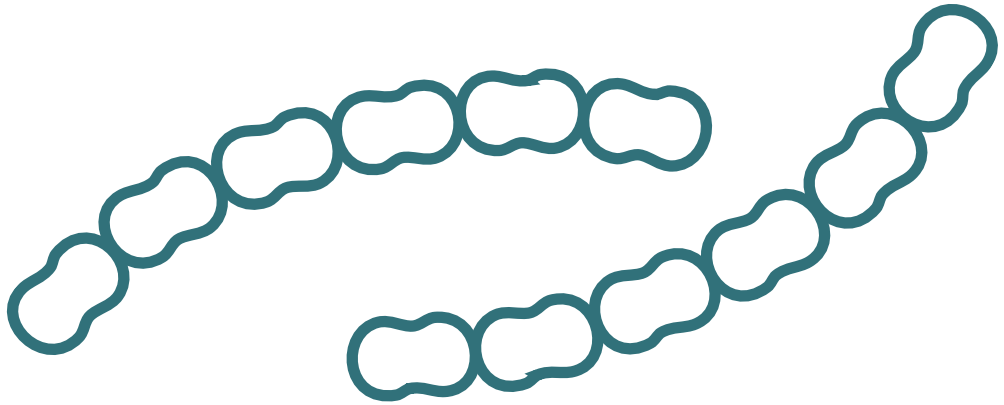
Primary Care Alberta

Communicable Disease Control – Public Health, CDC & Screening

Pneumococcal Conjugate Vaccine



Objectives

- On completion of this presentation the learner will understand the clinical information for the Pneumococcal Conjugate 20 vaccine.
- Operational questions will not be addressed during this presentation (e.g., vaccine distribution specifics).
- Always use the online resources for the most up to date information.

Immunization Resources

For more detailed information providers should refer to the program resources found on the following websites:

- Immunization Program Standards Manual – Internal
- Immunization Program Standards Manual –External
- Alberta Immunization Policy

Pneumococcal Vaccine – History Of Use In Alberta

1998 - Pneumococcal Polysaccharide vaccine was offered nationally, focusing on persons 65 years of age and older and those under 65 eligible due to health conditions or living situation.

2001 - Prevnar, Pneumococcal Conjugate vaccine, was introduced to the childhood immunization program. It was later expanded to include persons with high-risk medical conditions.

June 24, 2024 - Alberta implemented Pneumococcal Conjugate 15 (Vaxneuvance) and Pneumococcal Conjugate 20 (Prevnar 20).

June 2024 - Pneumococcal Polysaccharide (Pneumovax 23) is no longer available as part of the provincial program in Alberta.

Why Is Pneumococcal Conjugate Vaccine Important?

- Pneumococcal vaccines are used to prevent serious illnesses caused by the *Streptococcus pneumoniae* bacterium.
- Pneumococcal vaccines protect against the most common strains of *Streptococcus pneumoniae* bacterium.
- Pneumococcal **conjugate** vaccines provide an improved immune response compared to polysaccharide vaccine due to immunologic memory, resulting in higher levels of antibodies. They also have shown better effectiveness against nasopharyngeal carriage and noninvasive pneumonia overall.

Pneumococcal Conjugate Vaccine

	Prevnar 20
Dosage/Route	0.5 mL/IM
Packaging	Pre-filled, single dose syringe (needles not included), 10 doses per package
Indication	Individuals who have not received a previous does of Pneu-C20 who: • Are 65 years of age and older. • Belong to one or more of the groups at high risk for IPD.
Ingredients	Serotypes: 1, 3, 4, 5, 6A, 6B, 7F, 8, 9V, 10A, 11A, 12F, 14,15B, 18C, 9A, 19F, 22F, 23F and 33F Aluminum phosphate, polysorbate 80, sodium chloride, succinic acid, water for injection
Schedule	See biological page

Pneumococcal 20 (Pneu-C20) Vaccine Eligibility

Individuals who have not received a previous dose of Pneu-C20 who:

- Are 65 years of age and older.
- Belong to one or more of the groups at increased risk for IPD:
  - Populations with sustained high rates of IPD
  - Individuals with specific medical conditions
  - Individuals with certain behavioral and environmental risk factors.

- Refer to the biological page for specific eligibility criteria

Pneu-C20 Schedule

Vaccine schedule and number of doses required depends on previous vaccine history. Refer to the biological page for specific scheduling information.

Eligible individuals presenting at:

2 months up to 6 months of age (4 doses)

Dose 1: 2 months of age

Dose 2: 4 months of age

Dose 3: 6 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 11 months of age (3 doses)

Dose 1: Day 0

Dose 2: 8 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 23 months of age (2 doses)

Dose 1: day 0

Dose 2: 8 weeks after dose 1

24 months and older

1 dose

Reactions To Pneu-C20 Vaccine

	Prevnar 20
Common	• Irritability, drowsiness/increased sleep, fatigue • Pain, redness, swelling at injection site • Fever, myalgia, arthralgia, chills • Vomiting, diarrhea • Headache • Joint pain • Rash
Uncommon	• Hypersensitivity reaction, including face edema, dyspnea, bronchospasm • Nausea • Rash, angioedema • Vaccination site pruritus and urticaria, lymphadenopathy • Urticaria or urticaria like rash • Seizures
Rare	• Anaphylaxis • Allergic reaction

Contraindications

Pneumococcal conjugate vaccine is contraindicated for the following people:

- People who have experienced anaphylaxis to a previous dose of pneumococcal conjugate vaccine or any diphtheria toxoid-containing vaccine
- People who have a known severe hypersensitivity to any component of the vaccine
- Children under 6 weeks of age

Note: Pneu-C20 will not protect against serotypes not included in the vaccine.

Commitment to Comfort

Needle Fears

- This can affect people to a degree that they avoid immunization

Commitment to Comfort | Alberta Health Services outlines five principles to improve the immunization experience, health outcomes, satisfaction and encourage repeat attendance to healthcare encounters.

- Make a comfort plan
- Use positive language
- Use comfort positions
- Shift attention
- Use numbing cream

Adverse Events following Immunization (AEFI)

- An adverse event following immunization (AEFI) is defined as a serious or unexpected event temporally associated with immunization.
- Adverse Events Following Immunization (AEFI) policy for Alberta immunization providers may be found in the IPSM and on the Alberta Health website. The policy includes a list of reportable AEFI.
- Severe reactions such as anaphylaxis, death and other serious events, should be reported within 24 hours and all other reactions within 3 days to the AEFI Team.
- “Reportable AEFIs” are reported to Alberta Health, and in turn to the National Surveillance Program.

AEFI Reporting

- **AHS Public Health** - AEFI reporting will continue to follow the procedure outlined in the AEFI Standard in the Immunization Program Standards Manual (IPSM).
- **Non-AHS Public Health Practitioners** report AEFI through the AEFI report form found at: Adverse Event Following Immunization Reporting | Alberta Health Services
- Consult with AHS Adverse Event Following Immunization (AEFI) Team at AEFI@primarycarealberta.ca or 1-855-444-2324 as soon as possible for any case where there is uncertainty as to whether a symptom following immunization is related to the immunization.

Anaphylaxis Management Resources

Alberta Health Services employees need to ensure they have completed the Anaphylaxis Management learning module.

Covenant Health employees need to ensure they have completed Covenant Health Anaphylaxis Learning Module found on CLiC.

All other providers must have Anaphylaxis Management Guidelines in place.

- Additional information available in the Canadian Immunization Guide – Vaccine Safety

Infection Prevention and Control (IPC)

IPC's mandate is to reduce the incidence of healthcare associated infections in patients, residents, and clients by:

- Process and outcome surveillance
- Outbreak identification and management
- Consultation and education
- Policy and procedure development
- Research

For more information go to the AHS IPC website at:

https://www.albertahealthservices.ca/info/page6410.aspx

QUESTIONS

Email: CDCIMM@primarycarealberta.ca

Ph: 1-855-444-2324

Primary Care Alberta

Thank you

References – Pneumococcal

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