

Pocket Guide for Immunizers

Pneumococcal Conjugate Vaccine

The National Advisory Committee on Immunization (<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/10vol36/acs-12/index-eng.php>) recommends pneumococcal conjugate vaccine for the following:

1. All children up to 59 months of age
2. Children at any age (5-18 years) who are at higher risk of invasive pneumococcal disease, including children who have:
 - cochlear implants (including those children who are to receive implants)
 - chronic cardiac or pulmonary disease (excluding asthma)
 - chronic cerebrospinal fluid leak
 - chronic neurologic conditions that may impair clearance of oral secretions
 - poorly controlled diabetes mellitus
 - asplenia (functional or anatomic)
 - sickle cell disease or other hemoglobinopathies
 - congenital immunodeficiencies involving any part of the immune system
 - hematopoietic stem cell transplant (candidate or recipient)
 - HIV infection
 - immunosuppressive therapy
 - chronic kidney disease
 - chronic liver disease (including hepatitis B and C)
 - malignant neoplasms including leukemia and lymphoma
 - solid organ or islet cell transplant (candidate or recipient)

Contraindications and Precautions

PNEU-C-13 is contraindicated in any individual with a history of anaphylaxis to any component of the vaccine, including diphtheria toxoid.

Schedule and Dosage

The dose for infants and children less than five years of age is 0.5 mL.

Recommended schedules for conjugate pneumococcal vaccine for children under 24 months of age in Canada, by Pneumococcal - Conjugate - valent vaccination history*

Age at examination	Number of previous doses of PNEU-C-7, PNEU-C-10 or PNEU-C-13 received	Recommended regimen if using a schedule with PNEU-C-13 only
2-6 months*	0 doses	• 2 or 3 doses† (8 weeks apart) and a booster at age 12-15 months • 1 or 2 doses† (8 weeks apart) and a booster age 12-15 months • 0 or 1 dose† (≥ 8 weeks after second dose) and a booster at age 12-15 months
	1 dose	
	2 doses	
7-11 months*	0 doses	• 2 doses (8 weeks apart) and a booster at age 12-15 months • 1 dose at 7-11 months, and 1 dose of 12-15 months (≥ 8 weeks later) • 0 or 1 dose† (≥ 8 weeks after second dose) a booster at age 12-15 months
	1 dose	
	2 doses	
12-23 months healthy	0 doses, or 1 dose at <12 months; 2 or more doses at <12 months, or 1 dose at ≥ 12 months, or complete age-appropriate vaccination with PNEU-C-7 or PNEU-C-10 (no PNEU-C-13)	• 2 doses ≥ 8 weeks apart • 1 dose ≥ 8 weeks after most recent dose

12-23 months, high risk for IPD*	0 doses, or 1 dose at < 12 months; 2 or more doses at < 12 months, or 1 dose at ≥ 12 months, or complete age-appropriate vaccination with PNEU-C-7 or PNEU-C-10 (no PNEU-C-13)	<ul style="list-style-type: none"> • 2 doses ≥ 8 weeks apart • 1 dose ≥ 8 weeks after most recent dose; followed by one dose of PNEU-P-23 when child turns 2 years of age, at least 8 weeks after previous PNEUMOCOCCAL – CONJUGATE – VALENT dose
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Recommended schedules for conjugate pneumococcal vaccine for Canadian children aged 24-59, by Pneumococcal - Conjugate - valent vaccination history.

Age at examination	Number of previous doses of PNEU-C-7, PNEU-C-10 or PNEU-C-13 received	Recommended regimen if using a combination of PNEU-C-7, PNEU-C-10, PNEU-C-13
24-35 months healthy	Any incomplete age-appropriate vaccination schedule with any product or complete schedule with PNEU-C-7 or PNEU-C-10 (no PNEU-C-13)	<ul style="list-style-type: none"> • 1 dose of PNEU-C-13, ≥ 8 weeks after most recent dose
24-35 months, high risk of IPD	Any incomplete age-appropriate vaccination schedule with any product or complete schedule with PNEU-C-7 or PNEU-C-10 (no PNEU-C-13)	<ul style="list-style-type: none"> • 1 dose of PNEU-C-13, ≥ 8 weeks after most recent dose; Followed by one dose of PPV 23 8 weeks after previous PNEUMOCOCCAL - CONJUGATE - VALENT dose
36-59 months healthy	Complete schedule with PNEU-C-7 or PNEU-C-10 (no PNEU-C-13) Any incomplete age-appropriate vaccination schedule with any product	<ul style="list-style-type: none"> • If of aboriginal origin or attend group child care, 1 dose of PNEU-C-13, ≥ 8 weeks after most recent dose • All other children, consider a single dose of PNEU-C-13† • 1 dose of PNEU-C-13 should be administered
36-59 months, high risk of IPD *	Any incomplete age-appropriate vaccination schedule with any product, or complete schedule with PNEU-C-7 or PNEU-C-10 (no PNEU-C-13)	<ul style="list-style-type: none"> • 1 dose of PNEU-C-13, ≥ 8 weeks after most recent dose; Followed by one dose of PNEU-P-23 8 weeks after previous PNEUMOCOCCAL - CONJUGATE - VALENT dose

* Children who are at high risk of IPD should receive a dose of PNEU-P-23. Because young children do not respond to polysaccharide vaccines, the youngest age at which this dose should be given is 24 months of age.

† Provincial schedules vary as to whether 3 doses (2, 4 and booster) or 4 doses (2, 4, 6 and booster) are recommended for healthy children. Prescribers should follow their relevant provincial schedule.

** Children who are at high risk of IPD should also receive a dose of PNEU-P-23 at 24 months of age. This dose should be given whether or not the child has already received PNEU-P-23. If the child has not previously received PNEU-P-23, it should be given at least 8 weeks after the last dose of PNEU-C-13.

Route of Administration

Administer PNEU-C-13 by intramuscular injection. Shake the syringe well to create a homogenous white suspension, then expel air from the syringe before vaccine administration.

Adverse Reactions

- Soreness or redness at injection site may occur.
- May increase sleep after second dose.

For more information, please visit Immunize Canada's website: immunize.ca
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There have been no changes this year to information for the pneumococcal conjugate vaccine. Immunize Canada's 2012 pocket guide for immunizers on pneumococcal conjugate vaccine (based on The Canadian Immunization Guide) is downloadable at http://immunize.ca/uploads/posters/general/2012/pneumo_conj_2012_e.pdf

The Canadian Immunization Guide, 7th ed., pp. 267-276, provides information on the pneumococcal conjugate vaccine and can be found online at <http://www.phac-aspc.gc.ca/publicat/cig-gci/p04-pneu-eng.php>