

Bacterial STI Testing: Quick Reference

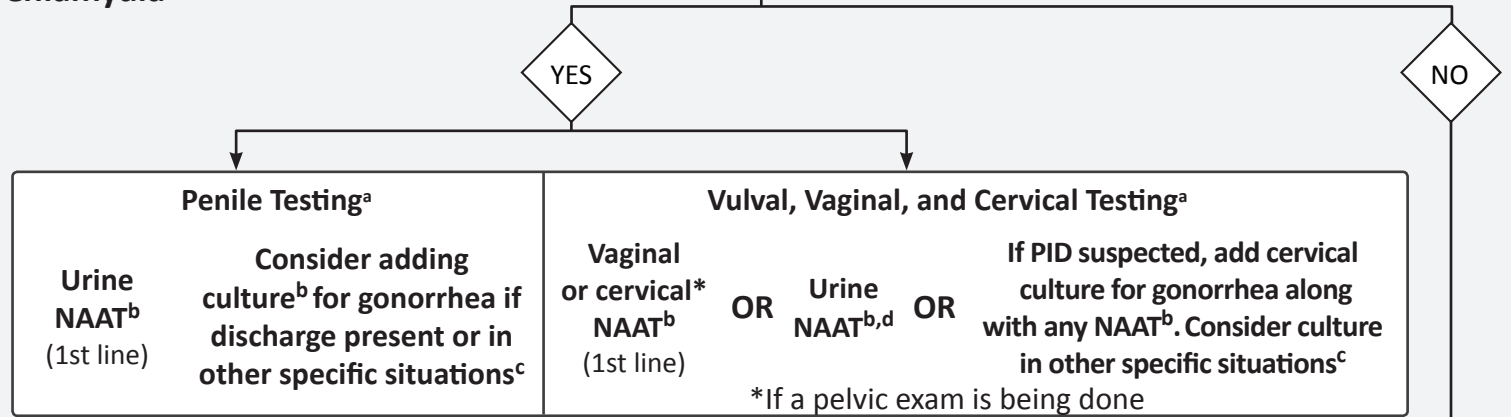
The purpose of this guide is to promote current testing options for bacterial STIs based on risk factors and clinical presentation.

Testing for chlamydia, gonorrhea and syphilis

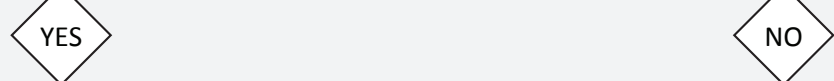
Signs/symptoms of a bacterial STI (See Box 1 on reverse) OR Risk factors for an STI (See Box 2 on reverse) OR Patient requests STI screening OR In 1st trimester of pregnancy, and if high risk for STIs, test in all trimesters

Gonorrhea/Chlamydia

Has patient had exposure at urogenital site?

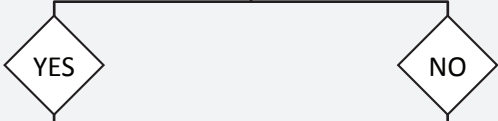


Has patient had receptive exposure at rectal/pharyngeal site?



Is patient any of the following?^e

- MSM
- Engaging in sex work or sexual contact of someone engaging in sex work
- A sexual contact of a gonorrhea or chlamydia case
- Having signs or symptoms of rectal or pharyngeal infection (See Box 1 on reverse)

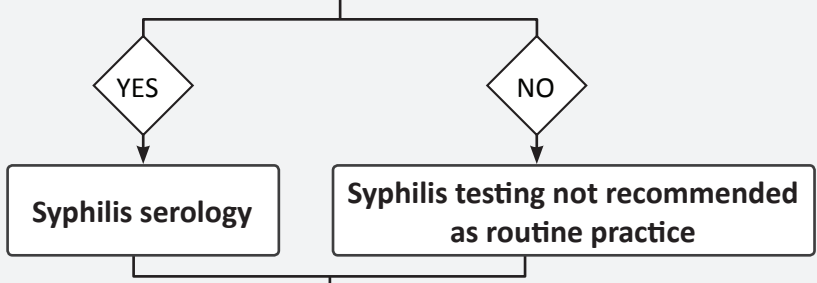


Rectal and/or pharyngeal NAAT^f whether symptomatic or asymptomatic at exposure sites OR Rectal and pharyngeal testing not recommended as routine practice^e

Syphilis

Syphilis

Signs/symptoms (See Box 1 on reverse) OR Risk factors (See Box 2 on reverse) OR Patient requests STI screening OR In 1st trimester of pregnancy, and if high risk for STIs, test in all trimesters



Abbreviations

- CGSTI:** Canadian Guidelines on Sexually Transmitted Infections
- HIV:** Human Immunodeficiency Virus
- LGV:** Lymphogranuloma venereum
- MSM:** Cisgender and transgender men who have sex with men, including males who identify as gay, bisexual, queer, two-spirit or other men who have sex with men
- NAAT:** Nucleic acid amplification testing
- PID:** Pelvic inflammatory disease
- PHO:** Public Health Ontario
- STBBIs:** Sexually transmitted and blood-borne infections
- STI:** Sexually transmitted infection

Consider other STBBIs

- Offer testing for HIV^B and other STIs, as per Canadian Guidelines for Sexually Transmitted Infections (CGSTI).
- Review and offer immunization for human papillomavirus/hepatitis A virus/hepatitis B virus, as indicated.
- Discuss post-exposure prophylaxis (PEP) or pre-exposure prophylaxis (PrEP) for HIV if indicated.

Box 1 - Common Signs/Symptoms^h

Urogenital gonorrhea/chlamydia

- Often asymptomatic
- Urethral or vaginal discharge
- Painful urination
- Urethral itchiness and redness
- Abnormal vaginal bleeding
- Lower abdominal discomfort or pain

Rectal/pharyngeal gonorrhea/chlamydia

- Often asymptomatic
- Proctitis with or without rectal pain and discharge
- Pharyngitis

Lymphogranuloma venereum (LGV)

- Often asymptomatic
- Genital/rectal lesion
- Swollen lymph nodes
- Painful urination
- Rectal bleeding

Primary syphilis

- Chancre (often not noticed)

Secondary syphilis

- Rash
- Mucosal lesions
- Condylomata lata

Latent/tertiary syphilis

- Often asymptomatic
- Diverse presentations possible, please see [CGSTI](#).

Box 2 - Risk Factors/At-Risk Groups

Gonorrhea/chlamydia

- Contact of a known case
- Sexually active and less than 25 years of age
- New sexual contact or more than two contacts in the past year
- Previous STI, including HIV
- MSM
- Had unprotected sex with resident of an area with high gonorrhea burden and/or high risk of antimicrobial resistanceⁱ
- People who are incarcerated
- People who engage in sex work and their sexual contacts
- People who are street-involved/under-housed

Syphilis

- Contact of a known case
- Previous STI, including syphilis or HIV
- MSM
- People who use injection drugs
- People who are incarcerated
- People who engage in sex work and their sexual contacts
- People who are street-involved/under-housed
- Multiple sexual partners
- Sexual partners of any of the above
- Consider screening based on local epidemiology^j

Important Considerations

- Culture preferred for test of cure for gonorrhea.
- For protocols for medico-legal purposes, please refer to the [CGSTI](#).
- Cultures for gonorrhea should be received at the testing laboratory within 48 hours of collection, but may still be processed if delayed.

Notes:

- Assess STI-related risk and consider specimen collection sites in people who identify as transgender, gender non-conforming, non-binary, or intersex based on their symptoms, current anatomy, sexual behaviour, and in a manner that affirms patient gender identity and provides patients with information and choices for testing.
- NAAT is more sensitive for diagnosing gonorrhea, but culture testing provides antimicrobial sensitivity information. For symptomatic patients, consider testing by culture for gonorrhea and add any urogenital NAAT, as this will concurrently test for chlamydia and gonorrhea and provides a more sensitive test.
- Culture for gonorrhea should be used in the following situations: test of cure; if antimicrobial susceptibility testing is required; if required for medico-legal purposes; or if suspected treatment failure with ongoing signs/symptoms.
- Urine NAAT is a second-line option in females because it is less sensitive than cervical or vaginal NAAT.
- Rectal and/or pharyngeal testing in individuals who have had exposures at those sites and are not in specific risk groups (not MSM, not people who engage in sex work and their sexual contacts or not sexual contacts of those infected with gonorrhea or chlamydia) may be considered in individual circumstances based on clinical evaluation or local epidemiology. Infections at rectal and pharyngeal sites are often asymptomatic. A test of cure is recommended for positive cases of pharyngeal gonorrhea.
- Lymphogranuloma venereum (LGV) is caused by *Chlamydia trachomatis* serovars L1, L2 or L3. All positive male rectal chlamydia culture or rectal NAAT specimens are sent to the National Microbiology Laboratory for LGV testing. In addition, providers can request LGV testing of positive chlamydia specimens from females and non-rectal sites in males based on clinical evaluation of signs/symptoms and sexual behaviour/exposure.
- If concurrently testing for HIV, please include a separate [PHO HIV requisition](#).
- For detailed signs and symptoms, please refer to the [CGSTI](#).
- Safer sex counselling should be considered for travellers who intend to or may have new sexual contacts when abroad.
- Please contact your local public health unit. <http://www.health.gov.on.ca/en/common/system/services/phu/locations.aspx>.