

Updated Palivizumab Prophylaxis Guidance for the 2021–22 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 and infants with chronic lung disease or congenital heart disease.¹ Rural Alaska Native children have had 5-fold higher RSV hospitalization rates compared to other US children.²

Palivizumab (Synagis®) is a monoclonal antibody that reduces the risk of RSV hospitalization in certain high-risk children.¹ In 2014, the American Academy of Pediatrics (AAP) revised the eligibility criteria for palivizumab prophylaxis to restrict availability to those children at highest risk.^{1,3} Nationally, RSV activity usually starts in late fall and peaks in February. The AAP recommends a maximum of 5 palivizumab doses to cover the season, which typically lasts 4–5 months.^{1,3} The AAP *Redbook* recognizes Alaska’s unique RSV seasonality and increased RSV hospitalizations among Alaska Native infants and supports Alaska-specific prophylaxis criteria.³

2021 Interseasonal RSV Activity

In March 2020, following the institution of social distancing for the prevention of coronavirus disease-19 (COVID-19), RSV infections decreased rapidly and dramatically in the United States.^{4,5} In a marked deviation from the typical season, RSV activity remained very low nationally through the traditional 2020–21 RSV season, but began to increase in the spring of 2021.^{4,5} It is unknown how long this activity will persist. Given the current atypical interseasonal change in RSV epidemiology, in August, the AAP strongly supported consideration of the use of palivizumab for high-risk infants in regions experiencing elevated rates of RSV activity approaching the fall-winter season with reassessment at least monthly.⁵

Alaska Interseasonal RSV Activity and Recommendations

Laboratory data from hospital laboratories are used to track trends. Historically, season onset can be determined in real time by identifying the first 2 consecutive weeks when RSV RT-PCR test positivity is ≥3% or antigen detection positivity is ≥10%.³ On August 25, 2021, the Statewide RSV Workgroup reviewed available RSV laboratory and hospitalization data. RSV activity waned in late March 2020 after COVID-19 pandemic social distancing mandates and stayed low through early 2021. RSV activity resumed in June 2021 and RSV hospitalizations increased in August, signifying a 2021 interseasonal RSV period. The Workgroup recommended interseasonal palivizumab September 3, 2021 through November 30, 2021.⁶ In keeping with the Interim Guidance from the AAP,⁵ the Workgroup met on November 22, 2021 to reassess RSV activity monthly and give updated guidance.

RSV activity remained elevated during September 3 through November 14, 2021. RSV positives from four hospitals are shown in the Figure.

Alaska Medicaid Palivizumab Clinical Criteria

During the 2021–22 RSV season inclusive of December 1, 2021 through May 15, 2022, based on the Statewide RSV Workgroup recommendations, Alaska Medicaid will authorize up to 5 monthly palivizumab doses per child including the interseasonal period starting September 3, 2021. If RSV activity drops to below threshold levels during this period, the RSV Workgroup Committee will advise discontinuation of palivizumab for the season. The clinical eligibility criteria for palivizumab will remain the same as during the 2020–21 season and will continue to reflect the 2009 AAP criteria (Table).^{6,7}

Figure. RSV Positives at Four Alaska Hospitals During the 2019–20, 2020–2021, and 2021–22 Seasons

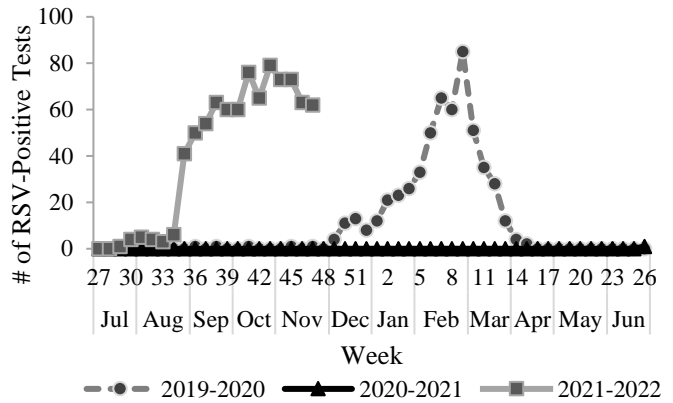


Table. Alaska Medicaid Palivizumab Coverage for the 2021–22 Season⁷

Date of Birth	Gestational Age (Wks)	Risk Factors	# of Doses 9/3/21–5/15/22
Born on or after Sept 1, 2021 (<3 months)	32 to <35	At least one: <ul style="list-style-type: none">• daycare attendance• sibling aged <5 years• home without running water• ≥3 children per bedroom or ≥7 people per household	≤3, until 90 days of age
Born after May 30, 2021 (<6 months)	29 to <32		≤5
Born after Nov 30, 2020 (<12 months)	<29		≤5
Born after Nov 30, 2020 (<12 months)	Any	<ul style="list-style-type: none">• congenital airway anomaly• neuromuscular disease	≤5
Born on or after Nov 30, 2019 with CHD; or born after Nov 30, 2019 with CLD	Any	<ul style="list-style-type: none">• 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.
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3. AAP. Respiratory Syncytial Virus. In: Kimberlin DW, Barnett ED, Lynfield R, Sawyer MH eds. *Red Book*. 32nd Itasca, IL 2021:628–36.
4. Nolen LD, Seeman S, Bruden D, Klejka J, Desnoyers C, Tiesinga J, Singleton R. Impact of social distancing and travel restrictions on non-coronavirus disease 2019 (Non-COVID-19) respiratory hospital admissions in young children in rural Alaska. *Clin Infect Dis* 2021;72(12):2196–98.
5. AAP. Interim Guidance for Use of Palivizumab Prophylaxis to Prevent Hospitalization from Severe Respiratory Syncytial Virus Infection During the Current Atypical Interseasonal RSV Spread (updated August 10, 2021.)
6. SOE *Bulletin*. “Palivizumab Prophylaxis Guidance during Interseasonal RSV Activity, September 2021.” No. 12, September 1, 2021. Available at: http://www.epi.alaska.gov/bulletins/docs/b2021_12.pdf
7. Alaska Medicaid Synagis Criteria, 2021–2022 season. Available at: <https://manuals.medicaidalaska.com/docs/pharmacy.htm>