

#### June 23, 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 I – Management of Specific Diseases: Pertussis

# Please note the following changes to the Communicable Disease Control Manual, Chapter I – Management of Specific Diseases: Pertussis.

The formatting of the guidelines has been revised. The flow chart included near the front of the guideline is intended as a quick reference to assist with case management. The ordering of information in the document has changed to ensure that information needed for actions related to case and contact management is near the front and background information is toward the back of the document.

### Page 1, Section 1.0 "Authority:"

• Updated. The authority for following up cases of pertussis can be found in the 2008 BC Public Health Act.

### Page 1, Section 2.0 "Goal:"

• Added information that the goal of the pertussis control program in BC is to reduce **severe** morbidity and mortality related to pertussis infection.

# Page 2, Section 3.0 "Pertussis Flow Chart:"

• New section.

# Page 3, Section 4.0 "Case Identification:"

• Information was previously in "Definitions."

# Administrative Circular 2010:11

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#### Page 3, Subsection 4.1 "Confirm the Diagnosis:"

- Added recommendations to "investigate all clinically identified and laboratory reports of pertussis as soon as possible. Assess whether case is confirmed, probable, or suspect."
- Definitions of confirmed, probable, and suspect cases of pertussis updated for consistency with "Case definitions for diseases under national surveillance" from the Public Health Agency of Canada.

#### Page 4, Section 5.0 "Case Management:"

• Section was previously titled "Procedure for Management of a Reported Case of Pertussis".

### Page 4, Subsection 5.1 "Laboratory Testing:"

• New section.

#### Page 4, Subsection 5.2 "Case History:"

- New section.
- Information regarding the period of communicability was previously found in section titled "Infectious Period".

#### Page 4, Subsection 5.3 "Case Treatment:"

- Section was previously called "Recommend Treatment."
- Added specific direction to refer client to a physician for treatment.
- More detailed information provided regarding the effect of starting antimicrobial therapy during the catarrhal and paroxysmal cough stages of pertussis illness.
- The table on page 5 is a brief summary of the age recommendations for each recommended antimicrobial agent.
- Other points for consideration when deciding which antimicrobial to recommend are included as background information.
- A detailed description of each antimicrobial agent is included in Subsections 11.2, 11.3, 11.4, and 11.5.

# Page 6, Subsection 5.4 "Treatment and Chemoprophylaxis of Pregnant Women:"

- Information was previously found in "Management of Pregnant Contacts."
- Section expanded to include information for pregnant cases and pregnant contacts.
- More information provided regarding antimicrobial agents. Either erythromycin or azithromycin may be taken during pregnancy. Clarithromycin and Trimethoprim-sulfamethoxazole are not recommended during pregnancy.

#### Page 6, Subsection 5.5 "Treatment and Chemoprophylaxis of Infants:"

- Information was previously found in "Recommend Treatment."
- Information has been re-organized for clarity.
- Deleted the statement "to date, use of azithromycin in infants < 1 month has not been associated with infantile hypertrophic stenosis (IHPS)." The 2008 MMWR article "Prevention of Pertussis, Tetanus, and Diphtheria Among Pregnant and Postpartum Women and Their Infants" states that IHPS has been reported in 2 preterm infants who received azithromycin for post-exposure prophylaxis; however a causal relationship between IHPS and azithromycin has not been established."

### Page 7, Subsection 5.6 "Exclusion of Cases:"

- Pregnant women in the third trimester added to examples of vulnerable individuals.
- Length of exclusion when no treatment is given has been clarified. If a case who does not receive antimicrobial treatment is excluded, the exclusion should extend until 21 days after the onset of the paroxysmal cough. If a specimen happens to be collected at the end of the 21 days and the case is still found to be culture positive, the exclusion should continue and consultation with BCCDC is recommended. There is not an expectation that all cases will be tested before the exclusion is discontinued.

### Page 8, Subsection 5.7 "Immunization of Lab Confirmed Cases:"

• Added rationale for completing the routine immunization series of all individuals diagnosed with natural pertussis infection. Information is taken from the 2006 Canadian Immunization Guide, 7<sup>th</sup> ed.

### Page 8, Section 6.0 "Contact Management:"

• The diagram depicting the stages of pertussis infection and the period of communicability has been moved here to assist with contact identification.

#### Page 9, Subsection 6.1 "Contact Identification:"

- Description of pertussis contact previously found in "Significant pertussis contact".
- Added "direct contact with the respiratory secretions of the infected person" to the list of types of contact to consider.

# Page 9, Subsection 6.1.1 "High risk contacts for whom chemoprophylaxis is recommended:"

- The list of high risk contacts has been re-formatted for clarity.
- Group daycare as a high risk environment has been deleted. This is consistent with the recommendations from the National Consensus Conference on Pertussis published in the 2003 CCDR.

# Page 10, Subsection 6.1.2 "Contacts for whom chemoprophylaxis is not recommended:"

- Information was previously found in "Notification and early treatment of contacts."
- Identification of contacts in this group is at the discretion of the MHO and is dependent on local resources.
- Information regarding pertinent information to be shared with the contact has been added.

# Page 10, Subsection 6.2 "Chemoprophylaxis:"

- Recommendation for chemoprophylaxis of all those in a group daycare has been deleted. Again, this is consistent with the recommendations from the National Consensus Conference on Pertussis published in the 2003 CCDR. The recommendation for chemoprophylaxis of all contacts in a group daycare if there is an infant <1 year of age or a pregnant woman in the 3<sup>rd</sup> trimester in the daycare is at the discretion of the MHO.
- Note added regarding chemoprophylaxis recommendation when the case is the infant or pregnant woman in the household or daycare setting.
- Direction is to refer identified high risk contacts to a physician for chemoprophylaxis. Previously, the high risk contact may have been given a prescription completed by the MHO. This recommendation was the result of a discussion on the Provincial CD Nurses monthly conference call August 12<sup>th</sup>, 2009.
- Detailed information regarding the recommended dosages, contraindications, precautions, and other considerations regarding the recommended chemoprophylactic agents is provided in Sections 11.1 – 11.5.

### Page 12, Subsection 6.4 "Immunization of Contacts:"

- Information was previously found in "Immunization." Information pertaining to acceleration of the pertussis immunization schedule in communities where there is evidence of ongoing pertussis transmission has been moved to Subsection 7.1 "Immunization during an outbreak."
- Added statement "Immunization following recent exposure is not effective against infection but will provide protection if subsequent exposure occurs."
- Wording changed from "children exposed to a case of pertussis" to "individuals identified as contacts" to reflect all the individuals who are eligible for pertussis-containing vaccine. It is recommended that this be used as an opportunity to update routinely recommended vaccines for all individuals identified during the contact identification process.

# Page 13, Section 7.0 "Outbreak Management:"

• Added clarification of high risk persons (i.e., infants <1 year of age and pregnant women in the 3<sup>rd</sup> trimester).

### Page 13, Subsection 7.1 "Immunization during an Outbreak:"

- Added clarification that acceleration of the pertussis immunization schedule is at the discretion of the MHO.
- Products used for routine immunization changed to INFANRIXhexa<sup>™</sup> and PEDIACEL®. Recommendations for acceleration of the pertussis immunization schedule are consistent with minimum interval recommendations.
- Recommendation for ADACEL® added.

### Page 14, Section 8.0 "Report:"

- Information was previously found in "Subsection 5.2 Report".
- Additional information added regarding reporting procedure. It is not expected that each individual case of pertussis will be reported to the MHO. As many of the recommendations in these guidelines are at the discretion of the MHO, the PHN should consult with the MHO according to local protocols.
- Public Health is responsible for reporting confirmed and probable cases to BCCDC via the electronic reporting format (i.e., iPHIS or PARIS).

# Page 14, Section 9.0 "Clinical Description:"

- Information was previously found in "Section 2.0 Clinical Description."
- Information has been re-formatted for clarity. A more detailed description of the three stages of pertussis illness (i.e., catarrhal, paroxysmal, and convalescent stages) has been provided.

# Page 15, Section 10.0 "Epidemiology:"

- Added more detailed information regarding rates of pertussis in BC.
- Added statement "One to three deaths occur in Canada each year, particularly in infants too young to have begun their immunization series and in partially immunized infants." This information is taken from the 2006 Canadian Immunization Guide, 7<sup>th</sup> ed.

# Page 16, Section 11.0 "Case and Contact Management Forms:"

• There are eleven supporting documents that may be used for case and contact management of pertussis.

# Page 17, Subsection 11.1 "Pertussis Treatment and Chemoprophylactic Agents – Dosage Summary:"

- This page is intended as a quick reference only. More detailed information is found on the individual pages for each antibiotic.
- Information was previously "Table 2: Treatment of Pertussis and Chemoprophylaxis of Pertussis Contacts, by Age."
- Age range in first column, bottom 2 rows changed for clarity. Ages are consistent with British Columbia's Children's Hospital pediatrics drug dosage guidelines.

### Pages 18 – 25:

- Detailed description of each medication is provided including indications, dosage recommendations, contraindications, precautions, recommendations during pregnancy or breastfeeding, common side effects, and other considerations.
- These pages were created in response to feedback that more detail is needed for nurses and physicians regarding prescribing antibiotics for pertussis treatment and prevention.

# Page 26, Subsection 11.6 "Sample Letter – Preventive Antibiotic Recommendations for High Risk Contacts to a Case of Pertussis:"

- The letter was previously available on the Surveillance Forms section of the BCCDC website under the title "Pertussis Treatment Form."
- The letter now clearly states that:
  - the recipient has been identified as a contact of a case of pertussis and that it is recommended that he/she receive a course of antibiotics;
  - the recipient should see a physician to obtain a prescription for antibiotics
  - the client (or their child) should contact their physician or PHN if they develop symptoms of whooping cough in the next 3 weeks (the potential incubation period)
  - more information can be found at <u>HealthlinkBC</u> and the <u>BCCDC</u> website
  - recipients should take this opportunity to review their own (or their child's) immunization status. A link to the immunization schedules for BC on the <u>ImmunizeBC website</u> is provided.

# Page 27, Subsection 11.7 "Sample Letter to Physician of High Risk Contact to a Case of Pertussis:"

- The letter is intended for use when a PHN is referring a high risk contact to a physician for a prescription for antibiotics.
- The form was developed in response to feedback indicating that when PHNs identify high risk pertussis contacts, the contacts are most often referred to their family physician for the antibiotic prescription.
- A copy of the "Pertussis Treatment and Chemoprophylactic Agents Dosage Summary" is included on page 28 and is intended to accompany the letter to the physician.

# Page 29, Subsection 11.8 "Sample Pertussis Contact Notification Letter:"

- The letter was previously found in "Appendix A."
- This letter is intended for contacts that are **not** high risk.
- Hyperlinks to <u>Healthlink BC</u> and <u>BCCDC</u> have been added.

• Recipients should take this opportunity to review their own (or their child's) immunization status. A link to the immunization schedules for BC on the <u>ImmunizeBC website</u> is provided.

# Page 30, Subsection 11.9 "Sample Letter to Physician of a Pertussis Contact:"

- The letter was previously found in "Appendix B."
- The letter is intended for physicians of contacts who are not high risk. By sending the letter to the physician, the PHN is notifying the physician of specific contacts and, at the same time, increasing physician awareness of pertussis in the community. The letter may be given to the client to take to the physician or sent directly to the client's physician.
- A copy of the "Pertussis Treatment and Chemoprophylactic Agents Dosage Summary" is included on page 31 and is intended to accompany the letter to the physician.

### Page 32, Subsection 11.10 "Pertussis Case Management Form:"

- The form was previously only located in the Surveillance Forms section of the BCCDC website. The form has been re-formatted.
- The purpose of the form is to facilitate case management. Completion of the form is optional. If completed, do not submit the form to BCCDC.

### Page 34, Subsection 11.11 "Pertussis Contact Management Form:"

- The form was previously only located in the Surveillance Forms section of the BCCDC website.
- The form has been re-formatted and the definition of "high risk contacts has been added.
- The purpose of the form is to facilitate contact follow-up. Completion of the form is optional. If completed, do not submit the form to BCCDC.

### Page 35, Section 12.0 "References:"

• Updated.

# Please remove and destroy the following pages from the Communicable Disease Control Manual, Chapter I – Management of Specific Diseases – Pertussis:

Table of Contents Pages 1 – 13 Appendices A and B

Dated February 2006

Please insert the following pages in the Communicable Disease Control Manual, Chapter I – Management of Specific Diseases – Pertussis:

Table of Contents Pages 1 –36

Dated June 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 <u>karen.pielak@bccdc.ca</u> or <u>cheryl.mcintyre@bccdc.ca</u>

Sincerely,

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