State of Alaska Epidemiology **Bulletin**

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Palivizumab Prophylaxis Recommendations — Alaska, 2013–14 RSV Season

Background

Respiratory syncytial virus (RSV) is the most common cause of bronchiolitis and pneumonia in infants in the United States. Most children are infected with RSV during their first year of life; virtually all children are infected at least once by their second birthday. Up to 3% of infants are hospitalized with RSV;[1] the hospitalization rate is higher for certain risk groups, e.g., premature infants and infants with chronic lung disease or congenital heart disease.[1] Rural Alaska Native children have RSV hospitalization rates that are 5-fold higher than other U.S. children.[2]

Palivizumab (Synagis®) is a monoclonal antibody that reduces the risk of RSV hospitalization in certain high-risk children.[1,3] The American Academy of Pediatrics has established eligibility criteria for palivizumab prophylaxis in high-risk children (Table 1).[1] In most areas of the United States, initiation of monthly palivizumab in November and continuation for up to five monthly doses is recommended for qualifying children.[1,3]

Table 1. Eligibility Criteria for Palivizumab Prophylaxis

Child's Age	Gestational Age (GA)	Health or Social Conditions
<24 months	Any	Chronic lung disease
≤24 months	Any	Hemodynamically significant cardiac disease
<12 months	Any	Congenital airway anomalies or neuromuscular disease
<12 months	<29 weeks	
<6 months	29 to <32 weeks	
<3 months	32 to <35 weeks	Attend daycare or have at least one sibling aged <5 years

Alaska RSV Seasonality

The RSV season is generally defined as the first and last 2 consecutive weeks during which RSV was laboratory-confirmed in ≥2 specimens and >10% of submitted specimens.[4] RSV direct fluorescent antibody testing is performed by the Alaska State Virology Laboratory on respiratory specimens collected from children aged <2 years, and when RSV testing is specifically requested. The RSV season can vary by year. YK Delta Regional Hospital (YKDRH) data indicate that the median RSV season duration decreased from 30 weeks during 1994–2003 to 11 weeks during 2003–2012. During 2012–13, RSV detection occurred during September–June, peaking in February–March (Figure 1). Seasonality also varies by region. During 2012–13, the RSV season onset was November 11–17 at Anchorage Facility D, December 9–15 at the Anchorage Facility C, February 3–9 at YKDRH, and March 3–9 at northern Facility B (Figure 2).

Alaska Medicaid Palivizumab Reimbursement Criteria

During the 2012–13 RSV season, Alaska Medicaid palivizumab reimbursement occurred from November 28 through May 14.[4] This period closely matched Alaska's 2012–13 RSV activity. For the 2013–14 season, because November 28 falls on Thanksgiving, Medicaid will adjust the reimbursement period to November 25 through May 11. If the 2013–14 RSV season starts prior to November 25, Medicaid will adjust the coverage dates accordingly. Medicaid will pay for up to three or six monthly doses of palivizumab for children meeting specified criteria (Table 2).

Figure 2. RSV-Positive Tests by Week from Four Alaska Hospitals — Alaska, 7/1/12–6/30/13

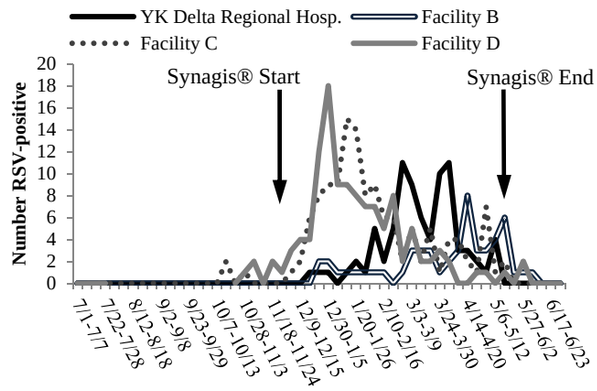


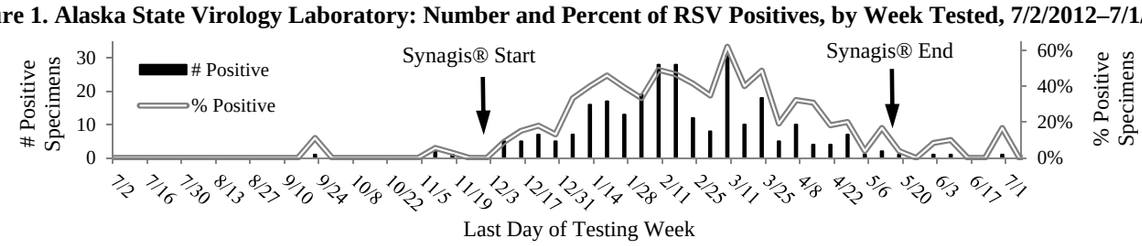
Table 2. Alaska Medicaid Palivizumab Coverage for the 2013–14 RSV Season

Date of Birth	Gest. Age (Weeks)	Risk Factors	# of Doses
Born on or after Aug 25, 2013 (<3 months)	32 to <35	At least one: • daycare attendance • sibling aged <5 years • home without running water[4] • home with ≥3 people in child's bedroom or ≥7 per household	Up to 3
Born after May 25, 2013 (<6 months)	29 to <32		Up to 6
Born after Nov 25, 2012 (<12 months)	<29		Up to 6
Born after Nov 25, 2012 (<12 months)	Any	• congenital airway anomaly • neuromuscular disease	Up to 6
Born on/after Nov 25, 2011 (CHD) or after Nov 25, 2011 (CLD) (<24 months)	Any	• congenital heart disease (CHD) • chronic lung disease (CLD)	Up to 6

References

1. American Academy of Pediatrics. *RedBook 2012 Report of the Committee on Infectious Diseases.* Pickering LK, ed. 29th ed. Elk Grove Village, IL: American Academy of Pediatrics 2012.
2. Singleton RJ, Bruden D, Bulkow LR. Respiratory syncytial virus season and hospitalizations in the Alaskan Yukon-Kuskokwim Delta. *Pediatr Infect Dis J* 2007;26:S46-S50.
3. Committee on Infectious Diseases. From the American Academy of Pediatrics: Policy Statements--Modified recommendations for use of palivizumab for prevention of respiratory syncytial virus infections *Pediatrics* 2009;124(6):1696-1701. Available at: http://pediatrics.aappublications.org/content/124/6/1694.full.html
4. Alaska Section of Epidemiology. Palivizumab Prophylaxis Recommendations – Alaska, 2012-13 RSV Season. *Bulletin* No. 18, Sept 4, 2012. Available at: http://www.epi.alaska.gov/bulletins/docs/b2012_18.pdf

Figure 1. Alaska State Virology Laboratory: Number and Percent of RSV Positives, by Week Tested, 7/2/2012–7/1/2013



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