Palivizumab Prophylaxis in Alaska, 2020–21 RSV Season

Background
Respiratory syncytial virus (RSV) is an important cause of hospitalization for infants in the United States. Hospitalization rates are higher for premature infants, particularly those aged <29 weeks gestation, and for infants with chronic lung disease or congenital heart disease. Rural Alaska Native children have historically had 5-fold higher RSV hospitalization rates compared to other U.S. children.

Palivizumab (Synagis®) is a monoclonal antibody that reduces the risk of RSV hospitalization in certain high-risk children. 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). Nationally, RSV activity peaks from late-December to late-January, and the median season duration lasts 18–21 weeks; as such, five or fewer monthly palivizumab doses provides protection through the season. However, the AAP Redbook recognizes Alaska’s unique RSV seasonality and the increased risk for RSV among Alaska Native infants, and thus offers Alaska-specific prophylaxis criteria.

Alaska RSV Seasonality
Laboratory data are used to track trends because RSV is not a reportable condition in Alaska. The RSV season is defined as the first and last 2 consecutive weeks during which RSV was confirmed in ≥2 specimens and >10% of specimens. Alaska State Virology Laboratory (ASVL) uses polymerase chain reaction methods to detect RSV. On April 5, 2020, ASVL paused RSV testing due to the coronavirus disease-19 (COVID-19) pandemic (Figure 1).

On August 31, 2019, the Statewide RSV Workgroup reviewed data from the preceding 6 years and recommended palivizumab administration from November 25, 2019 through May 22, 2020. RSV activity waned in late March 2020 (Figures 1, 2) after social distancing mandates for the COVID-19 pandemic were implemented. On September 8, 2020, the Workgroup met again to review seasonality data and recommended palivizumab administration from November 23, 2020 through May 15, 2021.

Alaska Medicaid Palivizumab Reimbursement Criteria
During the 2019–20 season, Alaska Medicaid reimbursed up to five monthly palivizumab doses from November 25 through May 15. During the 2020–21 season, Medicaid will reimburse up to five monthly palivizumab doses from November 23 through May 15. Except for the date changes, the eligibility criteria for palivizumab will remain the same as during 2019–20, and will continue to reflect the 2009 AAP criteria (Table 1). If the 2020–21 RSV season starts prior to November 23, Medicaid will adjust the coverage dates accordingly (Table 1).

Table. Alaska Medicaid Palivizumab Coverage for 2020–2021 Season

<table>
<thead>
<tr>
<th>Date of Birth</th>
<th>Gestational Age (Wks)</th>
<th>Risk Factors</th>
<th># of Doses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Born on or after Aug 25, 2020 (≤3 months)</td>
<td>32 to &lt;35</td>
<td>At least one: • daycare attendance • sibling aged &lt;5 years • home without running water • ≥3 people in child’s bedroom or &gt;7 in child’s household</td>
<td>≤5, until 90 days of age</td>
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<tr>
<td>Born after May 23, 2020 (≥6 months)</td>
<td>29 to ≤32</td>
<td>Any</td>
<td>≤5</td>
</tr>
<tr>
<td>Born after Nov 23, 2019 (≥12 months)</td>
<td>≤29</td>
<td>Any</td>
<td>≤5</td>
</tr>
<tr>
<td>Born after Nov 23, 2018 with CHD, or born after Nov 23, 2018 with CLD</td>
<td>Any</td>
<td>• congenital heart disease (CHD) • chronic lung disease (CLD)</td>
<td>≤5</td>
</tr>
</tbody>
</table>

Figure 2. RSV-Positive Tests by Week from Four Alaska Hospitals — Alaska, 7/1/2019 through 6/30/2020

References

Figure 1. Number and Percent of RSV-Positive Specimens Tested at ASVL by Week of Collection, 6/5/2017 through 8/5/2020