

Team Name: Communicable Disease/Immunization Team	Reference Number: CLI.6210.SG.001
Team Lead: Regional Public Health-Healthy Living Manager	Program Area: Public Health- Healthy Living
Approved by: Executive Director - North	Policy Section: General
Issue Date: August 26 2015 Review Date: Revision Date:	Subject: Communicable Disease Follow-up – Public Health

STANDARD GUIDELINE SUBJECT:

Communicable Disease Follow-up - Public Health

PURPOSE:

The purpose of this guideline is to provide guidance to Public Health Nurses (PHN) regarding the public health investigation and follow-up for cases and contacts of reportable communicable diseases including sexually transmitted and/or blood borne infections.

Cases and contacts of communicable diseases are prioritized in three categories:

- ➤ **High Priority**: case(s) and/or contact(s) that may have high case fatality rate, high transmissibility, high outbreak potential and would have effective Public Health (PH) intervention. The PHN will initiate investigation within 1 business day of receipt of lab report, clinical reports from Primary Care Providers or the community.
- ➤ **Medium Priority**: case(s) and/or contact(s) that may have high case morbidity, fatality potential and outbreak potential, but less effective/less urgent need for PH follow-up. The PHN will initiate investigation within 3 business days.
- > Low Priority: the PHN will initiate all other communicable diseases within 5 business days.

Note: Manitoba Health Communicable Disease Control Unit has determined specific response times for some communicable diseases (e.g., West Nile Virus).

PROCEDURE:

- Central Administrative Intake will receive copies of all reportable Communicable Disease lab reports
 from the Communicable Disease Control unit and forward to applicable Communicable Disease
 Coordinator who will review cases for reference and to identify potential trends.
- Where the referral is related to positive Sexually Transmitted/Blood Borne Infection (STBBI), Communicable Disease Coordinator will contact Primary Care Provider who ordered the test regarding the following and document on appropriate form:
 - Verify address

- Verify telephone number
- Inquire if additional tests were ordered and, if so, which tests and results have been received (e.g. additional serology tests on Sexually Transmitted Infection (STI) cases)
- > Inquire if treatment has been prescribed/provided and, if so, name of medication, dose and duration
- ➤ Verify with the Primary Care Provider whether the client is aware of the diagnosis. PHNs are not required to gain consent to contact client from Primary Care Provider. However, being aware of client's knowledge can support effective communication.
- Where further Public Health follow-up is required, Communicable Disease Coordinator will forward to local Public Health Nurse.

This contact with the Primary Care Provider can be a good means of investigating and gathering information that supports collaborative relationship between Public Health and Primary Care.

- 3. Central Administrative Intake will forward all other reportable Communicable Disease lab reports to applicable PHN based on community of residence of client
- 4. Upon receipt of the Communicable Disease (case/contact) referral, the PHN will:
 - Refer to the prioritization guidelines (Prioritization of Public Health Follow-up of Communicable Diseases) to determine how quickly Public Health follow-up should be initiated. If referral is for high priority, uncommon communicable disease, consultation with Communicable Disease Coordinator is recommended.
 - Read/review the relevant sections of the appropriate Manitoba Communicable Disease Management Protocol. http://www.gov.mb.ca/health/publichealth/cdc/protocol/index.html
 - ➤ Read/review the tools developed and posted on Public Health-Healthy Living Communicable Disease/Immunization Collaborative Work Site (CWS) under Communicable Disease Tools
 - ➤ Utilize the appropriate investigation form for documentation. Manitoba forms are available at http://www.gov.mb.ca/health/publichealth/surveillance/forms.html However, regionally we have amended the forms to include date tracking fields for our own quality assurance purposes please use forms posted on CWS.
 - Case definition confirm client meets the case/contact definition
 - Clinical presentation/natural history outlines symptoms typically experienced with the infection (this information is required for Communicable Disease Control Investigation form)
 - Transmission provides information on potential sources of transmission and outlines areas which the PHN should question the client about
 - Incubation period along with the date of onset of first symptom, the incubation period will determine how far back in time the PHN will question the client about possible sources of infection and potential transmission settings
 - Period of Communicability covers important information for PHN to provide to client in order for the client to understand how long they should heighten their personal hygiene/infection control practices
 - Key Investigations outlines areas to question client about in order to identify a possible source or risk factors for infection (see also "Transmission" section)
 - Management of cases outlines the Public Health management of cases and may cover such areas as: treatment (including immunization), infection control practices, education, Public Health measures that may need to be undertaken (e.g. exclusion), contact definition, additional diagnostic tests, etc.

 Management of contacts – outlines the Public Health management of contacts and may cover such areas as: definition of contacts, chemoprophylaxis (including immunization), education, diagnostic tests, etc.

Preventive measures – outlines the education that should be provided to the client to prevent future reinfection/transmission to others

5. PHN will contact the client in order to:

- Explain the reason why Public Health is contacting client
- Provide client with information about the Communicable Disease (refer to Clinical Presentation/Natural History, Transmission and Period of Communicability sections of the Communicable Disease protocol)
- Obtain demographic data from client in order to complete the appropriate Communicable Disease Control Investigation Form
 - Depending on the particular Communicable Disease, pay special attention to the client's occupation/place of employment and/or whether client attends school/daycare
- Gather the following information from the client in order to complete applicable sections of the Communicable Disease Control Investigation form (PHN may need to contact the client's physician or review medical records at hospital/clinic to obtain complete information on testing/treatment/course of illness):
 - Date of onset of illness this is the date of onset of first symptom(s)
 - Symptoms refer to Clinical Presentation/Natural History section of Communicable Disease Protocol. It may be necessary to ask additional questions (e.g. if case experiencing diarrhea, ask whether blood in stool/nausea/vomiting/fever)
 - Duration of symptoms this is the duration of illness from onset of first symptom to resolution of all symptoms
 - History of illness obtain information related to the history of the present illness up to either the date of interview or resolution of symptoms
 - o *Treatment* refer to Case/Contact Management sections. If client has received treatment, determine name of medication, dose and duration
 - Assess appropriateness of treatment provided (refer to Case/Contact Management sections).
 If unsure whether treatment provided was appropriate, consult Communicable Disease Coordinator
 - Hospitalization determine whether client was hospitalized for illness related to the Communicable Disease and, if so, the dates of admission and discharge as well as sequelae.
 "Sequelae" essentially refers to whether any complications of illness occurred (e.g. if Communicable Disease is influenza, sequelae may be bacterial pneumonia)
 - Underlying illness this refers to the presence of any acute or chronic medical conditions that may
 increase the client's risk of acquiring the infection or having a more severe course of illness (e.g.
 essentially whether the client has any medical conditions or is on treatment that results in a
 compromised immune system)
 - Source of infection refer to "Transmission" and "Key Investigation" sections of Communicable
 Disease Control protocol in order to complete section E of the Communicable Disease Control
 Investigation Form.
 - Use the date of onset of first symptom and incubation period for the organism in order to identify the time period of interest with respect to potential sources of infection
 - If client was asymptomatic, use the specimen collection date and incubation period to identify the time period of interest with respect to potential sources of infection

- Ask client questions to cover all potential categories listed under "Key Investigations" section
 of Communicable Disease Control Protocol as well as each of the potential "Sources of
 Infection" listed on the Communicable Disease Control Investigation Form. Examples of
 questions that may be important to inquire about, depending on the Communicable Disease
 include:
 - Food ask whether the client eats undercooked meat (e.g. chicken, hamburger, turkey, wild meat), deli meat/pre-packaged sliced meat, seafood, vegetables (e.g. home grown/farmer's market/store, were they washed?); drinks unpasteurized milk; eats out (e.g. restaurant/banquet); potential for cross-contamination?
 - Water ask about source of usual drinking water (e.g. city/town/private well/bottled); ask
 whether client has ingested water from a potentially contaminated or unusual source (e.g.
 creek, lake, hose from barn, swimming pool, etc.). If source of drinking water is a private
 well, ask when it was last tested and results, if known.
 - Person-to-person contact question about illness in household/work/school/daycare contacts both prior to onset of illness in case and subsequent to onset of illness in case.
 - Animals ask whether the client has had contact with house pets/farm animals and whether any of those animals have been ill. Ask whether client handles animal feed/fertilizer/treats.
 - Other ask whether the client thinks the illness could have been caused by something that has not already been discussed.
- Ask about client's immunization history if relevant (e.g. history of pneumococcal immunization in a case of invasive pneumococcal disease).
- It may be important to refer to Canadian Integrated Outbreak Surveillance Centre (CIOSC) bulletins that the Communicable Disease Coordinator has forwarded to PHN for additional potential sources of infection to guestion client about.
- Transmission setting refer to "Key Investigations" section of Communicable Disease Control protocol in order to complete applicable section of the Communicable Disease Control Investigation form.
- Ask client questions about potential transmission settings listed in the "Key Investigations" section of the Communicable Disease Control protocol and review the potential transmission settings listed on the Communicable Disease Control Investigation Form.
- Use the date of onset of first symptom and the incubation period to identify the time period of interest with respect to potential transmission settings.
- o If client was asymptomatic, use the specimen collection date and incubation period to identify the time period of interest with respect to potential transmission settings.
- ➤ Ensure appropriate Public Health management of the **case** is undertaken ensure that each of the bullets under "Case Management" section of the Communicable Disease Control protocol is covered.
- ➤ If more than one case is identified, the possibility of an outbreak may need to be considered. If PHN identifies other cases of illness that are linked to the original case the PHN is to consult the Communicable Disease Coordinator.
- Ensure appropriate Public Health management of **contact(s)** is undertaken if contacts are identified, refer to "Management of Contacts" section of Communicable Disease Control protocol and determine whether these individuals should be contacted by PHN for follow-up. If yes, manage contacts according to "Management of Contacts" section of Communicable Disease Control protocol.
- Provide education to client in order to decrease their future risk of re-infection and to decrease the risk of transmission to others.

- Ensure that each of the bullets under "Preventive Measures" section of the Communicable Disease Control protocol is covered.
- As well, refer to "Management of Cases/Contacts" sections in the Communicable Disease Control
 protocol as there may be areas pertaining to education of clients in these sections.
- Provide client with relevant fact sheet when available.
- Advise client that PHN is available as a resource for future questions.

6. If client refuses to seek medical attention:

If a case or contact is refusing to seek medical attention, regardless of the risk priority of the communicable disease, the PHN shall notify the Communicable Disease Coordinator who will in turn discuss the issue with the Medical Officer of Health.

7. If PHN is unable to establish contact with client:

- Consult Communicable Disease Coordinator.
- ➤ In some instances, it may be appropriate for the PHN to mail a letter to the client as a means of providing the client with information on their communicable disease and the Public Health follow-up required. Hard to Reach letter template is available for use see link to CWS in supporting documents.

8. Documentation:

- ➤ PHN to complete all sections of the Communicable Disease Control Investigation Form or appropriate specialized investigation form (e.g. West Nile Virus Public Health Human Case Investigation Form, Manitoba Health Investigation Form for Hepatitis B and C positive cases, etc.).
- Areas to pay particular attention to:
 - Section B:
 - "Diagnosis" section: the diagnosis is the medical condition that has resulted from infection with the particular organism identified on the laboratory report. The diagnosis can usually be found as the title of the Communicable Disease Control protocol for the particular organism. For example, if the laboratory report identifies salmonella as the organism, the diagnosis would be the title of the Communicable Disease Control protocol for salmonella (e.g. salmonellosis), not the name of the organism identified on the laboratory report.
 - "Occupation" and "Place of Employment" sections: indicate what the client does for a living and the name of the employer. If the client does not work or is retired, document that.

Section C:

- Disease: document same as that for "Diagnosis" section.
- Duration of Symptoms: if symptoms have not resolved, document as "on-going".
- Clinical course: document in the space beneath "Clinical course" if more room for documentation is required, document on the Integrated Progress Note Public Health-Healthy Living.
- *Drug/Dose/Duration*: ensure the name of the medication, dosage, frequency of administration and duration of treatment are documented.
- Underlying Illness: document only those acute or chronic conditions that may have increased
 the risk of the client acquiring infection or having a more severe course of illness (e.g. include
 conditions that compromise the immune system).
- Sequelae: if the client did not experience any sequelae, leave "Permanent" and "Died" sections blank.

Section D:

- Organism Identified: document the organism identified on the laboratory report.
- Specimen Date: if only one specimen (sample) was submitted, then record the specimen
 date in this section. You do not need to record it again under first specimen date; use this
 area only if there is more than one sample taken (you would then document the date of the
 first specimen sample under "first specimen date" and the date of the second specimen
 sample under "second specimen date").
- Site/Source: e.g. blood, CSF, stool. Document whether it is a culture result, serologic result or "Other" (e.g. "O & P" if giardia/cryptosporidia).

Section E:

- Source of Infection: document all pertinent "negative" and "positive" findings so that we know you have asked all relevant questions related to "Key Investigations" section of the Communicable Disease Control protocol. E.g. if client has a pet, document whether the pet has been ill or healthy; document whether other household/work members have been ill or healthy, etc. Document in the space under "Source of Infection" section. If more space is required, document on Nurse's Notes. Choose the most likely source of infection based on your findings.
- *Transmission Setting:* choose the most likely setting of transmission based on the information that you have gathered from the investigation.
- *Travel History*: document relevant travel history (travel history during incubation period is relevant; otherwise not relevant).

o Section F:

 Immunization History: document only relevant immunizations. E.g. pneumococcal immunization is relevant if case of invasive pneumococcal disease; MMR history is relevant if case of measles, mumps or rubella.

Section G:

- *Number*: if the case is associated with an outbreak, document the outbreak code provided by Cadham Provincial Laboratory in the "Number" section.
- Comments Section: document the education provided to the client, any plans/recommendations for further follow-up (e.g. client has appointment with PHN for pneumococcal immunization, additional stool specimens for C&S, etc.), management plan for contacts if contacts have been identified.
- If extra space for documentation of information on the Communicable Disease Control Investigation Form is required, use the Integrated Progress Note Public Health-Healthy Living and attach to the Communicable Disease Control Investigation Form.
- 9. For most Communicable Diseases, the Communicable Disease Control Investigation Form should be completed and submitted to Manitoba Health Communicable Disease Control within 30 days of receiving the initial referral. If the PHN anticipates that the investigation will take longer than 30 days to complete, the PHN will bring this to the Communicable Disease Coordinator's attention.
- 10. Upon completion of all necessary documentation, the PHN will submit the documentation to the Communicable Disease Coordinator for review. If there is a contact identified in another geographic area (outside the PHN geography but still within our region), the PHN still submit the documentation to the Coordinator who will work with the other Area Coordinator to ensure the contact is addressed.

- 11. When the Communicable Disease Coordinator has finished reviewing all documentation, the Communicable Disease Coordinator will return the documentation to the Central Admin Intake who will forward a copy of the completed Communicable Disease Control Investigation Form to the Medical Officer of Health and Manitoba Health Communicable Disease Control Unit (mail or fax).
- 12. On review of the Communicable Disease Control Investigation Form, the Medical Officer of Health may recommend further Public Health investigation/follow-up in specific areas, if indicated.
- 13. The Central Administrative Intake will maintain the original referral and documentation in the regional Public Health-Healthy Living office files (Portage).

SUPPORTING DOCUMENTS:

CLI.6210.SG.001.SD.01	Communicable Diseases Prioritization of Public Health Follow-up
CLI.6120.SG.001.SD.02	Communicable Disease Control Investigation Form
CLI.6210.SG.001.SD.03	Integrated Progress Note Public Health-Healthy Living
CLI.6210.SG.001.SD.04	Communicable Diseases Outreach Letter Template

REFERENCES:

- 1. Manitoba Health Communicable Disease Management Protocols, including individual STI protocols. Retrieved from:
 - http://www.gov.mb.ca/health/publichealth/cdc/protocol/index.html
- 2. Manitoba Health CDC Investigation Forms. Retrieved from: http://www.gov.mb.ca/health/publichealth/surveillance/forms.html
- 3. Canadian Immunization Guide, Evergreen Edition. Retrieved from: http://www.phac-aspc.gc.ca/publicat/cig-gci/index-eng.php
- 4. Canadian Guidelines on Sexually Transmitted Infections, Evergreen Edition. Retrieved from: http://www.phac-aspc.gc.ca/std-mts/sti-its/cgsti-ldcits/index-eng.php
- 5. Manitoba Health Notification of Sexually Transmitted Disease form. Retrieved from: http://www.gov.mb.ca/health/publichealth/cdc/protocol/form3.pdf