New Jersey Department of Health

Communicable Disease Service

Call for Enhanced Surveillance and Testing for Legionellosis

Date: August 5, 2025

Public Health Message Type: ☐ Alert ☒ Advisory ☐ Update ☐ Information

Intended Audience: ☒ All public health partners ☒ Healthcare providers ☒ Infection preventionists ☒ Local health departments ☐ Schools/child care centers ☐ ACOs ☐ Animal health professionals ☐ Other:

Key Points or Updates:

- The New Jersey Department of Health (NJDOH) is seeing an increase in the number of Legionnaires' disease cases being reported in **Essex County**.
- Healthcare providers are being asked to have a high index of suspicion for *Legionella* when evaluating patients for community-acquired pneumonia and healthcare-associated pneumonia.
    - **NJDOH requests that lower respiratory specimens are collected and held for any patient who tests positive for *Legionella* by a urinary antigen test, particularly those who live, work, or spend time in Essex County.**
- All suspected or confirmed cases of legionellosis (Legionnaires' disease and Pontiac fever) should be **promptly reported to the local health department** where the patient resides. If the patient's residence is unknown, report to your own local health department. Contact information is available at: localhealth.nj.gov.
- Local health departments should **promptly investigate cases** of legionellosis in their jurisdiction using the **Legionellosis Cluster Hypothesis Generating Questionnaire** and inquire about any time spent in Essex County, including addresses of locations visited and respective dates.

INFORMATION FOR HEALTHCARE PROVIDERS, FACILITIES, AND CLINICAL LABORATORIES

Healthcare providers should consider the diagnosis of Legionnaires' disease in patients presenting with clinical features of pneumonia, fever, and cough. NJDOH requests that lower 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, particularly those who live, work, or spend time in Essex County.

- Respiratory specimens should ideally be collected before starting antibiotics; however, treatment should not be delayed for specimen collection. Culture can still be attempted even after antibiotic therapy has been initiated.
- Respiratory specimens should be frozen immediately after collection at ≤-20°C.

- 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).

Inform NJDOH's Water Systems and Environmental Infection Control Unit (ICHEE.Water@doh.nj.gov) if any lower respiratory specimens are collected. Staff will provide instructions for shipping the specimens to NJDOH's Public Health and Environmental Laboratory. All additional testing is conducted free of charge.

Diagnostic Testing

The urinary antigen test is the most widely available rapid method of diagnosis and detects *Legionella pneumophila* serogroup 1. However, a negative urinary antigen test does not rule out infection with other *Legionella* species or serogroups.

Culture of *Legionella* from a lower respiratory specimen (e.g., sputum, tracheal aspirate, or bronchoalveolar lavage fluid) is the gold standard diagnostic test and should be used in conjunction with rapid non-culture diagnostics like the *Legionella* urinary antigen test.

Culture offers several key advantages:

- It can detect *Legionella* species other than *Legionella pneumophila* serogroup 1 that may also cause infection.
- Allows for the recovery of bacterial isolates that can undergo molecular typing, allowing comparison between clinical and environmental isolates to help confirm a source during an outbreak.
    - The urinary antigen test alone does not allow for molecular comparison to environmental isolates.

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. 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.

Contact Information:

Water Systems and Environmental Infection Control Unit, Communicable Disease Service,
ICHEE.Water@doh.nj.gov