Respiratory Syncytial Virus Infection (RSV) Fact Sheet

Overview
Respiratory syncytial virus, or RSV, is a common respiratory virus that usually causes mild, cold-like symptoms. While most people recover in a week or two, RSV can be serious, especially for infants and older adults. RSV is the most common cause of bronchiolitis (inflammation of the small airways in the lung) and pneumonia (infection of the lungs) in children younger than 1 year of age in the United States.

Symptoms
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.

Transmission
RSV is spread through contact with droplets from the nose and throat of infected people when they cough and sneeze. RSV can spread when virus droplets from a cough or sneeze in your eyes, nose, or mouth. You can also get RSV from touching 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.

Treatment
While there is no FDA-approved vaccine for RSV, most RSV infections go away on their own in a week or two.

There is no specific treatment for RSV infection and the best way to treat RSV is to treat symptoms. The best ways to relieve symptoms include:

- 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.

People at High Risk for Severe RSV Infection: Infants and Older Adults
Most people who get an RSV infection will have mild illness and will recover in a week or two. Some people, however, are more likely to develop severe RSV infection and may need to be hospitalized. Examples of severe infections include bronchiolitis (an inflammation of the small airways in the lung) and pneumonia. RSV can also make chronic health problems worse. For example, people with asthma may experience asthma attacks as a result of RSV infection, and people with congestive heart failure may experience more severe symptoms triggered by RSV.

RSV in Infants
RSV can be dangerous for some infants and young children. Each year in the United States, an estimated 58,000-80,000 children younger than 5 years old are hospitalized due to RSV infection. Those at greatest risk for severe illness from RSV include premature infants; infants, especially those 6 months and younger; children younger than 2 years old with chronic lung disease or congenital (present from birth) heart disease; children with weakened immune systems; and children who have neuromuscular disorders, including those who have difficulty swallowing or clearing mucus secretions.

If your child is demonstrating early signs of RSV, consider calling a health care provider. Your provider can help you determine the best ways to manage symptoms and when it is important to be seen in the clinic, urgent care, or emergency department. If it is an emergency, please call 9-1-1.

Resources
- [How Sick is Too Sick](https://www.colorado.gov/pacific/cdphe/how-sick-too-sick) tool (CDPHE)
- [Infectious Disease in School and Child Care Settings](https://www.colorado.gov/pacific/cdphe/infectious-disease-school-and-child-care-settings) (CDPHE)