



Bronchiolitis and Respiratory Syncytial Virus (RSV)

Respiratory syncytial virus (RSV) infects almost all children at least once before they are 2 years old. Most of the time this virus only causes minor cold like symptoms. Sometimes the virus will cause symptoms of wheezing along with cold symptoms. When this happens, we call the condition bronchiolitis. RSV can also cause pneumonia.

For certain infants who are extremely preterm (infants born before 32 weeks of pregnancy) or who are born with severe heart disease or severe lung disease, RSV infection can be especially serious. Preterm infants often have underdeveloped lungs and may have difficulty fighting an RSV infection once they become infected. Babies born prematurely at 32-35 weeks of pregnancy can also be at risk for severe RSV disease if other risk factors are also present (has school-age siblings, attends day care, is exposed to cigarette smoke, or has a congenital abnormality of the airway). Young children with medical conditions, such as chronic lung disease, serious heart conditions, or problems with their immune system, including problems due to cancer or organ transplants, are also at risk.

Each year, about 125,000 children are hospitalized in the United States with RSV infection, most of whom are under 1 year of age (4 out of 5).

When and how is RSV spread?

Respiratory syncytial virus infection occurs most often from late fall to early spring, often in clusters. Most illness occurs between November and April, although there may be seasonal variation by region. Respiratory syncytial virus occurs only in humans and is highly contagious.

The virus can live for several hours on a surface such as a counter top, table, or playpen, or on unwashed hands. Respiratory syncytial virus is spread by direct or close physical contact, which includes touching or kissing an infected person, or contact with a contaminated surface.

What are the symptoms of RSV?

For most healthy children the symptoms of RSV resemble the common cold and include:

- Runny nose - often with large amounts of drainage
- Coughing - usually congested and spasmodic or paroxysmal
- Low-grade fever

Some children will develop the following symptoms:

- Wheezing - a high pitch sound heard on expiration.
- Vomiting
- Poor feeding

However, signs of more serious infection may include:

- Difficult or rapid breathing
- Chest retractions - chest wall pulls in as the child inhales. Can be seen between the ribs, above the sternum (breastbone), or below the rib cage.
- Irritability and restlessness

How long does RSV last?

The course of the illness is generally 7-10 days. In some cases, symptoms can last up to a month. A child can get RSV infection more than once because there are many strains (varieties) of the RSV virus.

How can RSV be prevented?

There are important steps you can take to prevent exposure to RSV and other viruses, especially in the first few months of your child's life. These precautions include:

- Make sure everyone washes their hands before touching your baby.
- Keep your baby away from anyone who has a cold, fever or runny nose.
- Keep your baby away from crowded areas like shopping malls.
- Keep your baby away from tobacco smoke. Parents should not expose their infants and young children to secondhand tobacco smoke, which increases the risk of and complications from severe viral respiratory infections.
- For high-risk infants, participation in child care should be restricted during RSV season whenever possible.

For children that are at high risk for developing severe RSV disease, a preventative medication is available. The medication is called Synagis and is given by injection monthly during the winter season.

There are specific criteria for use of this medication. You should consult with us regarding specific details on who is at highest risk and which high-risk infants are most likely to benefit from receipt of Synagis.

How is RSV diagnosed?

If a specific diagnosis is needed, a nasal swab test is done to see if RSV is the diagnosis. However, the diagnosis of bronchiolitis (cold symptoms plus wheezing) is made from the examination alone. Most cases of bronchiolitis (4 out of 5) are due to RSV. Other viruses account for the rest.

How can RSV be treated?

Most cases of RSV infection are mild and disappear without treatment within five to seven days. When wheezing develops, a prescription medication called Albuterol can sometimes be helpful. Rarely, if severe respiratory symptoms occur, a child may need to be hospitalized.

Call us right away if your infant shows signs of difficult or rapid breathing. Prompt treatment is especially important if your child is at high risk for developing serious RSV infection.

The above article was adapted from information provided by the American Academy of Pediatrics.