

Mycoplasma pneumoniae Outbreak, Illinois, 2024

Summary and Action Items

Mycoplasma pneumoniae (*M. pneumoniae*) is a common cause of bacterial respiratory infections. These infections are most common in young adults and school-aged children. Infections are generally mild but sometimes can be severe. While this condition is not reportable in Illinois, there have been recent increases in percent positivity from clinical lab data as well as several clusters reported in schools throughout the state. The purpose of this Health Alert is to:

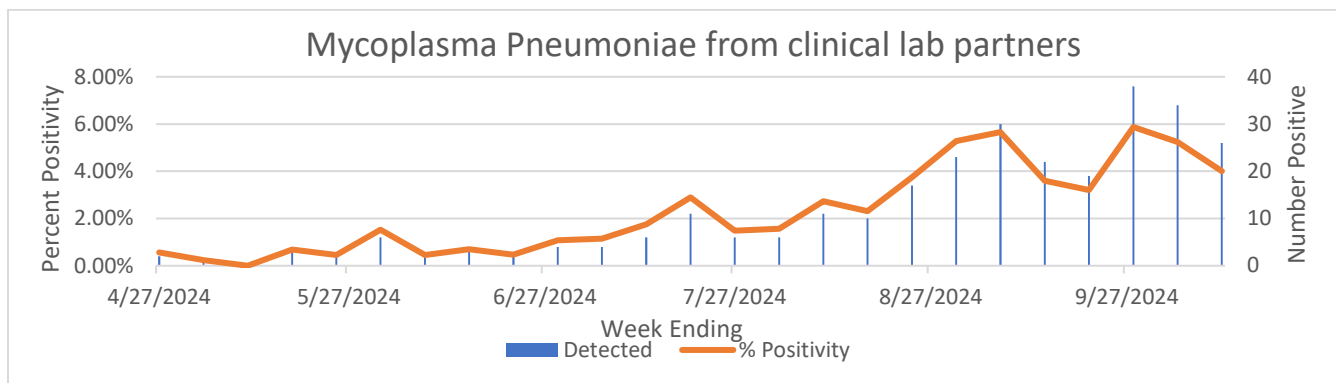
1. Bring awareness to the increases in lab positivity and an increased number of visits due to *M. pneumoniae* compared to last year, as well as increases specifically in school-aged children.
2. Request that clinicians consider testing for *M. pneumoniae* in children hospitalized with community-acquired pneumonia (CAP) and in patients with CAP who are not improving on antibiotics known to be ineffective against *M. pneumoniae* (such as beta-lactams).
3. Remind all that appropriate respiratory hygiene practices continue to be a core strategy to lower the risk of *M. pneumoniae* infection and other respiratory illnesses.

Background

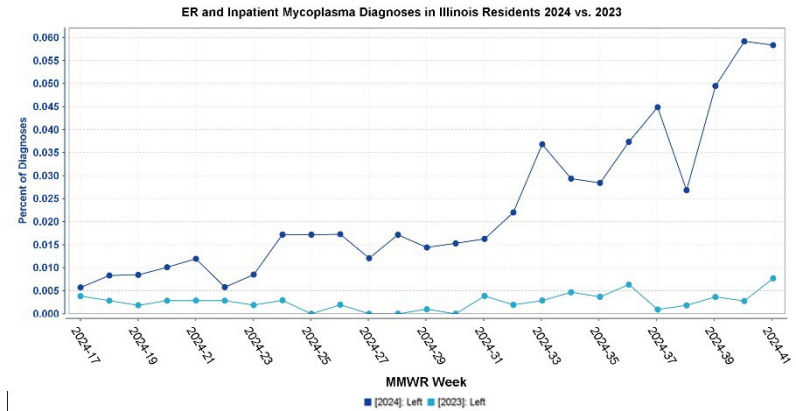
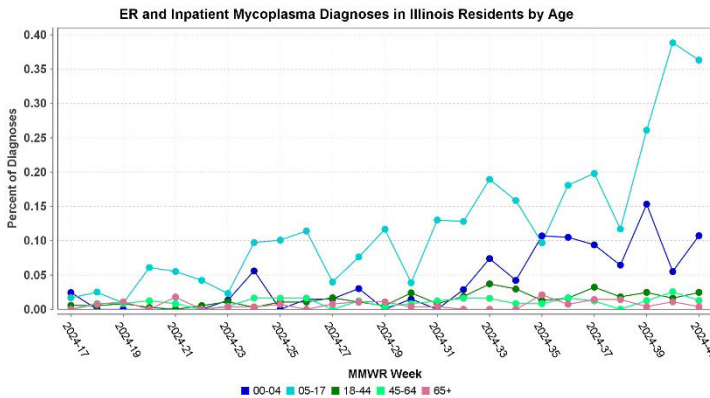
An infection with *M. pneumoniae* is not notifiable nationally or in Illinois, meaning healthcare providers aren't required to report infections to their local public health department. Trends can be monitored using other types of surveillance systems, including aggregate lab data reported by clinical labs and syndromic surveillance.

So far in 2024, CDC has seen an increase in *M. pneumoniae* infections, including in young children. This differs from previous years in which infections in young children were rare. Surveillance data indicate that *M. pneumoniae* infections began increasing in late spring/early summer of 2024. This increase is from a low baseline observed since the start of the COVID-19 pandemic. When people need hospital care due to pneumonia, *M. pneumoniae* is a common bacterial cause of the infection.

Illinois Data:



Illinois Department of Public Health



Symptoms

M. pneumoniae is exclusively a human pathogen, which primarily causes respiratory infections. Infections can occur in the upper and lower respiratory tract. Common manifestations include pharyngitis, pneumonia, and tracheobronchitis. The bacteria can also cause a wide array of extrapulmonary manifestations often without obvious respiratory disease. These include neurologic, cardiac, hematologic, rheumatologic, and skin complications. Notably, approximately 10% of children with *M. pneumoniae* infection exhibit a rash, often maculopapular; however, the rash can take many forms.

Transmission

M. pneumoniae are spread through respiratory droplets from coughing and sneezing. Other people can get infected if they breathe in those droplets. Most people who spend a short amount of time with someone who is sick from *M. pneumoniae* don't get infection. However, people who spend a lot of time together are at increased risk. This is especially true for people who live together. People living, working, and studying in crowded settings are at increased risk. The incubation period is usually 2 to 3 weeks which can result in lengthy outbreaks.

Diagnosis

There is no rapid test for *M. pneumoniae* infections, unlike some other respiratory illnesses. Diagnosis is often made clinically through examination and history. A chest x-ray may be ordered to see if the patient has radiographic evidence of pneumonia. Clinical reference laboratories can provide diagnostic testing for *M. pneumoniae* infections using culture, serology, or molecular methods. PCR tests are preferred. While some multiplex respiratory pathogen panels include *M. pneumoniae*, sensitivity may be lacking. Sensitivity may be improved with a single pathogen PCR and with a throat swab (oropharyngeal) rather than a nasopharyngeal sample. Interpretation of a PCR test is dependent on the clinical presentation as 17-25% of children 3 months to 16 years have asymptomatic PCR positivity (colonization).

Treatment

Most people with a mild *M. pneumoniae* infection will recover on their own without medication. Judicious use of antibiotics is recommended e.g., consider antibiotics for adults with community acquired pneumonia rather than mild upper respiratory tract disease or bronchitis. Treatment is also indicated for extrapulmonary disease or those with underlying conditions that place them at risk for complications. Macrolides (e.g., azithromycin) remain the first line antibiotics when antibiotic use is indicated. Resistance to macrolides emerged in *M. pneumoniae* in the early 2000s, however it remains low in the Midwest region of the United States.

Prevention

There is no vaccine to prevent infection with *M. pneumoniae*. Hand washing and covering coughs and sneezes can help prevent spreading this bacteria. Practicing good [respiratory hygiene](#) is a core prevention strategy to lower the risk from *M. pneumoniae* and other respiratory illnesses.

IDPH and LHD Response

Ensure that local healthcare providers, childcare providers, and schools are aware of increasing *M. pneumoniae* infections.

Contact

Additional questions about *M. pneumoniae* can be directed to your local health department or the Respiratory Surveillance Program at DPH.Respiratory@Illinois.gov.

Additional Resources

[CDC – About *Mycoplasma pneumoniae* Infection](#)

[CDC – *Mycoplasma pneumoniae* Infection Surveillance and Trends](#)

Target Audience

Infectious Disease Physicians, Family Practice and Internal Medicine Physicians, Pediatricians, Geriatric Physicians, Nurse Practitioners, Physician Assistants, Hospital Emergency Departments, Infection Control Preventionists, Local Health Departments, Schools, and Daycares

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