



BC Centre for Disease Control
Provincial Health Services Authority

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BCCDC Non-certified Practice Decision Support Tool
Lymphogranuloma Venereum (LGV)

LYMPHOGRANULOMA VENEREUM (LGV)

BACKGROUND

In BC, the management of LGV is centralized through the BCCDC STI Clinic. The overall management of cases occurs collaboratively with the physician (MD) or nurse practitioner (NP) in community who is overseeing the client's care, in coordination with the:

- BCCDC Provincial STI Clinic physicians: **604-707-5610**
- BCCDC Syphilis/LGV nurses: **604-707-5607**

SCOPE

For *all* cases, RNs must consult with or refer to a MD or NP to confirm diagnosis and to receive a client-specific order for treatment.

ETIOLOGY

A bacterial infection caused by *Chlamydia trachomatis* serovars L1, L2 and L3.

EPIDEMIOLOGY

Both testing and reported cases of LGV have increased significantly over the past decade. There were 100 cases of LGV reported between January and September 2019. This is more than double the annual reported cases in 2018 (n=42). Gay, bisexual, and other men who have sex with men (gbMSM) continue to be disproportionately affected.

In 2019, amongst cases of LGV:

- 99% of cases were identified as male.
- Mean age of infection was 38 years (range of 18 to 77 years).
- 97% occurred amongst gbMSM, of whom 34% had HIV co-infection (of those with known HIV status).
- 60% cases were reported by Vancouver Coastal Health, 15% Fraser Health, 21% Island Health and 1% Interior Health (3% reported as "Health Authority unknown").

Note: the above is based on preliminary data and is subject to change.

Risk Factors

- sexual contact where there is transmission through the exchange of body fluids
- condomless anal and/or oral group sex
- sexual contact with someone with confirmed or probable LGV

CLINICAL PRESENTATION

LGV can be asymptomatic. See below for possible signs and symptoms:

Primary Infection	Secondary Infection	Tertiary or Late Infection
<ul style="list-style-type: none"> • incubation period of 3 to 30 days • small (1 to 6 mm), painless papule at site of inoculation that may ulcer • self-limiting and may go unnoticed in up to 50% of individuals 	<ul style="list-style-type: none"> • begins within 2 to 6 weeks of primary lesion • may present as: <ul style="list-style-type: none"> ○ inguinal syndrome: inguinal and/or femoral lymphadenopathy (buboes) that can rupture ○ anorectal syndrome: mucoid and/or hemorrhagic proctitis which may include: <ul style="list-style-type: none"> ▪ anal pain ▪ constipation ▪ tenesmus ▪ significant systemic symptoms (fever, malaise, arthralgia, myalgia) is common ▪ can be complicated by abscesses, draining sinuses and strictures 	<ul style="list-style-type: none"> • chronic occurs in 10-20% of untreated cases • chronic inflammatory lesions leading to scarring • lymphatic obstruction causing elephantiasis • genital and rectal strictures and fistulae • possible extensive destruction of genitalia

Case definitions can be found on the [BCCDC website](#).

PHYSICAL ASSESSMENT

Physical assessment specific to LGV may include the following:

- inspect perianal region for lesions, fissures, hemorrhoids, exudate and erythema
- palpate inguinal region for lymphadenopathy (buboes)
- examine abdominal area
- anoscopic examination is recommended
- assess temperature

DIAGNOSTIC AND SCREENING TESTS

Laboratory confirmation of *C. trachomatis* (CT) is required prior to laboratory testing for LGV diagnosis. In BC, all rectal specimens that have tested positive for *C. trachomatis* are automatically forwarded to the BCCDC Public Health Laboratory (BCPHL) then to the National Microbiology Laboratory (NML) for LGV serovar testing.

For individuals presenting with ano-genital lesions where history and clinical presentation support probable LGV:

- collect a CT NAAT swab of the lesion
- on the requisition, for the CT lesion swab, indicate “*if positive for CT, send for LGV testing*”.

See the [CT DST](#) for indications of diagnostic specimen collection. Consider additional lesion specimens as per the genital ulcers or lesions section of the [STI Assessment DST](#).

It is recommended that *all* cases of proctitis receive an anosopic examination. See the [Proctitis DST](#) for recommended diagnostic specimen collection.

MANAGEMENT

Diagnosis and Clinical Evaluation

In BC, the diagnosis of LGV is reviewed by the managing MD or NP, in collaboration with a BCCDC Provincial STI Clinic physician. RNs must obtain a diagnosis prior to proceeding with treatment and follow-up care.

For BC LGV case definitions, see the [BCCDC website](#).

Consultation and Referral

For *all* cases, RNs must consult with the managing MD or NP in the community or a BCCDC Provincial STI Clinic physician (**604-707-5610**) to obtain a diagnosis and to determine a follow-up plan prior to treatment administration. The BCCDC Syphilis/LGV nurses (**604-707-5607**) may also be contacted for additional support.

For clients who continue to have symptoms following treatment completion, follow-up with MD or NP is recommended.

Treatment

For *all* cases, RNs must consult with the managing MD or NP in the community or a BCCDC Provincial STI Clinic physician prior to treatment administration.

Treatment	Notes
First Choice	1. Review information on the BCCDC Medication Handouts and your agency's drug reference database, including: <ul style="list-style-type: none"> • Allergies, interactions and side effects • How to take the medication • After-care information
doxycycline 100 mg PO BID for 21 days	
Alternate Treatment	
azithromycin* 1g PO once weekly for 3 weeks *while some experts believe azithromycin to be effective in the treatment of LGV, clinical data are lacking	2. Doxycycline <ul style="list-style-type: none"> • DO NOT USE if allergy to doxycycline or other tetracyclines, or if pregnant. • Take with food/water to avoid potential adverse gastrointestinal effects. • RE-TREATMENT may be indicated if 2 consecutive doses are missed, or if treatment is not fully completed. Consult with and/or refer to a MD/NP. 3. Azithromycin <ul style="list-style-type: none"> • DO NOT USE if allergy to macrolides. • Take with food/water to avoid potential adverse gastrointestinal effects. • Although rare, QT prolongation is more significant in older populations, those with pre-existing heart conditions, arrhythmias or electrolyte disturbances. It is unclear if young to mid-age healthy adults consuming a one-time dose of azithromycin could be similarly affected. Consult and/or refer to a MD/NP if the client: <ul style="list-style-type: none"> ○ has a history of congenital or documented QT prolongation ○ has a history of electrolyte disturbance in particular hypokalemia, hypomagnesaemia ○ has clinically relevant bradycardia or cardiac arrhythmia or cardiac insufficiency ○ is taking: <ul style="list-style-type: none"> ▪ Antipsychotics: pimozide (Orap®), ziprasidone (Zeldox®) ▪ Cardiac: dronedarone (Multaq®) ▪ Migraine: dihydroergotamine (Migranal®), ergotamine (Cafergot®)

Monitoring and Follow-up

- **Repeat testing:** Yes; 6 months post-treatment due to potential high risk of re-infection
- **Test-of-cure (TOC):** Yes; CT NAAT testing 3 to 4 weeks post-treatment for all cases of LGV

- **Follow-up:** if no improvement once treatment has ended, follow-up is recommended with a MD or NP

Inflammation resulting from LGV can take several weeks to completely resolve, and may continue past treatment completion. Some symptom improvement should occur upon treatment initiation.

Partner Counselling and Referral

- **Reportable:** Yes
- **Trace-back period:** last 60 days. If no sexual partners during this time, last sexual contact
- **Recommended partner follow-up:** empirically test and treat all contacts (see [Treatment of STI Contacts DST](#))

Potential Complications

- colorectal fistulae and strictures
- lymphatic obstructions (buboes)
- chronic ulcerations
- abscesses

Additional Client Education

Epidemiological evidence supports the relationship between LGV/HIV co-infection. Additional client education and support should include a more fulsome discussion regarding HIV prevention and treatment.

- [Standard Client Education for Sexually Transmitted Infections and Blood-Borne Infections \(STBBI\)](#)

Counsel client:

- regarding options for HIV prevention and testing; including HIV Pre-Exposure Prophylaxis (PrEP). See [Registered Nurse Assessment and Management of HIV Pre Exposure Prophylaxis \(PrEP\) DST](#) for guidance.
- for individuals currently living with HIV, assess current level of engagement in HIV care highlighting the benefit of ongoing treatment and management.

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