Both Pneumococcal-C-13 (Prevnar™13) and Pneumococcal-P-23 (Pneumovax®23) vaccines may be recommended for some individuals. To determine what your patient needs, see the following steps:

Step 1) Determine if individual has received previous doses of pneumococcal vaccines.
Step 2) Determine if individual is eligible for Prevnar™13 based on high risk criteria (See Table 1 for eligibility). If YES, give Prevnar™13 if no previous pneumococcal vaccines given.
Step 3) Determine if individual is eligible for Pneumovax®23. If eligible for Pneumovax®23, it should be given 8 weeks after Prevnar™13 (if Pneumovax®23 was given first, give Prevnar™13 one year later).
Step 4) If individual is eligible for Pneumovax®23, determine if they are eligible for a booster dose 5 years after the first dose (See Table 1 for eligibility).
Step 5) Is Individual ≥ 65 years of age? Determine if it has been 5 years since previous dose of Pneumovax®23.

* Regardless of any previous doses of pneumococcal vaccines, one dose of Pneumovax®23 is recommended for all individuals ≥ 65 years of age.

---

### Table 1: High Risk Pneumococcal Vaccine Eligibility Criteria

<table>
<thead>
<tr>
<th>High Risk Condition</th>
<th>Prevnar™13</th>
<th>Pneumovax®23</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 – 6 months</td>
<td>2 – 17 years</td>
<td>≥ 50 years</td>
</tr>
</tbody>
</table>

#### Neurological Disorders:
- Chronic cerebrospinal fluid (CSF) leak: Y
- Chronic neurologic conditions that may impair clearance of oral secretions: Y

#### Asplenia:
- Asplenia (functional or anatomic): Y Y Y Y
- Sickle cell disease or other hemoglobinopathies: Y Y Y Y

#### Chronic Diseases:
- Asthma (children 2 to 17 years of age): N
- Asthma (adults ≥ 18 years of age): N
- Cochlear implants: Y
- Chronic cardiac or pulmonary disease: Y
- Diabetes mellitus: Y
- Chronic kidney disease: Y
- Chronic liver disease: Y

#### Immunocompromised Persons:
- Congenital immunodeficiency: N Y Y Y
- Hematopoietic stem cell transplant (recipient): N† Y† Y Y
- HIV infection: Y N Y Y Y
- Immunosuppressive therapy: Y N Y Y Y
- Malignant neoplasms including leukemia and lymphoma: Y N Y Y Y
- Solid organ or islet transplant (candidate or recipient): Y N Y Y Y

#### Other:
- Alcoholism, smoker, homeless, and/or illicit drug user: N

Y = Recommended AND Publicly Funded
N = Recommended and NOT Publicly Funded
† See Publicly Funded Schedule for Ontario for hematopoietic stem cell transplant (HSCT) dosage information

---

### Table 2: Pneumococcal Vaccines

<table>
<thead>
<tr>
<th>Antigen Y</th>
<th>Pneu-C-13</th>
<th>\begin{tabular}{l} Preu-P-23 \ Conjugate \ Polysaccharide \end{tabular}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaccine Type</td>
<td>Bacterial capsule conjugated (chemically joined or linked) to a carrier protein (a protein that is easily recognized by the immune system)</td>
<td>Bacterial capsule</td>
</tr>
<tr>
<td>What is it?</td>
<td>Highly immunogenic in young children</td>
<td>Less immunogenic, particularly in children &lt; 2 years of age</td>
</tr>
<tr>
<td>Immunogenicity</td>
<td>46% efficacy against first episode of vaccine-type (VT) community-acquired pneumonia (CAP) 45% efficacy against first episode of non-bacteremic CAP 75% efficacy against first episode of VT Invasive Pneumococcal Disease (IPD) in immunocompetent individuals 65 years and older</td>
<td>50 - 80 % efficacy against Invasive Pneumococcal Disease (IPD) in the elderly and high risk groups</td>
</tr>
</tbody>
</table>

#### Efficacy

<table>
<thead>
<tr>
<th>Routine Use: Children &lt; 5 years of age</th>
<th>Routine Use: Adults ≥ 65 years of age</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High Risk: Adults &gt; 50</strong></td>
<td><strong>High Risk: Individuals ≥ 2 years of age</strong></td>
</tr>
<tr>
<td>4th dose for children 2 – 6 months of age</td>
<td>Recommended but not publicly funded: 1) Persons with alcoholism 2) Persons who smoke 3) Persons who are homeless 4) Individuals who use illicit drugs 5) Individuals ≥ 2 years of age with asthma</td>
</tr>
<tr>
<td>Recommended but not publicly funded: Healthy Individuals ≥ 65 Individuals 2 – 17 years of age AND with asthma Individuals 18 – 49 years with immunocompromising conditions</td>
<td>See booster eligibility above (Table 1)</td>
</tr>
</tbody>
</table>

---

Resources:
- National Advisory Committee on Immunization - Update on Pneu-C-13 vaccine in addition to Pneu-P-23 in immunocompetent adults 65 years and older - June 2016
- Ministry of Health and Long Term Care Publicly Funded Immunization Schedules for Ontario - October 2015

---

**Region of Peel**

**CDS-OM/6-11709**