

Respiratory Syncytial (sin-SISH-uhl) Virus

What is RSV?

Respiratory Syncytial Virus (RSV) is the most common cause of bronchiolitis (inflammation of the small airways in the lung) and pneumonia in children under one year of age in the United States. Each year, 75,000 to 125,000 children in this age group are hospitalized due to RSV infection. Nearly all children are infected with the virus by their second birthday, but only a small percentage develops severe disease.

While RSV is often thought of as a disease of only young children, it can also occur in adults with weakened immune systems and in the elderly.

How is RSV spread?

People infected with RSV are usually contagious for 3-8 days. However, some infants and people with weakened immune systems can be contagious for as long as four weeks. RSV can be rapidly transmitted to others.

RSV can be spread when droplets containing the virus are sneezed or coughed into the air by an infected person. Such droplets can linger briefly in the air, and if someone inhales the particles or the particles contact their nose, mouth, or eyes, they can become infected.

Infection can also result from direct and indirect contact with nasal or oral secretions from infected persons. Direct contact with the virus can occur, for example, by kissing the face of a child with RSV. Indirect contact can occur if the virus gets on an environmental surface, such as a doorknob that is then touched by other people. Direct and indirect transmissions of virus usually occur when people touch an infectious secretion and then rub their eyes or nose. RSV can survive on hard surfaces, such as tables and bed rails for many hours. RSV typically lives on soft surfaces, such as tissues and hands for shorter amounts of time.

What are the symptoms of RSV?

Illness usually begins 4-6 days after exposure (range: 2-8 days) with a runny nose and decrease in appetite. Coughing, sneezing, and fever may develop 1-3 days later. Wheezing may also occur. In very young infants, irritability, decreased activity, and breathing difficulties may be the only symptoms of infection. Most otherwise healthy infants infected with RSV do not require hospitalization. In most cases, including among those who need to be hospitalized, full recovery from illness occurs in about 1-2 weeks.

Visits to a healthcare provider for an RSV infection are very common. During such visits, the healthcare provider will assess the severity of disease to determine if the patient should be hospitalized. In the most severe cases of disease, infants may require supplemental oxygen, suctioning of mucus from the airways, or intubation (have breathing tubes inserted) with mechanical ventilation.

Are certain people at risk of getting RSV?

Premature infants, children less than two years of age with congenital heart or chronic lung disease, and children with compromised (weakened) immune systems due to a medical condition or medical treatment are at highest risk for severe disease. Adults with compromised immune systems and those 65 and older are also at increased risk of severe disease.

What is the treatment for human RSV?

There is no specific treatment for RSV. Most of the time an infant will recover in 1-2 weeks with supportive care. In the most severe cases in which an infant or young child is hospitalized with RSV, supplemental oxygen, suctioning of mucus from the airways, or intubation with mechanical breathing may be required.

How can RSV be prevented in the healthcare setting?

Frequent hand washing and wiping of hard surfaces with appropriate disinfectant may help stop infection and spread of RSV. Also, persons with RSV illness should not share cups or eating utensils with others and should not visit a long-term care facility.

Ideally, persons with cold-like symptoms should not interact with high-risk children and adults. If this is not possible, these persons should cover their mouth and nose when coughing or sneezing and then wash their hands before providing any care. They should also refrain from kissing high-risk children while they have cold-like symptoms. When possible, limiting the time that high-risk children spend in child care centers or other potentially contagious settings may help prevent infection and spread of the virus during the RSV season.

For more information regarding RSV, visit the following resources:

- <http://www.cdc.gov/rsv/index.html>
- <http://www.cdc.gov/rsv/about/index.html>