

October 2, 2024

Increase in *Mycoplasma pneumoniae* reported among Indiana children

The Indiana Department of Health (IDOH) has received reports of increases in pediatric pneumonia cases, including those caused by *Mycoplasma pneumoniae*. This uptick has been also observed across various regions in the United States, particularly affecting young children.

- *M. pneumoniae* usually peaks every 3 to 7 years, with variation of strain types contributing to this pattern.
- *M. pneumoniae* infections began increasing in Indiana in late spring/early summer 2024, including emergency department visits across all pediatric ages.

Recommendations

- Healthcare providers should have increased suspicion of *M. pneumoniae* among patients presenting with compatible symptoms or clinical presentations, including pneumonia.
 - Children younger than 5 years of age may have a milder, subclinical illness that does not result in pneumonia
 - Complications can include asthma exacerbation, severe pneumonia, hemolytic anemia, renal dysfunction, mycoplasma induced rash and mucositis, and others.
- Diagnosis is often clinical. However, testing can be molecular (RVP), if available, or serology (IgM). Serologic testing for *M. pneumoniae* can have false positives but with the increase in cases, if pre-test probability is high, it is likely accurate.
- The preferred treatment is with macrolides, including azithromycin. Other treatment options include tetracyclines and fluoroquinolones. *Mycoplasma pneumoniae* does not respond to beta-lactams and should also be considered in the differential for a patient failing this therapy.
 - Macrolide resistance is expected to be low (<10%) in Indiana, despite higher rates in other geographic areas. Reported cases have been responsive.
- Reporting: Cases of *M. pneumoniae* are not reportable however outbreaks or unusual clusters of *M. pneumoniae* should be reported to your local health department or to the IDOH Infectious Disease Epidemiology and Prevention Division at 317-233-7125.
- Prevention: Emphasize the importance of good respiratory hygiene and infection control practices to patients and their families to help prevent the spread of respiratory infections.

For More Information

- [CDC Clinical Care of Mycoplasma pneumoniae Infection](#)
- [CDC Mycoplasma pneumoniae Infection Surveillance and Trends](#)
- [CDC Respiratory Virus Guidance](#)

RSV protection for pregnant women, infants, and older adults

RSV is a virus that can cause respiratory illness in people of all ages, but can be more serious for infants, especially under 6 months of age, and older adults. [Per the Centers for Disease Control and Prevention \(CDC\)](#), each year RSV leads to over 2 million hospital visits and 58,000 to 80,000 hospitalizations among children 5 and younger, with another 100,000 to 160,000 hospitalizations among adults 60 years and older. A guide to vaccines that protect against respiratory illness is available [here](#).

In addition to hand hygiene and staying in when sick there are several ways at-risk Hoosiers can protect against RSV this year.

Maternal Providers

- [CDC](#) and gynecologists ([ACOG](#)) recommend a respiratory syncytial virus (RSV) vaccine for pregnant women to protect their babies from severe RSV disease.
 - Pregnant women should receive during September through January a single dose of vaccine during weeks 32 through 36 of pregnancy who do not have delivery planned within two weeks.
 - Women who received the RSV vaccine in a previous pregnancy are not recommended to have the RSV vaccine in subsequent pregnancies
 - In this situation it is recommended for the infant to receive nirsevimab as discussed below.
- Only Pfizer's Abrysvo is authorized for use during pregnancy.
 - Other RSV vaccines (GSK's Arexvy and Moderna's mResvia) are not approved for use during pregnancy.
- These other CDC-recommended vaccines are commonly given during pregnancy:
 - COVID-19 – any time during pregnancy
 - Influenza – any time during pregnancy
 - RSV – 32 to 36 weeks
 - Tdap – 27 to 36 weeks

Pediatric Providers

- Maternal RSV vaccination or [infant immunization with RSV monoclonal antibody](#) is recommended to prevent severe RSV disease in infants, either. Most infants will not need both.
 - Nirsevimab (Beyfortus) monoclonal antibody, found to be up to [90% effective](#) at protecting infants from RSV-associated hospitalization, should be given in October through March:
 - Supply: No anticipated shortage for this season.
 - Dose:
 - Age fewer than 8 months
 - 50 mg if <5kg, administered as single dose
 - 100mg if ≥ 5kg, administered as single dose



- Age 8 through 19 months
 - 200mg administered as two 100mg injections
 - One dose of nirsevimab is recommended for infants [younger than 8 months of age](#) who were born shortly before or are entering their first RSV season if:
 - Infants <34 weeks should receive nirsevimab regardless of maternal vaccination status, or
 - The mother did not receive the RSV maternal vaccine, or
 - The mother’s vaccination status is not known, or
 - The window between maternal vaccination and birth was <14 days, or
 - The healthcare provider determines the incremental benefit of Beyfortus is warranted because the infant is at increased risk, or when there are concerns about the adequacy of the maternal immune response or placental antibody transfer
 - One dose of nirsevimab for infants and children aged [8–19 months](#) who are at increased risk for severe RSV disease and entering their second RSV season.
 - Increased risk includes children with conditions such as chronic lung disease of prematurity requiring medical support in the 6 months prior to RSV season, severe immunocompromise, cystic fibrosis with either manifestations of severe lung disease or weight for length < 10th percentile, or American Indian or Alaska native children.
 - *Note:* A different monoclonal antibody, palivizumab, is limited to children ages 24 months and younger with certain conditions that place them at high risk for severe RSV disease. It must be given once a month during RSV season.

Adult Providers:

- CDC recommends adults 75 years and older receive a single dose of RSV vaccine of any type
- CDC recommends adults 60-74 who are at [increased risk of severe RSV disease](#) receive a single dose of RSV vaccine
 - Increased risk includes those with chronic cardiovascular disease, chronic lung disease, complicated diabetes, end-stage renal disease, chronic liver disease, moderate or severe immunocompromise, and other conditions (see link).
- Adults that have already received a dose of RSV do not need to receive another dose in the 2024-25 season

The Indiana Department of Health operates a publicly funded vaccine program to provide vaccines to individuals that are uninsured, underinsured or if under age 19, Medicaid eligible. If you are interested in participating in a this program, or have questions, please send an email to immunize@health.in.gov or call Clair Perry-Stewart at 317-697-0162.

