## Respiratory Syncytial Virus Infection (RSV)

## **Symptoms and Care**

People infected with RSV usually show symptoms within 4 to 6 days after getting infected. Symptoms of RSV infection usually include

- Runny nose
- Decrease in appetite
- Coughing
- Sneezing
- Fever
- Wheezing

These symptoms usually appear in stages and not all at once. In very young infants with RSV, the only symptoms may be irritability, decreased activity, and breathing difficulties.

Almost all children will have had an RSV infection by their second birthday.

Call your healthcare professional if you or your child is having difficulty breathing, not drinking enough fluids, or experiencing worsening symptoms.

Most RSV infections go away on their own in a week or two.

There is no specific treatment for RSV infection, though researchers are working to develop vaccines and antivirals (medicines that fight viruses).

Take steps to relieve symptoms

- **Manage fever and pain** with over-the-counter fever reducers and pain relievers, such as acetaminophen or ibuprofen. (Never give aspirin to children.)
- **Drink enough fluids.** It is important for people with RSV infection to drink enough fluids to prevent dehydration (loss of body fluids).
- **Talk to your healthcare provider** before giving your child nonprescription cold medicines. Some medicines contain ingredients that are not good for children.

RSV can cause more serious health problems

RSV can also cause more severe infections such as bronchiolitis, an inflammation of the small airways in the lung, and pneumonia, an infection of the lungs. It is the most common cause of bronchiolitis and pneumonia in children younger than 1 year of age.

Healthy adults and infants infected with RSV do not usually need to be hospitalized. But some people with RSV infection, especially older adults and infants younger than 6 months of age, may need to be hospitalized if they are having trouble breathing or are dehydrated. In the most severe cases, a person may require additional oxygen, or IV fluids (if they can't eat or drink enough), or intubation (have a breathing tube inserted through the mouth and down to the airway) with mechanical ventilation (a machine to help a person breathe). In most of these cases, hospitalization only lasts a few days.

## **RSV Transmission**

RSV can spread when

- An infected person coughs or sneezes
- You get virus droplets from a cough or sneeze in your eyes, nose, or mouth
- You have direct contact with the virus, like kissing the face of a child with RSV
- You touch a surface that has the virus on it, like a doorknob, and then touch your face before washing your hands

People infected with RSV are usually contagious for 3 to 8 days and may become contagious a day or two before they start showing signs of illness. However, some infants, and people with weakened immune systems, can continue to spread the virus even after they stop showing symptoms, for as long as 4 weeks. Children are often exposed to and infected with RSV outside the home, such as in school or childcare centers. They can then transmit the virus to other members of the family.

RSV can survive for many hours on hard surfaces such as tables and crib rails. It typically lives on soft surfaces such as tissues and hands for shorter amounts of time.

People are typically infected with RSV for the first time as an infant or toddler and nearly all children are infected before their second birthday. However, repeat infections may occur throughout life, and people of any age can be infected. Infections in healthy children and adults are generally less severe than among infants and older adults with certain medical conditions. People at highest risk for severe disease include

- Premature infants
- Young children with congenital (from birth) heart or chronic lung disease
- Young children with compromised (weakened) immune systems due to a medical condition or medical treatment
- Children with neuromuscular disorders
- Adults with compromised immune systems
- Older adults, especially those with underlying heart or lung disease

In the United States and other areas with similar climates, RSV circulation generally starts during fall and peaks in the winter. The timing and severity of RSV circulation in a given community can vary from year to year.

## **RSV Prevention**

There are steps you can take to help prevent the spread of RSV. Specifically, if you have cold-like symptoms you should

- Cover your coughs and sneezes with a tissue or your upper shirt sleeve, not your hands
- Wash your hands often with soap and water for at least 20 seconds
- Avoid close contact, such as kissing, shaking hands, and sharing cups and eating utensils, with others
- Clean 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, including premature infants, children younger than 2 years of age with chronic lung or heart conditions, children with weakened immune systems, or children with neuromuscular disorders. If this is not possible, they should carefully follow the prevention steps mentioned above and wash their hands before interacting with such children. They should also refrain from kissing high-risk children while they have cold-like symptoms.

Parents of children at high risk for developing severe RSV disease should help their child, when possible, do the following

- Avoid close contact with sick people
- Wash their hands often with soap and water for at least 20 seconds
- Avoid touching their face with unwashed hands
- Limit the time they spend in childcare centers or other potentially contagious settings during periods of high RSV activity. This may help prevent infection and spread of the virus during the RSV season

Researchers are working to develop RSV vaccines, but none are available yet. A drug called palivizumab (pah-lih-VIH-zu-mahb) is available to prevent severe RSV illness in certain infants and children who are at high risk for severe disease. This could include, for example, infants born prematurely or with congenital (present from birth) heart disease or chronic lung disease. The drug can help prevent serious RSV disease, but it cannot help cure or treat children already suffering from serious RSV disease, and it cannot prevent infection with RSV. If your child is at high risk for severe RSV disease, talk to your healthcare provider to see if palivizumab can be used as a preventive measure.