BC Centre for Disease Control
An agency of the Provincial Health Services Authority

Administrative Circular 2013:03

Date: February 27, 2013

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

Re: Revisions to the Communicable Disease Control Manual – Chapter II, Immunization Program Section III Special Populations & Section VII Biological Products

The following changes have been made to Section III, Special Populations

Page 8
Under high doses of oral corticosteroid therapy of more than 14 days duration:
The last few words of the 2nd bullet have been changed from:
. . . receiving oral corticosteroid therapy for 14 days or less.

New change:
. . . receiving oral corticosteroid therapy for less than 14 days.

Page 8
Under HIV infection, the wording has been changed from:

- Depending on immunization history, age, and susceptibility, MMR vaccine may be considered if no evidence of significant immune system compromise is present.
- Varicella vaccine may be considered for susceptible individuals ≥ 12 months of age with asymptomatic or mildly symptomatic HIV infection (CDC class N1 or A1) and with age – specific CD4 percentages of ≥ 25%.

New change:
Under HIV infection:

- Depending on immunization history, age, and susceptibility, varicella and MMR vaccine should be offered based on NACI recommended immunologic and CDC clinical categories. Refer to: 1.4.2 REFERRAL FORM FOR VARICELLA VACCINATION and 1.4.3 REFERRAL FORM FOR MMR VACCINATION

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Page 10
The varicella vaccination referral form for immunocompromised clients has been reformatted and reworded in many places.

The 1st sentence immediately below the heading has been changed from:
VARICELLA VACCINATION OF IMMUNOCOMPROMISED CLIENTS REQUIRES PHYSICIAN APPROVAL (either the primary care physician most familiar with the client's current medical status or a medical specialist) *****

New change:
PHYSICIAN APPROVAL IS REQUIRED FOR LIVE VACCINES: The primary care physician most familiar with the client's current medical status *or* a medical specialist*****

Page 10
The information located directly above the table has been changed from:
Varicella vaccine is available for susceptible❶ immunocompromised persons listed below.

New change:
Varicella vaccine is available for susceptible immunocompromised susceptible persons listed below ❶❷❸❹

New change:
❶ Either of the two varicella vaccines may now be used for these clients.
❷ A varicella susceptible person is one without a history of varicella or herpes zoster after 12 months of age and without a history of age appropriate varicella immunization. A self reported history of varicella is adequate for those born before 2004; for those born in 2004 and later, a health care provider diagnosed history is required for reliability. Confirm susceptibility by varicella-specific serology.
❸ Separate the administration of live MMR and varicella vaccine by 4 weeks; the exception is adult HSCT recipients aged ≥ 18 years and HIV infected individuals who can be co-administered these vaccines following physician approval. Univalent varicella vaccine should be used and not the combined MMRV.
❹ See Section VII, Immune Globulin Preparations or Blood: Timing Intervals for Vaccines Containing Live Measles, Mumps, Rubella, or Varicella Virus.

Page 10
The information under HSCT (top left box) has been changed from:
≥ 2 years after HSCT transplant (providing there is minimal immunosuppression and no graft vs. host disease). No need to test for VZV IgG prior to immunization.

New change with a new footnote number❺:
≥ 2 years after HSCT transplant (providing there is minimal immunosuppression and no graft vs. host disease). Test for varicella IgG prior to immunization. ❺

New footnote: ❺ HSCT recipients should not receive more than 1 dose of varicella vaccine. For others, measure the recipient's serological status 4 weeks after the 1st dose of varicella (mark requisition to indicate that client is immunocompromised). If non-immune, give a 2nd dose of varicella ***3 months after the 1st dose.***

Page 10
The following change has made within the table. HIV has been removed and added below within its own table and new footnote number ❻

Immunologic category	HIV-Infected client, by age group: ❻					
	< 12 months. NOTE: this column does not apply to varicella vaccine which is not given in infancy		1-5 years		≥ 6 years	
	Age –specific CD4+ T-lymphocyte counts ($x10^6$/L)	Percent (%) of total lymphocytes	Age –specific CD4+ T-lymphocyte counts ($x10^6$/L)	Percent (%) of total lymphocytes	Age –specific CD4+ T-lymphocyte counts ($x10^6$/L)	Percent (%) of total lymphocytes
1	≥ 1,500	≥ 25	≥ 1000	≥ 25	≥ 500	≥ 25
2	750-1,499	15 – 24	500 - 999	15 – 24	200 - 499	15 – 24

New footnote❻
❻ NACI recommends that HIV infected varicella susceptible children (12 months to ≤12 years old) in immunologic categories 1 and 2 (CD4 counts ≥15%) and CDC clinical category N (asymptomatic), A (mildly symptomatic) or B (moderately symptomatic) may receive two doses of varicella vaccine with a 3 month interval between doses. HIV infected varicella susceptible adolescents and adults in immunologic categories 1 and 2 may also receive two doses of varicella vaccine with a 3 month interval between doses.

Page 10a
New wording has been added to the physician approval form:
Patient verification must be renewed after 3 months has passed

Page 11
The MMR vaccination referral form for immunocompromised clients has been reformatted and reworded in many places.

The 1st sentence immediately below the heading has been changed from:
MMR VACCINATION OF IMMUNOCOMPROMISED CLIENTS WITH A LIVE VACCINE REQUIRES PHYSICIAN APPROVAL (either the primary care physician most familiar with the client's current medical status or a medical specialist).*****

PHYSICIAN APPROVAL IS REQUIRED FOR LIVE VACCINES: The primary care physician most familiar with the client's current medical status or a medical specialist.*****

Page 11
The information directly above the table has been changed from:
MMR vaccine is available for immunocompromised ❶ persons listed below.

New change:
MMR vaccine is available for susceptible immunocompromised clients listed below❶❷

Footnote ❶ has changed from:
❶ Separate the administration of MMR and Varicella vaccine by at least 4 weeks

New changes to footnote ❶ are now more detailed and include information about the number of doses and interval between doses:

❶ Separate the administration of live MMR and varicella vaccine by 4 weeks; the exception is adult HSCT recipients aged ≥ 18 years and HIV infected people who can be co-administered these vaccines following physician approval. Univalent varicella vaccine should be used and not the combined MMRV. For all except HSCT recipients, immunize according to age and past immunization history (e.g., give 2nd dose if in an age group for whom two doses of MMR would be indicated) and use a 4 week minimum interval between doses if 2 doses are indicated. HSCT recipients can be assumed to be susceptible following ablative therapy and transplant.

A new footnote❷ has been added:
❷ For intervals from receipt of blood/ blood products, see Section VII, Immune Globulin Preparations or Blood: Timing Intervals for Vaccines Containing Live Measles, Mumps, Rubella, or Varicella Virus.

Page 11
The following has been removed from the list of medical problems:
2 doses minimum 4 weeks apart ❸

New change:
Doses and intervals can be found in footnote ❶

Page 11
The information about HSCT recipients has changed from (1st row, 1st box):
HSCT recipient (provided there is no GVHD, no suppressive Rx): **2 doses 6 – 12 mos apart ❷**

New change:
HSCT recipient ≥ 2 years post transplant (provided there is no GVHD, immunosuppression has been discontinued for at least 3 months, and the client is deemed immunocompetent by a transplant specialist). ❸

A new footnote ❸ has been added:
❸ HSCT recipients: measure the recipient's serology 4 weeks after the 1st dose of MMR. If non-immune to measles or rubella, give a 2nd dose of MMR 3 months after the 1st dose.

Page 11
The following change has made within the table. HIV has been removed and added within its own table and a new footnote number ❹

Immunologic category	HIV-Infected client, by age group: ❹					
	< 12 months		1-5 years		≥ 6 years	
	Age –specific CD4+ T-lymphocyte counts ($x10^6$/L)	Percent (%) of total lymphocytes	Age –specific CD4+ T-lymphocyte counts ($x10^6$/L)	Percent (%) of total lymphocytes	Age –specific CD4+ T-lymphocyte counts ($x10^6$/L)	Percent (%) of total lymphocytes
1	≥ 1,500	≥ 25	≥ 1000	≥ 25	≥ 500	≥ 25
2	750-1,499	15 – 24	500 - 999	15 – 24	200 - 499	15 – 24

New footnote number❹

❹ NACI recommends that HIV infected children (12 months to ≤12 years old) in immunologic categories 1 and 2 (CD4 counts ≥ 15%) and CDC clinical category N (asymptomatic), A (mildly symptomatic) or B (moderately symptomatic) may receive two doses of MMR vaccine with a 3 month interval between doses. HIV infected adolescents and adults in immunologic categories 1 and 2 may also receive two doses MMR vaccine with a 3 month interval between doses. Univalent varicella vaccine may be given at the same time if indicated.

Page 11a
New wording has been added to the physician approval form:
Patient verification must be renewed after 3 months has passed

Page 16
Changes to page16 begin half way down the page and continue to the end of the page.

Old page 16: The Hematopoietic Stem Cell Transplant (HSCT) program of British Columbia will supply the client with a letter authorizing and outlining the vaccines required; and the recommended schedule. These vaccines may be administered by the client's doctor or by public health, according to Health Authority policy.

Public health should administer the vaccinations according to the client's letter, unless the schedule or vaccine is not licensed for use in the given age group. Maintain minimum intervals between vaccine doses and follow vaccine specific guidelines outlined in the Communicable Disease Control Manual, Chapter 2, Section VII, Biological Products.

If the client undergoes the procedure out-of-province and /or does not receive a letter outlining the vaccines required, refer to Table 4 Worksheet for Immunization of Adult Hematopoietic Stem Cell Transplant (HSCT) Recipients (Those ≥18 Years of Age) and Table 5 Worksheet for Immunization of Child Hematopoietic Stem Cell Transplant (HSCT) Recipients (Those <18 Years of Age).

Individuals post-HSCT receive all indicated vaccines, regardless of immunization history prior to HSCT and whether it was an allogeneic or autologous HSCT.

Immunization with inactivated vaccines is generally started 12 months post HSCT, except influenza which can be administered 6 months post HSCT.
Do not administer live vaccines until 24 months post HSCT and then only if there is no ongoing immune suppressive treatment or graft-versus-host disease (GVHD). **Note:** BCG is contraindicated at all times.

New page 16 changes:
HSCT recipients are at significant risk of developing life-threatening invasive pneumococcal disease (IPD). IPD rates in this group are between 1-10% with a median onset of 1 year following transplant. Because of the poor response to the pneumococcal polysaccharide vaccine in these recipients, individuals of all ages are recommended to receive the pneumococcal conjugate vaccine as well as the polysaccharide.

Use Table 4: Worksheet for Immunization of Adult Hematopoietic Stem Cell Transplant (HSCT) recipients (those ≥ 18 years of age) for scheduling guidance and as a paper record of Immunizations.

Use Table 5: Worksheet for Immunization of Child Hematopoietic Stem Cell Transplant (HSCT) recipients (those <18 years of age) for scheduling guidance and as a paper record of Immunizations.

Post-HSCT recipients receive all indicated vaccines, regardless of immunization history prior to HSCT and whether it was an allogeneic or autologous HSCT.

Most inactivated vaccines should be initiated **6** months post HSCT. Inactivated influenza vaccine can be given at 6 months post HSCT or as early as 4 months. If given before 6 months post HSCT a 2nd dose of inactivated influenza vaccine should also be given 4 weeks later.

The HSCT specialist will determine the appropriate time to commence immunizations and will provide written guidance to the client for sharing with the Public Health Nurse.

Do not administer live vaccines until 24 months post HSCT and then only if there is no ongoing immune suppressive treatment or graft-versus-host disease (GVHD).
Note: BCG is contraindicated at all times.

Page 17
New updates have been made to Table 4. Worksheet for Immunization of Adult Hematopoietic Stem Cell Transplant (HSCT) Recipients **(those ≥ 18 years of age).**

Hepatitis B (Row 4, Column 5) has a new footnote❺
❺For programmatic reasons the 3rd dose of Hep B and the 2nd dose of Hep A are to be given at 18 months after HSCT. However if the client presents earlier for the 3rd dose of Hep B and the 2nd dose of Hep A these vaccines can be administered following the minimum intervals. Section IIA page 12 3.1 Minimum intervals between vaccine doses table

PCV13 and PPV23 has a new change as NACI recommends a 6 month interval between the 3rd dose of PCV13 (Row 6, Column 3) and the 1st dose of PPV23 (Row 6, Column 4).
New change:
Row 1, Column 4 used to read, 10 months after HSCT
New change:
Row 1, Column 4 now reads, 14 months after HSCT

Refer to PPV23❻ (Row 6, Column 4). There is a new footnote ❻
❻ **PCV13 is to be given using a minimum interval of 4 weeks between the 1st and 2nd dose and 2nd and 3rd dose.** Administer PPV23 no earlier than 6 months after PCV13. A second dose of PPV23 is recommended 5 years after the first PPV23.

For your information, the NACI recommended 6 month interval between PCV13 and PPV23 can be found in the new Canadian Immunization Guide, 2012. Part 4, Active Vaccines, retrieved from,
http://www.phac-aspc.gc.ca/publicat/cig-gci/p04-pneu-eng.php#immuno

Page 17a
There is a change to footnote number ❼ from:
❼ . . . influenza may commence 3 months after HSCT.

New change:
❼ . . . influenza may commence 4 months after HSCT.

Page 17a
There is a new addition at the end of footnote ❾
❾ Either of the two available varicella vaccines may be used.

Page 17a
A new reference has been added at the end of the page.

Canadian Immunization Guide, 2012, Part 4, Active Vaccines, Chapters on Measles Vaccine http://www.phac-aspc.gc.ca/publicat/cig-gci/p04-meas-roug-eng.php#ru and Varicella Vaccine http://www.phac-aspc.gc.ca/publicat/cig-gci/p04-vari-eng.php#a4

The following changes have been made to Section VII, Biological Products

Page 33a
Influenza Vaccine (Live, attenuated) (FLUMIST®)

Under precautions, a new precaution has been added and a new footnote number❺:
6. No information on the effect of FLUMIST® on a TB skin test is available. Until such information is available, it is prudent to do TB skin testing on the same day as FLUMIST® immunization, or delay TB skin testing ≥ 4 weeks❺

Page 33b
New footnote❺:
❺ FLUMIST® and BCG are both live attenuated biological products and the effect of FLUMIST® on a TB skin is not available. Centers for Disease Control and Prevention. Epidemiology and Prevention of Vaccine-Preventable Diseases. Atkinson W, Wolfe S, Hamborsky J, eds. 12th ed., second printing. Washington DC: Public Health Foundation, 2012. p.9 - 29. Available from http://www.cdc.gov/vaccines/pubs/pinkbook/genrec.html

Page 53 and 54
Human Rabies Immune Globulin (Rabig) (HYPERRAB®)
Supplier: Grifols Therapeutics Inc.

The supplier name has been changed on the product to Grifols Therapeutics Inc. and HYPERRAB is now a Registered product and not a Trademark.
Talecris Biotherapeutics, Inc. was purchased by Grifols Therapeutics Inc. in 2010.

Page 64 and 65
Tetanus-Diphtheria-acellular Pertussis (Tdap) (ADACEL®)
Under precautions two new points have been added with a new footnote number❺:

PRECAUTION	1. History of Guillain-Barré syndrome (GBS) occurring within 8 weeks of receipt of a tetanus containing vaccine 2. Tdap should be considered during pregnancy, preferably after 20 weeks gestation❺

New footnote❺
The Society of Obstetricians and Gynecologists of Canada (#220, SOGC, 2008) consider inactivated viral vaccines, bacterial vaccines, and toxoids safe in pregnancy. Evergreen Canadian Immunization Guide (Part 4, 2012) recommends TdaP in the second half of pregnancy.

Please remove and destroy the following page from the Communicable Disease Control Manual, Chapter 2 – Immunization Program, Section III.

Page 8	Dated November 2010
Page 10	Dated June 2012
Page 11	Dated November 2012
Page 16	Dated January 2009
Page 17	Dated October 2012
Table of Contents	Dated June 2012

Please insert the following page in the Communicable Disease Control Manual, Chapter 2 – Immunization Program, Section III

Page 8	Dated February 2013
Pages 10 and 10a	Dated February 2013
Pages 11 and 11a	Dated February 2013
Page 16	Dated February 2013
Pages 17 and 17a	Dated February 2013
Table of Contents	Dated February 2013

Please remove and destroy the following page from the Communicable Disease Control Manual, Chapter 2 – Immunization Program, Section VII.

Pages 33a and 33b	Dated October 2012
Pages 53 and 54	Dated April 2010
Pages 64 and 65	Dated April 2010

Please insert the following page in the Communicable Disease Control Manual, Chapter 2 – Immunization Program, Section VII

Pages 33a and 33b	Dated February 2013
Pages 53 and 54	Dated February 2013
Pages 64 and 65	Dated February 2013

If you have any questions or concerns, please contact Karen McColgan, Public Health Resource Nurse, at telephone (604) 707-2577, fax (604) 707-2515 or by email at karen.mccolgan@bccdc.ca

Sincerely,

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