

Respiratory Syncytial Virus (RSV) Fact Sheet

1. What is respiratory syncytial virus (RSV)?

RSV is a common respiratory virus that usually causes cold-like symptoms such as coughing, sneezing, and runny nose. People often become infected with RSV for the first time as an infant or toddler. Most children are infected with RSV before their second birthday. People can get RSV more than once in their life. Most people recover in a 1-2 weeks. RSV can be serious especially for infants and older adults. In the United States, RSV activity generally starts during fall and peaks in the winter. The timing and severity of RSV activity in a given community can vary from year to year.

2. What are the symptoms of RSV?

Symptoms of RSV infection can include coughing, sneezing, runny nose, fever and wheezing. These symptoms usually appear at different times and not all at once. In very young infants, symptoms include irritability, decreased activity, decreased appetite, and apnea (pauses in breathing lasting more than 10 seconds). Most people who get an RSV infection will have mild illness and will recover on their own in a 1-2 weeks. People who develop breathing difficulties or dehydration may need to be hospitalized.

3. Who is at risk for severe illness?

Healthy adults and infants infected with RSV usually do not get severely ill. RSV infection in infants younger than 6 months of age and older adults may need to be hospitalized if they are having trouble breathing or are dehydrated. Premature infants, children with congenital heart or chronic lung disease, children with weakened immune systems, and children with neuromuscular disorders are at highest risk for severe disease. In the U.S., RSV is the most common cause of inflammation of the small airways in the lung (bronchiolitis) and pneumonia among infants and children under one year of age. Each year, 58,000 to 80,000 children younger than 5 years old are hospitalized due to RSV infection.

Adults aged 65 and older, or who have chronic heart or lung disease or weakened immune systems, are also at increased risk of severe disease. RSV infection can also lead to worsening of pre-existing conditions such as asthma, chronic obstructive pulmonary disease (COPD), and congestive heart failure.

4. How is RSV spread?

RSV is spread through close contact with infected persons or contact with contaminated surfaces or objects. Infection can occur when respiratory droplets containing the virus come in contact with eyes, nose, or mouth. Common examples include being near an ill person who is coughing or sneezing, kissing, or sharing eating utensils with a sick person, or shaking hands with an infected person or touching contaminated surfaces and then touching your face before washing your hands.

People infected with RSV are usually contagious (able to spread the illness) for 3 to 8 days. They may become contagious a day or two before they start showing symptoms. The virus sheds most during the early stages of illness and typically is highest when fever is present. Some infants and people with weakened immune systems can continue to spread the virus even after they stop showing symptoms.

Children are often exposed to and infected with RSV in school or childcare centers. Usually, children with RSV may return to their school or childcare facility after they have been fever-free for 24 hours without use of any fever-reducing medications. RSV can remain on hard surfaces for many hours. It typically stays on soft surfaces for shorter amounts of time.

5. How can RSV be prevented?

Prevention of RSV includes frequent hand washing with soap and water or an alcohol-based hand sanitizer, avoiding close contact with sick people, staying home when sick, covering coughs and sneezes, and cleaning and disinfecting frequently touched surfaces such as doorknobs and mobile devices.

Ideally, people with cold-like symptoms should not interact with children at high risk for severe RSV disease. If this is not possible, they should carefully follow the prevention steps mentioned above before interacting with such children. They should also refrain from kissing high-risk children while they have cold-like symptoms.

Two drugs, nirsevimab and palivizumab, are available to prevent severe RSV illness in certain infants and children who are at high risk for severe disease. This includes infants born prematurely or infants with congenital heart disease. Nirsevimab and palivizumab are made in a laboratory and contain long-acting antibodies that can prevent RSV infections and complications. It cannot cure or treat children who already have RSV infection. Healthcare providers usually give palivizumab to high-risk children as a series of monthly shots during RSV season. If your child is at high risk for severe RSV disease, talk to your healthcare provider to see if palivizumab can be used to prevent RSV. CDC recommends one dose of nirsevimab for all infants younger than 8 months that are born during or are entering their first RSV season. Some children between the ages of 8 and 19 months with an increased risk of severe RSV disease can get a dose in their second season. This would include children who are severely immunocompromised.

Recently, a vaccine was approved by the Food and Drug Administration (FDA) for pregnant people to protect newborns entering their first RSV season.

In May 2023, the FDA approved two RSV vaccines for persons 60 years and older. On June 21, 2023, the Advisory Committee on Immunization Practices (ACIP) recommended that persons 60 years and older may receive a single dose of either the GSK or Pfizer RSV vaccine using shared decision-making. Currently, the RSV vaccines are approved and recommended as a single dose. Vaccination should occur prior to the onset of RSV season. RSV vaccination might prevent severe complications related to RSV in older adults. More data is needed to understand if the vaccine would be needed every season like the flu vaccine. Consult your medical provider to discuss RSV vaccination.

6. How is RSV treated?

There is no specific medications for RSV infection, but symptoms can be alleviated by drinking fluids and managing fever with over-the-counter fever reducers (never give aspirin to children). Hospitalized persons with RSV may receive fluids, oxygen, or may need to have a tube inserted in the respiratory tract to help them breathe.

7. For more information about RSV and RSV Vaccine:

- RSV (Respiratory Syncytial Virus) | CDC
- <u>Use of Respiratory Syncytial Virus Vaccines in Older Adults: Recommendations of the Advisory Committee on Immunization Practices United States, 2023 | MMWR (cdc.gov)</u>
- RSV in Infants and Young Children | CDC

This fact sheet provides general information. Please contact your physician for specific clinical advice.

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