

# TUBERCULOSIS IN NASSAU COUNTY 2020

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 40 TB cases in 2020. In 2020, the rate of TB in Nassau County was 2.87 cases per 100,000 individuals, which decreased from 2019's rate of 3.75 cases per 100,000 individuals.

## DEMOGRAPHICS

### AGE

- Most TB cases in Nassau County occurred in patients between the ages of 65 and over, 16 cases (40%), a rate of 6.4 per 100,000 population.
- The same rate of TB occurred in those 0-17 and 45-64 (1.3 per 100,000 population).
- The average age for all patients was 51.

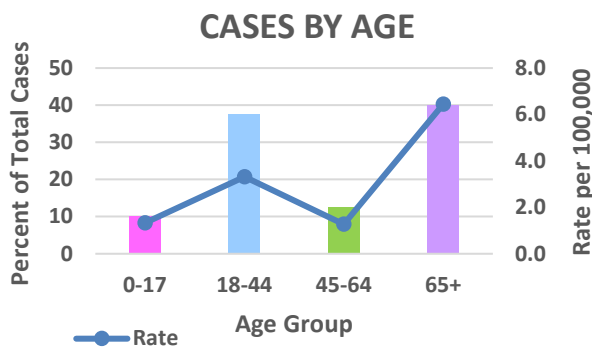


Figure 1: Percentage and rate of all tuberculosis cases by age group, Nassau County 2020

### SEX

- Males accounted for 67.5% of all county cases while females accounted for 32.5% of all county cases.
- Males had a higher rate of TB than females with a rate of 4.0 cases per 100,000 compared to 1.8 cases per 100,000.

### CASES BY SEX

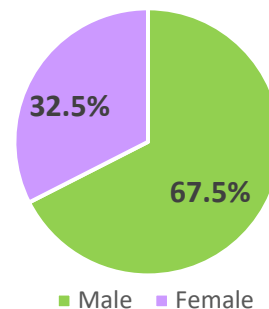


Figure 2: Tuberculosis cases by sex, Nassau County, 2020

### BIRTHPLACE

- 75% of patients with TB disease were foreign-born and 25% were U.S. born in 2020.

### CASES BY BIRTHPLACE

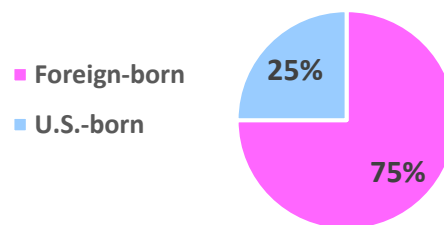


Figure 3: Tuberculosis cases of foreign-born and U.S.-born, Nassau County, 2020



# 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.

- The majority (67.5%) of all cases of TB were pulmonary only. 20% were extrapulmonary only and 12.5% were both pulmonary and extrapulmonary.
- Of extrapulmonary cases, extrapulmonary TB was most commonly lymphatic (38%) or pleural (31%).

## SITE OF DISEASE

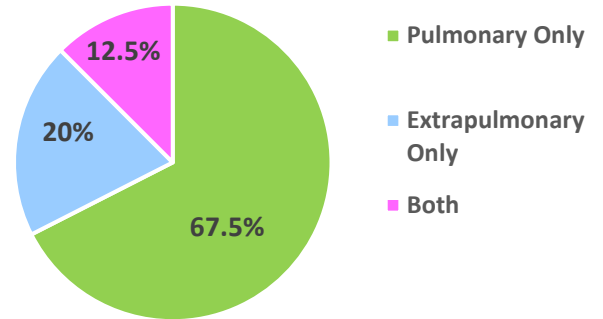


Figure 4: Tuberculosis cases by disease site, Nassau County, 2020

## 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.

- 37.5% of all TB cases were sputum AFB smear positive.
- 62.5% of all TB cases were sputum culture positive.
- 67% of sputum culture-positive cases converted to negative within 60 days of treatment initiation.

## SITES OF EXTRAPULMONARY DISEASE

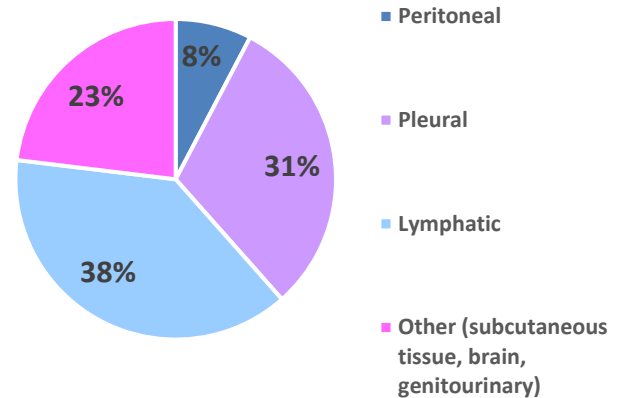


Figure 5: Extrapulmonary cases by disease site, Nassau County, 2020

## 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 134 contacts to active TB cases. Of those, 81% were evaluated (108).
- 31% of evaluated contacts were diagnosed with LTBI (33). Two contacts had TB disease.
- Of those diagnosed, 76% started LTBI treatment (25) and 76% of those completed LTBI treatment (19).

## 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 TB disease.

- 50% of eligible patients received DOT administered by the Nassau County Department of Health or another facility. Due to the Covid-19 pandemic there were many refusals and staff constraints.
- Of those eligible to complete treatment, 97% completed treatment within 12 months.

