Tuberculosis in City and County of San Francisco, 2020

The mission of San Francisco Tuberculosis Prevention and Control Program is to control, prevent, and finally eliminate tuberculosis in San Francisco by providing compassionate, equitable, and supportive care of the highest quality to all persons affected by this disease.

In 2020, 59 new cases with active tuberculosis (TB) were reported in San Francisco (6.7 TB cases per 100,000 persons). This is a 43.8% decrease from 2019 (105 cases, at 11.9 cases per 100,000 persons). The rate of TB in San Francisco is more than 3 times the national rate of 2.2 cases per 100,000 persons and more than 1.5 times the California rate of 4.3 cases per 100,000 persons. See Figure 1.

Demographics

In 2020, San Francisco reported 53 non-U.S.-born cases and an incidence rate of 17.9 cases per 100,000 persons, compared with 6 U.S.-born cases and an incidence rate of 1.0 case per 100,000 persons, respectively. In terms of race/ethnicity, Asian/Pacific Islander had the highest TB incidence rate reported (15.5 cases per 100,000 persons), which was more than 9 times higher than Non-Hispanic White. Incidence rates were nearly 3 times higher among Hispanic/Latino and 1.3 times higher among Non-Hispanic Black compared with Non-Hispanic White. See Figure 2.
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In 2020, 45 out of 59 active TB cases (76.3%) identified were males. The median ages of TB patients in San Francisco were 58 in 2016, 60 in 2017, 64 in 2018 and 2019, and 62 in 2020 (age range: 15-102). No pediatric cases (0-14 years old) were reported, and approximately 50% of cases were ages 65 and older. See Figure 3.

Site of Disease

Among 59 new TB cases reported in 2020, 44 (74.6%) had pulmonary TB disease, 2 had pleural TB disease, and 5 had pulmonary and pleural TB disease. Other sites of TB disease including lymphatic, ocular, peritoneal, bone marrow, and abdominal wall.

Risk Factors

Among all TB cases, 38 had at least one medical condition at the time of diagnosis. Sixteen cases (27.2%) had diabetes mellitus, 3 cases (5.1%) had end stage renal disease, and 7 cases (11.9%) had immunosuppression (HIV and non-HIV).

Additionally, 8 cases (13.6%) were people experiencing homelessness within the past 12 months prior to the TB diagnosis, 8 cases (13.6%) reported heavy alcohol consumption, and 7 cases (11.8%) found to have substance/drug use. No contacts of known active TB cases counted in 2020 were found to have active TB disease.

Mortality

At the time of this publication, there were 9 deaths among cases diagnosed with TB in 2020, representing a 15.3% mortality. One TB case died before being able to receive TB treatment, and 3 deaths were directly related to TB disease.

Drug Resistance to Standard Medications

The proportions of drug resistance remained low. Four cases were mono-resistant to isoniazid, 2 cases were mono-resistant to pyrazinamide. No cases of rifampin-resistant TB or multidrug resistant TB (MDR-TB) were reported in 2020.
Active TB annual incidence per 100,000: 2016 – 2020

*The 2016–2020 ACS estimates for population provided by the Census are used to create a rate which is equal to ([avg count 2016–2020] / [acs_population]) * 100000 representing the number of cases per 100,000 residents.

**8 cases with no stable address at the time of diagnosis are not listed