State of Alaska Epidemiology **Bulletin**

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Palivizumab Prophylaxis in Alaska, 2018–19 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 for 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, RSV activity peaks late-December to late-January with median RSV season duration from 18–21 weeks , so five or fewer monthly doses of palivizumab provides protection through the season.[1,4] However, the AAP *Redbook* recognizes the unique seasonality of RSV in Alaska and unique risk in Alaska Native infants, and acknowledges Alaska Native-specific prophylaxis criteria.[4]

Alaska RSV Seasonality

Because RSV is not a reportable condition in Alaska, laboratory data are used for surveillance purposes. The RSV season has been defined as the first and last 2 consecutive weeks during which RSV was laboratory-confirmed in ≥2 specimens and >10% of submitted specimens.[2] 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. During the 2017–18 season, at the statewide level, RSV activity occurred from mid-November through early June (Figure 1). Regional variation exists, but during the last season, RSV activity generally occurred between December and May (Figure 2).

On August 30, 2018, a workgroup of health care providers and public health officials concluded that palivizumab administration during November 28 through May 22 offers the best coverage for RSV prevention in Alaska.

Alaska Medicaid Palivizumab Reimbursement Criteria

During the 2017–18 season, Alaska Medicaid reimbursed up to five monthly palivizumab doses from November 27 through May 15. During the 2018–19 season, Medicaid will reimburse up to five monthly palivizumab doses from November 28 through May 22; the extension to May 22 was added to accommodate infants born late in the season. Except for the date changes, the eligibility criteria for palivizumab will remain the same as during 2017–18, and will continue to reflect the 2009 AAP criteria (Table).[5,6] If the 2018–19 RSV season starts prior to November 28, Medicaid will adjust the coverage dates accordingly (Table).[6]

Figure 2. RSV-Positive Tests by Week from Three Alaska Hospitals — Alaska, 7/1/17–6/30/2018

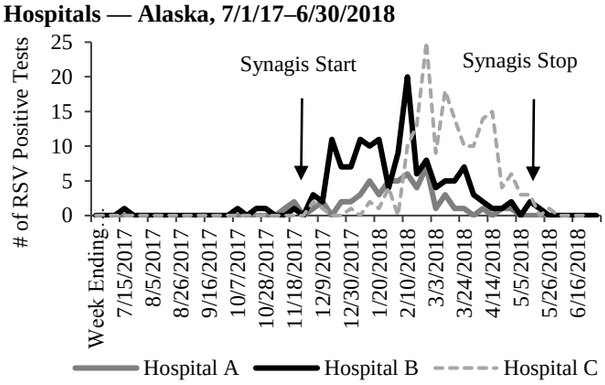


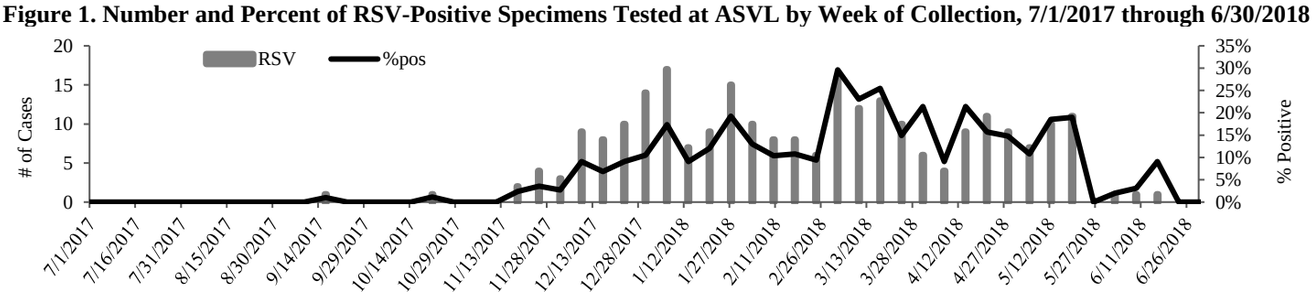
Table. Alaska Medicaid Palivizumab Coverage for the 2018–19 RSV Season[6]

Date of Birth	Gest. Age (Weeks)	Risk Factors	# of Doses
Born Sept 1, 2018 or after (<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 28, 2018 (<6 months)	29 to <32		≤5
Born after Nov 28, 2017 (<12 months)	<29		≤5
Born after Nov 28, 2017 (<12 months)	Any	• congenital airway anomaly • neuromuscular disease	≤5
Born on or after Nov 28, 2016 with CHD; or born after Nov 28, 2016 with CLD	Any	• congenital heart disease (CHD) • chronic lung disease (CLD)	≤5

References

1. 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
2. Karron R, Singleton R, Bulkow L et al. Severe respiratory syncytial virus disease in Alaska Native children. *J Infect Dis* 1999;180:41–9.
3. Alaska Section of Epidemiology *Bulletin*. "Palivizumab Prophylaxis – Alaska, 2017–18 RSV Season." No. 2, September 6, 2017. Available at: http://epibulletins.dhss.alaska.gov/Document/Display?DocumentId=1953
4. AAP. Respiratory Syncytial Virus. In: Kimberlin DW, Brady MT, Jackson MA, Long SS, eds. *Red Book*: 2018. 31st Ed. Elk Grove Village, IL.
5. Committee on Infectious Diseases, Policy Statement--Recommendations for Use of Palivizumab. *Pediatrics* 2009;124(6):1696–1701.
6. Alaska Medicaid Synagis Criteria, 2018–19. Available at: http://dhss.alaska.gov/dhcs/Documents/pharmacy/Criteria/CCFU_Synagis_2018-2019.pdf

Figure 1. Number and Percent of RSV-Positive Specimens Tested at ASVL by Week of Collection, 7/1/2017 through 6/30/2018



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