

COUNTY OF SAN LUIS OBISPO HEALTH AGENCY PUBLIC HEALTH DEPARTMENT

PROVIDER HEALTH ADVISORY

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Increase in Mycoplasma pneumoniae Infections in Children

The U.S. Centers for Disease Control and Prevention (CDC) has reported a national increase in *Mycoplasma pneumoniae (M. pneumoniae)* infections, particularly among young children, since late spring.

While there is no California-specific reporting requirement or surveillance system for *M. pneumoniae*, the California Department of Public Health (CDPH) has received reports from local health departments and hospitals about increased numbers of children hospitalized with pneumonia who have tested positive for *M. pneumoniae* infection and is alerting providers to this increase. Key messages from CDPH:

- CDC has reported an increasing number of respiratory infections in children due to *Mycoplasma pneumoniae* (*M. pneumoniae*).
- Illness due to *M. pneumoniae* is usually not laboratory confirmed and is not reported to public health agencies in California. However, there have been anecdotal reports of increased numbers of children hospitalized with *M. pneumoniae* infection from multiple hospitals.
- Providers should consider *M. pneumoniae* infection in children with community acquired pneumonia, especially those who are not clinically improving on antibiotics that are known to be ineffective against *M. pneumoniae*.
- Consider performing laboratory testing when *M. pneumoniae* infection is suspected, especially among children hospitalized with pneumonia, to confirm diagnosis and guide appropriate antibiotic therapy.
- Macrolides are the first-line antibiotic treatment for *M. pneumoniae* infection. Macrolideresistance is estimated to be less than 10% nationally, but some hospitals in California
 have anecdotally reported higher rates of resistance. Providers may consider using a
 second-line antibiotic regimen to treat patients with suspected or confirmed *M.*pneumoniae infection who aren't improving with macrolide antibiotics.

The County of San Luis Obispo Public Health Laboratory has observed a slight increase in *M. pneumoniae* detections in respiratory pathogen panels relative to last year. For more information about respiratory pathogen panel testing at the lab, see www.slocounty.gov/resp-panel.

Please see the attached three-page <u>advisory from CDPH</u> for more detail.



State of California—Health and Human Services Agency

California Department of Public Health



Health Advisory

TO: Healthcare Providers

Mycoplasma pneumoniae Infections Among Children and Adolescents During Fall and

Winter Respiratory Illness Season

11/22/2024

Key Messages

- CDC has reported increasing number of respiratory infections in children due to *Mycoplasma pneumoniae* (*M. pneumoniae*).
- Illness due to *M. pneumoniae* is usually not laboratory confirmed and is not reported to public health agencies in California. However, there have been anecdotal reports of increased numbers of children hospitalized with *M. pneumoniae* infection from multiple hospitals.
- Providers should consider *M. pneumoniae* infection in children with community acquired pneumonia, especially those who are not clinically improving on antibiotics that are known to be ineffective against *M. pneumoniae*.
- Consider performing laboratory testing when *M. pneumoniae* infection is suspected, especially among children hospitalized with pneumonia, to confirm diagnosis and guide appropriate antibiotic therapy.
- Macrolides are the first-line antibiotic treatment for *M. pneumoniae* infection. Macrolideresistance is estimated to be less than 10% nationally, but some hospitals in California have anecdotally reported higher rates of resistance. Providers may consider using a second-line antibiotic regimen to treat patients with suspected or confirmed *M. pneumoniae* infection who aren't improving with macrolide antibiotics.

Background

National Increase in Number of Mycoplasma pneumoniae Infections

On October 18, 2024, the U.S. Centers for Disease Control and Prevention (CDC) released a bulletin warning of increasing number of *Mycoplasma pneumoniae* (*M. pneumoniae*) infections, particularly among young children, since late spring. There is no national reporting requirement or dedicated surveillance system to track *M. pneumoniae* infections, however CDC uses syndromic and commercial laboratory data to track national trends.

CDC reported that the proportion of patients discharged from emergency departments with a diagnosis of *M. pneumoniae*-associated pneumonia or acute bronchitis increased since March 2024, peaking in late August but continuing to remain high as of early October. The increases were highest among children, with a notable increase in children ages 2–4 years, an age group in which *M. pneumoniae* has not historically been recognized as a leading cause of pneumonia.

There is no California-specific reporting requirement or surveillance system for *M. pneumoniae*, so data on California-specific trends in *M. pneumoniae* infections are not available. The California Department of Public Health (CDPH) has received anecdotal reports from some local health departments (LHDs) and hospitals about increased numbers of children hospitalized with pneumonia who have tested positive for *M. pneumoniae* infection.

M. pneumoniae Background

M. pneumoniae is a type of bacteria that is spread from person to person through contaminated respiratory droplets. Infection usually causes mild respiratory illness but can also cause more severe disease requiring hospital care, including new or worsening asthma, severe pneumonia, and encephalitis. *M. pneumoniae* infections can occur at any age, but they most often occur among children ages 5–17 years and young adults. Persons recovering from respiratory illness or who have weakened immune systems are at risk for more severe disease.

The number of *M. pneumoniae* infections varies seasonally and are more common in summer and early fall. Infections also follow a cyclical pattern, with the number of *M. pneumoniae* infections usually peaking every 3 to 7 years. During the COVID-19 pandemic the percentage of *M. pneumoniae* diagnoses and positive *M. pneumoniae* test results decreased but began to increase during the fall of 2023.

Most people with mild *M. pneumoniae* infections will recover without specific treatment, but people with more severe illness may require antibiotics. *M. pneumoniae* bacteria are naturally resistant to certain antibiotics (e.g., beta-lactams such as amoxicillin) that are commonly used to treat other kinds of bacterial pneumonia. Therefore, the diagnosis of *M. pneumoniae* infection should be considered for patients with community-acquired pneumonia who are not clinically improving on antibiotics that are not effective against *M. pneumoniae* infection. Macrolides (e.g., azithromycin) are the first-line antibiotic treatment for *M. pneumoniae* infection.

Macrolide-resistance in *M. pneumoniae* is estimated to be less than 10% nationally but may be higher in certain regions or within clusters or outbreaks. Thus, macrolide-resistance should be considered in patients with laboratory-confirmed *M. pneumoniae* infection not improving on macrolides.

Recommendations

Healthcare Providers

• Consider the possibility of *M. pneumoniae* infection in children with community acquired pneumonia, especially those who are not clinically improving on antibiotics that are known to be ineffective against M. pneumoniae, such as beta-lactams.

- If *M. pneumoniae* infection is suspected, especially among hospitalized children, perform laboratory testing to confirm the diagnosis and ensure appropriate antibiotic therapy is administered.
- Consider swabbing both the throat and the nasopharynx to improve the likelihood of detection in respiratory swab specimens.
- Consider using a second-line antibiotic regimen, such as fluoroquinolones or tetracyclines, depending on the patient's age, to treat patients with suspected or confirmed *M. pneumoniae* infection who aren't improving on macrolides.
- Although individual cases of *M. pneumonia*e infection are not reportable to public health, identified outbreaks (e.g., in an institutionalized setting such as daycare, school, etc.) should be reported to the LHD.

Resources

- CDC | Mycoplasma Pneumoniae Infections Have Been Increasing
- CDC | Mycoplasma pneumoniae Infection Surveillance and Trends
- CDC | Clinical Overview of Mycoplasma pneumoniae Infection
- CDC | Clinical Care of Mycoplasma pneumoniae Infection
- CDC | MMWR | Notes from the Field: Reemergence of Mycoplasma pneumoniae Infections in Children and Adolescents After the COVID-19 Pandemic, United States, 2018–2024

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