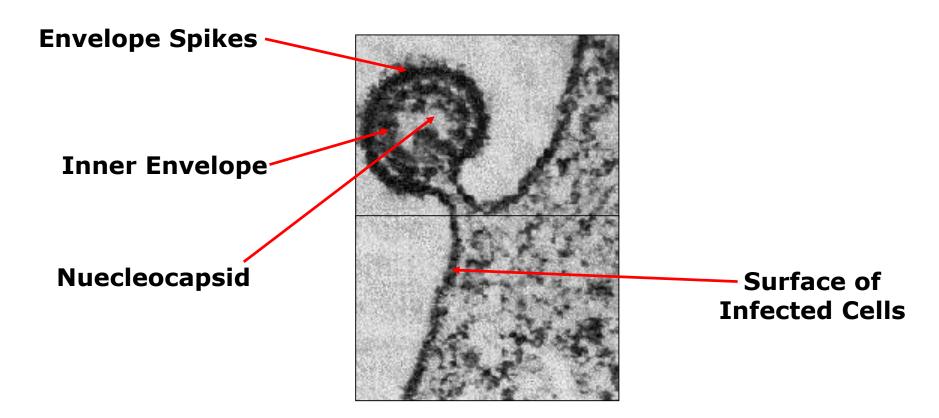
Respiratory Syncytial Virus and Bronchiolitis

Giovanni Piedimonte, M.D. Miriam K. Perez, M.D.





Respiratory Syncytial Virus

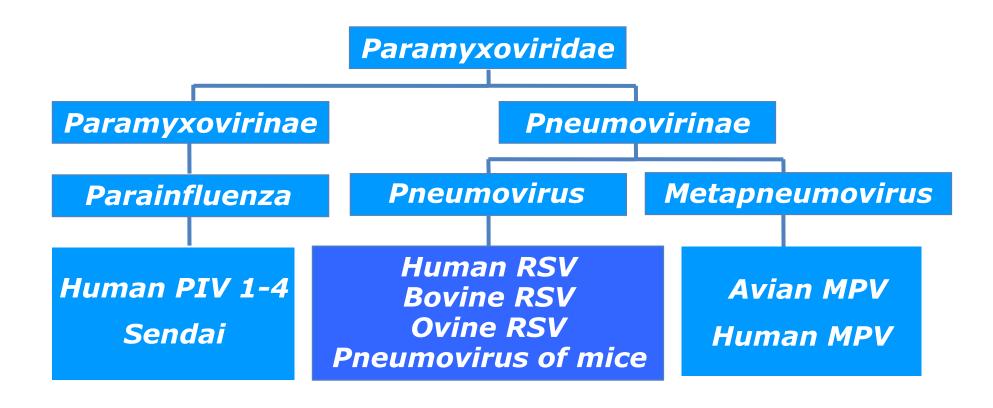


Electron photomicrograph of budding virion (Adapted from: Peter Collins, 1989; *Fields Virology* 2nd Edition, 1990).





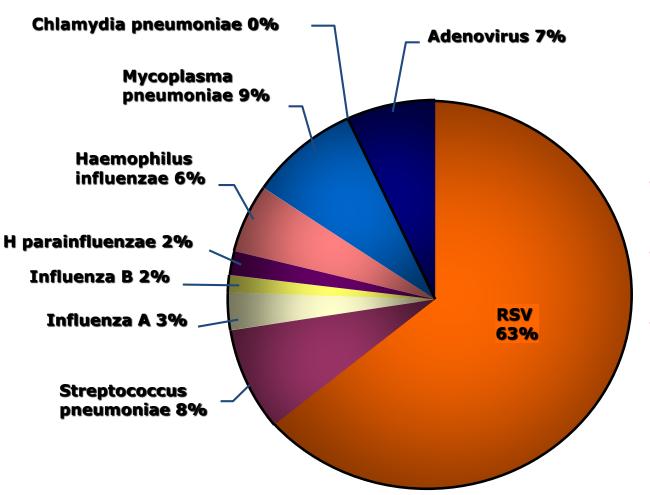
Paramyxoviridae







RSV: The Most Common Respiratory Pathogen in Children Worldwide



RSV accounts for:

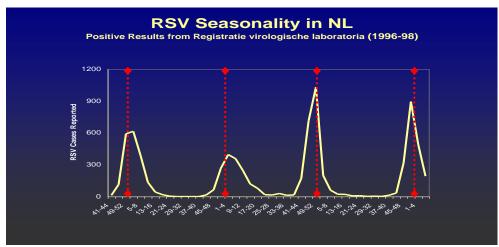
- >60% of ARIs during entire respiratory season
- 90% of ARIs at peak of respiratory season
- 80% of ARIs in infants
 1 year old during entire respiratory season

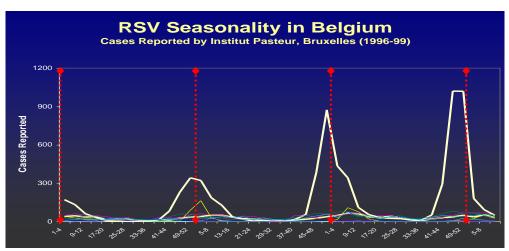
ARI = acute respiratory infection.

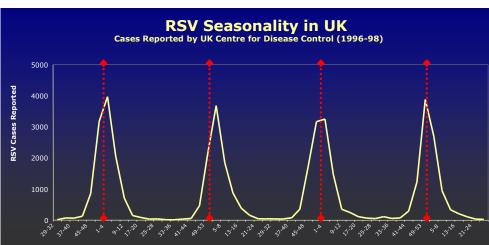


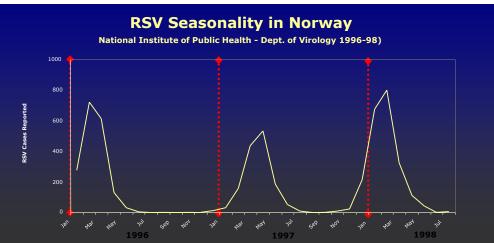


Global Seasonality of RSV





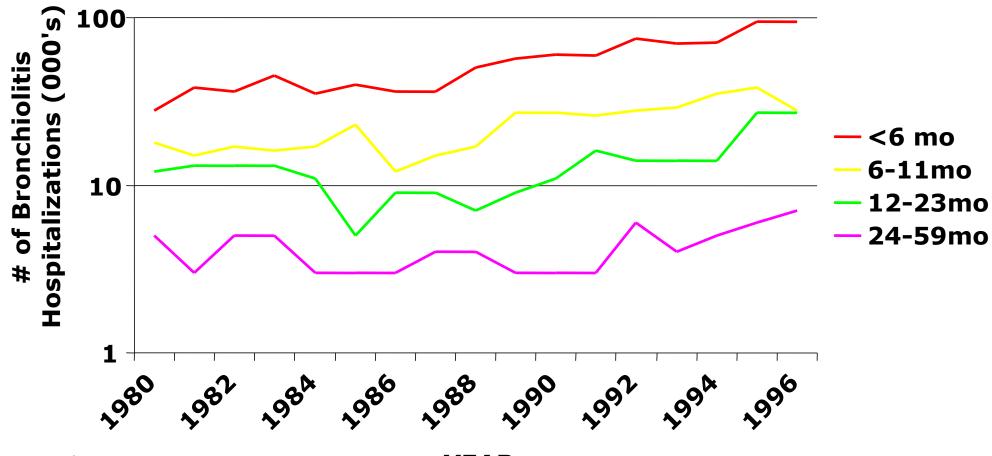


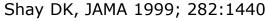






Annual Bronchiolitis Hospitalizations Among US Children











RSV Epidemiology

- >120,000 annual hospitalizations in US
- Peak incidence of severe illness 2-3 months
- Illness severity related to:
 - Age <12 weeks</p>
 - Absence of breastfeeding
 - History of prematurity
 - Underlying heart or lung disease
 - Immune deficit





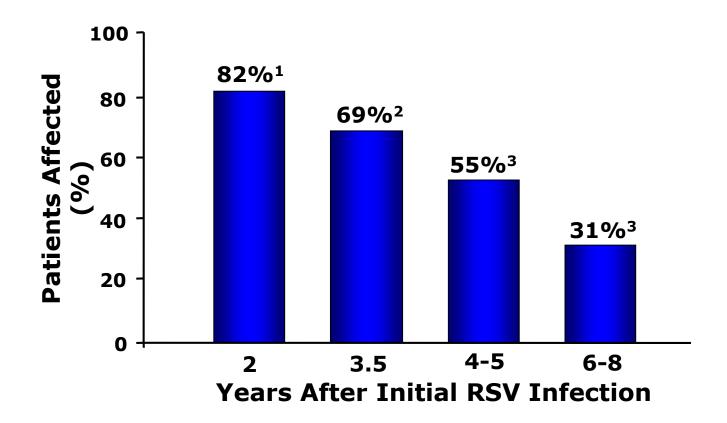
RSV: Radiologic Findings







Time Course of Post-RSV Recurrent Respiratory Symptoms



- 1. Henry RL et al. Arch Dis Child 1983; 58:713-716.
- 2. Webb MS et al. Arch Dis Child 1985; 60:1064-1067.
- 3. Hall CB et al. *J Pediatr* 1984;105:358-364.





Current Bronchiolitis Management



Bronchodilators Corticosteroids Ribavirin

> Fluid Intake Oxygen

Antivirals
DNAse
Surfactant
Heliox

