

CHLAMYDIA

Case definition

CONFIRMED CASE – GENITAL INFECTIONS

Laboratory evidence of infection in genitourinary specimens:

- Detection of *Chlamydia trachomatis* by culture

OR

- Detection of *C. trachomatis* nucleic acid

OR

- Detection of *C. trachomatis* antigen

CONFIRMED CASE – EXTRA-GENITAL INFECTIONS

Laboratory evidence of infection in rectum, conjunctiva, pharynx and other extra-genital sites:

- Detection of *C. trachomatis* by culture

OR

- Detection of *C. trachomatis* nucleic acid

OR

- Detection of *C. trachomatis* antigen

CONFIRMED CASE – PERINATALLY ACQUIRED INFECTIONS

Laboratory evidence of infection:

- Detection and confirmation of *C. trachomatis* in nasopharyngeal or other respiratory tract specimens from an infant in whom pneumonia developed in the first six months of life:

- Isolation of *C. trachomatis* by culture

OR

- Demonstration of *C. trachomatis* nucleic acid

OR

- Demonstration of *C. trachomatis* antigen

OR

- Detection and confirmation of *C. trachomatis* in conjunctival specimens from an infant who developed conjunctivitis in the first month of life:

- Isolation of *C. trachomatis* by culture

OR

- demonstration of *C. trachomatis* nucleic acid

OR

- Demonstration of *C. trachomatis* antigen

Causative agent

Chlamydia trachomatis, a bacterium with many serologic variants.

Source

C. trachomatis grows in the vagina, urethra, rectum and/or throat of infected persons. The bacteria may spread throughout the body causing cervicitis, pelvic inflammatory disease (PID), epididymitis, prostatitis, proctitis, urethritis, perihepatitis, conjunctivitis, Reiter's syndrome, lymphogranuloma venereum and trachoma. In young infants, *C. trachomatis* may cause neonatal conjunctivitis, nasopharyngitis and pneumonia.

Incubation

2-3 weeks but can be as long as 6 weeks.

Transmission

Exchange of infected secretions during sexual contact is necessary for infection. Vaginal, oral and anal intercourse is the primary source of transmission. Newborns delivered vaginally in a chlamydia positive mother are at risk and may become infected.

Communicability

An individual is infectious as long as bacteria are present, even without symptoms. Cases and contacts should abstain from sexual activity until treatment of both partners is complete [i.e., after completion of a multiple-dose treatment or for 7 days after single-dose therapy].

Symptoms

The majority of individuals are asymptomatic. Symptoms may include:

Females	Males	Neonates & infants
Vaginal discharge	Urethral discharge	Conjunctivitis (neonates)
Dysuria	Dysuria	Pneumonia (infants < 6 months)
Lower abdominal pain	Urethral itch	
Abnormal vaginal bleeding	Testicular pain	
Dyspareunia	Urethritis	
Conjunctivitis	Conjunctivitis	
Proctitis (commonly asymptomatic)	Proctitis (commonly asymptomatic)	
Cervicitis		

Diagnostic testing

Nucleic Acid Amplification Test (NAAT) from vaginal swab, conjunctival swab/ scraping, nasopharyngeal swab and urine are used for the screening and diagnosis of Chlamydia in Nova Scotia. Post exposure NAAT testing can be performed at the time of presentation without waiting for 48 hours.

Treatment

Information regarding treatment for adults and children may be found within Section 5-2 of the [*Canadian Guidelines on Sexually Transmitted Infections*](#). Primary care providers should consult their drug reference guidelines for appropriate dosing of antibiotics.

PUBLIC HEALTH MANAGEMENT & RESPONSE

Case management

The Public Health goal of case management is to reduce transmission and severe outcomes. This is achieved by ensuring that the case is aware of the positive result, has been appropriately treated, received education and is aware of the importance of identifying and notifying contacts. It also includes identifying risk factors which may inform public health action.

- Contact the health care provider and inform them of the role of Public Health in Chlamydia follow up.
- Determine if the case has been notified of the positive result, treated and provided education.
- In discussion with the health care provider, determine whether the client or the health care provider will be notifying contacts. Section 2 of the [Canadian Guidelines on Sexually Transmitted Infections](#) outlines the elements of partner notification.
- If the health care provider or the client requests assistance or public health deems that public health involvement is necessary, the public health nurse proceeds with case management, contact notification, and follow-up.
- Test of cure is not routinely recommended. However, it is indicated 3-4 weeks after completion of treatment, if:
 - symptoms persist
 - reinfection is suspected
 - compliance is suboptimal
 - an alternative treatment vs. preferred regimen has been used and
 - for all prepubertal children and pregnant women.
- If genital, rectal, or oral infections are diagnosed in prepubescent children, sexual abuse must be considered. For more information regarding sexual abuse, review and refer to the [Supplementary statement for the management and follow-up of sexual abuse in peripubertal and prepubertal children.](#)
- Document the required case management information in the public health electronic information system [Panorama].

High prevalence of chlamydia infections may require Public Health to prioritize case management for those who are most likely to experience negative sequelae of chlamydia, who are likely to have barriers to health service access and those who are most likely to benefit from public health interaction. Cases may be prioritized as per table (Adapted from Winnipeg Regional Health Authority guidelines 2013) below:

Priority	Urgent	High	Low	Lowest
Criteria	<ul style="list-style-type: none"> • under 12 years of age or ophthalmic infections 	<ul style="list-style-type: none"> • 12-15 years of age • partner is pregnant or under the age of 16 • positive with no treatment any age and unaware of infection • Pregnancy any age • Cases with co-infections e.g. HIV, gonorrhoea • Cases with reinfection 	<ul style="list-style-type: none"> • Between 16-24 (inclusive) years old • Age 16 or over, positive with no treatment, aware if infection and need for treatment 	<ul style="list-style-type: none"> • Over 25 years of age • Don't meet any of the conditions for a high-priority, or low-priority designation

Education of the case

- Provide information on chlamydia disease transmission, prevention and harm reduction or risk reduction measures.
- Discuss with the case the importance of adherence to treatment regimen and of abstaining from any sexual activity until treatment of the case and their sex partners is complete (i.e., after completion of a multiple-dose treatment or for 7 days after single-dose therapy).
- Discuss the importance of repeat screening 6 months after treatment for all cases.
- In certain circumstances test of cure is indicated (Refer to Case Management Section)

Contact tracing

The goal of partner notification is to prevent re-infection and further transmission. This is achieved by obtaining enough information to confidentially locate, notify and refer sexual partners/contacts for clinical evaluation, testing, treatment and health education. The function of contact notification may reside with the case, the health care provider or Public Health.

If the health care provider requests Public Health assistance, contact the client to discuss partner notification. If, Public Health is doing the contact notification the following prioritization of contacts based on the table below may be considered [Adapted from Winnipeg Regional Health Authority guidelines, 2013]:

Priority	Urgent	High	Low	Lowest
Criteria	<ul style="list-style-type: none">• under 12 years of age (e.g. newborns of mothers who were infected with chlamydia at the time of vaginal delivery)	<ul style="list-style-type: none">• 12-16 years of age (or ongoing partner between these ages)• Pregnant (or ongoing partner is pregnant)	<ul style="list-style-type: none">• Between 16-24 (inclusive) years old• No high priority conditions	<ul style="list-style-type: none">• Over 25 years of age• Don't meet any of the conditions for a high-priority, or low-priority designation.

Susceptibility

Susceptibility is universal. For more information on risk factors for chlamydia refer to Section 5-2 of the [*Canadian Guidelines on Sexually Transmitted Infections*](#).

Initiate contact tracing

- Notification of past and present sexual partners should be started as soon as the names are obtained, except in the event that a client asks the investigator to wait so that he or she may inform the partner(s) first
- All sexual contacts of the case within 60 days prior to symptom onset or date of specimen collection (if asymptomatic) should be tested and treated regardless of clinical findings and without waiting for test results. The length of time for the trace-back period should be extended:

1. to include additional time up to the date of treatment
 2. if the index case states that there were no partners during the recommended trace-back period, then the last partner should be notified
 3. if all partners traced [according to recommended trace-back period] test negative, then the partner prior to the trace-back period should be notified.
- Parents of infected neonates [i.e., mother and her sexual partner[s]] should be located, clinically evaluated and treated.

Surveillance Guidelines

General Information Sheet

REFERENCES

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