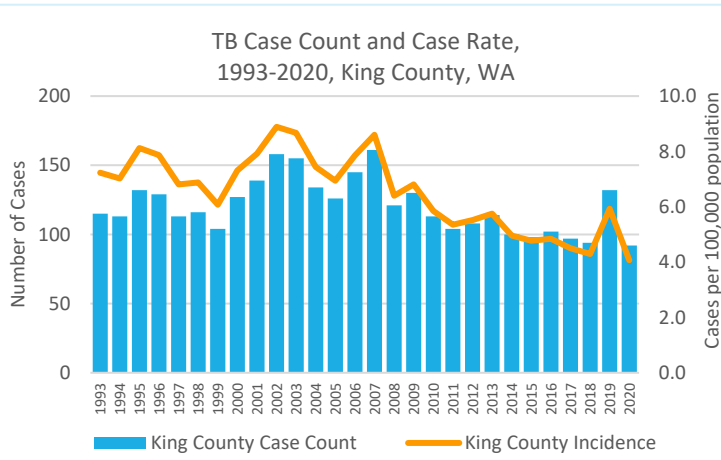


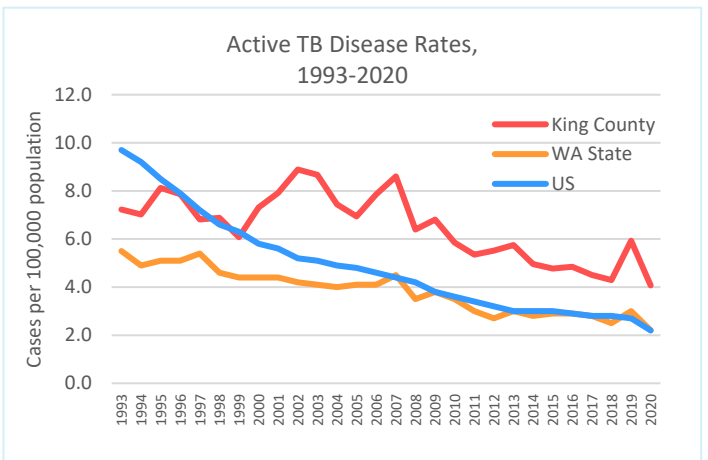
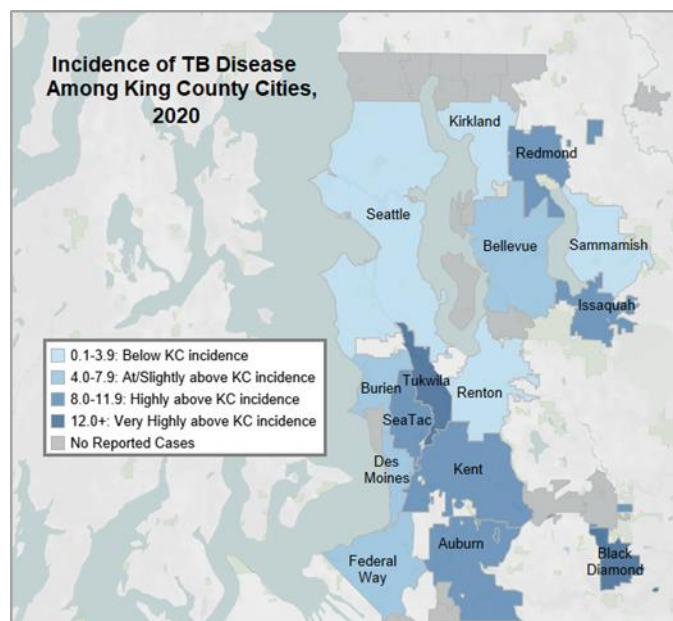
# TUBERCULOSIS

## SEATTLE & KING COUNTY, 2020



### OVERVIEW

In 2020, 92 cases of Tuberculosis (TB) were reported in King County, for an incidence of 4.1 cases per 100,000, a significant decrease from 2019 (132 cases; 5.9 cases per 100,000). Forty-eight (52%) of cases were hospitalized and there were two deaths related to TB disease in King County in 2020. The majority of cases were from South King County (42 cases, 46% of all cases). Tukwila, Issaquah, SeaTac, Kent, and Redmond had some of the highest incidence rates (range: 8.6-14.0 per 100,000 population).



### GENDER AND AGE

Historically, males comprise 55-65% of TB cases in King County. In 2020, 57% of TB cases were male. Cases ranged from 1 year to 90 years of age, with a median age of 45 years. The highest rate of TB was among males 65 years of age and older (12.2 cases per 100,000 population).

### COMORBIDITIES AND RISK FACTORS

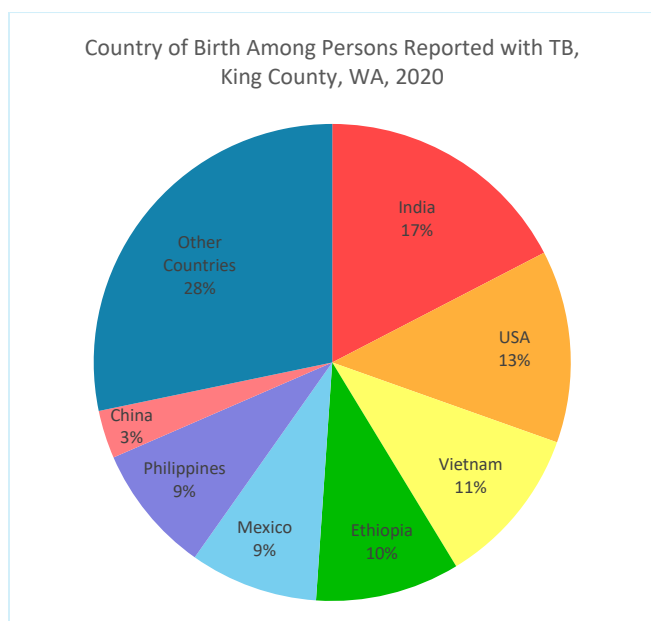
Diabetes mellitus is a risk factor for progression to active TB disease and was the most commonly reported comorbidity in 2020 (20 cases, 22%). Five cases (6%) were also infected with HIV. Other common risk factors in 2020 included being a contact of an infectious TB patient (10%) and excess alcohol use (5%). Three cases were diagnosed with COVID at the same time as TB.

### COVID-19 AND TB

The COVID-19 pandemic presented exceptional challenges for the TB program in 2020. After increased TB case reporting in 2019 our case count decreased dramatically in 2020. One hypothesis is delayed reporting of TB symptoms due to fear of presenting to the healthcare system, resulting in delayed TB diagnosis. Another hypothesis is less TB transmission due to COVID-19 protections.

## PLACE OF BIRTH AND RACE/ETHNICITY

A total of 79 (86 %) cases reported in 2020 were born outside the US. More than half of cases born outside the US came from five countries: India, Vietnam, Ethiopia, Mexico, and the Philippines. In King County, the rate of TB among persons born outside the US was 15.1 per 100,000 population in 2020, which is 22 times the rate of TB in US-born individuals in King County (0.7 cases per 100,000 population).



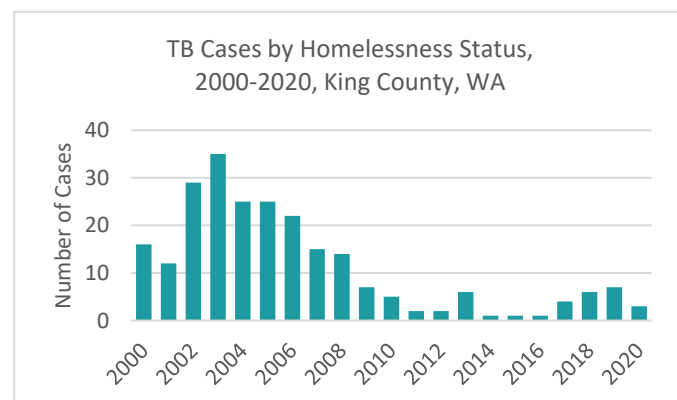
Races and ethnicities other than non-Hispanic White in King County continue to have disproportionately high rates of TB. In 2020, Asians had the highest proportion of cases in King County (45%) and had the 3<sup>rd</sup>-highest rate of TB cases with 9.4 cases per 100,000 population. Native Hawaiian/Pacific Islanders and Black/African Americans had the highest rates of TB cases (28.7 and 13.6 cases per 100,000 population, respectively).

## CONTACT INVESTIGATIONS

In 2020 the TB program conducted 41 contact investigations and identified 358 contacts of infectious TB cases. Through these investigations, we identified 69 individuals with latent TB infection (LTBI) and 4 with active TB disease.

## TB AND HOMELESSNESS

Across the US, TB continues to disproportionately affect those experiencing homelessness. Three TB cases (3%) were diagnosed in 2020 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. We continue to evaluate the increasing number of TB cases among the homeless over the past few years.



## DRUG RESISTANCE

Isoniazid (INH), rifampin (RIF), ethambutol (EMB), and pyrazinamide (PZA) are considered first-line anti-TB drugs and together form the standard regimen for active TB disease. Of the 66 TB cases with drug susceptibility testing available, 15 were resistant to at least one first-line drug. King County had no multidrug-resistant TB (MDR-TB) cases in 2020. MDR-TB is a form of TB caused by bacteria that do not respond to INH and RIF. A global total of 206,030 people with multidrug- or rifampin-resistant TB (MDR/RR-TB) were detected and notified in 2019, a 10% increase from 2018.

## WANT TO KNOW MORE? CHECK OUT:

- Public Health – Seattle & King County Tuberculosis Control Program <http://kingcounty.gov/health/TB>
- Centers for Disease Control and Prevention Division of Tuberculosis Elimination <http://cdc.gov/tb>
- World Health Organization - TB <https://who.int/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 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>