TUBERCULOSIS IN NASSAU COUNTY

2016

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 2016, the rate of TB in Nassau County was 2.84 cases per 100,000 individuals. The rate of TB has decreased slightly since 2015, when there were approximately 3 cases per 100,000 individuals.

DEMOGRAPHICS

Cases by Age

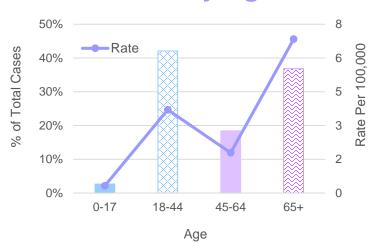


Figure 1: Percentage and rate of all tuberculosis cases by age group, Nassau County, 2016

Birthplace 16% ForeignBorn U.S.-born

Figure 2: Tuberculosis cases of foreign-born and U.S.-born Nassau County residents, 2016

BIRTHPLACE

o 84% of patients with TB disease were foreign-born.

AGE

- The majority of TB cases in Nassau County occurred in patients aged 18 to 44 (42.1%)
- The rate of TB in those 65 or older was the highest (6.84 cases per 100,000 individuals).
- o The lowest rate of TB occurred in those under 18 (<1 case per 100,000 individuals).
- o The average age for all patients was 52. The average age for males was 50. For females, the average age was 54.

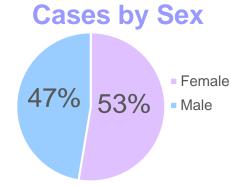


Figure 3: Tuberculosis cases by sex, Nassau County, 2016

SEX

- o Females had a higher rate of TB than males, respectively 2.89 per 100,000 and 2.78 per 100,000.
- o Females accounted for 53% of all county cases and males accounted for 47% 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.

- 63% of all cases of TB were pulmonary only. 24% were extrapulmonary only, and 13% were both pulmonary and extrapulmonary.
- Of extrapulmonary disease sites, extrapulmonary TB occurred in the pleura, lymph nodes, or bones/joints most often.

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.

- o 32% of all TB cases were sputum smear-positive. Of pulmonary cases, 41% were sputum smear-positive.
- o 58% of all TB cases were sputum culture-positive. Of pulmonary cases, 76% were sputum culture-positive.
- 82% of sputum culture-positive cases were eligible to convert to negative. Of those eligible, 78% converted within 60 days of treatment initiation.

Site of Disease

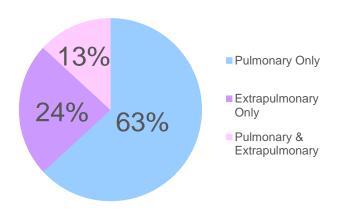


Figure 4: Tuberculosis cases by disease site, Nassau County, 2016

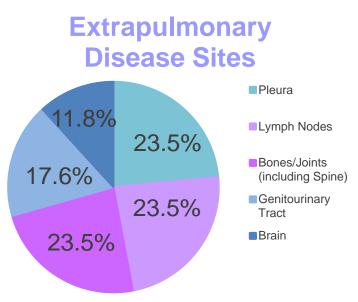


Figure 5: Counts of extrapulmonary disease sites, Nassau County, 2016

LATENT TUBERCULOSIS

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. However, they can develop TB disease if the bacteria are activated. Generally, 5-10% of those with LTBI develop TB disease (CDC, 2014).

- o Nassau County Department of Health identified 259 contacts to active TB cases. Of those, 159 were evaluated.
- 23% of evaluated contacts were diagnosed with LTBI. Of those diagnosed, 81% 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 Division of TB Control to all patients receiving treatment for pulmonary TB disease.

- o 90% received DOT administered by the Nassau County Department of Health.
- o Of those eligible, 100% have completed, or are likely to complete, treatment within 12 months.