CHLAMYDIA TRACHOMATIS (REPORTABLE)

DEFINITION

Bacterial infection caused by the transmission of *Chlamydia trachomatis* (*C. trachomatis* or CT) during sexual contact in which body fluids are exchanged.

*Note:* Lymphogranuloma venereum (LGV) is a bacterial infection also caused by *C. trachomatis* serovars L1, L2 or L3. LGV serovars of *C. trachomatis* typically causes more severe and/or complicated infection and are tropic to the lymph tissue. STI RN(C) must refer to a physician or nurse practitioner (NP) for all clients who present with suspected LGV. For management of contacts to LGV, see the Treatment of STI Contacts DST.

CAUSE

Bacterial: *Chlamydia trachomatis*

PREDISPOSING RISK FACTORS

- sexual contact where there is transmission through the exchange of body fluids

TYPICAL FINDINGS

**Sexual Health History**

- sexual contact with at least one partner
- often asymptomatic
- sexual contact with someone with confirmed positive laboratory test for STI

**Physical Assessment**

- often asymptomatic
- inflammation of the tissues around the eye including: acute redness, purulent discharge and crusting (symptoms of conjunctivitis); can be caused from chlamydial infection in the eye; consult with or refer to physician or nurse practitioner (NP) for symptoms of conjunctivitis

The DSTs are not intended to replace the RN(C)’s professional responsibility to exercise independent clinical judgment and use evidence to support competent, ethical care. The RN(C) must consult with or refer to a physician or nurse practitioner as appropriate, or whenever a course of action deviates from the DST.
• sore throat (throat infection is most often asymptomatic)
• urethral symptoms such as, discharge, itch or awareness
• painful (dysuria) or difficult urination
• testicular pain and/or swelling (symptoms of epididymitis)
• abnormal change in vaginal discharge
• abnormal vaginal bleeding:
  o vagina with or without cervix: after intercourse or between menstrual period
  o vagina after vaginoplasty: abnormal vaginal bleeding is not always STI-related as longer post-operative symptoms of bleeding could be indicative of hypergranulation; refer to the STI Assessment DST for more information, and especially for clients experiencing pain, discharge, or bleeding in the first 3 to 4 month post-operative period
• lower abdominal pain (symptom of pelvic inflammatory disease)
• dyspareunia
• inflammation of the rectum, rectal pain and anal discharge (symptoms of proctitis)

**DIAGNOSTIC TESTS**

Full STI screening is recommended. See the STI Assessment DST.

• **Throat**: CT NAAT swab, if indicated in sexual health history

• **Penile urethra (with or without phalloplasty or metoidioplasty with urethral lengthening)**: CT NAAT urine. Ideally the client should not have voided in the previous 1-2 hours; collect first void 10-20 ml

• **Vagina**:
  o **With cervix**: Vaginal CT NAAT swab. Vaginal specimens may be clinician- or self-collected by swabbing the posterior fornix of the vaginal wall
    ▪ If vaginal swab is declined, urine CT NAAT can be collected
    ▪ Cervical CT NAAT swab can also be collected but is not the preferred mode of collection
  o **After total hysterectomy (no cervix)**: CT NAAT urine (preferred) or vaginal CT NAAT swab
  o **After vaginoplasty**: CT NAAT urine. Ideally the client should not have voided in the previous 1-2 hours; collect first void 10-20 ml
• **Rectum**: CT NAAT swab, if indicated in sexual health history

**Notes:**

1. In general, self-collected vaginal swabs are indicated when a full or partial pelvic examination is not required or appropriate. Clinician-collected vaginal swabs are generally done when a partial or full pelvic examination is required or requested by the client.

2. Recent data show that vaginal swabs for *C. trachomatis* and *N. gonorrhoeae* NAATs identify as many or more infections over cervical, urethral swabs or urine specimens.

**CLINICAL EVALUATION/CLINICAL JUDGMENT**

Treat all clients with confirmed chlamydia by positive laboratory result.

*When providing treatment for a client with confirmed positive cervical, vaginal or urine laboratory test for *Chlamydia trachomatis*; assess for signs of pelvic inflammatory disease (PID) through symptoms inquiry and/or physical assessment (bimanual exam), if indicated.*

Treat all persons identified as a sexual contact within the past 60 days to a confirmed chlamydia or case. If there are no sexual contacts in the previous 60 days then follow-up should occur for the last sexual contact.

**MANAGEMENT AND INTERVENTIONS**

**Goals of Treatment**

• treat infection

• prevent complications

• prevent the spread of infection
# TREATMENT OF CHOICE

<table>
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<tr>
<th>Treatment</th>
<th>Notes</th>
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<tr>
<td><strong>First Choice</strong></td>
<td>General:</td>
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<tr>
<td>doxycycline 100 mg PO BID for 7 days</td>
<td>1. Treatment covers general CT infection but does not cover LGV. Referral to a physician or NP is required for LGV diagnosis and treatment.</td>
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<td>OR</td>
<td>2. Retreatment is indicated if the client has missed 2 consecutive doses of doxycycline or has not completed a full 5 days of treatment.</td>
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<td>azithromycin 1 gm PO in a single dose</td>
<td>3. See BCCDC <a href="#">STI Medication Handouts</a> for further medication reconciliation and client information.</td>
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<td>4. See Monitoring and Follow-up section for test-of-cure (TOC) requirements.</td>
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### Allergy and Administration:

- **DO NOT USE** azithromycin if history of allergy to macrolides.
- **DO NOT USE** doxycycline if pregnant and/or allergic to doxycycline or other tetracyclines.
- If an azithromycin or doxycycline allergy or contraindication exists, consult with or refer to a physician or NP for alternate treatment.
- Azithromycin and doxycycline are sometimes associated with gastrointestinal adverse effects. Taking medication with food and plenty of water may minimize adverse effects.
- Recent data has emerged regarding azithromycin and QT prolongation. Although rare, it is more significant in older populations, those with pre-existing heart conditions, arrhythmias or electrolyte disturbances.
- It is unclear how significant these findings are in young to mid-age healthy adults consuming a one-time dose of azithromycin; however, please use the following precautions:
  - Consult with or refer to an NP or physician if the client:
    - has a history of congenital or documented QT prolongation.
    - has a history of electrolyte disturbance in particular hypokalemia, hypomagnesaemia.
    - has clinically relevant bradycardia, cardiac arrhythmia or cardiac insufficiency.
    - is on any of the following medications:
      - Antipsychotics: pimozide (Orap®), ziprasidone (Zeldoi®)
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<td>- Cardiac: dronedarone (Multaq®)</td>
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<td>- Migraine: dihydroergotamine (Migranal®), ergotamine (Cafergot®)</td>
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PREGNANT OR BREAST-/CHEST-FEEDING CLIENTS

For all pregnant or breast-/chest-feeding clients, consult with or refer to a physician or NP. Test-of-cure (TOC) is recommended for pregnant and/or breast-/chest-feeding clients and should be performed at 3-4 weeks after completion of treatment.

PARTNER COUNSELLING AND REFERRAL

People who have confirmed laboratory tests positive for *Chlamydia trachomatis* require partner counselling to identify people who may have been exposed through sexual contact in the previous 60 days. If no sexual partner in the previous 60 days then follow-up should occur for the last sexual contact (see *Treatment of STI Contacts DST*).

MONITORING AND FOLLOW-UP

Repeat testing at 6 months due to potential high risk of re-infection.

TOC is only recommended 3-4 weeks post-treatment completion for pregnant and/or breast-/chest-feeding clients or if symptoms persist following treatment.

POTENTIAL COMPLICATIONS

- epididymitis
- sexually-acquired reactive arthritis
- pelvic inflammatory disease (PID)
- infertility
- ectopic pregnancy
- chronic pelvic pain

CLIENT EDUCATION

Counsel client regarding:

- abstaining from sexual activity during the 7-day course of treatment or for 7 days post-single-dose therapy for clients and their contacts.
- informing last sexual contact AND any sexual contacts within the last 60 days that they require testing and treatment.
- methods of partner notification.
• the appropriate use of medications (dosage, side effects, and need for re-treatment if dosage not completed, or symptoms do not resolve).
• harm reduction (condom use significantly reduces the risk of transmission).
• cleaning sex toys between use and using condoms if sharing sex toys
• the benefits of routine STI screening.
• the potential complications of untreated chlamydia.
• co-infection risk for HIV when another STI is present.
• the asymptomatic nature of STI.
• repeating STI screening, which includes testing for *Chlamydia trachomatis*, in 6 months’ time as re-infection rate is high.
• the importance of revisiting a health care provider if symptoms persist.

**CONSULTATION AND/OR REFERRAL**

Consult with or refer to a physician or NP for all clients who are pregnant or breast-/chest-feeding. Consult with or refer to physician or NP for symptoms of conjunctivitis. Consult with or refer to physician or NP for allergy/contraindications to treatment outlined in this DST.

**DOCUMENTATION**

• *Chlamydia trachomatis* is reportable
• complete H208 form as per reporting procedures
• as per agency policy
REFERENCES

More recent editions of any of the items in the reference list may have been published since this DST was published. If you have a newer version, please use it.


specimens to detect *Chlamydia trachomatis* and *Neisseria gonorrhoeae* by a nucleic acid amplification test. *Journal of Clinical Microbiology*, 41(9), pp.4395-4399.
