



BC Centre for Disease Control
AN AGENCY OF THE PROVINCIAL HEALTH SERVICES AUTHORITY

January 5, 2010

ATTN: Medical Health Officers and Branch Offices
Public Health Nursing Administrators and Assistant Administrators
Holders of Communicable Disease Control Manuals

**Re: Revisions to Communicable Disease Control Manual:
Chapter 2 – Immunization Program**

(1) SECTION IIA – “IMMUNIZATION SCHEDULES”

Page 3, Subsection 1.2 “Schedule B: Children \geq 1 Year But $<$ 7 Years When Starting Immunization (Children who will be able to complete a series of Infanrix hexa™ before 7 years of age):”

- Added meningococcal C conjugate vaccine to Grade 6 visit. A booster dose of meningococcal C conjugate vaccine is recommended for all children in Grade 6. Footnote states this booster dose is to be given regardless of the interval since the last dose of a meningococcal C-containing vaccine. For programmatic reasons, Grade 6 is the most opportune time to offer this booster dose.

Page 4, Subsection 1.2.1 “Alternate Schedule B: Children \geq 1 Year But $<$ 7 Years When Starting Immunization:”

- Added meningococcal C conjugate vaccine to Grade 6 visit with the same footnote specified above.

Page 6, Section 1.4 “Children 7 Years to 17 Years (Inclusive) When Starting Immunization:”

- Added meningococcal C conjugate vaccine to initial visit.
- Footnote ③: deleted Recombivax®(MerckFrosst). Both Engerix®-B (20mcg/ml) and RecombivaxHB®(10mcg/ml) may be used in the two dose schedule for grade 6 students and all individuals \geq 11 to \leq 15 years of age.

Administrative Circular 2010: 01



(2) SECTION III: “IMMUNIZATION OF SPECIAL POPULATIONS”

Table of Contents:

- **2.0 “OTHER CONDITIONS”** moved from page 1 to page 2

The following revisions were made to be consistent with the recommendations in Section VII – Biological Products:

Page 2, Table 1 “Vaccines Recommended for Immunosuppressed Clients:”

- Added an “x” for eligibility of individuals with congenital immunodeficiencies for pneumococcal vaccine.

Page 11, Subsection 1.4.2 “Referral Form For MMR Vaccination:”

- Clarified the following information in footnotes ② and ③:
 - Only HSCT clients require re-immunization (2 doses of MMR) due to the hematopoietic ablative therapy preceding the transplant.
 - Immunize according to past immunization history (e.g., if 1 dose of MMR previously received, give 1 more dose).

Page 12, Subsection 1.5.1 “Anatomic or Functional Asplenia:”

- Meningococcal vaccine: added “Reinforcement dose(s) recommended ③.” Information provided in footnote ③ regarding when to administer reinforcement doses.

Page 14, Subsection 1.5.2 “Congenital Immunodeficiency States:”

- Meningococcal vaccine: added “Reinforcement dose(s) recommended ③.” Information provided in footnote ③ regarding when to administer reinforcement doses.

Page 15, Subsection 1.5.3 “Hematopoietic Stem Cell Transplantation (HSCT):”

- In recommended vaccines row for tetanus, diphtheria, acellular pertussis, and polio vaccines – wording changed for clarity. There is no change in vaccine recommendations.
- In row for Hib vaccine, revised wording to “All ages require three doses.”
- Meningococcal vaccine: added “Reinforcement dose(s) recommended ③.” Information provided in footnote ③ regarding when to administer reinforcement doses.

Page 19, Subsection 1.5.4 “Illness that progressively weakens the immune system [e.g., Human Immunodeficiency Virus (HIV)]:”

- For hepatitis A vaccine, added notation that HIV positive individuals require 3 doses of vaccine at 0, 1, and 6 months.

Page 29, Subsection 1.5.9 “Candidate for or Recipient of Solid Organ or Islet Cell Transplant:”

- Meningococcal vaccine: added “Reinforcement dose(s) recommended².” Information provided in footnote ² regarding when to administer reinforcement doses.

Page 31, “Table 8: BC Children’s Hospital Multi-organ Transplant Clinic Accelerated Immunization Schedule For Children Expected To Be Transplanted Before 18 Months Of Age:”

- Added recommendation for second dose of Menactra™ at 4 to 6 years, 3 years after first dose.

Page 32, “Table 9: BC Children’s Hospital Multi-organ Transplant Clinic Routine Immunization Schedule for Children Expected to be Transplanted After 18 months of age:”

- Added recommendation for second dose of Menactra™ at 4 to 6 years, 3 years after first dose.

Page 33, “Table 10: Work Sheet for Immunization of Adult Solid Organ Transplant Candidates and Recipients:”

- Shaded in 2 of the boxes in row beside Td or Tdap and Hepatitis B. Table is intended for reference and recording of basic series of immunizations, rather than booster doses.

Pages 39 & 40, Subsection 2.5 “Cochlear Implant:”

- Deleted recommendation for meningococcal vaccine. In a recent literature review, it was found there is no evidence that children with cochlear implants are at increased risk of meningococcal disease.
- Cochlear implant candidates and recipients should receive meningococcal C conjugate vaccine according to the routine schedule.
- Added statement on page 39 “There is no evidence that children with cochlear implants are more likely to get meningococcal meningitis than children without cochlear implants.”

Page 43, Subsection 2.9 “Women who are pregnant or planning a pregnancy:”

- Regarding hepatitis A vaccine if travelling to a hepatitis A endemic area - added “not provided free.”

Page 57, Section 4.0 “References:”

- Added reference for updated meningococcal recommendations (i.e., MMWR September 25, 2009).

(3) SECTION IV: “ADMINISTRATION OF BIOLOGICAL PRODUCTS”

Table of Contents:

- Added links to Subsection 2.4 “Vaccination Following Vaccine Administration Errors,” page 2a.

Page 1, Subsection 2.1 “Product Preparation:”

- Deleted bullet with the recommendation for the situation when an expired dose of vaccine has been administered. Information moved to Section 2.4 “Vaccination Following Vaccine Administration Errors.”

Page 2a, Subsection 2.4 “Vaccination Following Vaccine Administration Errors:”

- New section.

Pages 3 & 4, Section 3.0 “Considerations for the Scheduling and Administration of Multiple Injections:”

- New information added regarding site selection when administering multiple IM injections at one visit.
- Added general guidelines regarding maximum volume per injection site. The literature contains varying recommendations regarding the maximum number of injections and maximum total volume of all the injections to be given into one IM injection site (i.e., the vastus lateralis or the deltoid). The decision regarding number of injections and maximum volume to be administered should be based on the age and assessed muscle mass of the individual.

Pages 25, 26, and 27 Section 15.0 “References:”

- Updated to include references for information regarding maximum volume per injection site.

(4) SECTION V: “MANAGEMENT OF ANAPHYLAXIS IN A NON-HOSPITAL SETTING”

Page 7, Section 4.0 “ADMINISTRATION OF EPINEPHRINE” and

Page 12, Section 10.0 “EMERGENCY TREATMENT OF ANAPHYLAXIS:”

- Added the following recommendation for the administration of epinephrine when vaccines have been administered IM in both legs and both arms: “If both arms and both legs have been used for IM immunizations, administer epinephrine SC into the upper outer triceps area of the arm(s), or into the fatty area of the anterolateral thigh.”

(5) SECTION VII: BIOLOGICAL PRODUCTS

Table of Contents:

- Added links to rotavirus vaccines, RotaTeq™, page 62a, and Rotarix™, page 62b.
- Added link to varicella zoster vaccine, ZOSTAVAX™, page 81.

Page 1, Diphtheria - Tetanus- Acellular Pertussis - Hepatitis B- Polio- Haemophilus Influenzae Type b Adsorbed (DTaP- HB- IPV- Hib) (INFANRIX hexa™):

- Contraindications information: HIB changed to Hib.

Page 2, Diphtheria -Tetanus - Acellular Pertussis-Polio-Haemophilus Influenzae Type b Adsorbed (DTaP-IPV-Hib) (PEDIACEL®):

- Contraindications information and footnote ❶: HIB changed to Hib.

Page 4, Haemophilus b Conjugate Vaccine (Act-HIB®):

- Added “malignant neoplasm, including leukemia and lymphoma,” as well as “HIV infection” to indications.
- Footnotes ❶❷❸❹: HIB changed to Hib.

Page 5, Hepatitis A Vaccine: Indications:

- Added “candidate or recipient” after liver transplant.
- Deleted “Bone marrow recipients;” replaced with haematopoietic stem cell transplant (HSCT) recipients.”

Page 14, Hepatitis B Vaccine Pre-Exposure Indications:

- Added “candidate or recipient” of liver transplant.
- Changed wording from “recipients of a kidney transplant” to “candidates or recipients of a kidney transplant.”

Page 16, Hepatitis B Vaccine (Engerix®-B):

- Added Indication (4): Recommendations for grade 6 program. The recommended series for grade 6 students and adolescents ≥ 11 years to ≤ 15 years is 2 doses of the adult single dose formulation (20 mcg/1.0 ml) six months apart.
- Deleted information from footnote ❶ that stated “the exception is all persons who receive the 2-dose RecombivaxHB® schedule (e.g., routine grade 6 program).
- Added information to footnote ❷: The adult single dose formulation is thimerosal-free.

Page 18, Hepatitis B Vaccine Pre-Exposure (RecombivaxHB®) (10 mcg/1.0 ml) (Pediatric presentation: 5 mcg/0.5 ml, thimerosal free) Supplier: Merck Frosst

- Deleted information from footnote ❶ that stated “the exception is all persons who receive the 2-dose RecombivaxHB® schedule (e.g., routine grade 6 program).

Page 26, Immune Globulin (Ig) (GamaSTAN™ S/D):

- Under “Recommended and provided free for post-exposure prophylaxis of measles contacts,” added:
 - those for whom MMR is contraindicated

Page 30b, pH1N1 Influenza Vaccine (Inactivated split-Virion) (Arepanrix™):

- Revised footnote ④ “Use same type of influenza vaccine for both doses of pH1N1 vaccine (i.e., two adjuvanted or two unadjuvanted). Infants and children 6 months to 9 years of age who inadvertently received unadjuvanted vaccine for the 1st dose should receive adjuvanted vaccine for the 2nd dose. Adjuvanted vaccine is more immunogenic.”

Page 37, Meningococcal C Conjugate (MCC) Vaccine (Meningitec™)

- Reinforcements information added: “regardless of the interval since the last dose of a meningococcal C-containing vaccine.”

Pages 39 and 40, Meningococcal C Conjugate (MCC) Vaccine (Neis Vac-C®):

- Added footnote ⑦: “If a grade 6 student received Menactra® when they were 2 to 10 years of age, and have not previously received a dose of MCC vaccine, administer MCC vaccine.”
- All grade 6 students should receive a dose of MCC vaccine, including those students who received a previous dose of MCC vaccine or Menactra, “regardless of the interval since the last dose of a meningococcal C-containing vaccine.”
- Deleted indication (8) “Children that received Menactra® prior to 11 years of age, and are age-eligible for MCC vaccine”. This group of children is included in indication (6) “Grade 6 students”.

Pages 41 and 42, Meningococcal Quadrivalent Conjugate Vaccine (Menactra™):

- Deleted cochlear implant (candidate or recipient) from list of indications. In a recent review of the evidence, it was found that there is no evidence that individuals with cochlear implants are at increased risk of meningococcal disease. It is recommended that cochlear implant candidates or recipients receive meningococcal C conjugate vaccine according to the routine indications and schedule.
- Under “Reinforcements,” added “Medically high risk persons:” (dose: 0.5ml IM)
 - Previously vaccinated at ≥ 7 years of age: give 5 years after previous dose
 - Previously vaccinated at ages 2 – 6 years: give 3 years after previous dose
 - Re-immunize every 5 years as long as medical condition exists.
- Under “Special Considerations,” added a new recommendation: “If a Grade 6 child received Menactra® when they were 2 – 10 years of age, and have not previously received a dose of MCC vaccine, administer MCC vaccine.”

Page 44, Pneumococcal Conjugate Vaccine (Prevnar™):

- Added “malignant neoplasm, including leukemia and lymphoma” to the list of examples of immunosuppression related to disease.

Pages 47 and 48, Pneumococcal Polysaccharide Vaccine (Pneumo 23™):

- Added “malignant neoplasm, including leukemia and lymphoma” to the list of examples of immunosuppression related to disease.
- In “Initial Series” section, added: **HSCT Recipients ≥ 2 years of age:** 2 doses: 0.5 ml SC or IM 7 months apart. This recommendation reflects that outlined in Section III – Immunization of Special Populations Tables 5 and 6: Worksheets for Immunization of Hematopoietic Stem Cell Transplant Recipients.
- Added “congenital immunodeficiency states” to the list of those recommended to receive a once-**only** revaccination.
- Precautions information: added information regarding clients with **Hodgkin’s disease:**
 - Do not administer Pneumo 23™ to clients with Hodgkin’s disease less than 10 days prior to or during immunosuppressive therapy.
 - Following intense chemotherapy with or without radiation, the immune response may be depressed for 2 years. During the 2 years following completion of treatment, the antibody response may improve as the interval between treatment and pneumococcal vaccination increases.
- Recommendation for clients with Hodgkin’s disease is based on information in Pneumovax® 23 product monograph and is applicable to both pneumococcal polysaccharide vaccines.

Pages 49 and 50, Pneumococcal Polysaccharide Vaccine (Pneumovax ® 23):

- Added “malignant neoplasm, including leukemia and lymphoma” to the list of examples of immunosuppression related to disease.
- In “Initial Series” section, added: **HSCT Recipients ≥ 2 years of age:** 2 doses: 0.5 ml SC or IM 7 months apart. This recommendation reflects that outlined in Section III – Immunization of Special Populations Tables 5 and 6: Worksheets for Immunization of Hematopoietic Stem Cell Transplant Recipients.
- Added “congenital immunodeficiency states” to the list of those recommended to receive a once-**only** revaccination.
- Contraindications information: deleted statements “Pneumovax23™ is contraindicated for clients with Hodgkin’s disease who have received extensive chemotherapy and/or nodal irradiation. Consult client’s medical specialist.” Chemotherapy treatment for Hodgkin’s disease is a precaution, rather than a contraindication.

Pages 49 and 50, Pneumococcal Polysaccharide Vaccine (Pneumovax ® 23) (cont'd):

- Precautions information: added information regarding clients with **Hodgkin's disease**:
 - Do not administer Pneumo 23™ to clients with Hodgkin's disease less than 10 days prior to or during immunosuppressive therapy.
 - Following intense chemotherapy with or without radiation, the immune response may be depressed for 2 years. During the 2 years following completion of treatment, the antibody response may improve as the interval between treatment and pneumococcal vaccination increases.

Page 62a, Rotavirus Vaccine (Pentavalent human-bovine reassortant) (Oral live attenuated viral) (RotaTeq™):

- New page.

Pages 62b and 62c, Rotavirus Vaccine (Human rotavirus, live attenuated, oral vaccine) (Rotarix™):

- New pages.

Pages 64 and 65, Tetanus-Diphtheria-acellular Pertussis (Tdap) (ADACEL®):

- Revised indications (2), (4) and (5) to include pertussis vaccine. If an individual presents who has not received any doses of tetanus or diphtheria or pertussis vaccine, they should receive the number of doses of Tdap that will complete a primary three dose series of these vaccines.
- "Contraindications" and "Vaccine Components" sections on page 64 moved to page 65

Pages 81 and 82, Varicella Zoster Vaccine (live attenuated viral) (ZOSTAVAX™):

- New pages

Please remove and destroy the following pages from the Communicable Disease Control Manual, Chapter 2 – Immunization Program:

(1) Section IIA – Immunization Schedules

Page 3
Page 4 and 6

Dated January 2009
Dated June 2009

(2) Section III – Immunization of Special Populations

Table of Contents, pages 2, 11, 14, 15, 19, 29, 33,
39, 40 and 57
Page 12, 31, 32, and 43

Dated January 2009
Dated June 2009

(3) Section IV – Administration of Biological Products

Table of Contents
Page 1, 3, 26, and 27
Pages 4 and 25

Dated October 2008
Dated July 2009
Dated October 2008

(4) Section V – Management of Anaphylaxis in a Non-Hospital Setting

Page 7
Page 12

Dated February 2009
Dated June 2009

(5) Section VII – Biological Products

Table of Contents
Page 30b
Page 2, 5, 18, 26, 64, 48, and 50
Pages 1, 4, 16, 40, and 65
Pages 37, 39, 41, 42, 47 and 49
Page 14 and 44

Dated November 5, 2009
Dated November 20, 2009
Dated January 2009
Dated June 2009
Dated July 2009
Dated October 2009

**Please insert the following pages in the Communicable Disease Control Manual,
Chapter 2 – Immunization Program:**

(1) Section IIA – Immunization Schedules

Pages 3, 4 and 6

Dated January 2010

(2) Section III – Immunization of Special Populations

Table of Contents
Pages 2, 11, 12, 14, 15, 19, 29, 31, 32, 33, 39, 40,
43, and 57

Dated January 2010
Dated January 2010

(3) Section IV – Administration of Biological Products

Table of Contents
Page 1, 2a, 3, 4, 25, 26, and 27

Dated January 2010
Dated January 2010

(4) Section V – Management of Anaphylaxis in a Non-Hospital Setting

Pages 7 and 12

Dated January 2010

(5) Section VII – Biological Products

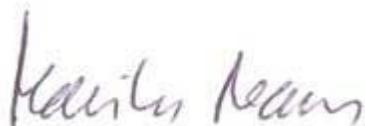
Page 30b
Table of Contents and pages 1, 2, 4, 5, 14, 16,
18, 26, 37, 39, 40, 41, 42, 44, 47, 48, 49, 50,
62a, 62b, 62c, 64, 65, 81, and 82

Dated January 5, 2010

Dated January 2010

If you have any questions or concerns, please contact Karen Pielak, Nurse Epidemiologist, or Cheryl McIntyre, Associate Nurse Epidemiologist, at telephone (604) 707-2510, fax (604) 707-2516 or by email at karen.pielak@bccdc.ca or cheryl.mcintyre@bccdc.ca

Sincerely,



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