

Respiratory Syncytial Virus (RSV)

Signs and Symptoms:

Respiratory syncytial virus (RSV) is a major cause of respiratory illness in young children. RSV infection produces a variety of signs and symptoms involving different areas of the respiratory tract, from the nose to the lungs.

In adults and children older than 3 years, RSV usually causes symptoms of a simple upper respiratory tract illness or common cold. These symptoms include a stuffy or runny nose, sore throat, mild headache, mild cough, low-grade fever, and a general feeling of being ill.

In children younger than age 3, RSV can cause a lower respiratory tract illness like bronchiolitis or pneumonia and in more severe cases can lead to respiratory failure. Symptoms may include high fever, severe cough, wheezing (noises when breathing), rapid breathing, difficulty breathing, and a bluish color of the lips or fingernails caused by lowered levels of oxygen in the blood. In infants with severe RSV infection, there may be retractions of the muscles between the ribs (sucking in of muscles/tissue between the ribs), as the child struggles to breathe. Children who were born prematurely, or who have preexisting lung, heart, or immune problems are at greatest risk to have serious complications from RSV infection.

Description:

RSV is a virus that causes infection of the lungs and breathing passages. RSV passes from person to person through infected nasal and oral fluids. It can enter the body when the eyes or nose are touched.

RSV infections occur all over the world; most often in epidemics that can last up to 5 months, from late fall through early spring. Since 1990, epidemics have typically begun sometime between late October and mid-December, and peaked during January and February.

The highest rates of RSV illness occur in infants 2 to 6 months old, with a peak at age 2 to 3 months. RSV infection is often carried home by a school-age child and passed on to a younger one, especially an infant. When RSV infects a day-care center, it is not unusual to see 100% of the children come down with an RSV infection. RSV commonly spreads through hospitals, too, infecting both patients and staff.

Prevention:

Because RSV spreads in fluids from the nose and throat of an infected person, it's best to wash your hands after touching anyone who has either a cold or a known RSV infection. Also, it's wise not to touch your nose or eyes after contact with someone with RSV as the virus could enter your body through either of these two areas. And whenever your school-age child comes down with a cold, keep your child away from an infant brother or sister until the symptoms pass.

There are preventative measures that can be given to infants who are at highest risk for severe illness if they acquire RSV, such as those who were born prematurely or who have chronic heart or lung disease. These treatments provide temporary immune protection against RSV. One such treatment, Synagis, is given as monthly intramuscular injections during the winter months and provides protection throughout the typical RSV season. Unlike a vaccine, its protection is short-lived, necessitating the repeated monthly injection. If your child has severe chronic lung problems, he or she may need to repeat the course during a second RSV season.

Incubation:

Incubation period is 4 to 6 days.

Duration:

RSV infection usually lasts 7 to 14 days, but some cases may last up to 3 weeks. Children who are hospitalized with lower respiratory tract illness usually spend 5 to 7 days in the hospital.

Contagiousness:

RSV is highly contagious and can attack up to 50% of infants during an RSV epidemic. Yearly epidemics occur in the late fall, winter, and early spring – almost never in the summer. Children in day-care centers and preschools are at greatest risk for transmitting RSV. Infants are at special risk if they have an older brother or sister in school. RSV is an especially contagious virus because it can live on surfaces for hours, and is easily passed from person to person. Good, frequent hand washing is a must to prevent its spread.

Someone who has an RSV infection, even if it's "just a cold", can pass infectious RSV particles through oral and nasal fluids. Contagiousness is highest during the first 2 to 4 days of the illness, but RSV particles may continue to be spread for up to 2 weeks after the stuffy nose begins.

Home Treatment:

- In treating RSV infections, the goal is to make children more comfortable while their bodies fight the virus.
- Using a cool-mist vaporizer to humidify the air may help soothe irritated breathing passages and relieve coughing.
- If necessary to loosen mucus in the nose, you can use salt-water (saline) nose drops.
- Treat a fever using a non-aspirin fever medicine like acetaminophen.
- If your child is too young to blow her own nose, use a nasal aspirator to remove sticky nasal fluids if your child is uncomfortable.

Professional Treatment:

RSV infection is not treated with antibiotics, because these drugs do not work against viruses.

Younger children, especially infants, who have severe RSV pneumonia or bronchiolitis may need to be treated in a hospital. There they can receive specialized respiratory therapy, including humidified oxygen and medicines to open up their breathing passages.

When to Call Your Child's Doctor:

Call your child's doctor if your child has any of the following symptoms: fever above 101 degrees Fahrenheit; thick nasal discharge that is yellow, green, or gray; cough that lasts more than 4 days; cough that produces yellow, green, or gray mucus; chest pain; difficulty breathing; very rapid breathing; bluish or gray color of the lips, skin or fingernails; or lethargy. Of course, call if you have any questions or concerns.

In infants, in addition to symptoms already mentioned, call your child's doctor if your child is unusually irritable or inactive, or if she refuses to breast-feed or bottle-feed, or has severe difficulty feeding because of breathing problems.

You're taking your premature baby home during RSV season, now what?

1. Limit visitors in your home. Do not allow non-family members that have a 'cold', sore throat, cough, runny nose, or that are otherwise ill into your home.

2. Do not take your baby to public places. Do not take him/her to the mall, church, grocery store, etc. until your pediatrician says that it is safe to do so.
3. **NO SMOKING IN THE HOME!!!**
4. If your baby is on the synagis treatment plan, don't forget to bring him/her in for their monthly shots.
5. Call your doctor if your child has:
 - A fever
 - A cough
 - A hard time handling nasal secretions
 - Is breathing fast
 - **Call 911 if your infant is blue**