

Routine Immunization Schedules

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The following is an overview of routine immunization schedules for infants and children (Table 1) and adults (Table 2, Table 3). This information is not intended to present a comprehensive review; the reader is therefore encouraged to seek additional and confirmatory information. Each province/territory establishes its own routine immunization program and information pertaining to each province/territory may be accessed from the following Website: www.phac-aspc.gc.ca/im/is-pi-eng.php.

The ease and value of routine immunization make it an effective preventive measure against infectious diseases. Immunization carried out as recommended in the following schedules provide basic protection for most people against the diseases listed.

Following a standard schedule ensures complete and adequate protection. However, modifications to the recommended schedule may be necessary because of missed appointments or intercurrent illness. Interruption of a recommended series does not require starting the series over again, regardless of the interval elapsed.

Similar vaccines are available from different manufacturers but may not be identical. It is therefore essential to read the manufacturer's package insert. For further information consult the *Canadian Immunization Guide* [www.phac-aspc.gc.ca/publicat/cig-gci/index-eng.php] and supplementary statements published by the National Advisory Committee on Immunization.¹

Table 1: Routine Immunization Schedules for Infants and Children¹

	Age/Timing	Vaccine or Toxoid											
		DTaP ^a	IPV ^a	Hib ^a	MMR	Td ^b or Tdap ^b	HBV ^c (3 doses)	Varicella ^{d,e}	PCV ^f	MCV ^g	Flu ^h	HPV ⁱ	Rotavirus ⁱ
Infants and Children	2 months	X	X	X			Infancy		X ^k	X ^l			Infancy
	4 months	X	X	X					X	X			
	6 months	X	X ^m	X			or		X	X ⁿ	X ^o		
	12 months				X			X	X	X ^p			
	18 months	X	X	X	X ^r or			X ^d or					
	4–6 years	X ^q	X ^q		X ^r			X ^d					
	14–16 years					X	9–13 years ^c			X ^s		≥9 years ⁱ	
Children <7 Years of Age Not Immunized in Early Infancy	1st visit	X	X	X	X ^t			X	X ^k	X ^l			
	2 months after 1st visit	X	X	X ^u	X ^r			X	X ^k	X ^l			
	2 months after 2nd visit	X	X ^m						X ^k				
	6–12 months after 3rd visit	X	X	X ^u									
	4–6 years of age ^u	X ^q	X ^q										
	14–16 years of age					X	9–13 years ^c			X ^s			
Children ≥7 Years of Age Not Immunized in Early Infancy	1st visit		X	X ^v	X	X		X		X			
	2 months after 1st visit		X		X ^r	X		X ^d					
	6–12 months after 2nd visit		X			X							
	10 years after 3rd visit					X	9–13 years ^c						

^a It is preferable to use products in which diphtheria toxoid is combined with acellular pertussis vaccine and tetanus toxoid (DTaP), with or without inactivated poliomyelitis vaccine and *Haemophilus influenzae* b conjugate vaccine.

^b Td and Tdap combined, adsorbed, “adult type” preparations for use in persons ≥7 years of age contain less diphtheria toxoid and pertussis antigens than preparations given to younger children and are less likely to cause reactions in older persons.

^c Hepatitis B vaccine can be routinely given to infants, children and preadolescents (9–13 years); three doses at 0-, 1- and 6-month intervals are preferred. Administer the second dose at least 1 month after the first dose. The third dose should be administered at least 2 months after the second dose. Alternatively, adolescents 11–15 years of age may be given a two-dose regimen of adult formulation Recombivax HB (10 µg/dose). The second dose is administered 4–6 months after the first dose.

^d Varicella-susceptible healthy children aged 12 months to 12 years should receive two doses of varicella vaccine administered at least 3 months apart.¹ If rapid protection is required, a minimum interval of 6 weeks between doses may be used. Providers may find it optimal to administer the first dose at 12–15 months and the second dose at 18 months or at school entry (4–6 years) depending on the provincial/territorial policy. This can be given as MMRV combined vaccine. Varicella-susceptible individuals ≥13 years of age should receive two doses at least 6 weeks apart. MMRV is only licensed for use in children ≤12 years of age.^{2,3}

^e Live vaccines such as the MMR and varicella can be given concurrently but at separate sites. If not given concurrently, then they should be given at least 4 weeks apart.

^f A pneumococcal conjugate vaccine (PCV13 preferred)⁴ should be used for children <2 years of age because the pneumococcal polysaccharide vaccine is ineffective in this age group. Either type of vaccine may be used for children ≥2 years of age; however, the conjugate vaccines are preferred for children up to the age of 5 years. A single dose of PCV13 is recommended for healthy children up to 35 months, aboriginal children up to 59 months and all children at high-risk of invasive pneumococcal disease (e.g., immunodeficiency, chronic kidney disease) who have completed a series of pneumococcal vaccination without PCV13. It may be considered in healthy children 36–59 months of age who have completed a PCV series with vaccine other than PCV13. Children ≥24 months at high-risk of invasive pneumococcal disease should also receive a dose of pneumococcal polysaccharide vaccine with administration of conjugate and polysaccharide vaccines separated at least 8 weeks apart.

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