

RSV (Respiratory Syncytial Virus)

Dear Parents: Although RSV is most common in infants under 1yr. There have been reports that this virus is active in the school population. Please read the following:

Clinical features: Respiratory syncytial virus (RSV) is the most common cause of bronchiolitis and pneumonia among infants and children under 1 year of age. Illness begins most frequently with fever, runny nose, cough, and sometimes wheezing. During their first RSV infection, between 25% and 40% of infants and young children have signs or symptoms of bronchiolitis or pneumonia, and 0.5% to 2% require hospitalization. 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, pulmonary, or immune systems.

Epidemiologic features: 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. In temperate climates, RSV infections usually occur during annual community outbreaks, often lasting 4 to 6 months, during the late fall, winter, or early spring months. The timing and severity of outbreaks in a community vary from year to year. RSV spreads efficiently among children during the annual outbreaks, and most children will have serologic evidence of RSV infection by 2 years of age.

Diagnosis: Diagnosis of RSV infection can be made by virus isolation, detection of viral antigens, detection of viral RNA, demonstration of a rise in serum antibodies, or a combination of these approaches. Most clinical laboratories use antigen detection assays to diagnose infection.

Treatment: For children with mild disease, no specific treatment is necessary other than the treatment of symptoms (e.g., acetaminophen to reduce fever). Children with severe disease may require oxygen therapy and sometimes mechanical ventilation. Ribavirin aerosol may be used in the treatment of some patients with severe disease. Some investigators have used a combination of immune globulin intravenous (IGIV) with high titers of neutralizing RSV antibody (RSV-IGIV) and ribavirin to treat patients with compromised immune systems.

Prevention: Frequent hand washing and not sharing items such as cups, glasses, toys and utensils with persons who have RSV illness should decrease the spread of virus to others. Excluding children with colds or other respiratory illnesses (without fever) who are well enough to attend child care or school settings will probably not decrease the transmission of RSV, since it is often spread in the early stages of illness. Development of an RSV vaccine is a high research priority, but none is yet available. Children with chronic lung diseases and premature infants are most vulnerable and may benefit from antibody therapy.

For more information contact your health care provider, School Nurse, Marin County Health Department, or: <http://www.cdc.gov/ncidod/dvrd/revb/respiratory/rsvfeat.htm>