

SUPPLEMENTARY STATEMENT

concerning the laboratory diagnosis of

LYMPHOGRANULOMA VENEREUM (LGV)

October
2014

Canadian Guidelines on Sexually Transmitted Infections

KEY ISSUE

Lymphogranuloma venereum (LGV) is caused by *Chlamydia trachomatis* serovars L1, L2, and L3. For more than a decade, there have been sporadic outbreaks of LGV in Canada. In response to these outbreaks, and to changing approaches to screening and diagnosis (including to the selection of specimens and diagnostic tests), guidance regarding LGV is being revised.

This statement contains interim recommendations for the laboratory diagnosis of LGV, until the *Guidelines* chapter is revised.

EPIDEMIOLOGY

- Until the past decade, LGV was considered a tropical disease; and therefore case finding focussed on travellers from endemic regions of Africa, south-east Asia, the Caribbean and Latin America.
- Currently in Europe, the United States, and Canada, the subpopulation most at risk of LGV is men who have sex with men (MSM)—particularly those who are positive for hepatitis C (HCV), HIV or other STIs, and/or engage in unprotected anal and/or oral group sex.
- In Canada, outbreaks have been sporadic, and cases confined to major urban centres in the provinces of Alberta, British Columbia, Ontario and Québec.

MANIFESTATIONS

LGV tends to be more invasive than non-LGV serovars. Signs and symptoms may include:

- painful, ulcerative proctitis, with or without pus and/or bleeding;
- painful inguinal and/or femoral lymphadenopathy or buboes;
- fever, myalgia and arthralgia.

DIAGNOSIS

- Commercial nucleic acid amplification tests (NAATs) are approved in Canada for *C. trachomatis* testing of urethral, cervical and vaginal swabs, and for urine. However, current literature indicates that NAATs can be used to detect rectal and oropharyngeal infections if performance specifications have been established for the assay in use: check with your lab.
- Serology is not recommended, given cross-reactions with other *Chlamydia* species, and difficulties interpreting variations in titres (for example, low titres do not rule out LGV).



INTERIM RECOMMENDATIONS FOR SCREENING AND DIAGNOSIS

- Suspect LGV if proctitis and/or marked inguinal or femoral lymphadenopathy or buboes are present **AND/OR** if patient history suggests possible or probable exposure (refer to the **Epidemiology** section).
- Collect any of the following, as clinically indicated: first void urine; urethral, cervical, vaginal, rectal, and oral swabs; and fluid from buboes, if present.
- **For symptomatic individuals** (those with proctitis with or without pus or bleeding, and/or marked lymphadenopathy or buboes in the inguinal or femoral regions, accompanied by signs and symptoms of systemic illness),
 - request NAAT for detection of *C. trachomatis*;
 - request that specimens **positive** for *C. trachomatis* be forwarded to the provincial/territorial laboratory or the National Microbiology Laboratory for LGV genotyping.
- **For sexual partners of individuals diagnosed with LGV**,
 - request NAAT for detection of *C. trachomatis*;
 - request that specimens **positive** for *C. trachomatis* be forwarded to the provincial/territorial laboratory or the National Microbiology Laboratory for LGV genotyping.
- **For asymptomatic MSM fulfilling risk criteria** (positive for HCV, HIV or other STI and/or a history of engaging in unprotected anal or oral group sex; **AND** a history of travelling to or residing in an area of Canada or abroad where LGV prevalence is high),
 - request NAAT for *C. trachomatis*;
 - consider requesting that specimens **positive** for *C. trachomatis* be forwarded to the provincial/territorial laboratory or the National Microbiology Laboratory for LGV genotyping.

Currently, a **confirmed case** is defined as an individual positive by NAAT testing, confirmed to be *C. trachomatis* L1, L2 or L3.

TREATMENT

Preferred treatment is Doxycycline 100 mg PO bid for 21 days (compared to 7 days for non-LGV *Chlamydia*). For complete information on the management of LGV, including information about alternative therapies and treatment of partners, refer to the [LGV chapter](#) of the *Canadian Guidelines*.