

# Pneumococcal Conjugate Vaccines: 20 Valent (Prevnar) 15 Valent (Vaxneuvance)

June 20, 2024









### Land Acknowledgment

- In the spirit of Truth and Reconciliation, FNIHB Alberta Region acknowledges that we call Alberta the traditional and ancestral territory of many peoples, presently subject to Treaties 6, 7, and 8 - namely the Cree, Dene, Blackfoot, Saulteaux and Nakota Sioux who have inhabited and cared for these lands long before today and the homeland of the Metis.
- We also acknowledge the many indigenous communities that have been forged in urban centers across Alberta.
- We take this time to thank them, and to the land for all that it provides us.





## Acknowledgement

The FNIHB Alberta Region CDC Team has created this training by using Alberta Health and Alberta Health Services documents.





A complete webinar for the PNEU-C20 (Prevnar-20) and PNEU-C15 (Vaxneuvance) vaccines was previously provided on June 20, 2024.

Unfortunately, the recorded webinar was not able to be posted, so this condensed version has been posted for nurses to review as needed.



This condensed videoconference will review the Prevnar-20 vaccine, it will not include:

- Vaccine storage and handling
- IM injections
- Informed consent
- Fit to immunize
- Vaccine documentation

Immunizers are responsible for reviewing these sections in previous videoconferences or obtaining the information from an experienced nurse.

#### **Anaphylaxis**

- Healthcare providers MUST review the anaphylactic directive and guideline before giving vaccines.
  - ISC CDC Guidelines for the Management of Anaphylaxis Related to Immunizations
  - ISC Management of Anaphylaxis Post-Immunization
- An EPI kit must be onsite when providing immunizations.
- All clients should be encouraged to wait for 15 minutes after their immunization.
- For clients with any known anaphylactic allergies, extend this recommended wait period to 30 minutes.
- Have clients remain within the clinic area and return immediately for assessment if they feel unwell.



#### Why We're Here Today

 As of June 24, 2024, Alberta began to offer Pneumococcal Conjugate 20 (Prevnar-20™) and Pneumococcal Conjugate 15 (Vaxneuvance™).

Prevnar-20 and Vaxneuvance have replaced PCV-13 and PPV-23 vaccines.

Note: Pneu-C20 (Prevnar-20) is the vaccine that will be used in Health Centres in First Nations communities for both the childhood and adult pneumococcal programs.



#### **FNIHB Mandatory Immunization Certification**

- Routine immunizations shall be administered by a HCP who:
  - Is a regulated member of a health profession's body under the Alberta Health Professions Act;
  - Practices within their scope;
  - Adheres to the Standards of Practice outlined by their regulatory body;
  - Adheres to FNIHB-AB Policies, Procedures, and Guidelines.
- To provide pneumococcal immunizations to **all age groups**, a *FNIHB Immunization Certificate* must be obtained.
- To provide pneumococcal immunizations only to **eligible individuals 18 years** and older, this education session must be reviewed.
- All immunizers providing pneumococcal vaccines must review the most current AHS Prevnar-20 biological page prior to administration of vaccine.

#### Today's Agenda

- Review invasive pneumococcal disease
- Review conjugate and polysaccharide vaccines
- Review information on the AHS biological pages for:
  - PNEU-C20 (Prevnar-20)
  - Vaxneuvance (Limited review because Prevnar-20 will be the vaccine used in First Nations communities)
- Prevnar-20 scheduling scenarios

#### **Invasive Pneumococcal Disease Review**

- The bacterium *Streptococcus pneumoniae* is the cause of invasive pneumococcal disease (IPD) and a common cause of respiratory infections including community acquired pneumonia and acute otitis media.
- Humans carry S. pneumoniae in their nasopharynx.
- *S. pneumoniae* is transmitted by direct contact with respiratory droplets or indirect contact with respiratory secretions of infected or colonized persons. The incubation period for IPD has not been clearly defined and may be as short as 1 to 3 days.
- S. pneumoniae is considered invasive when S. pneumoniae a specimen is collected from a normally sterile site (excluding the middle ear and pleural cavity).
  - Normally sterile site specimens are defined as: blood, cerebrospinal fluid (CSF), pleural fluid, peritoneal fluid, pericardial fluid, bone, or joint fluid.

#### Invasive Pneumococcal Disease Review (con't)

- Invasive pneumococcal disease is reportable in Alberta.
- IPD is most common in the very young, the elderly, and groups at increased risk due to an underlying medical, environmental or living condition.
- There is an increased susceptibility for IPD in people who smoke, persons with alcohol use disorders, persons with substance use disorders and people who are underhoused or experiencing homelessness who have high rates of respiratory infections, including those caused by *S. pneumoniae*.
- The incidence rate of IPD in pediatric populations under 19 years of age is significantly higher in northern Canada compared to the rest of Canada.
- Severe infections from IPD can lead to significant mortality and morbidity with lifelong complications.
- In 2023, First Nations communities reported 74 cases of IPD.

#### Invasive Pneumococcal Disease Review (con't)

- Previous invasive pneumococcal disease does not provide/confer immunity.
- Regardless of previous IPD, pneumococcal conjugate vaccine is recommended.
  - o If a series is interrupted due to IPD, the series should be continued once the individual has recovered.
- For disease investigation and reporting requirements, refer to <u>Alberta public health disease management guidelines :</u> <u>pneumococcal disease, invasive (IPD)</u>.

#### **Conjugate and Polysaccharide Vaccines**

- Conjugate vaccine: A type of vaccine that joins a protein to an antigen to improve the protection the vaccine provides.
  - PCV-13
  - PCV-15
  - PCV-20
- Polysaccharide vaccine: A type of vaccine that is composed of long chains of sugar molecules that resemble the surface of certain types of bacteria in order to help the immune system mount a response
  - PPV-23/PNEUMO-P

#### **Pneumococcal Vaccines**



Table 2: S. pneumoniae serotype antigens included in pneumococcal vaccines

	Serotypes in pneumococcal vaccines																							
Vaccine	1	4	6B	9V	14	18C	19F	23F	5	<b>7F</b>	3	6A	19A	22F	33F	8	10A	11A	12F	15B	2	9N	17F	20
PNEU-C-10	•	•	•	<b>✓</b>	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	•	<b>~</b>														
PNEU-C-13	•	•	•	<b>✓</b>	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	•	<b>~</b>	•	•	<b>✓</b>	$\leftarrow$										
PNEU-C-15	•	•	•	<b>✓</b>	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	•	<b>~</b>	•	•	<b>✓</b>	<b>~</b>	<b>~</b>	<b>(=</b>								
PNEU-C-20	•	<b>~</b>	<b>✓</b>	<b>~</b>	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	•	<b>~</b>	•	~	<b>✓</b>	<b>~</b>	<b>~</b>	<b>✓</b>	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>~</b>	<b>(=</b>			
PNEU-P-23	•	<b>~</b>	•	•	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	•	<b>~</b>	•		<b>✓</b>	<b>✓</b>	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	•	<b>✓</b>	<b>~</b>

- Vaccination is the most effective way to prevent IPD.
- Each of the vaccines protect against different serotypes of S. pneumoniae.
- Prevnar 20<sup>™</sup> and Vaxneuvance® will not protect against serotypes not included in the vaccine.
- Even though, the Pneu-P-23 vaccine protects against more serotypes, protection from a polysaccharide vaccines wanes faster compared to conjugate vaccines.

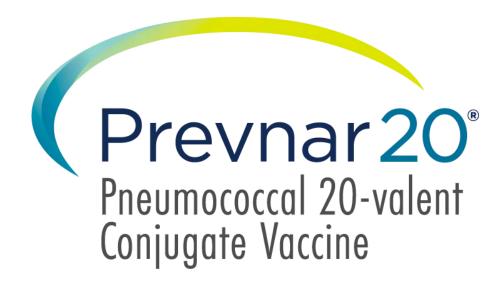
#### **AHS Biological Pages**

- The biological pages are posted on the AHS website for the two vaccines that protect against pneumococcal.
- These are the documents that are used when providing the immunizations.
- Always use the biological pages posted on the AHS website for complete and current information.

 Note: First Nations, Métis, and Inuit children (regardless of where they live) may be at a higher risk for Invasive Pneumococcal Disease and should be offered Pneu-C20 vaccine instead of Pneu-C15/Vaxneuvance.

#### **Immunization Doses**

- An individual's immunization chart must be reviewed prior to administering pneumococcal containing vaccines:
  - Review the chart to see if the individual has received previous doses of pneumococcal containing vaccines
  - Identify when the last dose of pneumococcal containing vaccine was given
  - Review the biological page to determine if the individual is eligible
  - The number of doses on the biological page indicates the total number of doses required. For example:
    - If there is one dose on the immunization chart, and the biological page indicates they need two, then one more appropriately spaced pneumococcal vaccine is to be given.



#### Prevnar 20™ Pneumococcal Conjugate (20 valent)

 Introduced into the routine immunization program June 24, 2024, for high-risk individuals 2 months of age and older who belong to one or more of the groups at increased risk for Invasive Pneumococcal Disease (IPD) and for all individuals 65 years and older who have not previously received a dose of Pneumo-P or PneuC20.



Manufacturer: Pfizer Canada Inc.

• Biological Classification: Inactivated Conjugate

Dose: 0.5 mL

Route: Intramuscular (IM) injection

Blood/Blood Products: Does not contain any blood products

 Bovine/porcine Products: Does not contain any bovine or porcine products.

• Latex: No latex in the product.

 Interchangeability: Eligible children who have started their immunization series with a different pneumococcal conjugate vaccine may complete their series using Prevnar-20. There is no need to restart the immunization series.

• Appearance: A homogenous white suspension



#### Storage:

- Store between 2° C and 8° C
- Store syringes horizontally in the fridge to minimize re-dispersion time.
- Administer as soon as possible once removed from cold chain.
- Do not freeze.
- Vaccine Code: PNEU-C20
- Antigen Code: PNEUMO-C
- Licensed for: Individuals 6 weeks of age and older
- Packaging:
  - o available in 10 dose/pkg and 1 dose/pkg (usually for acute care).
  - o In AVI, the Prevnar 20 vaccine type will be Pneumococcal 20-valent Conjugate.



#### **Vaccine composition:**

Each 0.5 mL dose contains:

- Active substances individually linked to the non-toxic diphtheria (CRM197) carrier protein:
  - 2.2 mcg of each of S. pneumoniae serotypes 1, 3, 4, 5, 6A, 7F, 8,
     9V, 10A, 11A, 12F, 14, 15B, 18C, 19A, 19F, 22F, 23F and 33F
  - 4.4 mcg of S. pneumoniae serotype 6B
- Nonmedicinal ingredients: aluminum phosphate, polysorbate 80, sodium chloride, succinic acid, water for injection



#### Administration with Other Products:

- Can be administered concomitantly with other inactivated and live vaccines using a separate needle and syringe for each vaccine.
- The same limb may be used, if necessary, but different sites on the limb must be used.





#### **Indications for Provincially Funded Prevnar-20 Vaccine:**

- All individuals 65 years of age and older who have <u>not</u> previously received a dose of Pneumovax® 23 or Pneumococcal 20-valent conjugate vaccine (Prevnar 20™).
- Individuals 2 months of age to 17 years of age who belong to one or more of the groups at increased risk for Invasive Pneumococcal Disease which include:
  - Residents of continuing care homes and senior supportive living accommodations.
  - First Nations, Métis, and Inuit individuals, regardless of where they live.
- Individuals 18 years of age and older who belong to one or more of the groups at increased risk for IPD and did not receive the previously recommended doses of pneumococcal conjugate and polysaccharide vaccines (following slides).

Coniugate Vaccine



#### **Indications for Provincially Funded Prevnar-20 Vaccine:**

#### **Medical Conditions**

- Asplenia/hyposplenism (functional or anatomic).
- Chronic cardiac disease (including congenital heart disease and cyanotic heart disease).
- Chronic cerebral spinal fluid (CSF) leak.
- Chronic liver disease (including biliary atresia, fatty liver, hepatitis B and C and hepatic cirrhosis due to any cause).
- Chronic neurologic condition that may impair clearance of oral secretions.
- Chronic pulmonary disease (excluding asthma unless treated with highdose oral corticosteroid therapy).



#### **Indications for Provincially Funded Prevnar-20 Vaccine:**

Medical Conditions (con't)

- **Chronic renal disease**, including nephrotic syndrome, on dialysis or with renal transplant.
- Cochlear implants (candidates and recipients).
- Congenital immunodeficiencies 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.
- Diabetes mellitus.
- Hematopoietic stem cell transplant (HSCT) and/or CAR T-cell therapy recipients. See <u>Immunization for Child HSCT Transplant Recipients</u> or <u>Immunization for Adult HSCT Transplant Recipients</u>.
- HIV infection.



#### **Indications for Provincially Funded Prevnar-20 Vaccine:**

Medical Conditions (con't)

- **Immunosuppressive therapy** including:
  - long term use of long-term corticosteroids,
  - chemotherapy,
  - radiation therapy,
  - post-organ transplant therapy,
  - o 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: See biological page for timing of immunization for individuals prescribed eculizumab (Soliris®) or other complement C5 inhibitors.





#### **Indications for Provincially Funded Prevnar-20 Vaccine:**

Medical Conditions (con't)

- Malignant hematologic disorders (affecting the bone marrow or lymphatic system) including leukemia, lymphoma, Hodgkin's disease, and multiple myeloma.
- Malignant solid organ tumors either currently or within last 5 years.
- Sickle-cell disease and other hemoglobinopathies.
- Solid organ or islet transplant (SOT) candidates and recipients (see documents specific to immunization for SOT individuals).



#### **Indications for Provincially Funded Prevnar-20 Vaccine:**

Environmental & lifestyle

- Individuals who:
  - o Have an alcohol use disorder
  - Use illicit drugs
  - Smoke or vape
  - Have poor indoor air quality in the home (including, but not limited to, secondhand smoke, wood fired stoves)
  - Are experiencing houselessness
    - The individual does not have an address (house, apartment, townhouse, etc.).
    - This would include people staying in shelters, cars, etc.



#### Individuals currently **NOT** eligible to receive Prevnar-20:

- Individuals 25 months of age and older who have already received at least one dose of Prevnar 20<sup>™</sup> are NOT eligible for another dose.
  - Reimmunization using a same-valency conjugate is not currently recommended as it is not known whether additional doses will provide additional benefit.
- With the exception of adult HSCT and SOT recipients, individuals 18
  years of age and older who previously received another pneumococcal
  conjugate vaccine series and the recommended dose(s) of Pneumo-P are
  considered complete and are <u>NOT</u> eligible for Pneu-C20.





## Immunization Schedule and Doses for Children 6 weeks of age to 17 years of age at high-risk for IPD

Starting immunization at:									
2 months up to and including 6	❖ Dose 1: two months of age								
months of age (4 doses)	Dose 2: four months of age								
	Dose 3: six months of age								
	Dose 4 (reinforcing): 12 months of age and a minimum of 8 weeks after the previous dose.								
7 months up to and including	❖ Dose 1: day 0								
11 months of age (3 doses)	Dose 2: eight weeks after dose 1.								
	Dose 3 (reinforcing): 12 months of age and a minimum of 8 weeks after the previous dose.								
12 months up to and including	❖ Dose 1: day 0								
24 months of age (2 doses)	<ul> <li>Dose 2: eight weeks after dose 1</li> </ul>								
25 months and older	❖ 1 dose								



**Note:** See AHS Prevnar-20 Biological Page for *Interrupted* Schedule for High-Risk Children (4 dose series) for number of doses and spacing for children who are off schedule.

# Children 6 weeks of age to 17 years of age at high-risk for IPD who previously completed the pneumococcal series

- Children at an increased risk of developing IPD who previously completed a series with another pneumococcal conjugate vaccine and/or received the recommended doses of Pneumovax® 23 vaccine are eligible for one dose of Prevnar 20™.
- It is recommended that this dose be given at least 8 weeks after the last pneumococcal conjugate vaccine dose or at least one year since their last dose of Pneumovax® 23 vaccine.



#### Children 6 weeks of age to 17 years of age at high-risk for IPD

- Dose 1 may be administered to infants as early as six weeks of age.
- The recommended interval between doses 1, 2 and/or 3 for children younger than one year of age is eight weeks. However, the interval may be shortened to four weeks (age requirement for the dose must be met).
- The reinforcing dose is to be given in the second year of life (12 months of age or older), and at least 8 weeks from previous dose.
- The minimum interval between doses for children receiving immunization after 12 months of age is eight weeks.
- High-risk children who started a series with another pneumococcal conjugate vaccine, should complete their series with Pneu-C20. Previous doses will be counted, and the series will not be restarted. Children who have completed a vaccine series appropriate for age that includes at least one dose of Pneu-C20 are considered complete.

Conjugate Vaccine

Adults 18 years of age and older at risk for IPD with the following medical conditions are eligible for <u>one dose</u> of Prevnar-20 if they have not received at least 2 doses of Pneumo-P and one dose of Pneu-C13, or a previous dose of PneuC20:

- Asplenia/hyposplenism (functional or anatomic).
- Chronic renal disease, including nephrotic syndrome, on dialysis, or with renal transplant.
- Congenital immunodeficiencies 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.
- · HIV infection.

(con't next page)



Adults 18 years of age and older at risk for IPD with the following medical conditions are eligible for <u>one dose</u> of Pneu-C20 if they have not received at least 2 doses of Pneumo-P and one dose of Pneu-C13, or a previous dose of PneuC20 (con't):

- Immunosuppressive therapy including:
  - o long-term use of corticosteroids,
  - chemotherapy (undergoing or anticipating),
  - radiation therapy (undergoing or anticipating),
  - o post-organ transplant therapy,
  - o biologic and non-biologic immunosuppressive therapies, examples include:
    - inflammatory arthropathies, e.g., systemic lupus erythematosus (SLE), rheumatoid or juvenile arthritis,
    - inflammatory dermatological conditions, e.g., psoriasis, severe atopic dermatitis, and eczema, and

Conjugate Vaccine

 inflammatory bowel disease, e.g., Crohn's disease, ulcerative colitis (con't next page)



Adults 18 years of age and older at risk for IPD with the following medical conditions are eligible for <u>one dose</u> of Pneu-C20 if they have not received at least 2 doses of Pneumo-P and one dose of Pneu-C13, or a previous dose of PneuC20 (con't):

- Malignant hematologic disorders (affecting the bone marrow or lymphatic system) including leukemia, lymphoma, Hodgkin's disease and multiple myeloma.
- Malignant solid organ tumors either currently or within past 5 years.
- Sickle-cell disease and other hemoglobinopathies.



The following individuals are eligible for <u>one dose</u> of Pneu-C20 if they have not received at least one dose of Pneumo-P or a previous dose of Pneu-C20.

- Populations with sustained high rates of IPD:
  - Residents of continuing care homes and supportive living accommodations.
  - o First Nations, Métis, and Inuit peoples, regardless of where they live.

(con't next page)



The following individuals are eligible for <u>one dose</u> of Pneu-C20 if they have not received at least one dose of Pneumo-P or a previous dose of Pneu-C20.

Individuals with the following medical conditions:

- Chronic cardiac disease (including congenital heart disease and cyanotic heart disease).
- Chronic cerebral spinal fluid (CSF) leak.
- Chronic liver disease (including biliary atresia, fatty liver, hepatitis B and C and hepatic cirrhosis due to any cause).
- Chronic neurologic condition that may impair clearance of oral secretions.
- Chronic pulmonary disease (including asthma requiring medical treatment within the last 12 months regardless of whether they are on high dose steroids).
- Cochlear implants (candidates and recipients).
- Diabetes mellitus.

(con't next page)





The following individuals are eligible for **one dose** of Pneu-C20 if they have not received at least one dose of Pneumo-P or a previous dose of Pneu-C20.

#### Individuals who:

- Have an alcohol use disorder
- Use illicit drugs
- Smoke or vape
- Have poor indoor air quality in the home (including, but not limited to, secondhand smoke, wood fired stoves)
- Are experiencing houselessness



Adult Hematopoietic stem cell transplant (**HSCT**) and/or **CAR T-cell therapy** and/or Solid Organ Transplant (**SOT**)

- See Immunization for Adult HSCT Transplant Recipients.
- See Immunization for Adult SOT Candidates and Recipients.



#### Adults 65 years of age and older

Individuals **65 years of age and older** who have not received a Pneumo-P vaccine dose on or after 65 years of age or a dose of Pneu-C20

• 1 dose





- It is recommended that individuals wait at least 8 weeks since their last pneumococcal conjugate vaccine dose or at least one year since their last Pneumo-P vaccine before receiving Pneu-C20.
- If possible, vaccine should be administered at least 14 days before splenectomy or initiation of immunosuppressive therapy.
- If the vaccine cannot be administered before initiation of immunosuppressive therapy, generally a period of at least 3 months should elapse between therapy cessation and administration of the vaccine.
- If immunosuppression is 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.



#### **Contraindications**

- Known severe hypersensitivity to any component of Pneu-C20 including diphtheria toxoid.
- Anaphylaxis to a previous dose of vaccine containing pneumococcal antigen.

#### **Precautions**

 Pneu-C20 will not protect against S. pneumoniae serotypes not included in the vaccine



#### **Possible Reactions**

#### Common:

- Pain, redness, swelling at injection site
- Irritability
- Drowsiness/Increased sleep
- Decreased appetite
- Fever
- Muscle pain
- Fatigue
- Headache
- Joint pain
- Chills
- Vomiting
- Diarrhea
- Rash

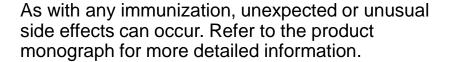
#### **Uncommon:**

- Hypersensitivity reaction, including face edema, dyspnea, bronchospasm
- Angioedema
- Vaccination-site pruritus, lymphadenopathy, urticaria
- Urticaria or urticaria like rash
- Seizures

#### Rare:

- Anaphylaxis
- Allergic reaction
- Vaccination site hypersensitivity







#### **Pregnancy**

- Safety during pregnancy has not been established in humans.
- If indicated, individuals who are pregnant can be immunized with pneumococcal vaccines, as there is no evidence to suggest a risk to the infant, fetus or to the pregnancy from immunization.

#### Lactation

 Safety during lactation has not been established in humans, and it is not known whether vaccine antigens or antibodies are excreted in human milk. However, if indicated, individuals who are breastfeeding can be immunized with pneumococcal vaccines, as there is no evidence to suggest a risk to the infant, fetus or to the pregnancy from immunization.



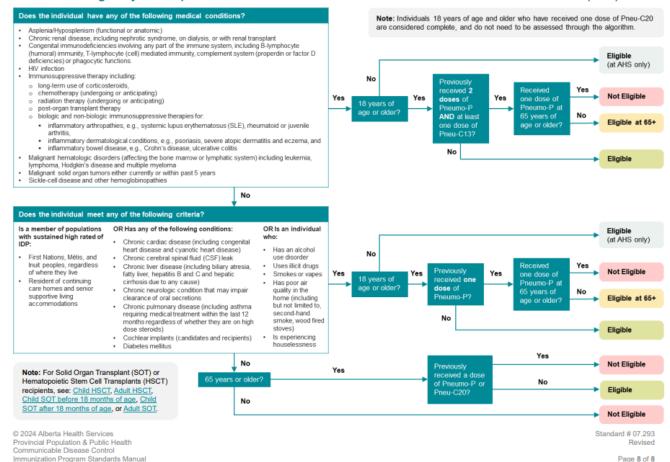
- It is recommended that individuals wait at least 8 weeks since their last pneumococcal conjugate vaccine dose or at least one year since their last Pneumo-P vaccine before receiving Pneu-C20.
- If possible, vaccine should be administered at least 14 days before splenectomy or initiation of immunosuppressive therapy.
- If the vaccine cannot be administered before initiation of immunosuppressive therapy, generally a period of at least 3 months should elapse between therapy cessation and administration of the vaccine.
- If immunosuppression is 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.



# Algorithm for Prevnar-20 Eligibility on Last Page of AHS Prevnar-20 Biological Page – Very Helpful

Appendix A

Pneu-C20 Eligibility for Populations at Increased Risk of Invasive Pneumococcal Disease (IPD)





# The first section reviews eligibility for Prevnar-20 for medical conditions

#### Does the individual have any of the following medical conditions?

- Asplenia/Hyposplenism (functional or anatomic)
- · Chronic renal disease, including nephrotic syndrome, on dialysis, or with renal transplant
- Congenital immunodeficiencies 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.
- · HIV infection
- Immunosuppressive therapy including:
  - long-term use of corticosteroids,
  - o chemotherapy (undergoing or anticipating)
  - radiation therapy (undergoing or anticipating)
  - o 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

No

- inflammatory bowel disease, e.g., Crohn's disease, ulcerative colitis
- Malignant hematologic disorders (affecting the bone marrow or lymphatic system) including leukemia, lymphoma, Hodgkin's disease and multiple myeloma
- Malignant solid organ tumors either currently or within past 5 years
- Sickle-cell disease and other hemoglobinopathies

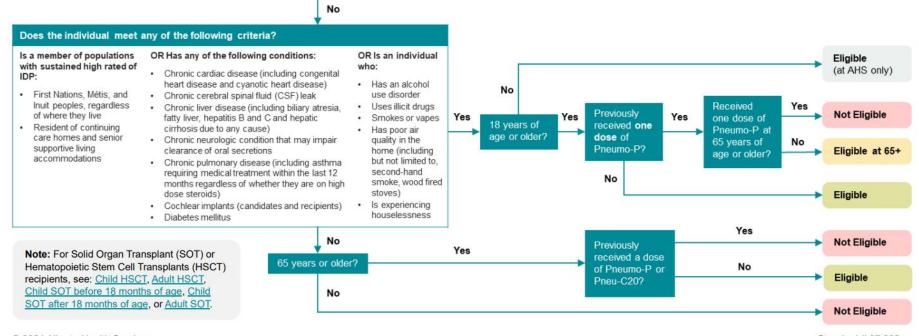
Eligible (at AHS only) No Previously received 2 Received Not Eligible Yes doses of Yes one dose of 18 years of Pneumo-P Pneumo-P at age or older? AND at least 65 years of Eligible at 65+ age or older? one dose of Pneu-C13? No Eligible

**Note:** Individuals 18 years of age and older who have received one dose of Pneu-C20 are considered complete, and do not need to be assessed through the algorithm.



# The second section reviews eligibility for Prevnar-20 for populations with sustained high rates of IPD

(including First Nations, Metis, and Inuit peoples), other medical conditions, environmental, and lifestyle



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# PNEU-C15 (Vaxneuvance)



### PNEU-C15 (Vaxneuvance)

#### Vaxneuvance™ Pneumococcal Conjugate (15 valent)

- Introduced into the routine immunization program June 24, 2024, for children two months up to and including 59 months of age who <u>do not</u> belong to a group at increased risk for Invasive Pneumococcal Disease (IPD).
- Each 0.5 mL dose contains 15 serotypes (1, 3, 4, 5, 6A, 6B, 7F, 9V, 14, 18C, 19A, 19F, 22F, 23F and 33F) conjugated to diphtheria carrier protein.
- Is a three-dose schedule for those starting before 12 months of age.





### PNEU-C15 (Vaxneuvance)

Note: First Nations, Métis, and Inuit children (regardless of where they live) may be at a higher risk for Invasive Pneumococcal Disease and should be offered Pneu-C20 vaccine instead of Pneu-C15/Vaxneuvance.

A full review of the Pneu-C15/Vaxneuvance is not being completed in this condensed videoconference.

For children not eligible for the Pneu-C20 or if parent prefers to have the Pneu-C15, the AHS Pneu-C15 biological page must be reviewed for full information.





# Prevnar-13 and Pneumo-23 Stock

• After June 24, 2024, Prevnar-13 and Pneumo-23 should no longer be in used and should have been removed from the vaccine fridge.

#### **Prevnar-20 Immunization Scenarios**



Note: see AHS biological page for full information.

#### Scenario 1 – Infant, pneumococcal series not complete yet

An infant requires pneumococcal vaccine because they have not completed their pneumococcal series yet.

• Prevnar-20 vaccine is used for today's dose and for future doses required to complete the series. See biological page for spacing.

#### AHS PREVNAR 20/Pneu-C20 Biological Page - Schedule

High-risk children who started a series with another pneumococcal conjugate vaccine, should complete their series with Pneu-C20. Previous doses will be counted, and the series will not be restarted. Children who have completed a vaccine series appropriate for age that includes at least one dose of Pneu-C20 are considered complete.

#### Scenario 2 – Infant/child, pneumococcal series complete

An infant/child (18-month-old, pre-school age, school age) who has previously received all pneumococcal vaccine doses they are eligible for.

 One dose of Prevnar-20 vaccine can be offered. Adhere to spacing requirements.

#### AHS PREVNAR 20/Pneu-C20 Biological Page - Schedule

Children at an increased risk of developing IPD who previously completed a series with another pneumococcal conjugate vaccine and/or received the recommended doses of Pneumo-P vaccine are eligible for one dose of Pneu-C20. It is recommended that this dose be given at least 8 weeks since the last pneumococcal conjugate vaccine dose or at least one year since their last dose of Pneumo-P vaccine.

Note: It is recommended that individuals wait at least 8 weeks since their last pneumococcal conjugate vaccine dose or at least one year since their last Pneumo-P vaccine before receiving Pneu-C20.

#### Scenario 3 – Adults 18 to 64 years of age

An adult who has never received a pneumococcal vaccine after the age of 18 years.

 One dose of Prevnar-20 vaccine can be offered. Adhere to spacing requirements.

#### AHS PREVNAR 20/Pneu-C20 Biological Page - Schedule

The following individuals are eligible for one dose of Pneu-C20 if they have not received at least one dose of Pneumo-P or a previous dose of Pneu-C20.

Populations with sustained high rates of IPD:

- Residents of continuing care homes and supportive living accommodations.
- First Nations, Métis, and Inuit peoples, regardless of where they live.

Note: It is recommended that individuals wait at least 8 weeks since their last pneumococcal conjugate vaccine dose or at least one year since their last Pneumo-P vaccine before receiving Pneu-C20.

#### Scenario 4 – Adults 18 to 64 years of age

An individual received a PPV23/PNEUMO-P vaccine after the age of 18 years.

Currently not eligible for a dose of Prevnar-20 vaccine. Eligible at 65 years of age.

### AHS PREVNAR 20/Pneu-C20 Biological Page - Indications for Provincially Funded Vaccine

Eligibility includes: Individuals 18 years of age and older who belong to one or more of the groups at increased risk for IPD and did **NOT** receive the previously recommended doses of pneumococcal conjugate and polysaccharide vaccines.

# Scenario 5 – Individuals who paid for the Prevnar-20 vaccine at a pharmacy

An individual purchased the Prevnar-20 vaccine at the pharmacy and had it administered before the publicly funded vaccine program started.

- Currently not eligible for a dose of Prevnar-20 vaccine. Eligible at 65 years of age if they are younger than 65 years.
- Individuals 18 years of age and older who have received one dose of Pneu-C20 are considered completed, and do not need to be assessed through the algorithm.

### AHS PREVNAR 20/Pneu-C20 Biological Page - Indications for Provincially Funded Vaccine

Eligibility includes: Individuals 25 months of age and older who have already received at least one dose of PneuC20 are **NOT** eligible for another dose. Reimmunization using a same-valency conjugate is not currently recommended as it is not known whether additional doses will provide additional benefit.

## Scenario 6 – Elder 65 years of age or older who never received a dose of PPV-23/PNEU-P

An Elder who has never received a PPV-23/PNEUMO-P or Prevnar-20 vaccine after the age of 65 years.

 One dose of Prevnar-20 vaccine can be offered. Adhere to spacing requirements.

#### AHS PREVNAR 20/Pneu-C20 Biological Page - Schedule

Eligibility includes: Individuals 65 years of age and older who have **NOT** received a Pneumo-P vaccine dose on or after 65 years of age or a dose of Pneu-C20.

1 dose

Note: It is recommended that individuals wait at least 8 weeks since their last pneumococcal conjugate vaccine dose or at least one year since their last Pneumo-P vaccine before receiving Pneu-C20.



# Scenario 7 – An Elder who received PPV-23/PNEU-P or Prevnar-20 after 65 years of age

An Elder who received a PPV-23/PNEUMO-P or Prevnar-20 vaccine after the age of 65 years.

Currently not eligible for a dose of Prevnar-20 vaccine.

### AHS PREVNAR 20/Pneu-C20 Biological Page - Indications for Provincially Funded Vaccine

Eligibility includes: Individuals 65 years of age and older who have <u>NOT</u> received a Pneumo-P vaccine dose on or after 65 years of age or a dose of Pneu-C20 are eligible.

#### Scenario 8 – An individual with a medical condition

An individual 18 years of age and older with a medical condition:

 See biological page and algorithm to determine eligibility based on previous pneumococcal doses.

### AHS PREVNAR 20/Pneu-C20 Biological Page - Indications for Provincially Funded Vaccine

Individuals with the following medical conditions are eligible for one dose of Pneu-C20 if they have <u>NOT</u> received at least 2 doses of Pneumo-P and one dose of Pneu-C13, or a previous dose of Pneu-C20

#### Resources

**AHS Immunization Program Standards Manual** 

AHS Pneumococcal Vaccine, 20-valent Conjugate (Pneu-C20): Prevnar 20 Biological Page

Pneumococcal Vaccine, 20-valent Conjugate (Pneu-C20) Information Sheet

Pneumococcal Vaccine, 15-valent Conjugate (Pneu-C15) Vaxneuvance Biological Page

Pneumococcal Vaccine, 15-valent Conjugate (Pneu-C15) Information Sheet



### **Questions?**

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