

Respiratory Syncytial Virus: A Short Review

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Respiratory syncytial virus is a virus which infects the breathing passages and lungs. Healthy individuals may experience cold-like symptoms and they will recover within 1 or 2 weeks. But RSV may become serious, especially in infants and adults.

Respiratory Syncytial Virus spread when an infected person coughs or sneezes and droplets get into the mouth, eyes, nose, of a healthy person. By touching a contaminated surface with the virus on it, like a doorknob, and with that hands if the individual touch their face may expose to the virus. Respiratory Syncytial Virus also spreads through direct contact like kissing on the face of a child with the virus [1].

Respiratory Syncytial Virus may survive for several hours on the hard surfaces like tables and crib rails. It usually lives on soft surfaces like tissues and hands for shorter amounts of time. Children are frequently exposed to the virus outside the home, like in day care centers or in school. Then they can transmit the virus to the other family members [2].

Respiratory Syncytial Virus is one of the most common cause of bronchiolitis (small airways in the lung) and pneumonia in children <1 year of age in the US. On an average every year in US, Respiratory Syncytial Virus leads to approximately 2.1 million outpatient visits and 58,000 hospitalizations among children younger under the age of 5 years.

Respiratory Syncytial Virus is also recognized as a major cause of respiratory illness in older adults and it is estimated to cause 177,000 hospitalizations and 14,000 deaths in adults 65 and older in the US every year.

People of all ages can get an infection of Respiratory Syncytial Virus but those at highest risk for severe disease include:

- Premature infants
- Young children with congenital heart or chronic lung disease, weak immune systems due to a medical condition or medical treatment
- Adults with weak immune systems
- Older adults, especially with underlying lung or heart disease.

Symptoms of Respiratory Syncytial Virus infection usually include: runny nose, sneezing, loss of appetite, fever, coughing, and wheezing. The symptoms appear in different stages and not all at a time. In young infants, the symptoms may be irritability, decreased activity, and difficulty in breathing. Individual with Respiratory Syncytial Virus infection show symptoms within a week.

People infected with Respiratory Syncytial Virus are regularly contagious for 3 to 8 days. However, few infants, and individuals with weakened immune systems may continue to spread the virus even after they stop showing symptoms which lasts for 4 weeks.

To help prevent the spread of Respiratory Syncytial Virus [4], those with symptoms should:

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- Wash hands with soap and water for 20 seconds frequently
- Cover coughs and sneezes.
- Avoid touching face with unwashed hands.
- Avoid close contact, like kissing, shaking hands, sharing cups, sharing and eating utensils.
- A clean contaminated surface (such as doorknobs) also helps to stop the spread of the infection.
- Researchers are working to develop Respiratory Syncytial Virus vaccines.

A drug called palivizumab (pah-lih-VIH-zu-mahb) is available to prevent severe Respiratory Syncytial Virus illness in infants and in young children who are at high risk for severe disease (infants born prematurely or with congenital heart disease or chronic lung disease). The drug can help to prevent the severity of disease, but cannot help to cure or can treat the children who are already suffering with other serious disease, and it cannot prevent infection with Respiratory Syncytial Virus.

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