Tuberculosis in City and County of San Francisco, 2021

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 2021, 74 new cases with active tuberculosis (TB) were reported in San Francisco (8.6 TB cases per 100,000 persons). This is a 28.4% increase from 2020 (59 cases, at 6.7 cases per 100,000 persons). The rate of TB in San Francisco is 3.6 times the national rate of 2.4 cases per 100,000 persons and nearly double the California rate of 4.4 cases per 100,000 persons. See Figure 1.

Demographics

In 2021, San Francisco reported 69 non-U.S.-born cases and an incidence rate of 24.1 cases per 100,000 persons, compared with 5 U.S.-born cases and an incidence rate of 0.9 case per 100,000 persons, respectively. In terms of race/ethnicity, Asian/Pacific Islander had the highest TB incidence rate reported (20.1 cases per 100,000 persons), which was more than 34 times higher than Non-Hispanic White. Incidence rates were more than 14 times higher among Non-Hispanic White and nearly 11 times higher among Hispanic / Latino compared with Non-Hispanic White. See Figure 2.
In 2021, 55 out of 74 active TB cases (74.3%) identified were males. The median ages at time of TB reporting were 60 in 2017, 64 in 2018, 63 in 2019, 62 in 2020, and 66.5 in 2021 (age range: 27-97). No pediatric cases (0-14 years old) were reported, and more than half of the cases were ages 65 and older. See Figure 3.

**Site of Disease**

Forty-eight cases had pulmonary TB disease, 2 had pleural TB disease, 3 had pulmonary and pleural TB disease, and 6 reported having pulmonary and extrapulmonary TB diagnosed at the same time. Other sites of TB disease including lymphatic, ocular, pericardium, peritoneal, genitourinary, anus, skin, joint, spine, and central nerves system.

**Comorbidities and Risk Factors**

In addition to TB, 65 reported having one or more comorbidities at the time of diagnosis. Specifically, 25 cases (33.8%) had diabetes mellitus, 40 cases (54.1%) had hypertension, 5 cases (6.8%) had end stage renal disease, and 13 cases (17.6%) were immunocompromised (HIV and non-HIV).

Additionally, 15 cases (20.3%) were people experiencing homelessness within the past 12 months prior to the TB diagnosis, 10 cases (13.5%) reported heavy alcohol consumption, and 9 cases (12.2%) found to have substance/drug use.

**Drug Resistance to Standard Medications**

The proportions of drug resistance remained low. Four cases were mono-resistant to isoniazid, and 2 cases were mono-resistant to pyrazinamide. One multidrug resistant TB (MDR-TB) was reported in 2021.
Active TB annual incidence per 100,000: 2017 – 2021

*The 2017–2021 ACS estimates for population provided by the Census are used to create a rate which is equal to (avg count 2017–2021) / (acs_population) * 100000 representing the number of cases per 100,000 residents.

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