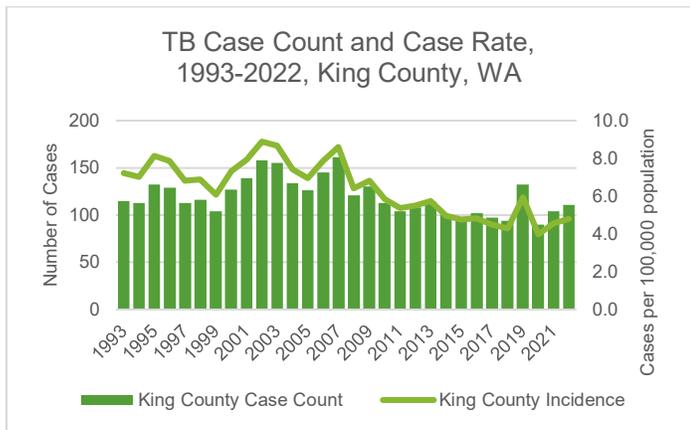


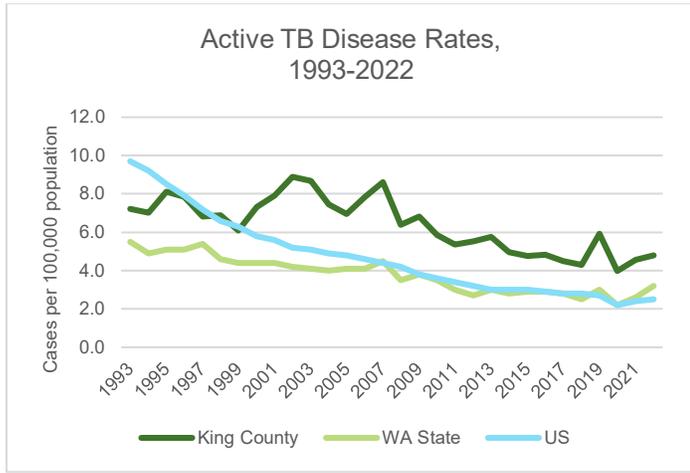
Tuberculosis in Seattle & King County

2022 Annual Report



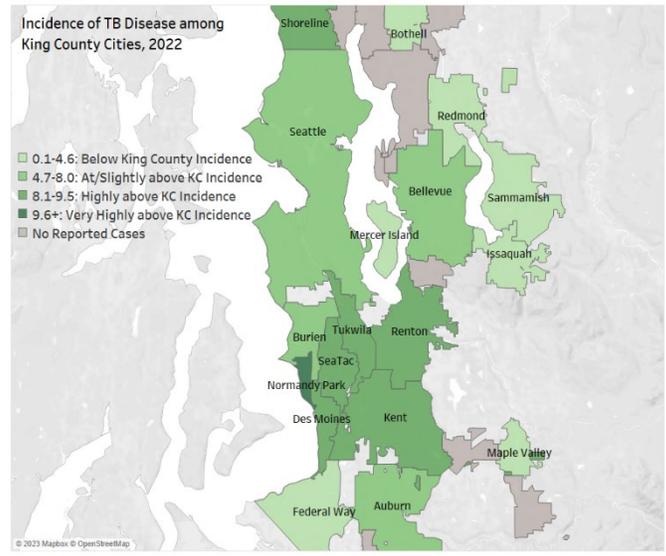
OVERVIEW

In 2022, 111 cases of Tuberculosis (TB) were reported in King County, for an incidence of 4.8 cases per 100,000, an increase from 2021 (103 cases; 4.5 cases per 100,000). There were four deaths related to TB disease in King County in 2022. The majority of cases were from Seattle (43 cases, 39% of all cases). Renton, SeaTac, and Kent had some of the highest incidence rates (range: 8.0-15.6 per 100,000 population).



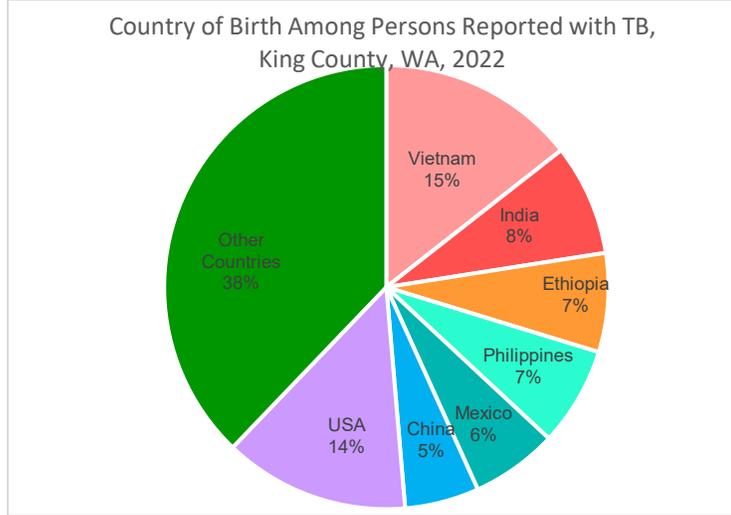
GENDER AND AGE

Historically, males comprise 55-65% of TB cases in King County. In 2022, 51% of TB cases were male. Cases ranged from 0 to 87 years of age, with a median age of 46 years. The highest rate of TB was among males 65 years of age and older (11.0 cases per 100,000 population).



PLACE OF BIRTH

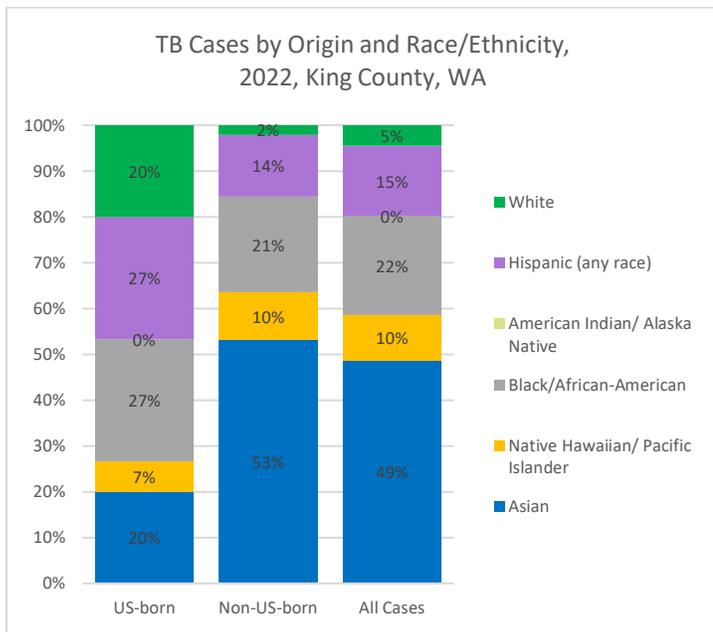
A total of 96 (86%) cases reported in 2022 were born outside the US. More than half of cases born outside the US came from five countries: India, Ethiopia, Philippines, Vietnam, and Mexico. In King County, the rate of TB among persons born outside the US was 17.1 per 100,000 population in 2022, which is 19 times the rate of TB in US-born individuals in King County (0.9 cases per 100,000 population).



RACE AND ETHNICITY

Races and ethnicities other than non-Hispanic White in King County continue to have disproportionately high

rates of TB. In 2022, Asians had the highest proportion of cases in King County (49%) and had the 2nd-highest rate of TB cases with 10.9 cases per 100,000 population. Black/African Americans had the highest rate of TB cases with 14.8 cases per 100,000 population.



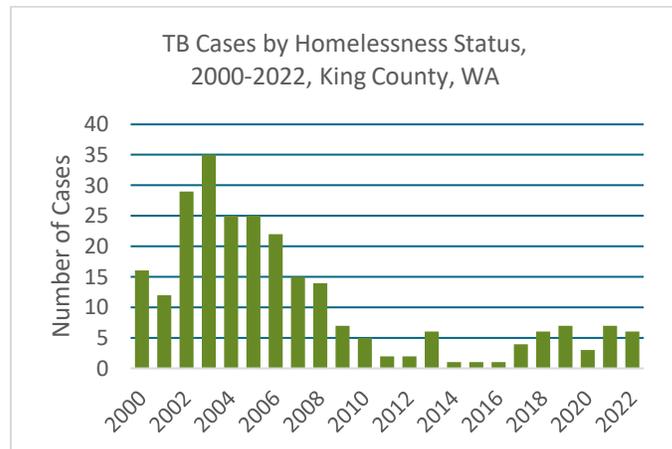
COMORBIDITIES AND RISK FACTORS

Diabetes mellitus is a risk factor for progression to active TB disease and was the most commonly reported comorbidity in 2022 (21 cases, 19%). Four cases (3.6%) were co-infected with HIV.

CONTACT INVESTIGATIONS

In 2022 the TB program conducted 77 contact investigations and identified 710 contacts of infectious TB cases. Through these investigations, we identified 94 individuals with latent TB infection (LTBI) and 5 with active TB disease.

TB AND HOMELESSNESS



TB continues to disproportionately affect those experiencing homelessness. Whereas people experiencing homelessness make up 1.8% of King County population, six TB cases (5%) diagnosed in 2022 were among King County residents experiencing homelessness. The number of active TB cases among this population 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. However, this virulent outbreak strain was seen in two (7%) of the homeless cases in years 2018-2022.

DRUG RESISTANCE

Of the 90 TB cases with drug susceptibility testing available, 18 were resistant to at least one first-line drug. Two cases were diagnosed with multidrug-resistant TB (MDR-TB), defined as resistance to both isoniazid and rifampin. We started using BPaL (new 6-month short course regimen) for 2 MDR-TB cases. The traditional MDR-TB regimen is at least 18 months. The global estimation for MDR-TB is 3.3% for new cases, and 20.5% for previously treated cases.

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 non-US-born rate. <http://www.ofm.wa.gov/pop/>
3. Rate of non-US-born cases is calculated with population data from the U.S. Census Bureau: State and County QuickFacts. <https://census.gov/quickfacts>