 Department of Health Government of Nunavut		NURSING POLICY, PROCEDURE, PROTOCOLS & MEDICAL DIRECTIVE	
		Community Health Nursing	
TITLE:		SECTION:	POLICY NUMBER:
<i>B. Pertussis</i> Testing and Management		Pharmacy	09-025-00
EFFECTIVE DATE:	REVIEW DUE:	REPLACES NUMBER:	NUMBER OF PAGES:
July 2024	July 2027	Update (#09-025-00)	7
APPLIES TO:			
Public Health Nurses, Community Health Nurses and Supervisors of Health Programs			

1. BACKGROUND:

The Department of Health (Health) is committed to improving access for testing/screening for *Bordetella pertussis* (*B. pertussis*) and providing treatment options that align with current research and best practices. This Medical Directive is in response to a current outbreak of *B. pertussis*.

Pertussis is an acute bacterial infection of the respiratory tract caused by *B. pertussis*. Antibiotic therapy is recommended for all patients defined as a confirmed or probable case of *B. Pertussis*, or post-exposure prophylaxis for patients who are a positive contact and defined as a vulnerable population. Therapeutic intervention needs to occur within a timely manner in order to impact health outcomes.

This medical directive provides an authorizing mechanism for Public Health Nurses (PHN) to initiate testing for *B. pertussis*. along with permitting PHNs, Community Health Nurses (CHN) and Supervisors of Health Programs (SHP) to dispense antibiotics to patients on a case-by-case basis as identified and directed by the CPHO office. The purpose of this medical directive is to minimize transmission risk, ensure timely treatment, and protect vulnerable populations within the community.

2. MEDICAL DIRECTIVE:

- 2.1. PHNs are authorized to initiate PCR nasopharyngeal swabs for *B. pertussis* as per the guidelines outlined in Health's **Communicable Disease Manual**.
 - 2.1.1. CHNs and SHPs already possess the delegated authority to initiate PCR nasopharyngeal swabs for *B. pertussis* and will adhere to Health's **Communicable Disease Manual** for guidance.
- 2.2. PHNs, CHNs and SHPs may dispense post-exposure prophylactic antibiotics as outlined in **Table 1. Recommended Treatment and Prophylaxis Therapy for *B. Pertussis*** to contacts of a positive *B. Pertussis* case as identified and directed by the CPHO office.
- 2.3. CHNs and SHPs may actively treat confirmed or probable cases of *B. Pertussis* with antibiotics as outlined in **Table 1. Recommended Treatment and Prophylaxis Therapy for *B. Pertussis*** as identified and directed by the CPHO office.

- 2.3.1. If the confirmed or probable case is classified as a “vulnerable population” (Refer to 5.6) a consult with an NP/MD is required for additional considerations in the plan of care.

Table 1: Recommended Treatment and Prophylaxis therapy for B. Pertussis

Treatment eradicates <i>Bordetella pertussis</i> from the nasopharynx but has no effect on the clinical symptoms or course of pertussis, unless given early. There is no limit to the start date of treatment of laboratory confirmed cases of pertussis. However, there is no benefit to treatment after three weeks of paroxysmal coughing.		
*Antibiotic therapy and dosing are the same for both post-exposure prophylaxis and active treatment		
Antibiotic	Dosage	Contraindications
1 st Line Azithromycin PHN, CHNs and SHP are permitted to dispense as per CPHO Office	<u>Infants under the age of six months:</u> <ul style="list-style-type: none"> 10mg/kg PO daily for 5 days <u>Infants 6 months and older:</u> <ul style="list-style-type: none"> 10 mg/kg PO daily for 1 day (max of 500mg/day); THEN 5 mg/kg PO daily for 4 days (max of 250mg/day). <u>Adults:</u> <ul style="list-style-type: none"> 500 mg po daily for 1 day; THEN 250 mg PO daily for 4 days. 	<ul style="list-style-type: none"> Allergy; Prolonged QTc
2 nd Line Trimethoprim/ Sulfamethoxazole (TMP/SMX) CHNs and SHP are permitted to dispense as per CPHO Office *Use if contraindication to Azithromycin	<u>Children:</u> <ul style="list-style-type: none"> 8 mg of TMP/kg/day divided into BID dosing PO for 10 days. - Refer to Append A: Pharmacy Memo for further guidance on compounding weight-based dosing for TMP/SMX pediatric tablets <u>Adults:</u> <ul style="list-style-type: none"> Bactrim DS PO BID for 10 days. 	<ul style="list-style-type: none"> Infants < 2 months of age. 1st & 3rd Trimester; TMP/SMX previously induced Steven-Johnson syndrome or Thrombocytopenia; Folate deficiency induced anemia; Severe liver disease
*If patient has contraindications to all the above therapies, consult an MD/NP		

3. Authorized Implementors

- 3.1. PHNs, CHNs and SHPs who possess the knowledge, skill and judgment to do so. The PHN, CHN and SHP are required to demonstrate competency to implement this medical directive through the orientation process.
- 3.2. Sub-delegation is not permitted to another health care provider or staff.

4. PRINCIPLES:

- 4.1. PHNs, CHNs and SHPs are expected to practice within their own level of competence and seek guidance from their supervisor, physician or NP as needed. Decision making model is included in **Appendix B: Decision Making Model for Performing Transferred Medical Functions** to assist with the decision to perform additional skills and delegated functions.
- 4.2. Guidelines do not replace clinical judgement. Management decisions must be individualized.

5. DEFINITIONS:

- 5.1. **Infectious agents:** The bacillus *Bordetella pertussis* (*B. pertussis*) is highly contagious.

- 5.2. **Reservoir:** Humans are the only reservoir for *B. pertussis*. Adults and adolescents are often an important source of infection for infants.
- 5.3. **Mode of Transmission:** Pertussis is mainly transmitted by large droplet infection or direct contact with discharges from respiratory mucous membranes of infectious people. Indirect spread via contaminated objects occurs rarely. There is some experimental evidence which supports airborne transmission over distances greater than one metre.
- 5.4. **Exposure:** Shared Respiratory Secretions; face to face exposure for greater than 5 minutes; and shared confined air (within 1 meter) for greater than one hour).
- 5.5. **Incubation Period:** Ranges from 4-21 days, typically seen between 7-10 days.
- 5.6. **Vulnerable Populations:** < 1 years old (regardless of vaccine status); pregnancy in 3rd trimester; and immunocompromised.
- 5.7. **Immunocompromised/Significantly Immunosuppressed:** Solid organ transplant; Cancer; advanced or untreated HIV; Hematologic Malignancy or Bone Marrow Transplant; high dose corticosteroids for more than 2 weeks; alkylating agents; antimetabolites; cancer chemotherapy; TNF blockers; anti CD20 agents and other immunosuppressive biologic agents.
- 5.8. **Confirmed Case:** A. Laboratory confirmation of infection detecting *B. pertussis* DNA or an indeterminate test result from an appropriate clinical specimen AND one or more of the following: a) cough lasting 2 weeks or longer; b) paroxysmal cough of any duration; c) cough with inspiratory “whoop”; d) cough ending in vomiting or gagging or associated with apnea.
OR
B. pertussis Epidemiologic link to a laboratory-confirmed case AND one or more of the following for which there is no other known cause: a) paroxysmal cough of any duration; b) cough with inspiratory “whoop”; c) cough ending in vomiting or gagging or associated with apnea.
- 5.9. **Probable Case:** Cough lasting 2 weeks or longer in the absence of appropriate laboratory tests and not epidemiologically linked to a laboratory-confirmed case AND one or more of the following, with no other known cause: a) paroxysmal cough of any duration; b) cough with inspiratory “whoop”; c) cough ending in vomiting or gagging or associated with apnea.
- 5.10. **Suspected Case:** One or more of the following, with no other known cause: a) paroxysmal cough of any duration; b) cough with inspiratory “whoop”; c) cough ending in vomiting or gagging or associated with apnea.
- 5.11. **Health Care Providers:** Community Health Nurse; Supervisor of Health Programs; Nurse Practitioner; Public Health Nurse; Licenced Practical Nurse; Advanced Care Paramedic; Primary Care Paramedic

6. PROTOCOL/PROCEDURE

- 6.1. All Healthcare Providers are expected to follow Health’s **Communicable Disease Manual** for guidance on reporting, contact tracing, assessment and follow up with patient’s who are contacts of a positive *B. pertussis* case along with confirmed, probable, or suspected cases of *B. pertussis*.
- 6.2. CHNs and SHPs will follow the First Nations and Inuit Health Branch’s *B. Pertussis* Clinical Practice Guidelines on assessments, monitoring and follow-ups. CHNs and SHPs will strictly adhere to consultation recommendations when advised.

- 6.3. PHNs, CHNs and SHPs are responsible for determining if the conditions of this medical directive have been met before enacting it.
- 6.4. PHNs, CHNs and SHPs will follow **Section 2 (Medical Directive)** authorizing testing for *B. Pertussis* and dispensing antibiotics as identified and directed by the CPHO office.
- 6.5. PHNs, CHNs and SHPs will follow **Policy 09-005-00 Dispensing Medication** when issuing antibiotic therapy to a patient.
- 6.6. PHNs, CHNs and SHPs are accountable for providing timely follow-up of test results in accordance with **Policy 08-005-00 Acknowledgement of Diagnostic Test Results** and **Policy 08-006-00 Follow-up of Abnormal Diagnostic Test Results**.

7. Documentation

- 7.1. The PHNs, CHNs, SHPs will follow **Policy 06-008-00 Documentation Standards; Policy 06-009-00 Documentation Format; and Policy 09-006-00 Administering and Dispensing Medications – Documentation**.

8. RELATED POLICIES, PROTOCOLS AND LEGISLATION

Nunavut Communicable Disease and Surveillance Manual

Documentation Standards Policy (06-008-00)


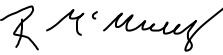
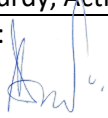
Documentation Format Policy (06-009-00)

Acknowledgement of Diagnostic Test Results (08-005-00)

Follow-up of Abnormal Diagnostic Test Results (08-006-00)

Dispensing Medication Policy (09-005-00)

Administering and Dispensing Medications – Documentation Policy (09-006-00)

Approved By: 	Date: 08-Aug-24
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