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Palivizumab Prophylaxis for Respiratory Syncytial Virus during the 2011–12 Season

Introduction

Palivizumab (Synagis®) is a monoclonal antibody that reduces the risk of respiratory syncytial virus (RSV) hospitalization in certain high-risk children.¹ The American Academy of Pediatrics (AAP) has established eligibility criteria for palivizumab prophylaxis (Table 1).¹

Table 1. AAP Palivizumab Prophylaxis Eligibility Criteria

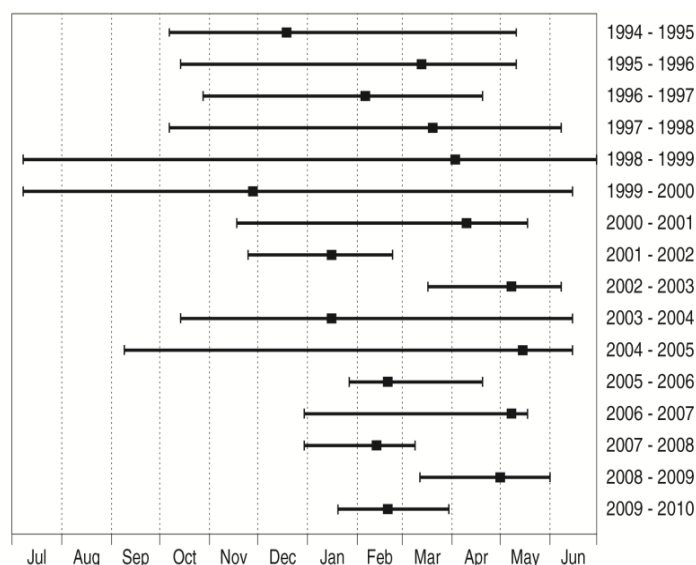
Child's Age (Months)	Gestational Age (Weeks)	Health or Social Conditions
<3	32 to <35	Attend daycare or have at least one sibling aged <5 years
<6	29 to <32	None
<12	<29	None
<12	Any	Congenital airway anomalies or neuromuscular disease
<24	Any	Chronic lung disease or hemodynamically significant cardiac disease

In most areas of the United States, initiation of monthly palivizumab in November and continuation for a maximum of five monthly doses provides protection into April and is recommended for qualifying children.^{1,2} However, Alaska's RSV season is typically longer than the overall RSV season nationally.^{3,4} Therefore, Alaska Medicaid has historically allowed at least one additional dose of palivizumab to be administered each season to qualifying high-risk children who live in Alaska.³ Hospital laboratory data are used to assist in determining RSV season onset and offset, which is defined as the first and last 2 consecutive weeks during which RSV was detected in ≥ 2 specimens and $>10\%$ of submitted specimens.^{1,2}

Alaska RSV Seasonality Data

Using data from the Yukon-Kuskokwim Delta Regional Hospital (YKDRH), the median RSV season for 1994–2010 was November 7–14 through May 12–18. The RSV season shifted from October 14–20 through May 19–25 during 1994–2004 to January 20–26 through April 14–20 during 2005–2010 (Figure 1).

Figure 1. RSV Season Onset and Offset for each RSV Season — YKDRH, 1994–95 through 2009–10

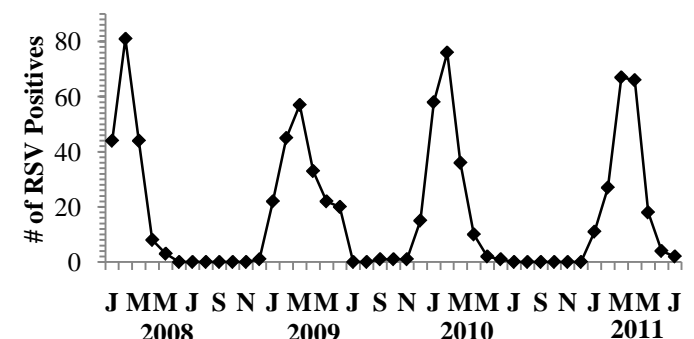


The RSV season onset can vary significantly by region in Alaska. For example, during 2007–2008, the RSV season onset week was November 18, November 25, and December 30 at Alaska Native Medical Center, Providence Alaska Medical Center, and YKDRH, respectively.

RSV testing with direct fluorescent antibody is performed by the Alaska State Virology Laboratory on respiratory

specimens collected from children aged <2 years, and when RSV testing is specifically requested. During 2000–2011, RSV detection occurred during October–June, and peaked in February. Seasonal data from January 2008 through July 2011 are shown below (Figure 2).

Figure 2. Alaska State Virology Laboratory RSV Positive Specimens, by Month and Year, January 2008–July 2011



New Alaska Medicaid Synagis® Reimbursement Criteria

Due to shifts in RSV seasonality, Alaska Medicaid has revised the 2011–12 RSV season for palivizumab reimbursement to begin November 28, 2011 and end May 14, 2012.³ However, if the 2011–12 Alaska RSV season starts prior to November 28, Alaska Medicaid will provide earlier coverage (i.e., if ≥ 2 RSV specimens and $>10\%$ of specimens during 1 week at two facilities are positive). Alaska Medicaid will pay for a maximum of three or six monthly doses of palivizumab for high-risk children between November 28, 2011 and May 14, 2012 (Table 2).

Table 2. Alaska Medicaid Palivizumab Coverage, 2011–12

Age at RSV Season Onset	Gestational Age (Wks)	Risk Factors (At least one)	# of Doses
Born after Sept 1, 2011 (<3 months)	32 to <35	<ul style="list-style-type: none"> Daycare attendance Sibling aged <5 years Home without running water^{3,5} Home with ≥ 3 people in child's bedroom or ≥ 7 per household³ 	Up to 3
Born after May 28, 2011 (<6 months)	29 to <32	None	Up to 6
Born after Nov 28, 2010 (<12 months)	<29	None	Up to 6
Born after Nov 28, 2010 (<12 months)	Any	<ul style="list-style-type: none"> Congenital airway anomaly Neuromuscular disease 	Up to 6
Born after Nov 28, 2009 (<24 months)	Any	<ul style="list-style-type: none"> Congenital heart disease Chronic lung disease 	Up to 6

References

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