Palivizumab Prophylaxis in Alaska, 2019–20 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 Native-specific prophylaxis criteria.

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. RSV testing at the Alaska State Virology Laboratory (ASVL) is conducted using a polymerase chain reaction test to detect RSV (Figure 1).

On August 30, 2018, the Statewide RSV Workgroup comprised of select health care providers and public health officials reviewed data from the preceding 6 years and decided to recommend palivizumab administration from November 28, 2018 through May 15, 2019. Because RSV activity started earlier than expected in Fairbanks and Anchorage (Figure 2), the Workgroup released an Alaska Public Health Advisory on November 7, informing clinicians that they may start palivizumab administration early. RSV activity waned in late November 2018, and the Workgroup met again to review seasonality data over the previous 6 years and decided to recommend palivizumab administration from November 25, 2019 through May 15, 2020.

Alaska Medicaid Palivizumab Reimbursement Criteria
During the 2018–19 season, Alaska Medicaid reimbursed up to five monthly palivizumab doses from November 6 through May 22, 2019. During the 2018–20 season, Medicaid will reimburse up to five monthly palivizumab doses from November 25 through May 15. Except for the date changes, the eligibility criteria for palivizumab will remain the same as during 2018–19, and will continue to reflect the 2009 AAP criteria (Table). If the 2019–20 RSV season starts prior to November 25, Medicaid will adjust the coverage dates accordingly (Table).

Table. Alaska Medicaid Palivizumab Coverage for the 2019–20 RSV 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 Aug 27, 2019 or after (3 months)</td>
<td>32 to &lt;35</td>
<td>At least one: • daycare attendance • sibling aged &lt;5 years • home without running water • ≥2 people in child’s bedroom or ≥7 in child’s household</td>
<td>≤5, until 90 days of age</td>
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<tr>
<td>Born after May 25, 2019 (&lt;6 months)</td>
<td>29 to &lt;32</td>
<td></td>
<td>≤5</td>
</tr>
<tr>
<td>Born after Nov 25, 2018 (&lt;12 months)</td>
<td>&lt;29</td>
<td></td>
<td>≤5</td>
</tr>
<tr>
<td>Born after Nov 25, 2018 (&lt;12 months)</td>
<td>Any</td>
<td>• congenital airway anomaly • neuromuscular disease</td>
<td>≤5</td>
</tr>
<tr>
<td>Born on or after Nov 25, 2018 with CHD; or born after Nov 25, 2017 with CLD</td>
<td>Any</td>
<td>• congenital heart disease (CHD) • chronic lung disease (CLD)</td>
<td>≤5</td>
</tr>
</tbody>
</table>

References
1. AAP. Updated guidance for palivizumab prophylaxis among infants and young children at increased risk of hospitalization for RSV infection. Pediatr Infect Dis 2014;34(2):e415–20. Available at: http://pediatrics.aappublications.org/content/133/2/e620.full

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