March 28, 2011

Respiratory Syncytial Virus Fact Sheet

1. **What is respiratory syncytial virus (RSV)? -** RSV is the most common cause of bronchiolitis (inflammation of the small airways in the lung) and pneumonia (lung infection) among infants and children under one year of age. Each year, 75,000 to 125,000 children in this age group are hospitalized due to RSV infection. Illness begins most frequently with fever, runny nose, cough and sometimes wheezing. Almost all children will have had an RSV infection by their second birthday. When infants and children are exposed to RSV for the first time, 25% to 40% of them will develop signs or symptoms of bronchiolitis and/or pneumonia, and 0.5% to 2% of them will require hospitalization.

2. **What are the symptoms of RSV? -** Symptoms of RSV infection are generally similar to other respiratory infections. A person with an RSV infection might cough, sneeze, and have a runny nose, fever, and decrease in appetite. 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 need to be hospitalized. In most cases, even among those who need to be hospitalized, hospitalization usually lasts only a few days, and recovery from illness often occurs in about 1 to 2 weeks.

3. **Who is at risk for severe illness? -** Premature infants, children less than 2 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. Most children recover from illness in 8 to 15 days. The majority of children hospitalized for RSV infection are under 6 months of age. RSV also causes repeated infections throughout life, usually associated with moderate-to-severe cold-like symptoms; however, severe lower respiratory tract disease may occur at any age, especially among the elderly or among those with compromised cardiac (heart), pulmonary (lung), or immune systems.

4. **How is RSV spread? -** RSV is spread from respiratory secretions through close contact with infected persons or contact with contaminated surfaces or objects. Infection can occur when infectious material contacts mucous membranes of the eyes, mouth or nose, and possibly through the inhalation of droplets generated by a sneeze or cough. 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 touch their eyes, lips or nose.

5. **When does RSV occur? -** In temperate climates, RSV infections generally occur during fall, winter, and early spring. The timing and severity of RSV circulation in a given community can vary from year to year. RSV spreads efficiently among children during annual outbreaks, and most children will have serologic evidence of RSV infection by 2 years of age.

6. **How is RSV treated? -** 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 of cases, an infant may require supplemental oxygen, suctioning of mucus from airways, or intubation (have a breathing tube inserted) with mechanical ventilation. There is no specific treatment for RSV infection

7. **Is there a vaccine for RSV? -** Development of an RSV vaccine is a high research priority, but none is yet available.

8. **How can RSV be prevented?** – Frequent hand washing and wiping of hard surfaces with soap and water or a disinfectant may help stop the spread of RSV. Also, persons with RSV illness should not share cups or eating utensils with others. Ideally, persons with cold-like symptoms should also not interact with high-risk children. 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 public settings may help prevent infection and spread of the virus during the RSV season.

9. **For more information about RSV:** http://www.cdc.gov/rsv/index.html

   This fact sheet provides general information. Please contact your physician for specific clinical information related.