

Information for Family Physicians About *Mycoplasma pneumoniae* Infection

November 29, 2024

Ontario is experiencing increased *Mycoplasma pneumoniae* (*M. pneumoniae*) activity, especially in young and school-age children.

Typical *M. pneumoniae* season is late summer to fall and rates usually decline as winter approaches.

Most *M. pneumoniae* infections are mild and most patients will recover without antibiotics. Those with pre-existing lung conditions may be at higher risk of more severe illness.

Symptoms | Testing

- **Common symptoms** of *M. pneumoniae* infection are fever, headache, and a slowly worsening cough.
 - **Activity is highest in those 10-19 years of age**, and they may present with prolonged fever and cough, progressive shortness of breath and fatigue, and oxygen desaturation.
 - **Kids 9 and younger may present with milder symptoms** including prolonged dry cough for weeks; worse at night and difficulty sleeping. If they also present with wheezing, consider managing co-morbidities including asthma.
- **Testing is typically done to alter management.** Test (PCR) for *M. pneumoniae* using PHO's testing kit or their local / institutional laboratory practice. Throat swab is preferred over nasopharyngeal swab.

About *M. pneumoniae*

- **Bacterial infection** that can cause a variety of upper and lower respiratory tract infections, such as Tracheobronchitis (chest cold), mild pneumonia ("walking pneumonia") and pneumonia.
- **Spread through airborne droplets** from close contact.
- **Common outbreak settings** are crowded environments, such as schools, post-secondary residence halls, and long-term care facilities.

Testing Resources from Public Health Ontario

- To order testing supplies from PHO, complete the Requisition for Specimen Containers and Supplies and fax completed requisitions to your closest PHO laboratory.
- *Mycoplasma pneumoniae/Chlamydomphila pneumoniae* PCR Kit (6-Pack) – collection instructions.

Management | Treatment Recommendations

- **Most patients with a mild *M. pneumoniae* infection will recover** without antibiotics. Prescribe antibiotics only when indicated by clinical or laboratory evidence.
 - As noted, **testing is typically done to alter management.**
 - **Amoxicillin** is the first-line antibiotic to treat bacterial pneumonia. However, *M. pneumoniae* is treated with a **macrolide**. Therefore:
 - If your patient has worsening symptoms (excluding isolated cough) after 72 hours of amoxicillin or is not getting better in 5-7 days, consider switching antibiotics and/or testing.
 - **Doxycycline** is recommended for patients with suspected or confirmed *M. pneumoniae* infection who are not improving on – or who are resistant to – macrolides (exceptions: tetracyclines are generally not recommended for younger children or those requiring supplemental oxygen or ventilatory support).
 - **Fluoroquinolones** may be considered as an alternative for adult patients; they are generally contraindicated in children.
 - **A note about antibiotics in pregnancy:**
 - Careful consideration is needed when weighing the benefits and risks of taking antibiotics during pregnancy.
 - Fluoroquinolones and tetracyclines are generally avoided; the data is mixed on pregnancy risks with macrolides.¹
- ### Treating *Mycoplasma Pneumoniae*

 - **Macrolides** are generally considered for first-line treatment:
 - Erythromycin: 25–50 mg/kg/day for 14 days
 - Clarithromycin: 10–15 mg/kg/day for 10 days
 - Azithromycin: 10 mg/kg/day for 3 days
 - **Doxycycline** is recommended as a second-line treatment, or for certain cases with macrolide-resistance.
 - **Fluoroquinolones** are an alternative, but generally contraindicated in children.

Help Your Patients Stay Healthy This Respiratory Season

- While there is no vaccine for *M. pneumoniae*, continue to promote the recommended vaccines for other respiratory infections, based on age and health status. The OCFP's [respiratory illness webpage](#) has more information on COVID-19, RSV, influenza, invasive pneumococcal disease and pertussis.
- See resources to share with patients to help them [stay healthy](#) and [care for sick children at home](#).
- [Updated clinic screening tool](#).

¹ Mayo Clinic: <https://www.mayoclinic.org/healthy-lifestyle/pregnancy-week-by-week/expert-answers/antibiotics-and-pregnancy/faq-20058542>