

# MLS Laboratory Update: Reminder to Submit Isolates or Specimens for Confirmed or Suspected Legionnaires' Disease Cases

JULY 16, 2025

## Purpose of this Message:

Following a record number of legionellosis cases in Minnesota in 2024, MDH is reminding MLS laboratories that *Legionella*-positive cases are reportable and that the original isolate or clinical specimen (NOT antigen-positive urine) should be submitted to MDH-PHL for *Legionella* culture and subtyping. When an isolate is not available, the optimal clinical specimen to submit to MDH-PHL, is an available residual lower respiratory tract specimen\* (e.g., sputum, bronchoalveolar lavage [BAL], pleural fluid, or endotracheal aspirate).

## Action Item:

1. Please submit isolates (when available) or available residual lower respiratory tract specimens\* from patients with positive *Legionella* urinary antigen tests (UAT) or positive *Legionella* PCR tests to MDH-PHL.
2. Use "Project 2126" on the MDH-PHL [General Infectious Disease Laboratory Submission Form \(https://www.health.state.mn.us/diseases/idlab/forms.html\)](https://www.health.state.mn.us/diseases/idlab/forms.html) when submitting lower respiratory tract specimens for *Legionella* culture.
3. Please forward or share this message with lab sections/benches (such as chemistry) that perform *Legionella* UAT.

## Please Submit Residual Specimens\*:

- MDH-PHL is requesting that laboratories retain and submit to MDH-PHL available residual lower respiratory tract specimens\* for *Legionella* culture for any of the following:
  1. Patient specimen is positive by *Legionella* UAT
  2. Patient specimen is positive by *Legionella* PCR
  3. It is known that a patient's *Legionella* infection continues to be clinically suspected despite a negative *Legionella* UAT
- Available lower respiratory tract specimens\* sent to MDH-PHL for *Legionella* culture should note "Project 2126" on the submission form. The MDH-PHL general Infectious Disease Laboratory submission form and form guidance are available online at [Forms for the Infectious Disease Laboratory \(https://www.health.state.mn.us/diseases/idlab/forms.html\)](https://www.health.state.mn.us/diseases/idlab/forms.html).
- *Legionella* isolates from laboratories that do perform *Legionella* culture should continue to be submitted to MDH-PHL per usual practice.
- DO NOT submit urine specimens that are positive for the *Legionella* UAT to MDH-PHL. Urine is not an acceptable specimen source for *Legionella* culture.

\*NOTE: MDH-PHL is **NOT** requesting that a specimen be collected solely for submission to MDH-PHL, only submit residual respiratory specimen if there is one available.

## Results Reporting:

- MDH-PHL does not typically report results back to submitters for these specimens, as it is considered surveillance.
- If your laboratory requires a report back for the culture results, please note that request on the submission form and contact Paula Vagnone at [paula.snippes@state.mn.us](mailto:paula.snippes@state.mn.us) or 651-201-5581.

## Background:

- Legionellosis is a reportable disease in Minnesota, and clinical materials (isolate or specimen) must be submitted.
- The incidence of Legionnaires' disease has risen both nationally and in Minnesota over the past several years. In 2024, there were 171 cases reported to MDH, the highest number of cases ever reported in Minnesota. The median annual number of cases reported from 2016 to 2023 was 117 (range, 94 to 152 per year). Prior to 2016, there were never more than 60 cases reported annually.
- Most cases of Legionnaires' disease are diagnosed via *Legionella* UAT, which detects *Legionella pneumophila* serogroup 1 infection.
- Very few (<5%) of the *Legionella* UAT-positive cases reported to MDH also had *Legionella* culture of lower respiratory tract specimens such as sputum or BAL performed.
- *Legionella* UAT may be sufficient to diagnose and treat an individual patient and fulfills the public health case definition for Legionnaires' disease laboratory diagnosis. However, as with other infectious diseases, culture-independent methods affect public health surveillance because clinical materials and isolates are not available for molecular subtyping methods such as whole genome sequencing. Testing clinical isolates is crucial for identifying clusters and outbreaks and linking patient illness to other illnesses and an environmental source.
- An increase in patient specimens cultured and isolates obtained would improve MDH's capability to detect and investigate clusters and outbreaks of Legionnaires' disease.
- Because *Legionella* culture requires special selective media (e.g., buffered charcoal yeast extract agar), a routine bacterial culture will not yield *Legionella*.

More information on legionellosis in Minnesota is available at [Legionellosis \(Legionella\) Legionnaires' Disease and Pontiac Fever](https://www.health.state.mn.us/diseases/legionellosis/index.html)  
(<https://www.health.state.mn.us/diseases/legionellosis/index.html>)

## Questions:

If you have laboratory-related questions please contact Paula Vagnone, Microbiology Unit Supervisor, at 651-201-5581.

If you have questions about reporting a case or epidemiology, please call Ellen Laine at 651-201-4031.

Thank you for your assistance!

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*To obtain this information in a different format, call: 651-201-5200.*