

Apneic spells

Poor air exchange; poor breath sounds

When the lower airway is involved, classic manifestations include signs of altered air exchange, such as wheezing, retractions, crackles, dyspnea, tachypnea, and diminished breath sounds. Apnea may be the first recognized indicator of RSV infection in very young infants (younger than 1 month old).

Diagnostic Evaluation

Identification has been simplified by the development of tests done on nasopharyngeal secretions, using either a rapid immunofluorescent antibody/direct fluorescent antibody (DFA) staining or an enzyme-linked immunosorbent assay (ELISA) for RSV antigen detection (see [Respiratory Secretion Specimens, Chapter 20](#)). Hyperinflation of the lungs is generally seen on the chest radiograph.

Therapeutic Management

Children with bronchiolitis are cared for home if they are maintaining hydration, do not have respiratory distress, and do not need oxygen therapy. Hospitalization is recommended for children with respiratory distress or those who cannot maintain adequate hydration. Other reasons for hospitalization include complicating conditions, such as underlying lung or heart disease, associated debilitated states, or a home environment where adequate management is questionable. In-patients are treated symptomatically with humidified oxygen, adequate fluid intake, airway maintenance, and medications. Humidified oxygen is administered in concentrations sufficient to maintain adequate oxygenation (SpO_2) at or above 90% as measured by pulse oximetry. An infant who is tachypneic or apneic, has marked retractions, seems listless, has a history of poor fluid intake, or is dehydrated should be closely observed for respiratory failure. In general, the illness peaks in 5 to 7 days but the cough can persist for 2 to 3 weeks.

Children with thickened secretions may benefit from extra