

# TUBERCULOSIS IN NASSAU COUNTY 2017

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. In 2017, the rate of TB in Nassau County was 2.99 cases per 100,000 individuals, which increased from 2016's rate of 2.84 cases per 100,000 individuals.

## DEMOGRAPHICS

### CASES BY AGE

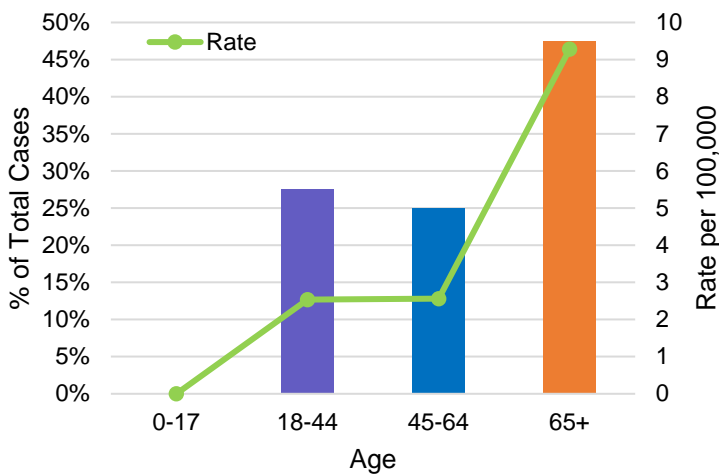


Figure 1: Percentage and rate of all tuberculosis cases by age group, Nassau County, 2017

### CASES BY BIRTHPLACE

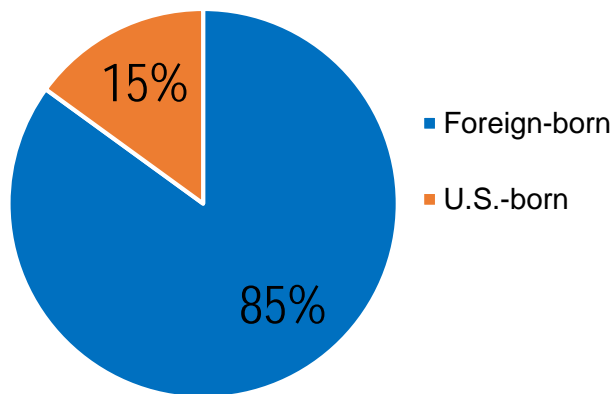


Figure 2: Tuberculosis cases of foreign-born and U.S.-born Nassau County residents, 2017

### BIRTHPLACE

- 85% of patients with TB disease were foreign-born.

### AGE

- The majority of TB cases in Nassau County occurred in patients over the age of 65 (47.5%).
- The rate of TB in those 65 or older was the highest of any age group (9.28 per 100,000).
- The lowest rate of TB occurred in those under 18 (0 per 100,000).
- The average age for all patients was 61. The average age for males was 59 and for females was 64.

### CASES BY SEX

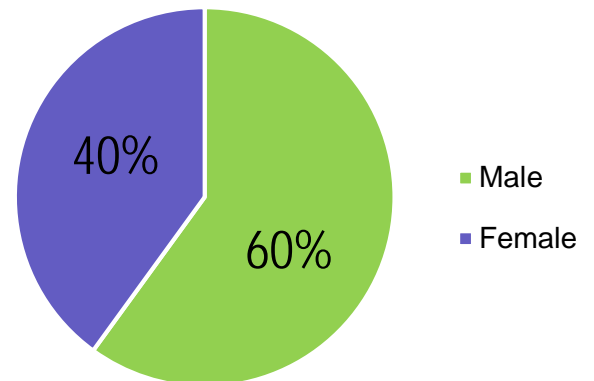


Figure 3: Tuberculosis cases by sex, Nassau County, 2017

### SEX

- Males had a higher rate of TB than females with a rate of 3.7 cases per 100,000 compared to 2.3 cases per 100,000.
- Males accounted for 60% of all county cases while females accounted for 40% of all county cases.



# 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.

- More than half of all cases of TB were pulmonary only. 30% were extrapulmonary only and 10% were both pulmonary and extrapulmonary.
- Of extrapulmonary cases, extrapulmonary TB was most common in the lymph nodes.

## PULMONARY

Individuals suspected of having 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 culture, which confirms the diagnosis of TB disease.

- 40% of all TB cases were sputum smear-positive and 57% of pulmonary cases were sputum smear-positive.
- 60% of all TB cases were sputum culture-positive and 86% of pulmonary cases were sputum culture-positive.
- 67% of sputum culture-positive cases converted to negative within 60 days of treatment initiation.

## 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 434 contacts to active TB cases. Of those, 243 were evaluated.
- 13% of evaluated contacts were diagnosed with LTBI.
- Of those diagnosed, 65% started LTBI treatment.

## TREATMENT

Directly Observed Therapy (DOT) is the most effective way to ensure patients adhere to and are able to 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.

- 86% of eligible patients received DOT administered by the Nassau County Department of Health.
- Of those eligible, 100% have completed, or are likely to complete, treatment within 12 months.

## SITE OF DISEASE

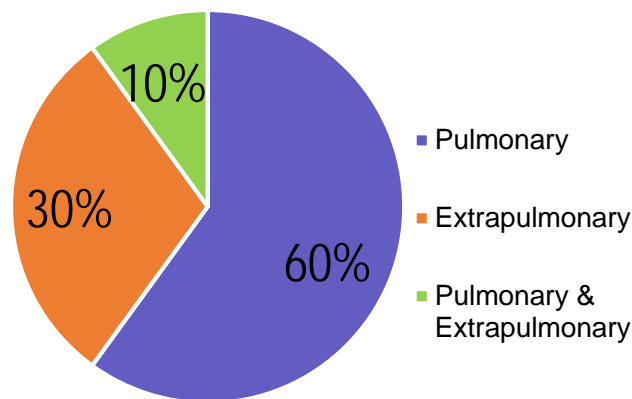


Figure 4: Tuberculosis cases by disease site, Nassau County, 2017

## EXTRAPULMONARY DISEASE SITES

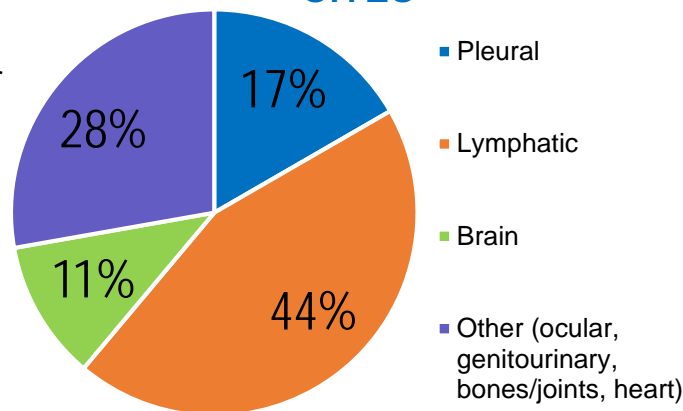


Figure 5: Extrapulmonary cases by disease site, Nassau County, 2017

