

## Health Advisory

### Update regarding Respiratory Syncytial Virus (RSV) October 10, 2023

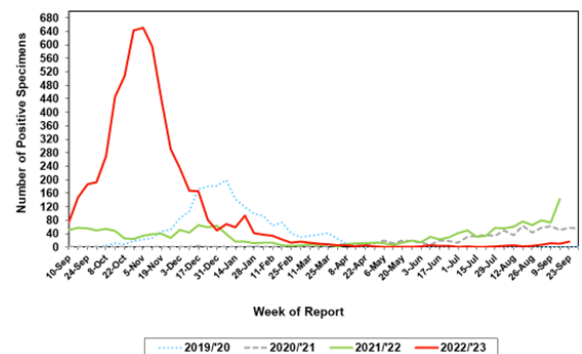
#### SUMMARY POINTS

- RSV infection is the leading cause of hospitalizations in infants.
- 60,000-160,000 adults 65 and older are hospitalized due to RSV infection each year.
- Vaccination of all pregnant individuals is recommended at 32-36 weeks of gestation to prevent RSV LRTI in infants. Immunization with monoclonal antibody is recommended for all infants less than 8 months of age whose parent didn't receive RSV vaccination during pregnancy.
- Infants with risk factors for severe RSV disease who are 8-19 months of age should receive monoclonal antibody.
- Vaccination for adults 60 and over is available with shared decision making.



Laboratory-Based Surveillance for RSV (Counts)  
Philadelphia, 2019/2020 through 2022/2023 Seasons\*

\*Based on six hospital laboratories with RSV testing capabilities across respiratory virus seasons



Respiratory Syncytial Virus (RSV) is a highly contagious virus commonly seen in the fall and winter months. It typically causes an upper respiratory infection; however, can progress to pneumonia and bronchiolitis. It is the leading reason for hospitalizations among infants. Although infants born preterm and those with chronic health conditions are at increased risk for hospitalization due to RSV disease, most hospitalizations occur in previously healthy full-term infants. Approximately 58,000-80,000 infants are hospitalized, and 100-300 infants die yearly in the United States due to RSV. RSV can also be very serious among the elderly. Every year 60,000-160,000 adults 65 years and older are [hospitalized](#) with RSV and 6,000-10,000 die.

RSV is typically a winter virus peaking in December and January. However, over the past several years, the virus has peaked in irregular and unexpected months, with a spring wave in 2021 and a very large early fall wave last season in 2022. The CDC [Center for Forecasting Analytics](#) anticipates that RSV will return to normal seasonal patterns this year.

Based on sentinel surveillance from six hospitals in Philadelphia, the number of specimens testing positive for RSV is much lower currently than this time in the past two years (Figure). However, RSV activity has started to increase in southern states, so local seasonal increases are anticipated in the coming weeks.

#### RSV prevention in infants and young children

Two new modalities for RSV prevention in infants and young children are available this year.

Abrysvo, Pfizer's RSV vaccine, is indicated for all pregnant individuals 32-36 weeks gestation. Abrysvo reduces the risk of severe lower respiratory tract infection (LRTI) by 81.8% within 90 days after birth and by 69.4% within 120 days after birth.

Nirsevimab (Beyfortus) is a long-acting monoclonal antibody that is 81% effective in the prevention of RSV associated hospitalization and 90% effective in preventing RSV associated ICU stays in infants entering their first RSV season and in children with risk factors of severe disease who are entering their second RSV season. Nirsevimab is given as a single dose as soon as possible during the RSV season. Newborns and infants less than 8 months of age whose birthing parent didn't receive Abrysvo (Pfizer's RSV vaccine) while pregnant can receive the immunization prior to discharge from the hospital or as soon as possible after discharge. In [rare](#)

[instances](#), a child whose birthing parent received the RSV vaccine during pregnancy should get nirsevimab as well. Those include infants who are born less than 14 days after their parent received vaccination as well as infants at very high risk of severe disease should they get infected. Children between the ages of 8 and 19 months who are at [increased risk of severe RSV](#) and are entering their second RSV season should also receive nirsevimab. Those younger than 8 months of age will receive a single 50mg or 100mg injection depending on the weight of the infant. Those 8-19 months of age will receive two 100 mg injections in a single visit. If palivizumab was already administered this season and less than 5 doses were administered, the infant should receive one dose of nirsevimab. Any infant who has received nirsevimab should not subsequently receive palivizumab.

Nirsevimab can be ordered through the Vaccines for Children (VFC) program by all VFC enrolled providers and should be offered at no-cost to VFC eligible babies. Abrysvo will also be available through VFC to pregnant VFC eligible individuals less than 19 years of age, likely within the next month. Enrolled providers will be notified through PhilaVax when the VFC vaccine supply is orderable.

### **RSV prevention in adults 60 and older**

Two new vaccines against RSV are available for prevention of RSV LRTI in adults 60 and older. Arexvy (GSK) and Abrysvo (Pfizer) are both available as single dose IM vaccines. They each provide 80-90% protection against RSV LRTI during the year in which they are given. Protection is sustained, at a lower level the following year. There were six cases of rare neurologic events in the trials for these two vaccines. Clinicians are encouraged to discuss the vaccine with patients and used shared decision making in discussions about RSV vaccine for adults 60 and older.

### **Resources:**

- [RSV – Clinical Description and Diagnosis](#) (*Centers for Disease Control and Prevention*)
- [RSV Preventive Antibody – What You Need to Know](#) (*Centers for Disease Control and Prevention*)
- [ACIP and AAP Recommendations for Nirsevimab](#) (*American Academy of Pediatrics*)
- [Data Reports and Statistics: Other Respiratory Viruses](#) (*PDPH Health Information Portal*)