



## Legionnaires' Disease Cluster in Union County

### Situational Update and FAQs

May 22, 2019

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The New Jersey Department of Health (NJDOH) has identified an unexplained increase and cluster of Legionnaires' disease cases in Union County, New Jersey. As of May 19, 2019, 22 cases of Legionnaires' disease have been identified associated with this county. NJDOH and respective local health departments are actively investigating these cases to identify common exposures. To date, no definitive epidemiologic link has been identified between the cases, including no common drinking water source. However, reported exposures appear to be geographically clustered. The Centers for Disease Control and Prevention (CDC) is providing technical assistance to NJDOH to identify potential sources of exposure.

Residents at risk for Legionnaires' disease presenting with pneumonia-like/respiratory symptoms, such as fever, chills, cough, shortness of breath, and muscle aches are urged to promptly seek medical attention. NJDOH has alerted healthcare providers in the area. Legionnaires' disease is treatable with antibiotics. Every year, there are between 250-350 cases of Legionnaires' disease in the state.

#### **Main messages/key messages:**

- Legionnaires' disease is a form of pneumonia caused by *Legionella* bacteria and cannot be spread from person-to-person.
- People can get Legionnaires' disease when they breathe in small droplets of water in the air that contain *Legionella* bacteria.
- Most healthy people exposed to *Legionella* bacteria do not get sick.
- People at increased risk of getting sick are: people 55 years or older, current/former smokers, people with chronic lung disease, people with weakened immune systems or who take drugs that weaken the immune system and people with underlying illnesses such as diabetes, kidney failure, or liver failure

- People at increased risk are encouraged to seek medical care if they are experiencing fever, shortness of breath, cough, pneumonia-like symptoms and not to delay in seeking care.

### **What is being done to address the issue?**

NJDOH is working with representatives from the Centers for Disease Control and Prevention (CDC) to:

- Identify additional potential cases of Legionnaires' disease among residents and visitors to Union County.
- Conduct an epidemiologic investigation to identify possible exposures and an environmental assessment to identify potential environmental sources of *Legionella*.
- Conduct environmental sampling for *Legionella* as indicated by the epidemiologic investigation and environmental assessments. Recommend environmental remediation strategies and implementation/refinement of water management programs to prevent further transmission of Legionnaires' disease.

NJDOH and local health departments in Union County are conducting public health investigations of individuals to determine a common source of exposure.

### **What is legionellosis?**

Legionellosis is associated with two clinically and epidemiologically distinct illnesses: Legionnaires' disease, which is typically characterized by fever, muscle pain, cough, and pneumonia; and Pontiac fever, a milder illness without pneumonia.

### **What is Legionnaires' disease?**

Legionnaires' disease is a type of pneumonia (lung infection) caused by bacteria called *Legionella*.

### **How do you get Legionnaires' disease?**

People can get Legionnaires' disease by breathing in aerosolized (small droplets) of water containing *Legionella* bacteria. Aerosolized water can come from showers, faucets, hot tubs, humidifiers, and decorative fountains. Legionnaires' disease is not spread from person-to-person.

### **What is Pontiac fever?**

Pontiac fever is a milder form of Legionnaires' disease without pneumonia. Symptoms include flu-like illness, fever, headache, and muscle aches but no sign of pneumonia.

### **Who is at risk for Legionnaires' disease?**

Most healthy people exposed to *Legionella* bacteria do not get sick. People at increased risk of getting sick are:

- People 50 years or older
- Current or former smokers
- People with a chronic lung disease (like chronic obstructive pulmonary disease or emphysema)
- People with weak immune systems or who take drugs that weaken the immune system (like after a transplant operation or chemotherapy)
- People with cancer
- People with underlying illnesses such as diabetes, kidney failure, or liver failure

### **What are the symptoms of Legionnaires' disease?**

The usual symptoms may include: cough, shortness of breath, fever, muscle aches, and headaches. Symptoms may start anywhere from 2-14 days after coming into contact with and breathing the bacteria; most often, symptoms begin 5-6 days after being exposed.

### **How is someone diagnosed with Legionnaires' disease?**

Tests of the person's urine and sputum (mucous coughed up from the lungs) are examined. A chest x-ray may be taken to look for signs of pneumonia (lung infection).

### **Can Legionnaires' disease be treated?**

Yes, the disease can be treated with specific antibiotics, which is why it's important to seek medical care if illness is suspected.

### **Is it safe to use/drink the water in Union County?**

You cannot get Legionnaires' disease by drinking/ingesting water. If you have concerns about your water quality, contact your water supplier or NJ Department of Environmental Protection's Bureau of Safe of Drinking Water.

### **If I live in Union County, should I be concerned about Legionnaires' disease?**

Most healthy people exposed to *Legionella* bacteria do not get sick. The risk of catching Legionnaires' disease is low. If you consider yourself in the high-risk group, and you have symptoms, see your healthcare provider.

### **If I visited Union County, should I be concerned about Legionnaires' disease?**

Legionnaires' disease has a two-week period when most people exposed to the bacteria become ill. If you visited Union County more than two weeks ago and did not develop symptoms, such as fever, chills, cough, and muscle aches (malaise), you are out of the incubation period for the disease. Most often symptoms occur 5 to 6 days or up to 14 days after being exposed to the *Legionella* bacteria.

### **Does the NJDOH have any recommendations for healthcare providers?**

NJDOH is requesting that healthcare providers consider the diagnosis of Legionnaires' disease in patients presenting with clinical features of pneumonia, fever, and cough. When testing for Legionnaires' disease, please be aware that both urine antigen assay AND culture of respiratory secretions on selective media are the preferred diagnostic tests. Best practice is to obtain both the respiratory culture and the urinary antigen test concurrently. Note that serological assays can be nonspecific and are not recommended in most situations.

#### **Collection of Respiratory Specimens on Positive Urinary Antigen Patients:**

NJDOH requests that respiratory specimens (sputum, bronchoalveolar lavage, tracheal aspirate, or lung tissue) are collected and held for patients who tested positive for Legionella by a urinary antigen test and who reside/work in or visited Union County.

- These respiratory specimens should ideally be obtained prior to antibiotic administration, but antibiotic treatment should not be delayed to facilitate this process (and culture can be attempted even after antibiotic therapy has been initiated).
- Respiratory specimens should be frozen immediately after collection.

- Please inform your laboratory to not reject respiratory specimens based on specimen quality (e.g., due to lack of white blood cells in the sample, contamination with other bacteria).

After further public health investigation, NJDOH may request that these specimens are sent to the Centers for Disease Control and Prevention (CDC) for Legionella culture and molecular testing free-of-charge.

### Reporting:

Health care providers and administrators are required to report cases of legionellosis (Legionnaires' disease and Pontiac fever) to the local health department where the patient resides within 24 hours of diagnosis (N.J.A.C. 8:57 - 1.4). If the patient residence is unknown, report to your own local health department. Contact information is available at: [localhealth.nj.gov](http://localhealth.nj.gov).

Timely identification and reporting of cases of legionellosis is important, as this allows public health officials to quickly identify and stop potential clusters and outbreaks by linking new cases to previously reported ones.

### **When does CDC get involved in responding to outbreaks of Legionnaires' disease?**

State public health officials typically invite CDC to assist with an investigation when they need additional expertise, capacity, or resources.

### **For more information:**

- Check the NJ Department of Health (NJDOH) website: <https://www.nj.gov/health/>
- Follow NJDOH on social media: Twitter and Facebook @NJDeptofHealth
- Centers for Disease Control and prevention website at: <https://www.cdc.gov/legionella/index.html>