

Legionella Update

Attention: Physicians, Hospitals, CNE, ER Manager, ER Physician, Infection Control Practitioners, Occupational Health Professionals, Community Health Centres, Walk-In Urgent Care Clinic, Nurse Practitioner, Ontario Health, Ontario Health Teams, Midwives, Family Health Team, Indigenous Healthcare & Community, Long-Term Care Homes, Retirement Homes, Neighbouring Health Units, Paramedic Services, Corrections

Date: June 16, 2026

Spotlight on Legionella

Public Health Ontario is currently monitoring two concurrent Legionella clusters in Hamilton and Toronto, representing an unusual early shift in the Legionella season. While legionellosis cases in Ontario typically peak in July, these bacteria pose a year-round risk. In 2025, 75.7% of confirmed legionellosis cases required hospitalization and 7.3% resulted in a fatal outcome.

Legionella bacteria are naturally present in freshwater environments but can pose a health risk in human-made water systems, including large building plumbing systems, cooling towers, certain medical devices, and decorative fountains. Infection typically occurs through inhalation of aerosolized water droplets containing the bacteria and, less commonly, through aspiration of contaminated drinking water. Most exposed individuals do not become ill.

Key Points

Legionellosis may present as:

- **Legionnaires' Disease** – Symptoms include anorexia, malaise, myalgia, headache, productive cough, temperature greater than 39 degrees Celsius, pneumonia, confusion, chills, nausea, diarrhea; or
- **Pontiac Fever** – Milder form of the illness without pneumonia. Symptoms include anorexia, malaise, myalgia, headache, productive cough, and temperature greater than 37.5 degrees Celsius.

Risk factors for developing Legionnaires' disease include:

- Age greater than or equal to 50 years
 - Smoking (current or historical)
 - Chronic lung disease, such as emphysema or COPD
 - Immune system disorders due to disease or medication
 - Systemic malignancy
 - Underlying illness, such as diabetes, renal failure, or hepatic failure
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<http://www.smdhu.org/PHA>

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Consider Legionellosis in patients with compatible symptoms. Clinical presentation may resemble pneumonia caused by other pathogens. Definitive diagnosis requires specific testing:

- Detection of *L. pneumophila* serogroup 1 antigen in urine; or
- Positive *Legionella* culture from a lower respiratory tract specimen (i.e. sputum).

Although the urinary antigen test (UAT) is commonly used, it detects only *L. pneumophila* serogroup 1. It does not detect non-serogroup 1 infection or support sequencing. A lower respiratory specimen for culture is important because a clinical isolate is required to establish genetic linkage to an environmental isolate during source investigations.

Where feasible, the Simcoe Muskoka District Health Unit (SMDHU) asks clinicians to order both a lower respiratory specimen culture (e.g., sputum) and a urinary antigen test when testing for Legionellosis. Sputum culture supports epidemiologic investigation of potential sources.

Respiratory specimens should be sent to the Public Health Ontario Laboratory (Public Health Ontario – [General Test Requisition](#)). Additional information on Legionellosis and testing is available here: [Public Health Ontario – Legionella](#). A general fact sheet is also available [here](#) on the SMDHU website.

Legionella Prevention: Water System Management and Monitoring for Health Care Facilities

Hospitals and Long-Term Care Homes are reminded to proactively manage and monitor building water systems to prevent Legionella growth and transmission. Facilities should maintain comprehensive water management programs by implementing specific control standards, such as:

- [ASHRAE Standard 188-2018 \(Risk Management for Building Water Systems\)](#)
- [ASHRAE Guideline 12-2023 \(Managing the Risk of Legionellosis Associated with Building Water Systems\)](#)

Hospitals and Long-Term Care Homes can also consider the standard for federal buildings [Mechanical Design 15161-2013: Control of Legionella in Mechanical Systems](#) as additional guidance for water management planning.

Please ensure Infection Prevention and Control (IPAC) staff are aware of current best practices by reviewing the following Public Health Ontario (PHO) resources:

- PHO Rounds: [Legionella Risk Management and Investigations in Health Care Facilities](#)
- PHO Rounds: [Legionella in Healthcare Settings: When Risk Becomes Reality](#)

Ongoing vigilance and adherence to these guidelines are essential to protecting patient and resident health.

Healthcare providers must [report](#) suspected or confirmed cases to SMDHU for follow-up, as Legionellosis is reportable. If you have any questions, please contact the Infectious Diseases Team at 705-721-7520 ext. 8809. If you have any questions related to water system management and monitoring, please contact the Safe Water Team at 705-721-7520 ext. 8811.