



# BC PEDIATRIC SOCIETY > HIGH RISK IMMUNIZATION SCHEDULE 2017

For further information and links to other references, please see our website [www.bcpeds.ca](http://www.bcpeds.ca)

Please see [www.immunizebc.ca](http://www.immunizebc.ca) for further immunization information or  
**BC Centre for Disease Control Immunization**

(Manual <http://www.bccdc.ca/health-professionals/clinical-resources/communicable-disease-control-manual>)

**HIGH RISK**

AGE	PROVINCIAL VACCINE	ROUTE	OTHER VACCINES & COMMENTS
<b>2 months</b>	DTaP-HB-IPV-Hib (Infanrix hexa™)	IM	<ul style="list-style-type: none"> <li>Men-A/C/Y/W-CRM (Menveo®) is indicated in place of Men-C conjugate at 2, 4 and 12 months of age for children at high risk for invasive meningococcal disease due to medical conditions or close contacts of meningococcal A/C/W/Y disease. Periodic revaccination recommended if risk ongoing. Recommended but not publicly funded for travelers for whom meningococcal vaccine is indicated.<sup>1</sup></li> <li><a href="#">See Factsheet: Meningococcal Disease</a></li> <li>A meningococcal B vaccine is now approved for use in Canada. NACI recommends the multi-component meningococcal serogroup B (4CMenB) vaccine may be considered on an individual basis, for children 2 months of age and older, and should be considered for active immunization of individuals beginning at 2 months of age at high risk. Not publicly funded.<sup>4</sup> Dose schedule available <a href="#">here</a>.</li> <li><a href="#">See Factsheet: Meningococcal B Vaccine: What Parents Need to Know</a></li> </ul>
	Pneumococcal conjugate (Prevnar® 13)	IM	
	Men-C conjugate (NeisVac-C®) Men-A/C/Y/W-CRM (Menveo™) for high risk only <sup>1</sup>	IM	
	Rotavirus (Rotarix®) <sup>1,2,3</sup>	PO	
<b>4 months</b>	2 <sup>nd</sup> DTaP-HB-IPV-Hib (Infanrix hexa™)	IM	<ul style="list-style-type: none"> <li>Consider meningococcal B vaccine for high risk.<sup>4</sup></li> </ul>
	2 <sup>nd</sup> Pneumococcal conjugate (Prevnar® 13)	IM	
	2 <sup>nd</sup> Men-A/C/Y/W-CRM (Menveo™) for high risk only <sup>1</sup>	IM	
	2 <sup>nd</sup> Rotavirus (Rotarix®) <sup>3</sup>	PO	
<b>6 months</b>	3 <sup>rd</sup> DTaP-HB-IPV-Hib (Infanrix hexa™)	IM	<ul style="list-style-type: none"> <li>Hepatitis A Vaccine is publicly funded for Aboriginal children only.<sup>2</sup></li> <li><a href="#">See Factsheet: Hepatitis A – Local Risks</a></li> <li>Consider meningococcal B vaccine for high risk.<sup>4</sup></li> </ul>
	3 <sup>rd</sup> Pneumococcal conjugate (Prevnar® 13) for high risk <sup>1</sup>	IM	
	Hepatitis A (Aboriginal Infants only) <sup>5</sup>	IM	
	Influenza	IM	
<b>12 months</b>	2 <sup>nd</sup> Men-C conjugate (NeisVac-C®)	IM	<ul style="list-style-type: none"> <li>Consider Men-A/C/Y/W Menveo® 12-23 months of age.<sup>1</sup></li> <li>Consider hepatitis A vaccine (two dose series), especially if traveling.</li> <li><a href="#">See Factsheet: Travel Vaccines – Enterically Borne</a></li> <li>Consider meningococcal B vaccine for high risk.<sup>4</sup></li> <li>Annual Influenza immunization is publicly funded for children 6 – 59 months and all ages for those with, or close contacts of those with high risk medical conditions.</li> <li><a href="#">See Factsheet: Influenza</a></li> </ul>
	3 <sup>rd</sup> Men-A/C/Y/W-CRM (Menveo®) for high risk only <sup>1</sup>	IM	
	3 <sup>rd</sup> (or 4 <sup>th</sup> if high risk) Pneumococcal conjugate <sup>1</sup>	IM	
	MMR <sup>3</sup>	SC	
	Varicella (Varivax® III or Varilrix®) <sup>3</sup>	SC	



**HIGH RISK**

AGE	PROVINCIAL VACCINE	ROUTE	OTHER VACCINES & COMMENTS
18 months	4 <sup>th</sup> DTaP-IPV-Hib	IM	<ul style="list-style-type: none"> <li>Consider meningococcal B vaccine for high risk.<sup>4</sup></li> </ul>
	Hepatitis A (Aboriginal Infants only) <sup>5</sup>	IM	<ul style="list-style-type: none"> <li>Consider Men-A/C/YW for high risk: Menveo<sup>®</sup> at 2-24 months of age; Menactra<sup>®</sup> or Nimenrix<sup>®</sup> at 2 years of age and older.<sup>1</sup></li> </ul>
2 years	Pneumococcal polysaccharide (pneumovax 23 <sup>®</sup> ) for high risk <sup>1</sup>	IM	<ul style="list-style-type: none"> <li>• <a href="#">See Factsheet: Hepatitis A – Local Risks</a></li> <li>• If travelling, consider Dukoral<sup>®</sup> for Traveller’s Diarrhea, hepatitis A and typhoid fever vaccination. Also consider contacting a travel clinic for further information.</li> <li>• <a href="#">See Factsheet: Travel Vaccines – Enterically Borne</a></li> </ul>
4-6 years	Tdap-IPV	IM	<ul style="list-style-type: none"> <li>• Consider Influenza –two doses needed if under 9 years old and receiving for the first time. Influenza yearly publicly funded for children 6 – 59 months and older children with, or close contacts of those with high risk medical conditions.</li> <li>• <a href="#">See Factsheet: Influenza</a></li> </ul>
	MMRV <sup>3</sup> (ProQuad <sup>®</sup> , Priorix-tetra <sup>®</sup> )	SC	
	Nonavalent HPV (Gardasil <sup>®</sup> 9) (2 doses)	IM	<ul style="list-style-type: none"> <li>• Gardasil<sup>®</sup> 9 is publicly funded for grade 6 boys and girls, females born after 2005 and HIV+ females 9-26 yrs of age.<sup>6</sup></li> <li>• HPV vaccine is publicly funded for high risk males 9-26 years, including those who have sex with men, street involved youth, boys who may be questioning their sexual identity, and youth in custody or in care of Ministry of Children and Families, females born 1994 - 2004.<sup>6</sup></li> <li>• Recommended for older girls and women up to age 45 and all boys age 9 to 26 years. Not publicly funded.<sup>6</sup></li> <li>• Immunocompromised males and females initiating Gardasil<sup>®</sup> or Gardasil<sup>®</sup> 9 at age 15 years or older should receive a 3 dose series.<sup>6</sup></li> <li>• <a href="#">See BCPS Factsheet: Human Papillomavirus (HPV)</a></li> <li>• Consider annual Influenza vaccine.</li> <li>• <a href="#">See Factsheet: Influenza</a></li> </ul>
	Varicella (Varivax <sup>®</sup> III or Varilrix <sup>®</sup> ) if susceptible <sup>3</sup>	SC	<ul style="list-style-type: none"> <li>• Consider Men-A/C/YW for high risk and travelers for whom meningococcal vaccine is indicated. Menveo<sup>®</sup>, Menactra<sup>®</sup> or Nimenrix<sup>®</sup>.<sup>1</sup></li> </ul>
14 years (Grade 9)	Tdap (Adacel <sup>®</sup> ) then every 10 years	IM	<ul style="list-style-type: none"> <li>• Consider annual Influenza vaccine.</li> <li>• <a href="#">See Factsheet: Influenza</a></li> </ul>
	Men-C-ACYW	IM	<ul style="list-style-type: none"> <li>• <a href="#">See Factsheet: Meningococcal Disease</a></li> <li>• A meningococcal B vaccine is now approved for use in Canada. NACI recommends the multi-component meningococcal serogroup B (4CMenB) vaccine may be considered on an individual basis, for children 2 months of age and older, and should be considered for active immunization of individuals beginning at 2 months of age at high risk. Not publicly funded.<sup>4</sup> Dose schedule available <a href="#">here</a>.</li> </ul>



**Hepatitis A, HPV, Meningococcal and Pneumococcal vaccine** recommendations for immunization of high risk including immunocompromised, immunosuppressed or children with other health conditions, travelers, aboriginal or special populations may be found at:

- 1) [BC Centre for Disease Control Immunization Program Manual Section VII Biological Products](#)
- 2) [Section III - Immunization of Special Populations](#)
- 3) [NB: Immunization Contraindications and Precautions including live virus vaccination of immunosuppressed](#)

There are no contraindications to administering inactivated vaccines to immune compromised.

**Live virus vaccines (eg: MMR, Varicella, Rotovirus) may cause serious adverse events if administered to immune compromised.**

<sup>1</sup> BC Centre for Disease Control. May, 2017. *Communicable Disease Control Immunization Program Section VII – Biological Products*

[http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%202%20-%20Imms/SectionVII\\_BiologicalProducts.pdf](http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%202%20-%20Imms/SectionVII_BiologicalProducts.pdf)

<sup>2</sup> First dose of Rotarix<sup>®</sup> vaccine to be given no later than 20 weeks less 1 day of age. Second dose to be administered by 8 months less 1 day of age.

[http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%202%20-%20Imms/SectionIIA\\_ImmunizationSchedules.pdf](http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%202%20-%20Imms/SectionIIA_ImmunizationSchedules.pdf)

<sup>3</sup> See precautions and advice when administering live vaccines to immune compromised individuals.

[http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%202%20-%20Imms/SectionIII\\_ImmunizationofSpecialPopulations.pdf](http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%202%20-%20Imms/SectionIII_ImmunizationofSpecialPopulations.pdf)

<sup>4</sup> The Recommended Use of the Multicomponent Meningococcal B (4CMenB) Vaccine in Canada.

<http://www.phac-aspc.gc.ca/naci-ccni/mening-4cmemb-exec-resum-eng.php>

<sup>5</sup> Unimmunized Aboriginal children: Two doses of Hepatitis A, given at least 6 months apart. Children previously immunized with 1 dose, provide dose 2 no sooner than 6 months after first dose.

[http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%202%20-%20Imms/SectionIIA\\_ImmunizationSchedules.pdf](http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%202%20-%20Imms/SectionIIA_ImmunizationSchedules.pdf)

<sup>6</sup> BC Centre for Disease Control. Vaccines in BC, Human Papillomavirus (HPV) Vaccine.

Retrieved June 28, 2017 from [http://www.bccdc.ca/health-info/immunization-vaccines/vaccines-in-bc/human-papillomavirus-\(hpv\)-vaccine](http://www.bccdc.ca/health-info/immunization-vaccines/vaccines-in-bc/human-papillomavirus-(hpv)-vaccine)

<sup>7</sup> Those who are immunocompetent and initiating HPV immunization prior to their 15<sup>th</sup> birthday give 2 doses, at least 6 months apart. Older individuals, and those known to have immune system defects should receive a 3 dose schedule at 0, 2 and 6 months. A complete series of Gardasil<sup>®</sup>9 is recommended to ensure protection against the five additional HPV types in the vaccine.

[http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%202%20-%20Imms/SectionVII\\_BiologicalProducts.pdf](http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%202%20-%20Imms/SectionVII_BiologicalProducts.pdf)