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Palivizumab Prophylaxis — Alaska, 2016–17 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 certain risk groups, such as 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 eligibility criteria for palivizumab prophylaxis to restrict recommendations to children at highest risk: 1) premature infants aged <12 months who are born before 29 weeks gestation, 2) infants aged ≤12 months with hemodynamically significant heart disease, 3) infants aged <12 months with anatomic or neuromuscular conditions that impair the ability to clear airway secretions, 4) children with ongoing chronic lung disease of prematurity aged <2 years who required supplemental oxygen for at least the first 28 days after birth, and 5) children aged <2 years who are profoundly immunocompromised.¹ Throughout most of the U.S., palivizumab prophylaxis for high-risk children starts in November and involves up to five monthly doses.^{1,3}

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 the GenMark eSensor Respiratory Viral Panel (RVP, a multiplex PCR platform) on all submitted respiratory specimens. The RSV season can vary by year. For example, during the 2013–14 season, ASVL consistently detected RSV in the weeks ending January 5 through June 21, about 1 month later than during the five prior seasons. By contrast, during the 2015–16 season, ASVL consistently detected RSV in weeks from late December through May 9 (Figure 1). Seasonality also varies by region and facility (Figure 2), but disease activity generally occurs between December and May. On August 31, 2016, a workgroup of health care providers and public health officials concluded that palivizumab administration during November 30 through May 15 continues to provide the best coverage for RSV prevention in Alaska.

Alaska Medicaid Palivizumab Reimbursement Criteria

During the 2015–16 season, Alaska Medicaid reimbursed up to five monthly palivizumab doses from November 30 through May 15. For the 2016–17 season, Medicaid will reimburse up to five monthly palivizumab doses from November 28 through May 15. Except for the date change to accommodate a Monday start, the eligibility criteria for palivizumab will remain the same as 2015–16, and will continue to reflect the

2009 AAP criteria (Table).^{4,5} If the 2016–17 RSV season starts prior to November 28, Medicaid will adjust the coverage dates accordingly (Table).⁵

Figure 2. RSV-Positive Tests by Week from Three Alaska Hospitals — Alaska, 7/12/15 – 7/3/2016

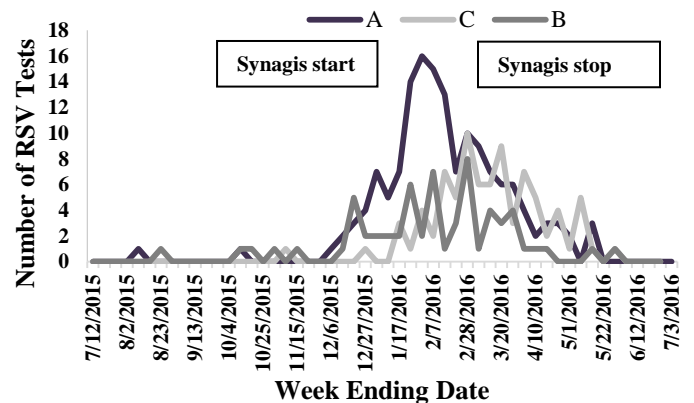


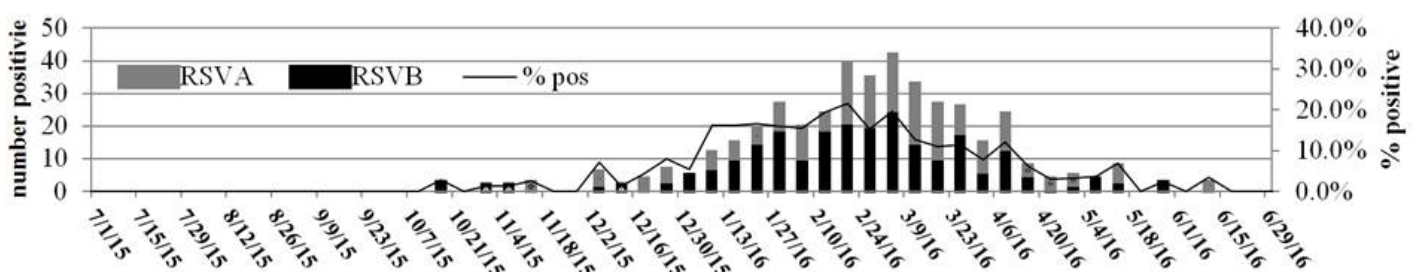
Table. Alaska Medicaid Palivizumab Coverage for the 2016–17 RSV Season⁵

| Date of Birth | Gest. Age (Weeks) | Risk Factors | # of Doses |
|---|-------------------|---|--------------------------|
| Born Sep 1 or after, 2016 (<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, 2016 (<6 months) | 29 to <32 | | ≤5 |
| Born after Nov 28, 2015 (<12 months) | <29 | | ≤5 |
| Born after Nov 28, 2015 (<12 months) | Any | • congenital airway anomaly • neuromuscular disease | ≤5 |
| Born Nov 28, 2014 or after, with CHD; or born after Nov 28, 2014 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. Bruden DJ, Singleton R, Hawk CS et al. Eighteen years of RSV surveillance. *Pediatr Infect Dis J* 2015;34:945-50.
3. Alaska Section of Epidemiology *Bulletin*. "Palivizumab Prophylaxis – Alaska, 2015–16 RSV Season." No. 23, September 21, 2015. Available at: http://www.epi.alaska.gov/bulletins/docs/b2015_23.pdf
4. Committee on Infectious Diseases, Policy Statement—Recommendations for Use of Palivizumab. *Pediatrics* 2009;124(6):1696-1701.
5. Alaska Medicaid Synagis Criteria, 2016–17. Available at: <http://dhss.alaska.gov/dhcs/Pages/pharmacy/medpriorauthoriz.aspx#biologic>

Figure 1. Number and Percent of RSV Positives Tested at ASVL by Collection Date Weeks ending 7/1/2015 through 6/29/2016



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