**Pneumococcal Vaccine, 23-valent Polysaccharide (Pneumo-P)**

Revision Date: December 9, 2022

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**Rationale for Update:**
- Updated recommendation for adults who privately purchase 20-valent pneumococcal conjugate vaccine.

Please consult the Product Monograph¹ for further information about the product.

<table>
<thead>
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<th>PNEUMOVAX® 23</th>
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<tr>
<td><strong>Manufacturer</strong></td>
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<td><strong>Licensed use</strong></td>
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<td><strong>Off-license use</strong></td>
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**Indications for use of provincially funded vaccine**
- All individuals 65 years of age and older.³
- **Note:** Individuals are eligible for one dose of Pneumo-P after they turn 65 years of age – as long as 5 years have passed since a previous Pneumo-P.³
- All residents of long-term facilities.³
- All individuals 2 years of age and older with conditions/circumstances that place them at higher-risk for invasive pneumococcal disease (IPD):
  - Alcoholism³.
  - Asplenia/hyposplenism (functional or anatomic)³.
  - Chronic cardiac disease³.
  - Chronic cerebral spinal fluid (CSF) leak³.
  - Chronic liver disease, including hepatic cirrhosis due to any cause, hepatitis B carriers and hepatitis C infection³.
  - Chronic neurologic conditions that may impair clearance of oral secretions.³
  - Chronic pulmonary disease (including asthma requiring medical treatment within the last 12 months regardless of whether they are on high dose steroids).³,⁴
  - Chronic renal disease, including nephrotic syndrome³.
  - Cochlear implants (candidates and recipients)³.
  - Congenital immune deficiencies involving any part of the immune system, including B-lymphocyte (humoral) immunity; T-lymphocyte (cell) mediated immunity; complement system (properdin or factor D deficiencies); or phagocytic functions.³
  - Diabetes mellitus³.
  - Hematopoietic stem cell transplant (HSCT) recipients³. See:
    - Immunization for Child Hematopoietic Stem Cell Transplant Recipients and
    - Immunization for Adult Hematopoietic Stem Cell Transplant Recipients.
  - HIV infection³.
- Immunosuppressive therapy including:
  - use of long term corticosteroids,
  - chemotherapy,
  - radiation therapy,
  - post-organ transplant therapy,
  - biologic and non-biologic immunosuppressive therapies for:
    - inflammatory arthropathies, e.g., systemic lupus erythematosus (SLE), rheumatoid or juvenile arthritis,
    - inflammatory dermatological conditions, e.g., psoriasis, severe atopic dermatitis and eczema, and
    - inflammatory bowel disease, e.g., Crohn’s disease, ulcerative colitis.

  Note: Individuals prescribed eculizumab (Soliris®) are at increased risk of serious infections, especially with encapsulated bacteria, such as Streptococcus pneumoniae, therefore, they should receive pneumococcal polysaccharide vaccine at least eight weeks after receiving Prevnar® 13. See scheduling for further spacing information.

  For additional information see: Immunization of Specific Populations.

- Malignant hematologic disorders (affecting the bone marrow or lymphatic system) including leukemia, lymphoma, Hodgkin’s disease and non-Hodgkin’s lymphomas, and multiple myeloma.1,3,8

- Malignant solid organ tumors either currently or within past 5 years.

- Living in homeless/chronically disadvantaged situations:
  - Definition: At the time of diagnosis, the individual did not have an address or home (apartment, townhouse, etc.). This would include people staying in shelters, cars, etc.
  - Document “No Fixed Address” under home address. If the individual is using a friend/relative’s mailing address, it can be included in brackets under home address.

- Sickle cell disease and other hemoglobinopathies.3

- Solid organ or islet transplant (SOT) candidates and recipients3 See:
  - Immunization for Children Expecting Solid Organ Transplant at 18 Months of Age or Older (Catch-up Schedule) and
  - Immunization for Adult Solid Organ Transplant Candidates and Recipients.

- Illicit drug use.3

Note:
- Pneumococcal conjugate vaccine may also be recommended for individuals at highest risk of IPD. See Biological Products: Pneumococcal 13-valent Conjugate Vaccine for these risk groups.
- Individuals 18 years of age and older, including those with conditions that place them at higher risk for IPD, who have received 20-valent pneumococcal conjugate vaccine (PCV20), according to the schedule(s) outlined in the product monograph, are not recommended to receive Pneumo-P at this time.12

Post-exposure
Previous IPD does not confer immunity or preclude immunization with pneumococcal vaccine.
**Pneumococcal Vaccine, 23-valent Polysaccharide (Pneumo-P)**

| For disease investigation and reporting requirements refer to Public Health Notifiable Disease Management Guidelines – Invasive Pneumococcal Disease.  
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<td><strong>Dose</strong></td>
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<td><strong>Route</strong></td>
<td>Intramuscular or subcutaneous injection</td>
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<td><strong>Schedule</strong></td>
<td>One dose for most individuals</td>
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<td><strong>Notes:</strong></td>
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| • If possible, vaccine should be administered at least 14 days before splenectomy or initiation of immunosuppressive therapy.  
| • If vaccine cannot be administered before initiation of immunosuppressive therapy, generally a period of at least 3 months should elapse between therapy cessation and the vaccine.  
| • If immunosuppressive therapy will be long term/ongoing and/or for those with malignant solid organ tumors or malignant hematological disorders, currently undergoing immunosuppressive therapy the vaccine should be administered as soon as possible.  
| • When both pneumococcal conjugate vaccine and pneumococcal polysaccharide vaccine are indicated, the pneumococcal conjugate vaccine should be administered first with a minimum interval of at least eight weeks between the two vaccines. However, if pneumococcal polysaccharide vaccine has already been administered, there must be an interval between doses as specified below:  
| • Children 2 – 17 years of age: pneumococcal conjugate vaccine may be administered with a minimal interval of at least eight weeks after the pneumococcal polysaccharide vaccine.  
| • Adults 18 years of age and older: pneumococcal conjugate vaccine may be administered with a minimal interval of at least one year after the pneumococcal polysaccharide vaccine.  
| **Reinforcing dose:** A one-time reinforcing dose should be offered 5 years later to those who have:  
| • Asplenia/hyposplenism (functional or anatomic).  
| • Chronic renal failure or nephrotic syndrome.  
| • Chronic liver disease including hepatic cirrhosis.  
| • Congenital immunodeficiencies involving any part of the immune system.  
| • HIV infection.  
| • HSCT recipients may be an exception to this recommendation – see:  
| • Immunization for Child Hematopoietic Stem Cell Transplant Recipients and  
| • Immunization for Adult Hematopoietic Stem Cell Transplant Recipients.  
| • Immunosuppression related to therapy including:  
| • use of long term corticosteroids,  
| • chemotherapy  
| • radiation therapy  
| • post-organ transplant therapy,  
| • biologic and non-biologic immunosuppressive therapies (e.g. Soliris® medication) for: |
- Inflammatory arthropathies, e.g. systemic lupus erythematosus (SLE), rheumatoid or juvenile arthritis,
- Inflammatory dermatological conditions, e.g., psoriasis, severe atopic dermatitis and eczema, and
- Inflammatory bowel disease, e.g., Crohn’s disease, ulcerative colitis.
- Malignant hematological disorders (affecting the bone marrow or lymphatic system) including leukemia, lymphoma Hodgkin’s disease and non-Hodgkin’s lymphoma and multiple myeloma
- Sickle cell disease
- SOT candidates and recipients - see:
  - Immunization for Children Expecting Solid Organ Transplant at 18 Months of Age or Older (Catch-up Schedule)
  - Immunization for Adult Solid Organ Transplant Candidates and Recipients.

Notes: Individuals with underlying medical conditions would be eligible for a dose after turning 65 years of age – as long as 5 years have passed since a previous Pneumo-P. Pneumococcal conjugate vaccine may also be recommended for individuals at highest risk of IPD. See Pneumococcal 13-valent Conjugate Vaccine: Prevnar® 13 for risk groups.

**Contraindications**
- Known severe hypersensitivity to any component of Pneumovax® 23.
- Anaphylactic or other allergic reaction to a previous dose of vaccine containing pneumococcal antigen

**Precautions**
- Pneumovax® 23 will only protect against serotypes of *S. pneumoniae* that are contained in the vaccine. It will not protect against other micro-organisms that cause invasive infection, otitis media and pneumonia.
- If antibiotics for prophylaxis against pneumococcal infection are required, these should not be discontinued after immunization with Pneumovax® 23.
- Pneumococcal vaccine should be given at least 14 days prior to initiation of immunosuppressive therapy (cancer chemotherapy and other immunosuppressive therapies) when possible.

**Possible reactions**
See Product Monograph

**Pregnancy**
Pregnant women with conditions that are a risk for IPD should receive pneumococcal vaccine as indicated.

**Lactation**
Breastfeeding women with conditions that are a risk for IPD should receive pneumococcal vaccine as indicated.

**Program Notes**
- 1997 April – Pneumovax®23 and Pneumo 23® Pneumococcal polysaccharide vaccine introduced into program for high risk groups except 65 years of age and older. End date for Pneumo 23® 2008-09.
- 1998 Fall – Pneumococcal polysaccharide vaccine for individuals 65 years of age and older.
- 2014 October – Illicit drug use added to indications.
- 2015 February 10 – Expanded indication for immunosuppressive therapy regarding medication Solaris®
<table>
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<tr>
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<tbody>
<tr>
<td>2019 January 1</td>
<td>Vaccine becomes available at pharmacies for healthy individuals</td>
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<tr>
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