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.2 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 require supplemental oxygen for at least the first 28 days after birth, and 5) children aged <2 years who are profoundly immuno-compromised.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. The RSV season can vary accordingly (Table).5

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).3

Table. Alaska Medicaid Palivizumab Coverage for the 2016-17 RSV Season6

<table>
<thead>
<tr>
<th>Date of Birth</th>
<th>Gest. Age (Weeks)</th>
<th>Risk Factors</th>
<th># of Doses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Born Sep 1 or after, 2016 (≤3 months)</td>
<td>≥32 to &lt;35</td>
<td>At least one: • daycare attendance • sibling aged ≤5 years home without running water • ≥2 people in child’s Bedroom or ≥2 in child’s household</td>
<td>≤3, until 90 days of age</td>
</tr>
<tr>
<td>Born after May 28, 2016 (≤6 months)</td>
<td>≥29 to &lt;32</td>
<td>≤5</td>
<td></td>
</tr>
<tr>
<td>Born after Nov 28, 2015 (≤12 months)</td>
<td>≤29</td>
<td>≤5</td>
<td></td>
</tr>
<tr>
<td>Born after Nov 28, 2015 (≤12 months)</td>
<td>Any</td>
<td>≤5</td>
<td></td>
</tr>
<tr>
<td>Born Nov 28, 2014 or after, with CHD; or born after Nov 28, 2014 with CLD</td>
<td>Any</td>
<td>≤5</td>
<td></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. Pediatrics 2014;134(2):415-20. Available at: http://pediatrics.aappublications.org/content/134/2/e620.full

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

(Contributed by Rosalyn Singleton, MD, MPH, Alaska Native Tribal Health Consortium; Erin Narus, PharmD, RPh and Alex Malter, MD, Division of Health Care Services; and Jayme Parker, MSPh, MB, Alaska State Virology Laboratory.)

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

(Contributed by Rosalyn Singleton, MD, MPH, Alaska Native Tribal Health Consortium; Erin Narus, PharmD, RPh and Alex Malter, MD, Division of Health Care Services; and Jayme Parker, MSPh, MB, Alaska State Virology Laboratory.)