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KODY H. KINSLEY • Secretary

MARK BENTON • Chief Deputy Secretary for Health

KELLY KIMPLE • Acting Director, Division of Public Health

From: Emma Doran, MD, MPH, Medical Epidemiologist

To: North Carolina Clinicians

Subject: Increase in Mycoplasma Pneumonia Activity in the United States and North Carolina

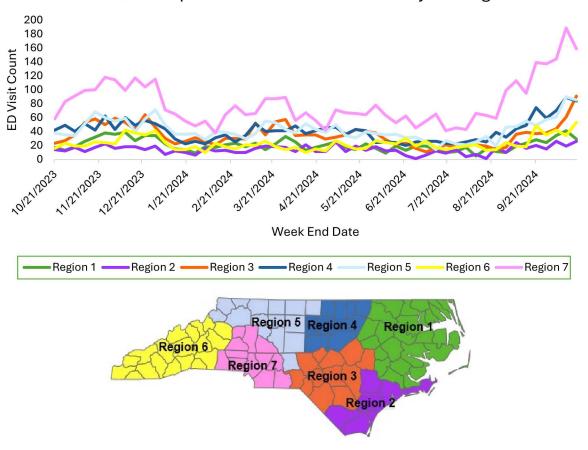
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## **Summary**

The Center for Disease Control and Prevention (CDC) released a <u>Bulletin</u> about increases in *Mycoplasma* pneumoniae infections in the United States. After low levels of detected infections since 2019, *M.* pneumoniae infections increased in the United States since late spring and have remained high.

While *M. pneumoniae* is not reportable in North Carolina, the number of unspecified pneumonia infections seen in emergency departments, particularly in the pediatric population in central North Carolina, has increased in recent months according to North Carolina's statewide syndromic surveillance system NC DETECT.

# Pediatric Unspecified Pneumonia Counts By NC Region



NC DEPARTMENT OF HEALTH AND HUMAN SERVICES • DIVISION OF PUBLIC HEALTH

LOCATION: 5605 Six Forks Road, Building 3, Raleigh, NC 27609
MAILING ADDRESS: 1931 Mail Service Center, Raleigh, NC 27699-1931
www.ncdhhs.gov • TEL: 919-707-5000 • FAX: 919-870-4829

## **Background**

Mycoplasma pneumoniae is a bacterium that <u>can cause respiratory tract infections</u>. M. pneumoniae infections are generally mild and mostly present as a chest cold but may also present as pneumonia. Symptom onset is typically gradual and can include fever, cough, and a sore throat. Younger children may have <u>different symptoms</u> (e.g., diarrhea, wheezing, or vomiting).

When an *M. pneumoniae* infection progresses to pneumonia, it's typically a less severe form of bacterial pneumonia commonly referred to as "walking pneumonia." Uncommon, serious complications from infection can occur that require hospital care, including new or worsening asthma, severe pneumonia, and encephalitis.

Since late spring, the number of infections caused by *M. pneumoniae* has been increasing nationally, especially among young children. *M. pneumoniae* infections can occur at any age, but they most often occur among children ages 5–17 years and young adults.

#### **Recommendations for Healthcare Providers**

- Consider *M. pneumoniae* as a possible cause of infection among children hospitalized with community-acquired pneumonia. Have increased suspicion of *M. pneumoniae* among patients with community-acquired pneumonia who aren't clinically improving on antibiotics that are known to be ineffective against *M. pneumoniae*, such as beta-lactams.
- Perform laboratory testing when *M. pneumoniae* infection is suspected, especially among hospitalized children, to ensure appropriate antibiotic therapy is administered.
- Consider <u>swabbing both the throat and the nasopharynx</u> to improve the likelihood of detection in respiratory swab specimens.
- Macrolides are the first-line treatment for this infection. Some first-line antibiotics used to treat pneumonia, like penicillin, will not treat *M. pneumoniae*.
- Resistance to macrolides emerged in *M. pneumoniae* in the early 2000s. There is global variability, but it has remained under 10% in the United States. Consider using a second-line antibiotic regimen, such as fluoroquinolones or tetracyclines, to treat patients with suspected or confirmed *M. pneumoniae* infection who aren't improving on macrolides.

### **Recommendations for Local Health Departments**

- Ensure that healthcare providers are aware of increasing *M. pneumoniae* infections.
- Encourage schools and school nurses to report outbreaks of pneumonia in schools. There is not a
  standardized definition for pneumonia outbreaks in schools; schools and school nurses can
  report a number of cases that seem unusual to them given the size of their school, or can use
  the interim definition of three or more cases of pneumonia in the same school (from different
  households) within four weeks.
- Educate the public and schools about following <u>core prevention strategies</u> to prevent spread of *M. pneumoniae* and other respiratory germs.

#### Resources

Clinical features of Mycoplasma pneumoniae infection

Mycoplasma pneumoniae clinical care and treatment guidance

Laboratory testing for Mycoplasma pneumoniae

Mycoplasma pneumoniae surveillance in the United States