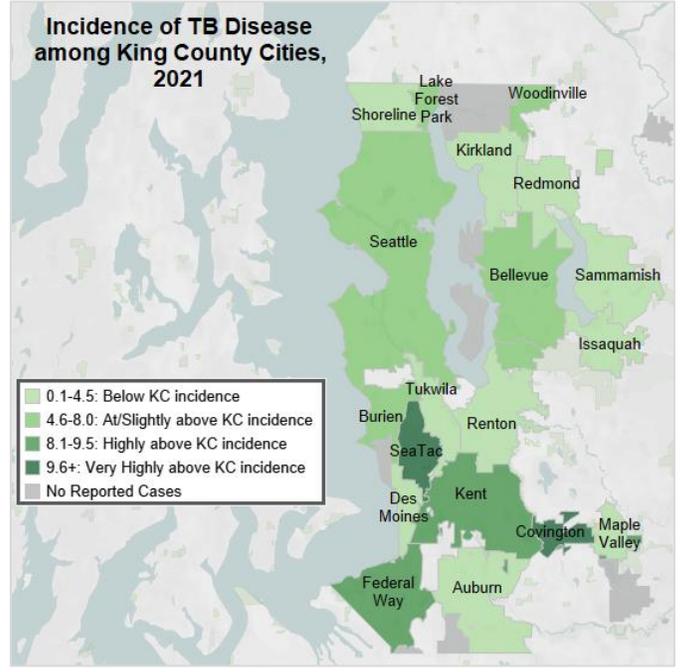
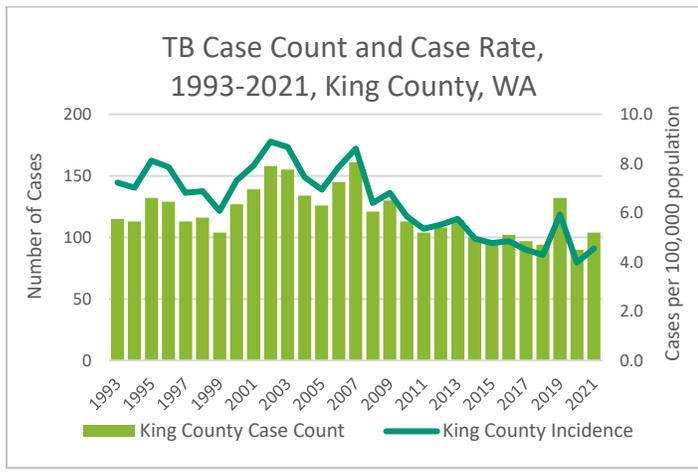


# Tuberculosis in Seattle & King County

2021 Annual Report

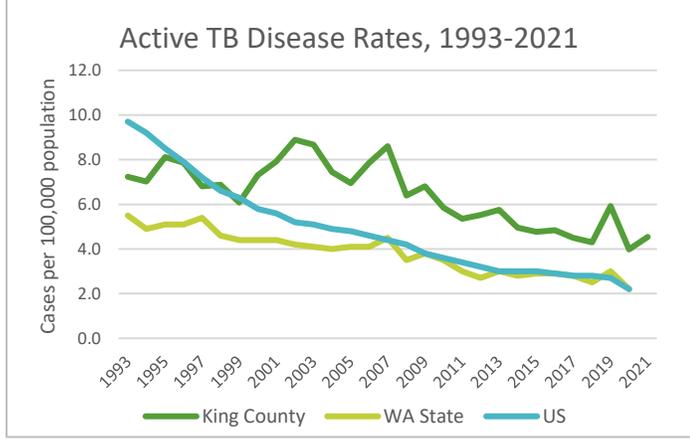


## OVERVIEW

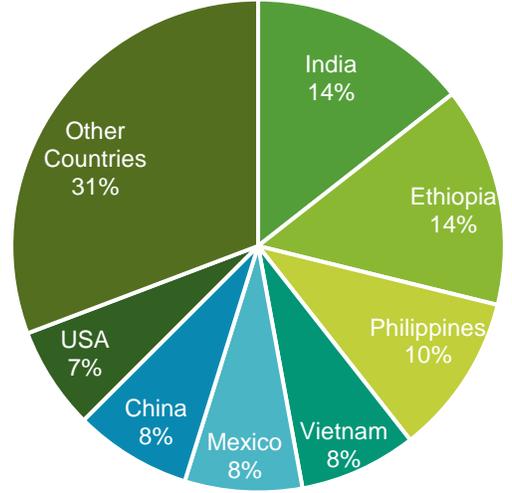
In 2021, 104 cases of Tuberculosis (TB) were reported in King County, for an incidence of 4.5 cases per 100,000, a 15% increase from 2020 (90 cases; 4.0 cases per 100,000). Fifty (48%) of cases were hospitalized and there were four deaths related to TB disease in King County in 2021. The majority of cases were from Seattle (45 cases, 43% of all cases). SeaTac, Federal Way, and Kent had some of the highest incidence rates (range: 8.0-15.6 per 100,000 population).

## PLACE OF BIRTH

A total of 95 (91%) cases reported in 2021 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 18.2 per 100,000 population in 2021, which is 36 times the rate of TB in US-born individuals in King County (0.5 cases per 100,000 population).



Country of Birth Among Persons Reported with TB, King County, WA, 2021

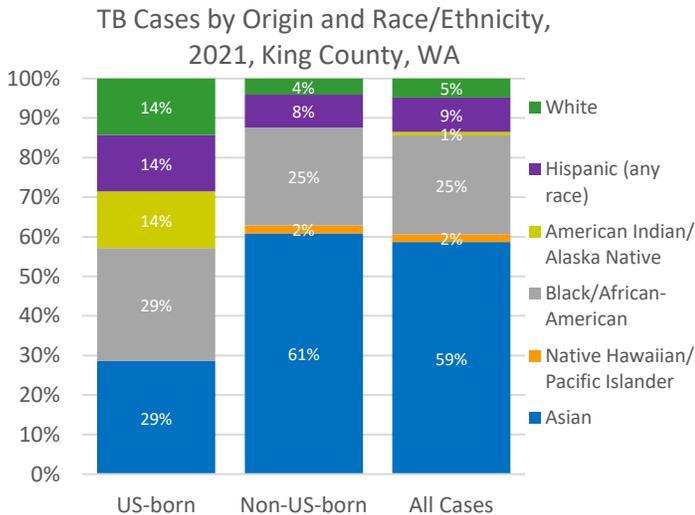


## GENDER AND AGE

Historically, males comprise 55-65% of TB cases in King County. In 2021, 61% of TB cases were male. Cases ranged from 11 to 89 years of age, with a median age of 40 years. The highest rate of TB was among males 65 years of age and older (14.3 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 2021, Asians had the highest proportion of cases in King County (59%) and had the 2<sup>nd</sup>-highest rate of TB cases with 12.9 cases per 100,000 population. Black/African Americans had the highest rate of TB cases with 16.2 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 2021 (30 cases, 29%). Four cases (4%) were co-infected with HIV.

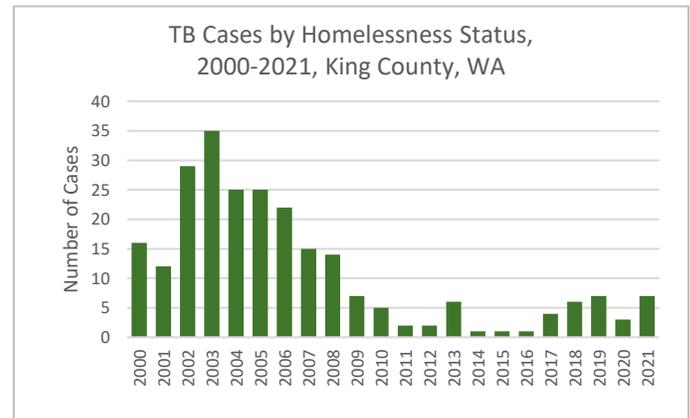
## COVID-19 AND TB

In 2021, 10 TB cases (10%) were diagnosed with COVID-19 prior-to or at the same time as TB. Since the start of the COVID-19 pandemic, approximately 16% of King County residents have been diagnosed with COVID-19. Both diseases affect vulnerable populations; TB risk is higher among people of color, especially those born outside the United States. The risk of COVID-19 is also disproportionately higher among people of color.

## CONTACT INVESTIGATIONS

In 2021 the TB program conducted 55 contact investigations and identified 202 contacts of infectious TB cases. Through these investigations, we identified 41 individuals with latent TB infection (LTBI) and 2 with active TB disease.

## TB AND HOMELESSNESS



TB continues to disproportionately affect those experiencing homelessness. Seven TB cases (7%) were diagnosed in 2021 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. We continue to vigilantly monitor the TB incidence among this vulnerable population.

## DRUG RESISTANCE

Of the 88 TB cases with drug susceptibility testing available, 18 were resistant to at least one first-line drug. Four 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 4 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.

### 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>