESS

Across the US, TB continues to disproportionately affect those experiencing homelessness. Five TB cases were diagnosed in 2018 among King County residents experiencing homelessness. The number of active TB cases among those experiencing homelessness has decreased since its peak in 2002-2003 (64 active TB cases in these two years) when a single strain was responsible for 66% of homeless cases.

TB cases among people experiencing homelessness, 1993-2018, King County, WA



DRUG RESISTANCE

Of the 83 TB cases with drug susceptibility testing, 21 (23%) were resistant to at least one first-line TB medication. Two cases were diagnosed with multidrug-resistant TB (MDR-TB), defined as resistance to both isoniazid and rifampin, the two most potent TB drugs. Approximately 5 percent of global TB cases are now MDR.

WANT TO KNOW MORE? CHECK OUT:

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/>

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/>