# Immunization update 2005: Stepping forward

Canadian Paediatric Society

This year marks a major step forward in improving access for all children and youth in Canada to the routine vaccines recommended by the National Advisory Committee on Immunization (Figure 1) (1). The disparity in vaccine access between have and have not regions noted previously (2,3) has been narrowed through the collaboration of the federal and provincial/territorial governments in the area of immunization (4). Unfortunately, harmonization of schedules across the country still remains a dream (Table 1). This lack of harmony continues to put children and youth who relocate at potential risk for missing out on a routine vaccine due to schedule timing differences. This is not a new problem (5) but one that is now more exaggerated due to the added variation in schedules and catch-up programs with the 'newer' vaccines (eg, varicella, conjugated pneumococcal and conjugated meningococcal vaccines) (Tables 1 and 2). Determining what a child or youth needs on arrival into a new region is often not an easy task. By referring to Tables 1 and 2, doctors and nurses will be better able to plan an immunization transition program for the children and youth who have changed jurisdictions. These tables are regularly updated with the help of the Canadian Nurses Coalition on Immunization and are available at the Canadian Paediatric Society's Web sites (<www.cps.ca> and <www.caringforkids.ca>), with a note of the posting date marking the most recent update. The Public Health Agency of Canada's Web site (<www.phac-aspc.gc.ca/im/ptimprog-progimpt/index.html>) is a good source for regularly updated tables. Please note that because changes do occur often, it may be wise to also check the individual provincial and territorial Web sites for the most up-to-date information.

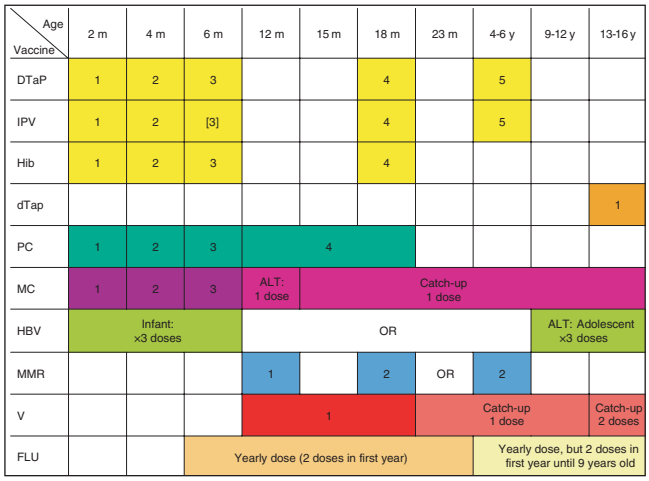


**Figure 1)** *Adapted from the National Advisory Committee on Immunization's routine childhood immunization schedule by Dr Ben Tan, Department of Paediatrics, University of Saskatchewan, Saskatoon, Saskatchewan. Numbers in parentheses indicate doses that are not needed routinely, but can be included for convenience. Within the same row, the bolder colour indicates the 'recommended' time, while the lighter hue indicates when immunization may still be considered. ALT Alternate recommended age; Catch-up Immunize if not previously vaccinated; DaPT Diphtheria-acellular pertussis-tetanus; dTap Tetanus-diphtheria acellular pertussis vaccine; FLU Influenza; HBV Hepatitis B virus; Hib* Haemophilus influenzae *type b vaccine; IPV Inactivated polio vaccine; MC Meningococcal conjugate; MMR Measles-mumps-rubella vaccine; m Months; PC Pneumococcal conjugate; V Varicella; y Years*

**TABLE 1**
**Routine immunization programs for infants and children in Canada, June 2005**

| Province or Territory | DaPT/IPV/Hib (2, 4, 6, 18 mo) | Hepatitis B | MMR (2 doses) | DaPT/IPV (4–6 yrs) | dTap | Varicella | Meningococcal conjugate | Pneumococcal conjugate | Influenza |
|---|---|---|---|---|---|---|---|---|---|
| British Columbia | ✓ | 2, 4, 6 mo | 12, 18 mo | ✓ | Grade 9 | 12 mo | 2, 12 mo | 2, 4, 6, 18 mo | 6–23 mo |
| Alberta | ✓ | Grade 5 | 12 mo, 4–6 yrs | ✓ | Grade 9 | 12 mo | 2, 4, 6 mo | 2, 4, 6, 18 mo | 6–23 mo |
| Saskatchewan | ✓ | Grade 6 | 12, 18 mo | ✓ | Grade 8 | 12 mo | 12 mo | 2, 4, 6, 18 mo | N/A |
| Manitoba | ✓ | Grade 4 | 12 mo, 4–6 yrs | ✓ | Grade 9 | 12 mo | Grade 4 | 2, 4, 6, 18 mo | 6–23 mo |
| Ontario | ✓ | Grade 7 (2 doses) | 12 mo, 4–6 yrs | ✓ | 14–16 yrs | 15 mo | 12 mo | 2, 4, 6, 15 mo | ≥6 mo |
| Quebec | ✓ | Grade 4 | 12, 18 mo | ✓ | Grade 9 | N/A | 12 mo | 2, 4, 12 mo | 6–23 mo |
| New Brunswick | ✓ | 0, 2, 6 mo | 12, 18 mo | ✓ | Grade 9 | 12 mo | 12 mo | 2, 4, 6, 18 mo | 6–23 mo |
| Nova Scotia | ✓ | Grade 4 | 12 mo, 4–6 yrs | ✓ | Grade 10 | 12 mo | 12 mo | 2, 4, 6, 18 mo | 6–23 mo |
| PEI | ✓ | 2, 4, 15 mo | 15, 18 mo | ✓ | Grade 9 | 12 mo | 12 mo | 2, 4, 6, 18 mo | N/A |
| NL | ✓ | Grade 4 | 12, 18 mo | ✓ | Grade 9 | 12 mo | 12 mo | 2, 4, 6, 18 mo | N/A |
| Northwest Territories | ✓ | 0, 1, 6 mo | 12, 18 mo | ✓ | Grade 9 | 12 mo | 2, 4 mo | N/A | 6–23 mo |
| Yukon Territory | ✓ | 2, 4, 12 mo; <19 yrs not immunized | 12, 18 mo | ✓ | Grade 9 | N/A | 2, 6 mo | 2, 4, 6, 12–18 mo | 6–23 mo |
| Nunavut | ✓ | 0, 1, 9 mo | 12, 18 mo | ✓ | Grade 9 | 12 mo | N/A | 2, 4, 6, 15 mo | ≥6 mo |

*DaPT Diphtheria-acellular pertussis-tetanus; dTap Tetanus-diphtheria acellular pertussis vaccine; Hib* Haemophilus influenzae *type b vaccine; IPV Inactivated polio vaccine; MMR Measles-mumps-rubella vaccine; mo Age in months; N/A Not available; NL Newfoundland and Labrador; PEI Prince Edward Island; yrs Age in years*

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**TABLE 2**
**Catch-up and high-risk immunization programs for children in Canada, June 2005**

| Province or Territory | Hepatitis B | Varicella | Meningococcal conjugate | Pneumococcal conjugate |
|---|---|---|---|---|
| BC | Selected*; Gr 6 (2 doses September 2001‡) | Kg; Gr 6 (September 2004†); high risk | Gr 6 (September 2003†); Gr 9 (September 2004†); high risk; contacts of cases | Asplenia <17 yrs; high risk <5 yrs |
| AB | Selected* | Kg; Gr 5 (April 2001†); susceptible >13 yrs | Contacts; high risk; laboratory workers | High risk; presumed high risk <5 yrs; asplenia <17 yrs |
| SK | Selected* | Gr 6 (January 2005†) | High risk and close contacts; Kg; Gr 6 (October 2004†) | High risk <5 yrs |
| MB | Selected* | High risk; Kg; susceptible household contacts; Gr 4 (October 2004†) | High risk >2 mos; Gr 4 (October 2004†) | High risk <5 yrs |
| ON | Selected* | <6 yrs and high risk (January 2005†) | Contacts of cases; Gr 7/12 yrs; 15–19 yrs; high risk (January 2005†) | High risk <5 yrs |
| QC | Selected* | High risk | Contacts of cases; high risk; laboratory workers | Nonimmunized children <5 yrs |
| NB§ | Gr 4 (April 2005¶) | 4 yrs (September 2004†) | Gr 9 (September 2004†); high risk <2 yrs; contacts of cases | High risk <5 yrs |
| NS | Selected* | <6 yrs; high risk; Gr 4 (September 2005†) | 14–16 yrs (2005†); Gr 4 (September 2005†) | High risk (January 2005†) |
| PEI | Selected* | Gr 9 (2003†) | High risk | Presumed high risk; high risk; asplenia |
| NL | Selected* | 4–6 yrs (February 2005) | Contacts of cases and outbreak control; Gr 4 and 9 (February 2005†) | High risk <2 yrs |
| NT | Selected* Gr 4 | 18 mo–5 yrs | 1–19 yrs | High risk <2 yrs |
| YT** | Selected* | High risk | High risk; students attending post-secondary institutions who return to YT for the summer | High risk up to 5 yrs |
| Nunavut | Gr 4 (2005§) | N/A | Contacts of cases; outbreak control | N/A |

**Prenatal infants, children from endemic countries and/or other selected high-risk groups; †Program began; ‡Two-dose program began; §Tetanus-diphtheria acellular pertussis vaccine (dTap) catch-up for this school year only (2004–2005) for students in grades 10 and 11; ¶Program ends; **dTap catch-up for grade 12 students for 2004–2005 and 2005–2006 only. AB Alberta; BC British Columbia; DaPT Diphtheria-acellular pertussis-tetanus; Gr Grade; Hib* Haemophilus influenzae *type b vaccine; IPV Inactivated polio vaccine; Kg Kindergarten; MB Manitoba; MMR Measles-mumps-rubella vaccine; mo Age in months; N/A Not available; NB New Brunswick; NL Newfoundland and Labrador; NS Nova Scotia; NT Northwest Territories; ON Ontario; PEI Prince Edward Island; QC Quebec; SK Saskatchewan; yrs Age in years; YT Yukon Territory*

## REFERENCES


1. Public Health Agency of Canada. <http://www.phac-aspc.gc.ca/im/index.html> (Version current at July 6, 2005).
2. Canadian Paediatric Society, Infectious Diseases and Immunization Committee. Routine Immunization Schedule: Update 2004. Paediatr Child Health 2004;9:17-20.
3. MacDonald NE, Embree J. Access to vaccines: A call to action. Paediatr Child Health 2003;8:11-2.
4. Final Report: National Immunization Strategy. A Report from the F/P/T Advisory Committee on Population Health and Health Security (ACPHHS) to the Conference of F/P/T Deputy Ministers of Health. <http://www.phac-aspc.gc.ca/publicat/nat_immunization_03/> (Version current at July 6, 2005).
5. MacDonald NE. Disharmony in provincial and territorial immunization schedules: A downside of recent developments. Paediatr Child Health 1997;2:71-2.



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The recommendations in this statement do not indicate an exclusive course of treatment or procedure to be followed. Variations, taking into account individual circumstances, may be appropriate. This article has also appeared in a previous issue of *Paediatrics & Child Health* (Paediatr Child Health Vol 10 No 6 July/August 2005).