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## Respiratory Season Update: Increased *Mycoplasma Pneumoniae* Activity

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

**Date:** November 22, 2024

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*Mycoplasma pneumoniae* tends to occur in late summer and early fall and there are cyclical increases every 3 – 7 years. Last year, except for Ontario, there was an increase in disease activity in several jurisdictions globally.

In contrast, when compared to last year, Ontario is experiencing a **marked increase in disease activity in 2024**. Total specimens tested, total positive specimens, and percent positivity have increased compared to same period last year. Disease activity, as measured by these indicators, began increasing from inter-seasonal lows in May and June, with more rapid increases in July and August. **Activity has remained high since August.**

*M. pneumoniae* is not a designated Disease of Public Health Significance and is not subject to mandatory reporting. Therefore, there is no provincial or national surveillance system for the pathogen. Based on preliminary data from Public Health Ontario (PHO), disease activity is highest in children aged 10 -19 years, then 5 – 9 years, followed by 1- 4 years. This is notable because historically those under 4 years of age have had very low disease activity. There is also lower disease activity in adult age groups.

### **Testing / Laboratory Information**

- *M. pneumoniae* testing is conducted by Public Health Ontario (PHO) as well as by numerous community and hospital laboratories in the province
- Information on testing at PHO can be accessed at [Mycoplasma pneumoniae – Respiratory PCR | Public Health Ontario](#)
  - Additionally, preliminary data from PHO looking at molecular markers predicted to confer macrolide resistance have been detected in a minority subset of samples tested at PHO. The clinical significance of this data is unclear.
  - Please note that laboratory testing protocols, including testing criteria and the type and number of specimens, may differ between PHO laboratory and other community or hospital laboratories.



### **Clinical Key Messages**

- Clinicians should be aware of increased *M. pneumoniae* activity in Ontario, including in young and school-aged children
- Clinicians could consider *M. pneumoniae* infection among patients with community-acquired pneumonia who are not clinically improving on antibiotics that are known to be ineffective against *M. pneumoniae*, such as beta-lactams. Macrolides are considered first-line treatment for *M. pneumoniae*
- If needed and clinically indicated, clinicians can test for *M. pneumoniae*, using PHO's testing kit or their local / institutional laboratory practice
- As PHO has identified molecular markers that are associated with macrolide resistance in a subset of samples tested, clinicians should consider using a second-line antibiotic regimen to treat patients with suspected or confirmed *M. pneumoniae* infection who aren't improving on macrolides.

### **Weekly Respiratory Virus Update:**

Simcoe Muskoka's Weekly Respiratory Virus Update (WRVU) is now live on our website:

<https://www.simcoemuskokahealth.org/Health-Stats/HealthStatsHome/Infectious-Diseases/Respiratory-Virus-Surveillance> . Over the 2024 summer months, the WRVU was redeveloped for the 2024-25 respiratory season into an interactive report, replacing the previous Weekly Respiratory Virus Update and the Community Risk Level tool. The new report summarizes and assesses current data providing an overall activity level and week-over-week comparison for COVID-19, Influenza and RSV (where data is available). Indicators include percent positivity, institutional outbreaks, cases (trend data only), hospitalizations and ED visits. Due to changes at the provincial level, wastewater surveillance is no longer being conducted in Simcoe Muskoka.

The tool will be updated each Wednesday, with an email notification sent out at the same time.