Introduction
Palivizumab (Synagis®) is licensed to prevent respiratory syncytial virus (RSV) hospitalizations in selected children <24 months of age with a history of preterm birth (<35 weeks' gestation), chronic lung disease (CLD) and significant congenital heart disease. The recommended timing interval for Palivizumab administration is once per month beginning just before the onset of the RSV season.

Methods
Alaska Medicaid Data
We queried the Alaska Medicaid hospitalization database for children <2 years of age with an approved claim for hospitalizations for a) bronchiolitis or respiratory syncytial virus pneumonia (ICD-9 codes 466.1, 466.11, 466.19, and 480.1) and b) lower respiratory tract infection (LRTI) (ICD-9 codes 466, 480-486, 490, 510-511). Evaluation was limited to January 1999 through June 2003.

Yukon Kuskokwim Delta Hospital-based Surveillance
We identified children from the Yukon-Kuskokwim Delta (YKD) aged <3 years who were hospitalized with LRTI during the RSV seasons (YKD) aged <3 years who were hospitalized with LRTI during 1994-7, 1997-2001, and 2001-2004, respectively.

Results
Alaska Medicaid Database
Most LRTI hospitalization billing codes among children <2 years of age were for bronchiolitis or RSV pneumonia (Figure). The number of cases identified reached a nadir during July and August each year. During 1999-2002, 12% of bronchiolitis/RSV pneumonia cases were in June (4.4%), July (2.1%), August (2.0%), and September (3.7%).

Yukon Kuskokwim Delta Respiratory Syncytial Virus Seasonality
The median RSV onset, peak and offset weeks for the YKD region were October 14-20th, February 20-26th, and May 19-25th, respectively, for a median RSV season length of 30.5 weeks. Between 1994 and 2004, 13% of RSV-related hospitalizations occurred from June through September.

Discussion
RSV seasonality is known to vary substantially by geographic region and latitude. The median RSV season length of 15-16 weeks in the continental United States supports the Redbook recommendation for palivizumab administration between November and March. However, the prolonged season for RSV and bronchiolitis hospitalizations in Alaska supports palivizumab use during the 31-week period from October 1 through May 31.

Recommendations
1. Health-care providers should be aware of the prolonged and variable RSV season in Alaska and consider RSV testing and instituting RSV precautions for children hospitalized with lower respiratory illness during all but the summer months.
2. Health-care providers should administer palivizumab monthly between October 1 and May 31 to high-risk infants and children who meet the American Academy of Pediatrics criteria.

References

Figure. Number of Lower Respiratory Tract Infection (LRTI) and Bronchiolitis/RSV Pneumonia Hospitalizations among Medicaid-enrolled Children <2 Years Old, Alaska, January 1999-June 2003.

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