BURDEN OF RSV DISEASE FOLLOWING A PALIVIZUMAB IMMUNISATION PROGRAMME.
OUR LADY´S CHILDREN´S HOSPITAL, DUBLIN, 2004/05 TO 2009/10 SEASONS

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Background: Respiratory Syncytial Virus (RSV) infection occurs primarily during winter months in temperate climates, and is the leading cause of bronchiolitis and pneumonia in the paediatric population. In 2005, Palivizumab RSV prophylaxis was introduced in Our Lady´s Children´s Hospital for infants at high risk of complicated infection.

Objective: To determine the continuing burden of RSV infection in our hospital following introduction of a prevention programme.

Methods: Health care records of all RSV-positive patients were reviewed at the end of each season. Information recorded included: number of patients with documented RSV infection each month (community or hospital acquired); patient demographics; risk factors for RSV; co-morbidities; length of hospital stay; number requiring ICU admission and mechanical ventilation.

Results: Over the 6-year period, 805 RSV-positive cases were identified. Peak incidence occurred between November and January each year. 491 (61%) cases occurred in infants without known risk factors. 102 (12.6%) required ICU admission and 79 (9.8%) mechanical ventilation, respectively. 47 (5.8%) cases were hospital-acquired. 25 (3.1%) of infections occurred in infants receiving Palivizumab.

Conclusions: The time of onset, duration and severity of RSV infection varied from year to year. This study demonstrates the variance and severity of RSV seasons and informs the selection process for Palvizumab prophylaxis. Hospital acquired RSV infections highlights scope for further improvements in infection control. Despite targeting high risk groups for prophylaxis, significant morbidity associated with RSV infection occurs. The majority of morbidity occurs in previously well infants. The need for a safe, effective vaccine remains.