1. **Purpose:**
   To ensure an evidence-informed, efficient, and consistent approach in the public health management of *Chlamydia trachomatis* infections.

2. **Scope and Goal:**
   This guideline supports Public Health Nurses (PHNs) working with the Healthy Sexuality and Harm Reduction team to follow-up *C. trachomatis* infections as per the Manitoba Health Communicable Diseases Management Protocols.

3. **Definition:**
   **3.1. Chlamydia trachomatis Infection:** *C. trachomatis* causes a broad range of clinical syndromes, infecting mainly mucosal membranes such as cervix, rectum, urethra, throat, and conjunctiva. Persistent low-grade clinically unapparent infections are also common. Genital infections caused by *C. trachomatis* often go unrecognized as they are asymptomatic in up to 70% of infected women and up to 50% of infected men. When symptomatic infection occurs, urethritis is most common presentation in men. Cervicitis is most common presentation in women. Symptoms usually begin two to six weeks after infection. In males with urethritis, symptoms include dysuria, urethral itch, and urethral discharge. On clinical grounds, chlamydial urethritis may be indistinguishable from gonococcal urethritis. Men with epididymitis may present with unilateral swollen epididymis, testicle or both, dysuria, fever, and occasionally shaking chills. In women, symptoms may include add vaginal discharge, postcoital bleeding, dysuria, low abdominal pain, and abnormal vaginal bleeding (Manitoba Health, 2008).

4. **Background:**
   4.1. All confirmed cases of *C. trachomatis* are reportable by laboratory to Manitoba Health Communicable Disease Control Branch for Public Health follow-up.
   4.2. All confirmed cases of *C. trachomatis* are reportable by attending health care professional to the Communicable Disease Control Branch, Manitoba Health for Public Health review.
   4.3. The testing practitioner (e.g., physician/nurse practitioner) is responsible for notifying, counseling, and treating patients with genital, rectal, pharyngeal, and ophthalmic chlamydial infections (i.e., lab-confirmed and clinical cases).
   4.4. There is evidence that public health case and contact management efforts have not been effective in reducing the incidence of chlamydia infection, although theoretically these efforts may reduce the incidence of pelvic inflammatory
disease, or other negative sequelae of chlamydia\textsuperscript{4,5}. Due to the high prevalence of chlamydia infection, universal case and contact follow up requires resources beyond what is available in the Winnipeg Health Region and compromises the ability to carry out other evidence informed programs for the reduction of sexually transmitted and blood borne infections. For these reasons, a targeted program has been developed to focus efforts on cases and contacts who are most likely to experience the negative sequelae of chlamydia, who are likely to have barriers to health service access, and those who are more likely to benefit from public health interaction.

4.5. Gonorrhea, syphilis, hepatitis C, and HIV infections are prioritized for follow-up before chlamydia infections.

5.0 Procedure - Chlamydia Cases: Upon assignment of the case to the PHN, the PHN will assess the file and relevant client history so the chart be can submitted to the Clinic Liaison Nurse to contact the testing practitioner within the appropriate timeframe (also referred to as ‘diarizing’).

5.1. Submit on the same day when the case was tested at a location where it is likely the case will stay for only a short time, and more immediate notification will increase likelihood of appropriate follow-up. Cases under 12 years of age or ophthalmic infections are considered \textit{urgent} and followed up the same day they are received. Administrative staff will notify the appropriate PHN or CLN of urgent cases by placing chart on the PHN or CLN chair rather than the inbox.

5.2. Chlamydia cases that are co-infected with other sexually transmitted infections [STI] (e.g. Neisseria gonorrhea, human immunodeficiency virus, or syphilis), or chlamydia contacts that are also contacts to another STI will be followed according to the protocol for the other STI, as these other infections are prioritized over chlamydia.

5.3. Diarize the file for all other cases. Refer to Chlamydia Case Algorithm or Appendix 1 of the Clinical Liaison Nurse operational guideline for timeframes. The PHN will make reasonable efforts to contact the case for the purpose of education and to interview for contacts if the testing practitioner did not do so.

5.4. \textbf{High Priority:} Cases identified as high priority based on a likelihood of poor outcomes will be prioritized. High priority cases include ANY of the following:

- Between 12-15 years of age
- Ongoing partner is pregnant or under the age of 16
- Positive with no treatment (PNT) any age and unaware of infection
- Pregnancy, any age. Pregnant cases prioritized according to PHN discretion. Clients unable to understand or mitigate the risks of chlamydia to the pregnancy and newborn are higher priority.

5.4.1 PHN will attempt to make up to two phone calls and send two letters. The ‘PNT’ (positive no treatment) letter can be sent to cases who haven’t received treatment, the ‘Health Matter’ letter is sent in other situations. If the client does not respond and only the interview is pending, the file may be closed.

5.4.2 Home visits are not generally recommended for chlamydia cases, but PHN may use professional judgment for exceptional circumstances for high-priority cases (e.g. a pregnant chlamydia case that has not received treatment and has an imminent expected date of delivery, or a PNT client under the age of 16 who is unaware of their infection).

5.5. **Low Priority:** Low priority cases include any of the following:

- Client is between the ages of 16 to 24 (inclusive)
- Age 16 or over, PNT, aware of infection and need for treatment.

5.5.1. For low priority cases, two contact attempts are recommended, starting with a phone call/ voice mail message if possible. If no message can be left, a ‘Health Matter’ letter should be sent. If no response, the file should be closed if only the interview for contacts is outstanding. If more than the interview is outstanding, PHN should use professional judgment re: continued follow-up weighing potential benefits vs. opportunity costs.

5.5.2. Although all STBBI cases are encouraged to notify their own partners (see 5.7.5), ‘low-priority’ cases are offered partner notification services by the PHN if they are unwilling or unable to notify their contacts, if their contacts are deemed “high-priority” of if there is evidence of abuse in the relationship that may put the case at risk for violence by notifying their partner.

5.5.3. 5.5.2. If a low priority case wishes to notify their own contacts, and those contacts would not be deemed “high priority” (ie not pregnant or under 16 years), the unique identifiers of the contacts do not need to be elicited, and files do not need to be opened for those contacts. If names are gathered for “case to notify” contacts, they can be recorded on the second side of the Sexually Transmitted Infection/Blood-Borne Pathogen Management Form under “Partner Notification Plan”.

5.6. **Self-managed:** All cases over 25 years are considered self-managed cases unless they have a condition or circumstance that deems them high priority or
5.6.1. Self-managed cases will receive one contact from the PHN. The content of the discussion with self-managed clients should focus on encouraging the client to notify their own sexual partners. Public health will not assist with contact notification of self-managed cases unless the named contact falls into a high-priority or low-priority population, if the contact was referred to HSHR team from another care provider (community health clinic or other region), or if there is evidence of abuse in the relationship that may put the case at risk for violence by notifying their partner. There is no need to elicit names and create files for contacts of self-managed cases unless the PHN plans to pursue the contact, however if the names of contacts are provided by the case, these contacts can be checked in the STI database for any significant STBBI history, such as HIV. If names of contacts are collected but files are not being opened for them (i.e. “case to notify”) these names may be recorded on the second side of the Sexually Transmitted Infection/Blood-Borne Pathogen Management Form under “Partner Notification Plan”.

5.7. Dialogue with clients for chlamydia cases consists of the following components:

5.7.1. Introduction
- Privacy ensured and confidentiality discussed
- Case identity confirmed with 2 identifiers (name, date of birth or Personal Health Information Number [PHIN])
- Introduction of self & PHN role

5.7.2. Clinical history
- Symptoms and onset, reason for testing

5.7.3. Treatment
- Assess treatment completion and tolerance;
- If case has vomited pills within 1-hour of administration, or if case untreated (PNT) the PHN encourages attendance for treatment with a treating practitioner or, if the client meets the eligibility criteria for the Antibiotic Treatment for Uncomplicated Chlamydia and Gonorrhea guideline, the PHN may offer to provide treatment (generally by office visit). Home visits for testing and treatment of chlamydia cases is not
recommended outside of HSHR outreach programs due to the high resource requirements involved in home visits.

- Encourage client to abstain from sex until 5 days after their treatment (if no regular intimate partner) or until 5 days after their regular partner’s treatment. This decreases the chance of re-infection.

### 5.7.4. Counseling/Education

- Assess client’s level of understanding
- Other testing
  - Focused sexual health history, risk assessment, and sexual context (social determinants of health)
  - Disease transmission and prevention (include discussion of asymptomatic transmission and incubation period)
- If client suspected or potential re-exposure to chlamydia, re-screening 6 weeks post treatment is generally recommended. If client pregnant and due to deliver in < 6 weeks, re-treatment may be indicated
- Potential consequences of untreated chlamydia
- Potential medication side effects and what to do if unable to complete treatment
- When test-of-cure is recommended (pregnancy or questionable treatment compliance or regime)
- Harm reduction or risk reduction counselling
- Review and reinforce client strengths (condom use, regular screening, other risk reduction practices)
- Referral to appropriate resources if indicated
- Encourage screening every 6 months if client remains at risk for STBBI

### 5.7.5. Contact/Partner notification

- To be done as soon as possible (preferably within 5 working days) See 6.0 Procedure Chlamydia Contacts
- Discuss partner notification process with case
- Obtain names and locating information of all sex partners exposed 2 months before onset of symptoms or date of testing if asymptomatic. All cases should be encouraged to notify their own sexual contacts within the interview period, regardless of whether or not public health will be involved in contact notification, unless there is evidence of violence in the relationship that may put the case at risk.
5.8. **Closure**: PHNs make reasonable efforts to ensure that the highest priority cases are treated and interviewed. If the PHN is satisfied that the health care provider has adequately managed the case, no further intervention is required.

5.8.1. Close file when reasonably assured that the case has been adequately treated and attempts made to notify contacts. The file may also be closed if the case does not respond to the PHN after the maximum number of attempts, as specified in the guideline.

5.8.2. A client who is PNT for chlamydia may be closed if over the age of 16, not pregnant, and unresponsive to the PHN, aware of their infection and the related risks. The testing practitioner should be notified that client has been unresponsive to the PHN and that there will be no further pursuit.

5.8.3. Other PNT chlamydia files may be closed on a case by case basis in consultation with the Communicable Disease Coordinator.

5.8.4. If the case or contacts reside outside of the Winnipeg Health Region, send referral will to Manitoba Health so it is forwarded to the appropriate jurisdiction, then close file.

5.8.5. The PHN must write a closure note on the bottom of the NSTD, or the bottom of the front page of the *Sexually Transmitted Infection/Blood-Borne Pathogen Management Form*, when an NSTD was not generated. The closure note should include the outcome of the contact interview (Int x #, case to notify #, declined interview, no interview); note if the client did not receive treatment; the PHN initials, date and “close”.

6.0 **Procedure: Chlamydia Contacts**: Upon assignment of the contact file to the PHN, the file will be reviewed to determine the level of priority. Chlamydia contacts should receive their first contact attempt from the PHN within 5 working days of receipt of the file. Home visits are not expected for the follow up of chlamydia contacts, but may be deemed appropriate by the PHN for urgent contacts, or in exceptional circumstances for high-priority contacts.

6.1. **Urgent** contacts include contacts under 12 years of age, e.g. newborns of mothers who were infected with chlamydia at the time of vaginal delivery.

6.1.1. Pursue urgent contacts without delay. In many cases the PHN will contact the legal guardian and may be negotiating follow up with the primary care provider or pediatrician (see guideline Privacy and Support – Contact with Parents and Guardians). If the contact or legal guardian is unresponsive, use PHN judgment re: home visit. The PHN should confirm testing and/or treatment of urgent contacts. If an infant contact has been assessed by a pediatrician who
is aware of the risks to the contact and has decided not to test or treat the infant, the file document and close file.

6.2. **High Priority** contacts include:
- Between 12-16 years (or ongoing partner between these ages)
- Pregnant (or ongoing partner is pregnant)
- Named a contact 3 times in the past 12 months

6.2.1 High priority contacts should be pursued with up to 2 phone calls and 2 letters (either “health matter” or “contact” letter). There should be an attempt to confirm that high priority contacts have been tested and/or treated. If the contact is under the age of 15 and is not attending for care or responding, the PHN may discuss involving the parent or guardian with the case. If the parent or guardian is aware of the youth’s contact to chlamydia, the file may be closed. See guideline Privacy and Support – Contact with Parents and Guardians as appropriate.

6.3 **Low Priority** contacts include:
- Between the ages of 16 and 24 (inclusive)
- No high priority conditions (pregnant/partner pregnant, contact to under 16 year old, named 3x contact in 12 months)

6.3.1 Low priority contacts should receive two contact attempts, starting with a phone call if possible and following up with either a “health matter” or “contact” letter. If there is no response, the file may be closed. There is no expectation to confirm testing or treatment of low priority contacts.

6.4 **Self-Managed**: Contacts of self-managed cases include those over the age of 25 that do not meet any of the conditions that render them urgent, high-priority, or low-priority.

6.4.1 Contacts over the age of 25 generated from interviews outside of the HSHR team (sent through MB Health) will be pursued as low priority contacts, as this information was gathered and sent with the expectation that public health would be following up. For contacts of self-managed cases generated through interviews with HSHR PHNs, see 5.6.1.

6.5 Contacts of unknown priority category:
Many contacts received do not have enough information to ascertain which category of priority they would fall into. These contacts will be pursued as ‘low priority’.

7.0 **Validation:**


3 Gottlieb, S., Martin, D., Xu, F., Bryne, G./& Brunham, R. Summary: The natural history of immunobiology of *Chlamydia trachomatis* genital infection and implication of chlamydia control. *Journal of Infectious Diseases*, 201, Supp.2 S190-S204.


**8.0 Recommended Reading:**

### Clinical Practice Guideline

**TITLE:** Management of Chlamydia Cases and Contacts

**APPROVED BY:** Healthy Sexuality and Harm Reduction Working Group

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<thead>
<tr>
<th>Population and Public Health</th>
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<th>Dec 2013</th>
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**TARGET REVIEW DATE:** Dec. 2015

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### Interventions

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<th>Ophthalmic/Eye</th>
<th>Rectal, genital/urethral, pharyngeal</th>
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| Interventions | Do not diarize file Consider HV if unable to reach by phone or letter | 2 phone calls, 2 letters. HV only in exceptional circumstances (pregnant PNT - imminent delivery date) Attempt confirm testing/treatment of contacts | 1 phone call, 1 letter No attempt to confirm testing or treatment of contacts required | Cases encouraged to notify own partners. PHN will notify contacts deemed high priority, may assist with contacts deemed low priority (case to notify okay for low priority). Non priority contacts generated from outside WHRA will be pursued with one contact attempt |
|----------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|