

Increasing Respiratory Syncytial Virus (RSV) Activity in Pennsylvania – Protect Vulnerable Populations Now

DATE:	12/31/2024
TO:	Health Alert Network
FROM:	Debra L. Bogen, M.D., FAAP, Secretary of Health
SUBJECT:	Increasing Respiratory Syncytial Virus (RSV) Activity in Pennsylvania – Protect Vulnerable Populations Now
DISTRIBUTION:	Statewide
LOCATION:	N/A
STREET ADDRESS:	N/A
COUNTY:	N/A
MUNICIPALITY:	N/A
ZIP CODE:	N/A

This transmission is a “Health Advisory” which provides important information for a specific incident or situation; may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, NURSING AND LABORATORY STAFF IN YOUR HOSPITAL; **EMS COUNCILS:** PLEASE DISTRIBUTE AS APPROPRIATE; **FQHCs:** PLEASE DISTRIBUTE AS APPROPRIATE **LOCAL HEALTH JURISDICTIONS:** PLEASE DISTRIBUTE AS APPROPRIATE; **PROFESSIONAL ORGANIZATIONS:** PLEASE DISTRIBUTE TO YOUR MEMBERSHIP; **LONG-TERM CARE FACILITIES:** PLEASE SHARE WITH ALL MEDICAL, INFECTION CONTROL, AND NURSING STAFF IN YOUR FACILITY

Summary

- Respiratory syncytial virus (RSV) activity is rising rapidly in Pennsylvania, especially among children under age five and adults aged 65 and older.
- RSV is a leading cause of severe respiratory illness, responsible for 60,000-120,000 hospitalizations and 6,000-10,000 deaths annually among adults 65 years and older in the US.
- RSV vaccines (which are not annual) are recommended for pregnant people (32-36 weeks gestation), adults 60-74 years with [certain health risks](#), and for everyone 75 and older.
- RSV vaccines demonstrate moderate to high efficacy in reducing morbidity and mortality especially in older adults.
- The Centers for Disease Control and Prevention (CDC) recommends all babies be protected from severe RSV by vaccinating pregnant individuals at 32-36 weeks gestational age or administering a long-acting monoclonal antibody to infants aged < 8 months entering their first RSV season and for those aged 8–19 months at increased risk for severe RSV infection.
- If you have additional questions about this health advisory, please contact DOH at 1-877-PA-HEALTH (1-877-724-3258) or your local health department.

RSV is rapidly increasing in PA, especially in young children and older adults who could be protected by vaccinations.

Respiratory syncytial virus (RSV) is a highly contagious virus causing acute respiratory infections across all age groups. It is a common cause of childhood illness and the leading reason for infant hospitalizations. Infection in infants and young children can progress to lower respiratory tract conditions such as pneumonia and bronchiolitis leading to emergency visits and hospitalizations. The American Academy of Pediatrics notes that around 2% to 3% of U.S. children under 6 months require hospitalization due to RSV annually (1). Premature infants and those with chronic lung disease or significant congenital heart disease face the highest risk of severe RSV disease.

RSV causes approximately 60,000-120,000 hospitalizations and 6,000-10,000 deaths annually among adults aged 65 and older (2). Factors like frailty, advanced age, and residence in a long-term care facility can increase the risk of severe RSV-associated respiratory illness. RSV can lead to exacerbation of conditions such as asthma, chronic obstructive pulmonary disorder (COPD), and congestive heart failure.

The percent of inpatient hospital beds and ICU beds occupied by RSV patients has been increasing in Pennsylvania since October according to hospitalization data reported to the National Health Safety Network (NHSN). Additionally, the percent of emergency department visits with an RSV diagnosis has been increasing steadily since October, largely driven by increases among children under five and adults 65 years and older. The CDC estimates less than 25% of Pennsylvanians (excluding those in Philadelphia County) aged 75 or older have received an RSV vaccine dose since it was recommended in June 2023 (3). CDC also estimates that approximately 34% of infants 0-7 months have received Nirsevimab in Pennsylvania (excluding those in Philadelphia County) this respiratory season (4).

Infants can be protected by vaccinating the mother at 32 to 36 weeks gestation or by administering monoclonal antibodies to the infant.

Nirsevimab is a long-acting monoclonal antibody approved by the Food and Drug Administration (FDA) to protect infants and some young children at increased risk for severe RSV disease. Nirsevimab is safe and efficacious. In clinical trials, one dose of Nirsevimab administered as an intramuscular injection protected infants for at least 5 months (the length of an average RSV season) and reduced the risk of severe RSV disease by about 80%.

CDC recommends Nirsevimab for babies born to mothers who did not get a maternal RSV vaccine during the period of year from October through March and, also, a small group of young children (ages 8-19 months) at increased risk of severe RSV. Children at increased risk include children who were born prematurely and have chronic lung disease, children with severe immunocompromise, children with severe cystic fibrosis, and American Indian and Alaska Native children.

The FDA approved the RSVpreF vaccine (Abrysvo, Pfizer), a recombinant protein vaccine, for use in pregnant people during weeks 32 through 36 of gestation during September through January in most of the U.S. for the prevention of RSV-associated lower respiratory tract disease in infants from birth through 6 months of age.

CDC does not currently recommend maternal vaccination outside of this period in most of the U.S. because vaccinating a pregnant person in February or March for an infant born in April or

May will provide that infant limited protection during the RSV season (typically fall and winter). That infant would be better protected by receiving nirsevimab just before or at the start of the RSV season. Because administration happens before the baby is born, it is difficult to adjust vaccination timing based on year-to-year variations in RSV circulation.

NOTE: Infants born 14 or more days after the mother's vaccination do not need nirsevimab.

RSV vaccines are recommended for all adults 75 and older and those 60 and older with certain health conditions (Arexvy, Abrysvo, and mResvia).

In June 2024, the Advisory Committee on Immunization Practices (ACIP) updated its recommendation for adult RSV vaccination. They recommend that all adults aged 75 years or older and adults 60-74 years that are at [increased risk](#) for severe RSV disease should receive a single dose of RSV vaccine. Adults 60-74 years old at increased risk of severe disease include people with chronic cardiovascular, respiratory, or liver disease, end-stage renal disease or dependence on hemodialysis, complicated diabetes mellitus, conditions resulting in an impaired or weakened airway clearance, severe obesity, immune compromise, or residing in a nursing home.

Administering an RSV vaccine and other adult vaccines at the same time is acceptable. Additional information regarding coadministration of vaccines can be found here: <https://www.cdc.gov/vaccines/vpd/rsv/hcp/older-adults.html>. Currently, eligible adults who have already received an RSV vaccine should not receive another dose. It is currently thought that a single dose of vaccine will provide protection against RSV for at least two seasons, but the need for additional doses will be evaluated in the future with recommendations being updated as needed. Vaccine effectiveness of Arexvy and Abrysvo against RSV-associated hospitalization among adults 60 years and older in their first RSV season following vaccination ranged from 75-82% in post-licensure observational studies (5). Vaccine efficacy of one dose of mResvia at approximately four months after vaccination was 78.7% in preventing lab-confirmed RSV-associated lower respiratory tract disease (RSV-LRTD) with two or more lower respiratory symptoms and 80.9% in preventing RSV-LRTD with three or more lower respiratory symptoms (6).

Recommendations

Providers should encourage RSV vaccination to their patients who are eligible to receive them. Despite these vaccines and long-acting monoclonal antibodies reducing the risk of severe RSV-related disease, many people in high-risk groups have not yet been vaccinated. CDC has created communication tools for providers to utilize to aid in increasing vaccine coverage among their patients. These resources can be found at: [Resources to Prepare for Flu, COVID-19, and RSV | Respiratory Illnesses | CDC](#).

Widespread adoption of RSV immunizations could significantly reduce hospitalizations and deaths, especially in high-risk populations. Take action now to protect Pennsylvania's most vulnerable residents.

For more information, contact the Department of Health at **1-877-PA-HEALTH (1-877-724-3258)**.

Individuals interested in receiving future PA-HANs can register at: <https://ondemand.mir3.com/han-pa-gov/login/>.

For More Information

[GET THE FACTS!](#)

[RSV Vaccines | RSV | CDC](#)

<https://www.cdc.gov/rsv/hcp/vaccine-clinical-guidance/older-adults.html>

[Respiratory Vaccines | Department of Health | Commonwealth of Pennsylvania](#)

[Use of Respiratory Syncytial Virus Vaccines in Adults Aged ≥60 Years: Updated Recommendations of the Advisory Committee on Immunization Practices — United States, 2024 | MMWR](#)

[Use of the Pfizer Respiratory Syncytial Virus Vaccine During Pregnancy for the Prevention of Respiratory Syncytial Virus–Associated Lower Respiratory Tract Disease in Infants: Recommendations of the Advisory Committee on Immunization Practices — United States, 2023 | MMWR](#)

[Use of Nirsevimab for the Prevention of Respiratory Syncytial Virus Disease Among Infants and Young Children: Recommendations of the Advisory Committee on Immunization Practices — United States, 2023 | MMWR](#)

References

1. CDC (2024). Clinical Overview of RSV [Clinical Overview of RSV | RSV | CDC](#).
2. Melgar M, Britton A, Roper LE, et al. Use of respiratory syncytial virus vaccines in older adults: recommendations of the Advisory Committee on Immunization Practices—United States, 2023. *MMWR Morb Mortal Wkly Rep* 2023;72:79
3. CDC (2024). RSVVaxView, Adults 75+ RSV Vaccination Coverage. Figure 2A. Monthly Cumulative Number and Percent of Adults 75 Years and Older Who Received 1+ RSV Vaccination Doses^{*†} by Jurisdiction, United States. Data Source: U.S. Jurisdiction Immunization Information Systems (IIS). [Respiratory Syncytial Virus \(RSV\) Vaccination Coverage, Adults 75 Years and Older, by Jurisdiction, United States | RSVVaxView | CDC](#)
4. CDC (2024). RSVVaxView, Nirsevimab Coverage, Children 0 to 7 months, United States. Figure 7A. Monthly Cumulative Number and Percent of Children <8 Months Who Received Nirsevimab^{*†} by Jurisdiction, United States. Data Source: U.S. Jurisdiction Immunization Information Systems (IIS). [Nirsevimab Coverage, Children 0 to 7 months, United States | RSVVaxView | CDC](#)
5. [Britton A, Roper LE, Kotton CN, et al. Use of Respiratory Syncytial Virus Vaccines in Adults Aged ≥60 Years: Updated Recommendations of the Advisory Committee on Immunization Practices — United States, 2024. *MMWR Morb Mortal Wkly Rep* 2024;73:696-702. DOI: <http://dx.doi.org/10.15585/mmwr.mm7332e1>.](#)
6. Das R. Update on Moderna’s RSV vaccine, mRESVIA (mRNA-1345), in adults ≥60 years of age [Presentation slides]. Presented at the Advisory Committee on Immunization Practices meeting, Atlanta, GA; June 26, 2024. <https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2024-06-26-28/04-RSV-Adult-Das-508.pdf>

Categories of Health Alert messages:

Health Alert: conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: provides important information for a specific incident or situation; may not require immediate action.

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of December 31, 2024 but may be modified in the future. We will continue to post updated information regarding the most common questions about this subject.