

DESCRIPTION

Tuberculosis (TB) is a serious infectious disease caused by a bacterium called *Mycobacterium tuberculosis*. TB is transmitted through the air, but extended close contact with someone with infectious TB is typically required for it to spread. Not everyone infected with the TB bacterium becomes sick. As a result, two TB-related conditions exist: latent TB infection (germs are dormant in the body and do not spread to others) and active TB disease (the infected person feels sick and can spread germs to others). Active TB most often affects the lungs, but can involve any part of the body. In most cases TB is curable, however it can be fatal without proper treatment. Sometimes TB becomes resistant to drugs used to treat it. Multidrug-resistant TB (MDR TB) is resistant to at least two of the most potent drugs used for treatment. This contrasts with “pan-sensitive” TB which is susceptible to all first-line drugs against TB.¹

HOW WE ARE DOING

In 2017, there were 38 cases of tuberculosis reported in Ramsey County. This was 29.2 percent of the Metro area total, and 21.3 percent of the Minnesota total. This is an increase of 9 percent for Ramsey County from the previous 5-year average of 35 cases.² In Ramsey County, most active TB cases occur in residents born in countries with high TB rates (90 percent of cases in 2017). In the last five years, people with TB in Ramsey County were born in 23 different countries, most from South/Southeast Asia (48 percent) or Africa (41 percent). Ramsey County residents born in the U.S. who have TB often report other risk factors including immune-suppression due to therapies or illnesses, substance abuse, homelessness, or lengthy stays in correctional facilities, nursing homes or other congregate settings.

Beginning in late 2016, an outbreak of MDR TB was identified in Ramsey County. Between 2016 and 2018, Ramsey County identified 18 cases of MDR TB (this compares to seven cases of MDR TB in the entire state from 2010 to 2015). In 2017 there were 7.5 confirmed cases of TB per 100,000 population. Foreign born residents experienced a rate of 44.5 per 100,000 population. Ramsey County does not meet the Healthy People targets related to TB.

BENCHMARK INDICATOR

Healthy People 2020: Reduce the tuberculosis (TB) case rate for foreign-born persons living in the U.S.

U.S. Target: 14 per 100,000 population

Healthy People 2020: Reduce tuberculosis

U.S. Target: 1.0 new case per 100,000 population³

DISPARITIES

In 2016, foreign born residents in Ramsey County experienced a rate of 44.5 new TB cases per 100,000 population, compared to a rate of 0.4 among U.S. born residents. The MDR TB outbreak in Ramsey County is concentrated in the Hmong community and is specifically affecting the elderly.

RISK FACTORS

Generally, persons at high risk for developing TB disease fall into two categories: persons who have been recently infected with TB bacteria; and persons with medical conditions that weaken the immune system (such as HIV, diabetes, cancer, kidney disease, children less than 5 years of age).¹

(continued on back)

Information to note

- In 2017, there were 38 cases of tuberculosis in Ramsey County, which was 21.3% of all Minnesota cases.
- There is an ongoing outbreak of multidrug-resistant tuberculosis in Ramsey County primarily affecting the Hmong community.

¹Tuberculosis (TB). Centers for Disease Control and Prevention. <https://www.cdc.gov/tb/default.htm> Accessed April 2018.

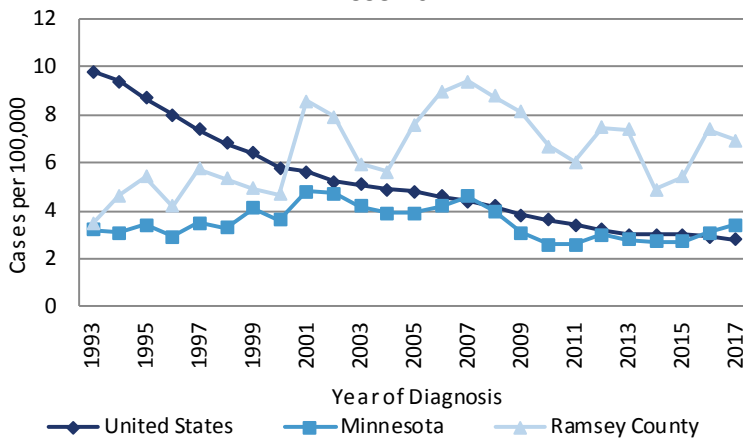
²Minnesota Department of Health Infectious Disease Surveillance. Minnesota Department of Health. <http://www.health.state.mn.us/macros/topics/stats.html>. Accessed April 2018.

³HealthyPeople 2020. <https://www.healthypeople.gov/2020/topics-objectives>. Accessed April 2018.

WHAT RAMSEY COUNTY GOVERNMENT IS DOING

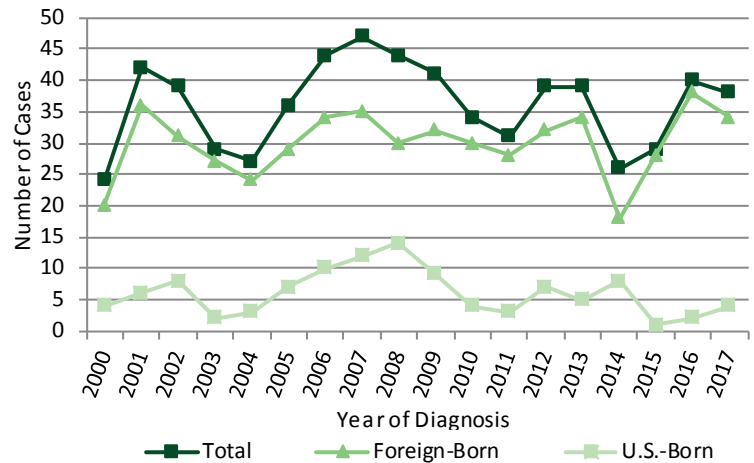
Between 2016 and 2018 Saint Paul- Ramsey County Public Health created six new positions and reallocated funding for sustained community engagement and provider education to address TB prevention and control. Although the MDR TB outbreak occurred in Ramsey County, all local health departments are mandated by law to assure follow-up for active and latent TB cases in their jurisdiction. There is limited outside funding for these prevention and control activities, leaving most counties with smaller budgets to tap during outbreaks. The burden of TB is well-known, but with a sustained investment in this area Ramsey County hopes to prevent future outbreaks.

Tuberculosis Incidence Rates, United States, Minnesota, and Ramsey County 1993-2017



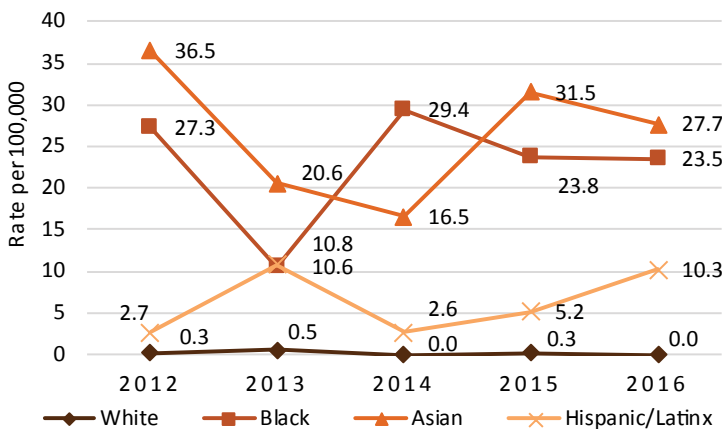
Source: Minnesota Department of Health and Centers for Disease Control.⁴

Tuberculosis Cases by Place of Birth, Ramsey County



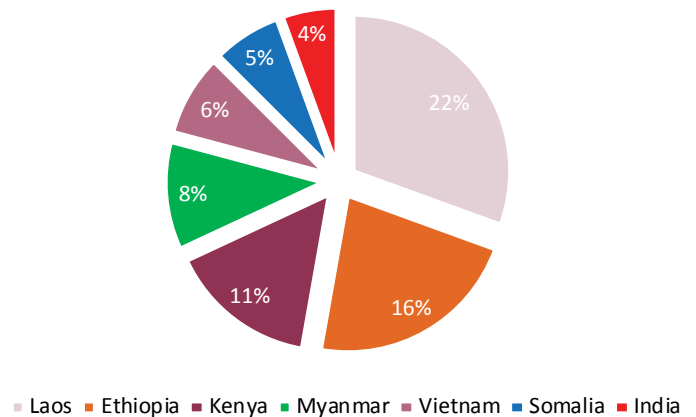
Source: Saint Paul - Ramsey County Public Health.

Tuberculosis Incidence Rates by Race/Ethnicity, Ramsey County, 2012-2016



Source: Saint Paul - Ramsey County Public Health.

Non-U.S. Born Tuberculosis Cases by Country of Birth, Ramsey County, 2013-2017



Source: Saint Paul - Ramsey County Public Health.

⁴ Source: rates for MN and US from <http://www.health.state.mn.us/divs/idepc/diseases/tb/stats/index.html> and <https://www.cdc.gov/tb/statistics/tbcases.htm> and https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_05_EST_S0101&prodType=table