

Manitoba's Pneumococcal Immunization Program

Frequently Asked Questions & Answers for Health Care Providers

1. What pneumococcal vaccines are used in Manitoba's Immunization Program?

There are two Health Canada approved vaccines available as part of Manitoba's Pneumococcal Immunization Program:

- **Pneumococcal 15-Valent Conjugate (Pneu-C-15) vaccine (Vaxneuvance®, Merck)**
- **Pneumococcal 20-Valent Conjugate (Pneu-C-20) vaccine (Pneumovax™20, Pfizer)**

The vaccines listed above replace the previously used pneumococcal vaccines listed below:

- **Pneumococcal 13-Valent Conjugate (Pneu-C-13) vaccine (Pneumovax®13, Pfizer)**
- **Pneumococcal 23-Valent Polysaccharide (Pneu-P-23) vaccine (Pneumovax®23, Merck)**

The Pneu-C-15 vaccine protects against 15 different serotypes of *Streptococcus pneumoniae* (*S. pneumoniae*) that cause the most severe infections. The Pneu-C-20 vaccine protects against the same 15 serotypes found in Pneu-C-15 as well as 5 additional serotypes that the Pneu-C-15 vaccine does not include.

2. Is the protection from Pneu-C-15 and Pneu-C-20 vaccine expected to be better than that offered by the Pneu-C-13 and Pneu-P-23 vaccines?

Conjugate vaccines ("-C-" vaccines) are expected to offer more durable protection compared to polysaccharide vaccines ("-P-" vaccines). While the two new Pneu-C-15 and -20 conjugate vaccines have been authorized based on immunogenicity data, there is an expectation that they will provide protection on par with Pneu-C-13 for the shared serotypes and will offer additional protection against the non-shared serotypes included in the vaccines.

Pneumococcal polysaccharide vaccine is less immunogenic than pneumococcal conjugate vaccine. Following immunization with Pneu-P-23 vaccine, antibody concentrations begin to decline after 5 years in immunocompetent individuals.

Source: *Pneumococcal vaccines: Canadian Immunization Guide* (canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-16-pneumococcal-vaccine.html)

3. What are the eligibility criteria and the dosing schedule for the Pneu-C-15 and -20 vaccines?

The Manitoba Immunization Program provides vaccines free-of-charge to individuals registered with Manitoba Health, Seniors and Long-Term Care (MHS LTC), as per provincial Eligibility Criteria for Publicly Funded Vaccines.

All children less than 5 years of age, without risk factors that increase the risk of invasive pneumococcal disease (IPD), should get the Pneu-C-15 vaccine, based on Manitoba's routine childhood immunization schedule: manitoba.ca/health/publichealth/cdc/div/schedules.html.

Individuals 65 years of age and older as well as children and adults at higher risk of pneumococcal disease due to a medical condition or other risk factors should get the Pneu-C-20 vaccine, based on Manitoba's immunization program eligibility criteria:
manitoba.ca/health/publichealth/cdc/vaccineeligibility.html.

The interval between a dose Pneu-C-13 or Pneu-C-15 and Pneu-C-20 is 8 weeks. This enables rapid protection in those who are at high risk of invasive pneumococcal disease against serotypes that are not included in Pneu-C-13 or Pneu-C-15. The interval between a dose of Pneu-P-23 and Pneu-C-20 is 5 years. Pneu-P-23 protects against the same serotypes as Pneu-C-20. Protection from a dose of Pneu-P-23 also wanes over a period of 5 years.

The following table summarizes the current eligibility criteria for Pneu-C-15 and Pneu-C-20 and dosing schedule:

Age and risk factors for IPD	Immunization history	Recommended vaccine and intervals between doses
Children 2 months to ≤ 23 months of age <u>without</u> risk factors for IPD	Not previously immunized or vaccination status unknown	Pneu-C-15: 3 doses[◇] (2, 4 and 12 months of age) <i>If a schedule was started with Pneu-C-13, it does not need to be repeated and can be completed with Pneu-C-15</i>
Children 24 months to ≤ 59 months of age <u>without</u> risk factors for IPD	Not previously immunized or if vaccine series is incomplete	Pneu-C-15: 1 dose
Children 2 months to ≤ 23 months of age at high risk* of invasive pneumococcal disease and/or living in First Nations communities (see below for high-risk criteria).	Not previously immunized or vaccination status unknown	Pneu-C-20: 4 doses[◇] (2, 4, 6 and 18 months of age). <i>If a schedule was started with Pneu-C-13, it does not need to be repeated and can be completed with Pneu-C-20</i>
Individuals 24 months and older at high risk* of invasive pneumococcal disease (see below for high-risk criteria).	Not previously immunized or vaccination status unknown	Pneu-C-20: 1 dose
	Previously immunized with Pneu-C-13	Pneu-C-20: 1 dose at least 8 weeks after any previous dose
	Previously immunized with Pneu-P-23	Pneu-C-20: 1 dose at least 5 years after any previous dose

[◇]Number of doses required is based on age and vaccination history at presentation as per [Pneumococcal vaccines: Canadian Immunization Guide - Canada.ca](http://Pneumococcalvaccines.CanadianImmunizationGuide-Canada.ca)

Age and risk factors for IPD	Immunization history	Recommended vaccine and intervals between doses
Individuals \geq 65 years of age <u>without</u> risk factors for IPD	Not previously immunized with Pneu-P-23 or Pneu-C-20, or vaccination status unknown	Pneu-C-20: 1 dose
	Previously immunized with Pneu-P-23 alone after turning 65 or 1 dose of Pneu-C-20	No additional doses. Vaccines are complete
Patients of any age currently under the care of a haematologist or oncologist from Cancer Care Manitoba (CCMB) with the following conditions: <ul style="list-style-type: none"> • Malignant neoplasms (solid tissue and haematological) including leukemia and lymphoma, or clonal blood disorder, and who will receive or have completed immunosuppressive therapy including chemotherapy or radiation therapy, <u>or</u> • Hypo- or asplenic (Sickle Cell Disease, etc.) 		CCMB directed Immunization Schedule

***High-risk criteria for invasive pneumococcal disease:**

- Chronic cerebral spinal fluid (CSF) leak
- Chronic neurologic condition that may impair clearance of oral secretions
- Cochlear implants (including those who are to receive implants)
- Chronic cardiac or pulmonary disease
- Diabetes mellitus
- Asplenia (functional or anatomic)
- Hemoglobinopathies
- HIV infection
- 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
- Acquired complement deficiency
- Immunosuppressive therapy including use of long-term corticosteroids, post-organ transplant therapy, and certain anti-rheumatic drugs
- Chronic kidney disease, including nephrotic syndrome and chronic renal failure
- Chronic liver disease (including hepatic cirrhosis due to any cause)
- Solid organ or islet transplant (candidate or recipient)
- Residents of a personal care home or a long-term care facility OR in residential care due to complex medical needs
- Persons with alcoholism
- Persons who are homeless
- Persons who use illicit drugs
- Hematopoietic stem cell transplant recipient (as per [CancerCare Manitoba Record of Immunizations Following Adult Hematopoietic Stem Cell Transplant \(HSCT\)](#))
- CAR T-cell therapy recipients (as per [CancerCare Manitoba Record of Immunizations Following Adult CAR-T Cell Therapy](#))

4. When can a client receive a booster dose of the Pneu-C-20 vaccine?

There is currently no recommendation for re-immunization with Pneu-C-20 vaccine. Children at increased risk of IPD who have completed a vaccine series that includes at least one dose of Pneu-C-20 do not require further doses; adults for whom Pneu-C-20 is indicated should only receive one dose of Pneu-C-20).

Source: *Pneumococcal vaccines: Canadian Immunization Guide* (canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-16-pneumococcal-vaccine.html)

5. Can the pneumococcal vaccines be given at the same time as other vaccines?

All pneumococcal vaccines can be given simultaneously with other routine and age-appropriate vaccines, except other pneumococcal formulations.

6. If a client is ineligible for a pneumococcal vaccine under Manitoba Health, Seniors and Long-Term Care (MHS LTC) eligibility criteria, how can they get immunized?

Prior to issuing/dispensing a prescription for purchase by a client, it is important that the client's eligibility for the publicly funded pneumococcal vaccines be confirmed by the health care provider or dispensing pharmacy (manitoba.ca/health/publichealth/cdc/vaccineeligibility.html). MHS LTC does not reimburse individuals who pay out of pocket for a vaccine that should have been provided free-of-charge.

Pneumococcal vaccines ordered from the provincial distribution warehouse must be used solely for administering the vaccine to eligible patients, as per MHS LTC's Eligibility Criteria for Publicly Funded Vaccines.

Those ineligible for publicly funded pneumococcal vaccines can obtain a prescription from a licensed health care provider, purchase the vaccine at a pharmacy and then make an appointment with any health care provider that offers non-funded immunization services. Physicians who administer a dose that is privately purchased need to submit the *Vaccine Administration Reporting Form for Health Care Providers* for data entry: manitoba.ca/health/publichealth/cdc/div/docs/iifhcp.pdf

Pharmacists need to enter administered vaccines into DPIN (Manitoba's Drug Program Information Network) using the "PS" (Professional care Service code) intervention code (see *Info sheet for Pharmacists*: manitoba.ca/health/publichealth/cdc/div/manual/docs/infosheet-for-pharmacists.pdf).

7. How can health care providers order the Pneu-C-15 and Pneu-C-20 vaccines?

Vaccine orders must be submitted to the provincial vaccine warehouse by faxing or emailing the completed *Manitoba Health Vaccines and Biologics Order Form*: manitoba.ca/health/publichealth/cdc/protocol/vaccinebiologics.pdf

Health care providers who have not previously accessed MHS LTC's publicly funded vaccines and biologics from the provincial vaccine warehouse must register with MHS LTC by filling out

and submitting the *Vaccine and Biologics New Provider Application Form*:
manitoba.ca/health/publichealth/cdc/protocol/npaf.pdf.