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Palivizumab Prophylaxis — Alaska, 2017–18 RSV Season

Background

Respiratory syncytial virus (RSV) is an important cause of hospitalization for infants in the United States.¹ Hospitalization rates are higher for premature infants—particularly those <29 weeks gestation—and infants with chronic lung disease or congenital heart disease.¹ Rural Alaska Native children have historically had 5-fold higher RSV hospitalization rates compared to 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} In 2014, the American Academy of Pediatrics (AAP) revised the 2009 eligibility criteria for palivizumab prophylaxis to restrict recommendations to children at highest risk (e.g., premature infants aged <12 months who are born <29 weeks gestation).¹ Nationally, palivizumab prophylaxis for high-risk children typically starts in November and involves up to five doses (administered monthly).^{1,3} However, the AAP *Redbook* recognizes the unique seasonality of RSV in Alaska and unique risk in Alaska Native infants, and acknowledges Alaska-specific prophylaxis criteria.⁴

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 testing at the Alaska State Virology Laboratory (ASVL) is conducted using a polymerase chain reaction test designed by the Centers for Disease Control and Prevention to detect RSV. This assay is performed on all submitted respiratory specimens, regardless of the age of the patient. The RSV season can vary by year. For example, during the 2013–14 season, RSV activity occurred from January 5 through June 21, about 1 month later than during the five prior seasons. By contrast, during the 2016–17 season, RSV activity occurred from early December through June 10 (Figure 1). Disease activity generally occurs during December–May, but year-to-year variation occurs by region and testing facility (Figure 2).

On August 24, 2017, a workgroup of health care providers and public health officials concluded that palivizumab administration during November 30 through May 15 offers the best coverage for RSV prevention in Alaska.

Alaska Medicaid Palivizumab Reimbursement Criteria

During the 2016–17 season, Alaska Medicaid reimbursed up to five monthly palivizumab doses from November 28 through May 15. For the 2017–18 season, Medicaid will reimburse up to five monthly palivizumab doses from November 27 through May 15. Except for the date change to accommodate a Monday start, the eligibility criteria for palivizumab will remain the same as during 2016–17, and will continue to reflect the 2009 AAP criteria (Table).^{5,6} If the 2017–18 RSV season starts prior to November 27, Medicaid will adjust the coverage dates accordingly (Table).⁶

Figure 2. RSV-Positive Tests by Week from Three Alaska Hospitals — Alaska, 7/2/16–7/3/2017

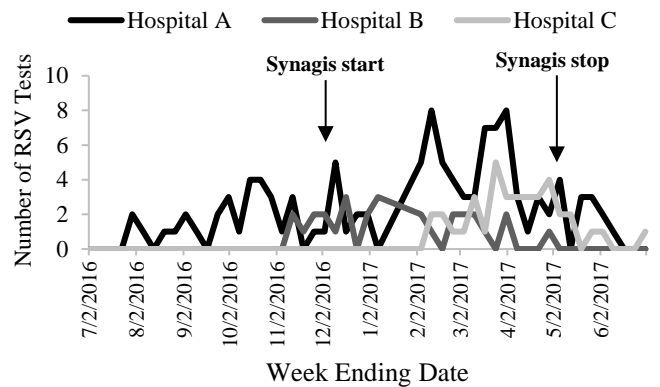


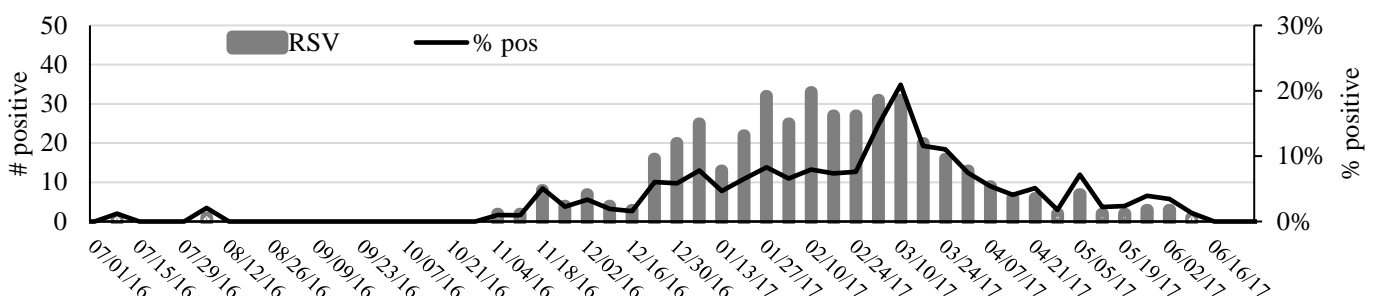
Table. Alaska Medicaid Palivizumab Coverage for the 2017-18 RSV Season⁶

Date of Birth	Gest. Age (Weeks)	Risk Factors	# of Doses
Born Aug 29 or after, 2017 (<3 months)	32 to <35	At least one: • daycare attendance • sibling aged <5 years • home without running water • ≥ 3 people in child's bedroom or ≥ 7 in child's household	≤ 3 , until 90 days of age
Born after May 27, 2017 (<6 months)	29 to <32		≤ 5
Born after Nov 27, 2016 (<12 months)	<29		≤ 5
Born after Nov 27, 2016 (<12 months)	Any	• congenital airway anomaly • neuromuscular disease	≤ 5
Born Nov 27, 2015 or after, with CHD; or born after Nov 27, 2015 with CLD	Any	• congenital heart disease (CHD) • chronic lung disease (CLD)	≤ 5

References

- AAP. Updated guidance for palivizumab prophylaxis among infants and young children at increased risk of hospitalization for RSV infection. *Pediatrics* 2014;134(2):415-20. Available at: <http://pediatrics.aappublications.org/content/134/2/e620.full>
- Bruden DJ, Singleton R, Hawk CS et al. Eighteen years of RSV surveillance. *Pediatr Infect Dis J* 2015;34:945-50.
- Alaska Section of Epidemiology *Bulletin*. "Palivizumab Prophylaxis – Alaska, 2015-16 RSV Season." No. 24, October 4, 2016. Available at: [c](#)
- AAP. Respiratory Syncytial Virus. In: Kimberlin DW, Brady MT, Jackson MA, Long SS, eds. *Red Book: 2015*. 30th Ed. Elk Grove Village, IL.
- Committee on Infectious Diseases, Policy Statement—Recommendations for Use of Palivizumab. *Pediatrics* 2009;124(6):1696-1701.
- Alaska Medicaid Synagis Criteria, 2017-18. Available at: <http://dhss.alaska.gov/dhcs/Pages/pharmacy/medpriorauthoriz.aspx#biologic>

Figure 1. Number and Percent of RSV-Positive Specimens Tested at ASVL by Week of Collection, 7/1/2016 through 6/29/2017



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