



TITLE: Lymphogranuloma venereum in BC: An update on a re-emerging STI

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PREPARED FOR: Public Health Practitioners and Clinicians involved in the care of MSM

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Objectives

- Describe the trends in LGV in BC with a focus on 2010 to 2014
- Outline how to order LGV testing if suspected
- Describe the public health follow-up for reported LGV cases

Background

Lymphogranuloma venereum (LGV) is a sexually transmitted infection caused by *Chlamydia trachomatis* serovars L1, L2 and L3. Though LGV was first reported in BC in 2004, there has been a significant increase in the number of reported LGV cases since late 2010, particularly among HIV-positive gay, bisexual, and other men who have sex with men (MSM). Depending on the site of infection, the clinical presentation of LGV may include: genital ulcers; large, painful inguinal lymphadenopathy; and hemorrhagic proctitis (i.e., the anorectal syndrome). Unlike *C. trachomatis*, untreated LGV may lead to serious sequelae such as lymphatic obstructions, chronic ulcerations, or colorectal strictures/fistulae.

Laboratory testing for LGV

Diagnosis of LGV first requires laboratory confirmation of *C. trachomatis* either by nucleic acid amplification testing (NAAT) or culture. Community laboratories (e.g., LifeLabs), the BC Public Health Microbiology and Reference Laboratory (BCPHMRL), and hospital laboratories can perform NAAT detection for *C. trachomatis*.

In BC, all rectal specimens that have tested positive for *C. trachomatis* are forwarded to BCPHMRL then to the National Microbiology Laboratory (NML) for LGV serovar testing.

The BCPHMRL informs both the submitting laboratory and the BC Centre for Disease Control (BCCDC) of a positive LGV result the same day results are received from NML.

Specimen collection for LGV testing

Clinicians suspecting LGV infection should carry out all of the following to ensure laboratory testing for LGV:

- Use the blue-shaft unisex swab from the GEN-PROBE® APTIMA® chlamydia and gonorrhea collection kit
- Mark the box for “rectal” site under the “Chlamydia (CT) & Gonorrhea (GC)” section of the lab requisition form
- Print “query LGV” on the lab requisition form

Public health follow-up for reported LGV cases

All genital chlamydia diagnoses, including LGV, are reportable under the BC *Public Health Act*. Public health follow-up of LGV cases (confirmed and probable) is managed centrally at BCCDC. A BCCDC nurse will contact the diagnosing clinician to ensure that the case receives adequate treatment, to coordinate the partner notification process, and to assist in the completion of an enhanced case report form for LGV surveillance in BC.

Case definition

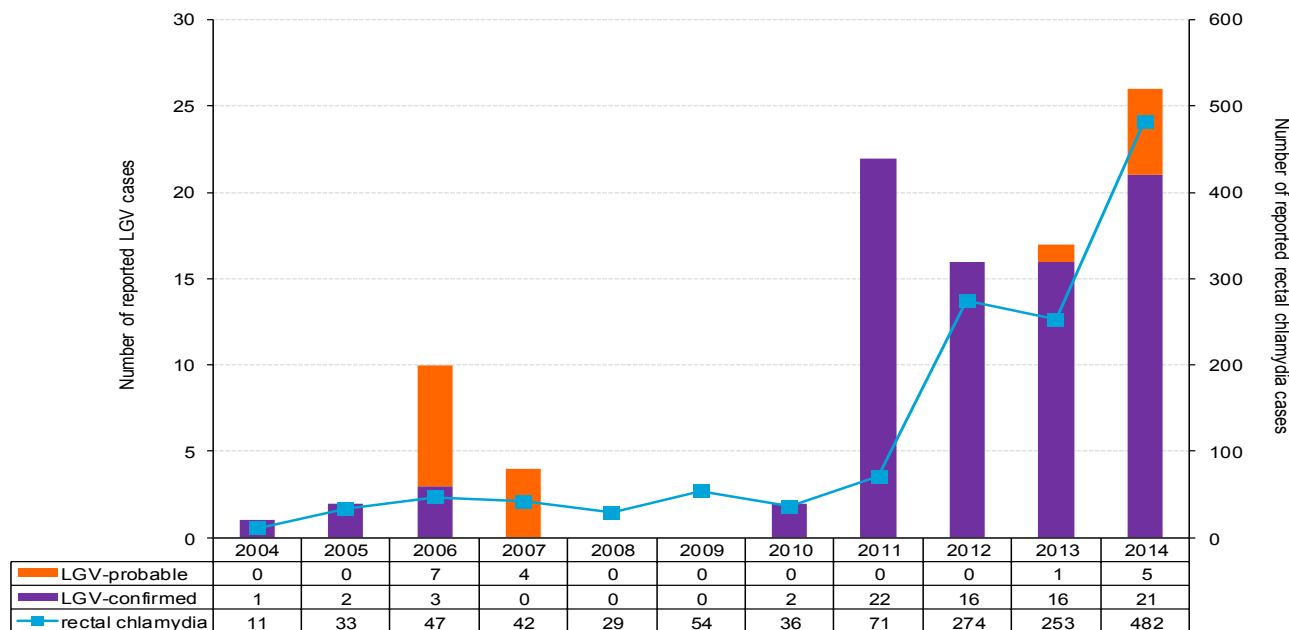
Confirmed – DNA sequencing for the presence of *C. trachomatis* serovars L1, L2 or L3

Probable – either (1) a positive NAAT or culture for *C. trachomatis* and either proctitis, inguinal or femoral lymphadenopathy, suspicious lesion, or having a sexual partner who is a confirmed or probable LGV case or (2) clinical symptoms consistent with LGV and having a sexual partner who is a confirmed or probable LGV case

Trends in reported LGV cases in BC

In BC, a sharp increase was observed in both reported LGV cases (confirmed and probable) in 2011 and rectal chlamydia cases in 2012 (Figure 1).

1. Reported cases of rectal chlamydia and lymphogranuloma venereum in BC, 2004 to 2014



- BCPHMRL began routinely forwarding all positive chlamydia rectal specimens to NML for LGV testing in July 2011
 - Public health clinics began routinely screening men who have sex with men (MSM) for chlamydia in 2012

BCPHMRL - BC Public Health Microbiology and Reference Laboratory
 NML - National Microbiology Laboratory

From 2010 to 2014, 83 LGV cases (77 confirmed, 6 probable) were reported in BC. All cases were MSM between the ages of 20 and 68 years; 93% (77/83 cases) resided in Greater Vancouver; 74% (61/82 cases) identified as Caucasian; and 93% (67/72 cases) presented with symptoms of proctitis (Table 2). Five cases were documented as asymptomatic. Of those with known HIV status, 68% (54/79 cases) were co-infected with HIV. All confirmed cases belonged to the L2b serotype.

2. Characteristics of reported lymphogranuloma venereum cases in BC, 2010 to 2014

	2010		2011		2012		2013		2014		TOTAL	
Total # LGV cases ^a in BC	2		22		16		17		26		83	
	n/N ^b	(%)	n/N ^a	(%)	n/N ^a	(%)	n/N ^a	(%)	n/N ^a	(%)	n/N ^a	(%)
Demographic characteristics												
Male	2/2	100%	22/22	100%	16/16	100%	17/17	100%	26/26	100%	83/83	100%
Age in years - mean (range)	50	(42-57)	47	(27-60)	45	(20-68)	46	(26-67)	41	(21-67)	44	(20-68)
Age in years - median (Q1-Q3)	50	(46-53)	48	(41-52)	48	(41-53)	49	(39-53)	44	(31-48)	46	(38-52)
Greater Vancouver residence (VCHA & FHA)	1/2	50%	20/22	91%	16/16	100%	15/17	88%	25/26	96%	77/83	93%
Caucasian	1/2	50%	17/22	73%	12/16	75%	12/16	75%	19/26	73%	61/82	74%
Male sex partners	2/2	100%	22/22	100%	16/16	100%	17/17	100%	26/26	100%	83/83	100%
Signs and symptoms												
Proctitis ^c	2/2	100%	19/19	100%	14/14	100%	15/16	94%	17/21	81%	67/72	93%
Rectal mass	0		2		0		5		3		10	
Inguinal lymphadenopathy	0		1		2		3		3		9	
Asymptomatic ^d	0		0		0		1		4		5	
Co-infection with HIV	2/2	100%	12/19	63%	12/16	75%	11/16	69%	17/26	65%	54/79	68%

^a LGV cases - confirmed and probable

^b N is the total number of valid cases (i.e., excludes missing or unknown values)

^c Proctitis includes the clinical diagnosis of proctitis and/or ≥ 1 of the following anal/rectal symptoms: mucous discharge, bleeding, frequent bowel movements, persistent diarrhea, constipation, bloody stools, burning or itchiness, pain, lesions, or discomfort

^d Phrase "asymptomatic" was documented in case chart