

TUBERCULOSIS IN NASSAU COUNTY 2019

Tuberculosis, also known as TB, is a reportable and contagious bacterial disease. Most commonly, it affects the lungs. However, it can also affect other parts of the body, such as the lymph nodes, bones, joints, and brain. It is characterized by chronic cough, fever, weight loss, and night sweats. Pulmonary TB is spread through the air when someone with the disease coughs, sneezes, speaks, or sings. TB can be treated through a combination of several different medications taken for at least 6 months. Nassau County had a total of 51 TB cases in 2019. In 2019, the rate of TB in Nassau County was 3.75 cases per 100,000 individuals, which increased from 2018's rate of 3.16 cases per 100,000 individuals.

DEMOGRAPHICS

AGE

- Most TB cases in Nassau County occurred in patients between the ages of 18-44, 17 cases (33.3%) and over the age of 65, 18 cases (35.3%).
- The highest rate of TB occurred in those over the age of 65, at 7.46 per 100,000 population.
- The lowest rate of TB occurred in those 0-17, at 1.37 per 100,000 population.
- The average age for all patients was 51.

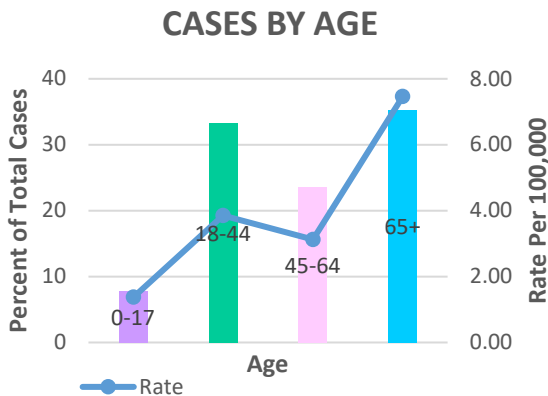


Figure 1: Percentage and rate of all tuberculosis cases by age group, Nassau County 2019

BIRTHPLACE

- 94.1% of patients with TB disease were foreign-born in 2019.



SEX

- Males had a higher rate of TB than females with a rate of 4.38 cases per 100,000 compared to 3.16 cases per 100,000.
- Males accounted for 56.9% of all county cases while females accounted for 43.1% of all county cases.

CASES BY SEX

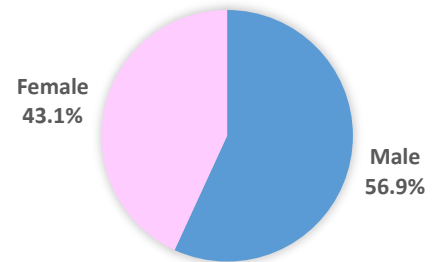


Figure 2: Tuberculosis cases by sex, Nassau County, 2019

CASES BY BIRTHPLACE

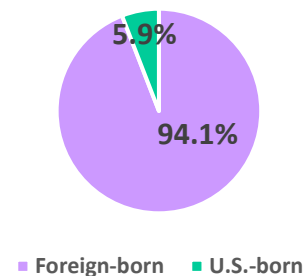


Figure 3: Tuberculosis cases of foreign-born and U.S.-born, Nassau County, 2019

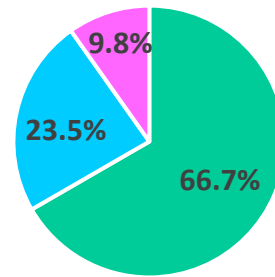
DISEASE DATA

SITE OF DISEASE

TB can be pulmonary (occurring in the lungs), extrapulmonary (occurring somewhere other than the lungs), or a combination of the two.

- Two-thirds (67%) of all cases of TB were pulmonary only. 24% were extrapulmonary only and 10% were both pulmonary and extrapulmonary.
- Of extrapulmonary cases, extrapulmonary TB was most commonly lymphatic.

SITE OF DISEASE



■ Pulmonary Only ■ Extrapulmonary Only ■ Both

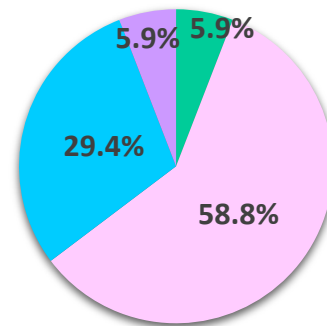
Figure 4: Tuberculosis cases by disease site, Nassau County, 2019

PULMONARY

Individuals suspected of having pulmonary TB have sputum samples collected for AFB smear and culture tests. A positive AFB smear is a strong indication that a patient is infectious. A patient that tests negative for AFB smear can still have a positive sputum culture, which confirms the diagnosis of TB disease. Culture conversion is used to determine treatment success.

- 27.5% of all TB cases were sputum AFB smear positive.
- 52.9% of all TB cases were sputum culture positive.
- 88.0% of sputum culture-positive cases converted to negative within 60 days of treatment initiation.

EXTRAPULMONARY SITES



■ Brain ■ Lymphatic ■ Pleural ■ Spinal Cord

Figure 5: Extrapulmonary cases by disease site, Nassau County, 2019

LATENT TUBERCULOSIS INFECTION

Latent TB Infection (LTBI) occurs when someone is infected with TB bacteria but does not have active TB. People with LTBI do not have any symptoms and are not infectious. They can, however, develop TB disease if the bacteria are activated. Generally, 5-10% of those with LTBI develop TB disease (CDC, 2014).

- Nassau County Department of Health identified 285 contacts to active TB cases. Of those, 70.9% were evaluated 202.
- 14.9% of evaluated contacts were diagnosed with LTBI (30).
- Of those diagnosed, 90.0% started LTBI treatment (27). 56% completed LTBI treatment (15).

TREATMENT

Directly Observed Therapy (DOT) is the most effective way to ensure patients adhere to and complete their treatments. The goal is for patients to complete treatment within 12 months. DOT is offered by the Department of Health's TB Control Bureau to all patients receiving treatment for pulmonary TB disease and select extrapulmonary cases.

- 97.0% of eligible patients received DOT administered by the Nassau County Department of Health.
- Of those eligible to complete treatment, 98.0% completed treatment within 12 months.

