



HEALTH CARE PROVIDERS'

GUIDE to Bacterial SEXUALLY TRANSMITTED INFECTIONS (STI)

November 2023



The Windsor-Essex County Health Unit (WECHU) is dedicated to providing public health programs and services to the community. Public health programs keep our community healthy by promoting improved health, preventing disease and injury, controlling threats to human life and function, and facilitating social conditions to ensure equal opportunity in attaining health for all.

Our Health Unit, in partnership with our agencies and health care providers, seeks to enable all Windsor and Essex County residents to be as healthy as possible.

WINDSOR-ESSEX COUNTY HEALTH UNIT
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Infectious Disease Prevention (extension 1420)

CONTENT DISCLAIMER

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Introduction

Bacterial sexually transmitted infections (STIs), such as gonorrhea, chlamydia, and syphilis, are increasing across Ontario and locally, in Windsor and Essex County. These infections pose a serious health risk to individuals and their partners. Complications from acquiring these infections range from chronic pelvic pain, infertility, and sterility to more systemic infections of other organs, such as the heart and brain.

Clinicians play a key role in assessing all patients for risk factors and screening those identified as at risk for STIs. As patients may be asymptomatic, making sexual health a part of your routine assessment can help to identify cases and prevent complications and further transmission.

This manual provides clinicians with clinical guidelines for screening and management of patients with STIs and their contacts, and information about ordering medications and reporting to the Windsor-Essex County Health Unit. The Health Unit is also available for individual consultation.

Duty to Report

Gonorrhoea, chlamydia, and syphilis are considered diseases of public health significance (DOPHS) and, as such, must be reported to your local public health unit. The Health Protection and Promotion Act 1990 (HPPA), R.S.O., 1990, and Ontario Regulation 135/18 outlines the requirements for physicians, practitioners, and institutions to report designated Diseases of Public Health Significance (DOPHS) to the Medical Officer of Health.

All clinically diagnosed, probable, and confirmed STI cases must be reported to the Health Unit by the next business day. This includes the human immunodeficiency virus (HIV) and confirmed or suspected cases of Hepatitis. Please complete the relevant Reporting Form found under the “Forms” section of our website at www.wechu.org/forms and fax to 226-783-2132.

This allows the Health Unit to conduct surveillance, ensure that clients and contacts are managed according to treatment guidelines to prevent secondary transmission, and develop population-level approaches to mitigate risks for acquiring STIs.

Section A: National and Provincial Guidelines for Gonorrhea, Chlamydia, and Syphilis

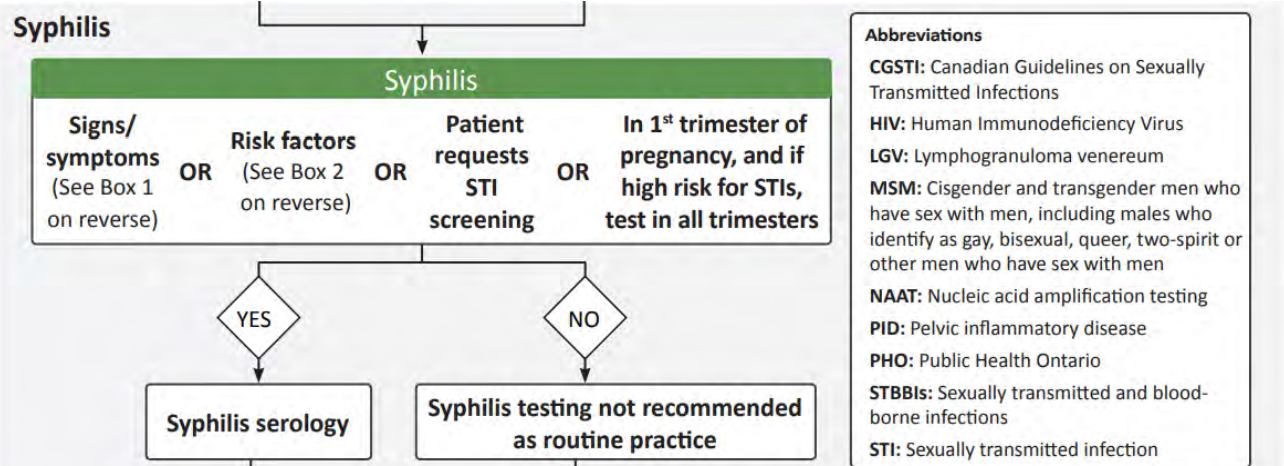
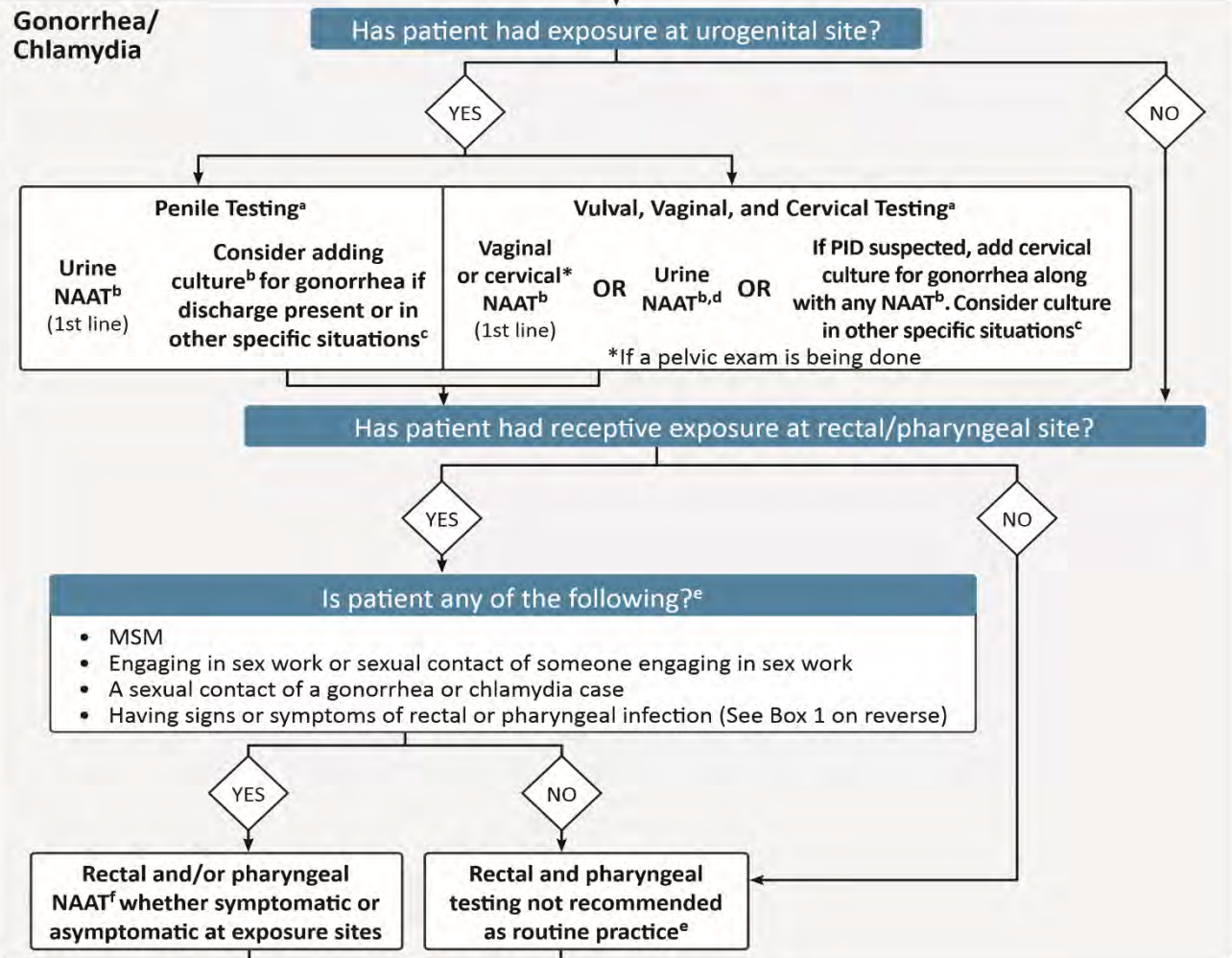
This section consists of quick reference resources for the management of bacterial STIs. For more detailed and up-to-date information, refer to the Canadian Guidelines on Sexually Transmitted Infections and Public Health Ontario's Summary of Recommendations: *Ontario Gonorrhea Testing and Treatment Guide*, 2nd Edition.

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



Consider other STBBIs

- Offer testing for HIV^g 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 gonorrhoea.
- ▶ For protocols for medico-legal purposes, please refer to the [CGSTI](#).
- ▶ Cultures for gonorrhoea 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 gonorrhoea, but culture testing provides antimicrobial sensitivity information. For symptomatic patients, consider testing by culture for gonorrhoea and add any urogenital NAAT, as this will concurrently test for chlamydia and gonorrhoea and provides a more sensitive test.
- Culture for gonorrhoea 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 gonorrhoea 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 gonorrhoea.
- 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 travelers who intend to or may have new sexual contact when abroad.
- Please contact your local public health unit.

<http://www.health.gov.on.ca/en/common/system/services/phu/locations.aspx>.

This guide is current as of March 2019. If you have any questions, please contact Public Health Ontario at cd@oahpp.ca.

Canadian Guidelines on Sexually Transmitted Infections: *Summary of Recommendations for Chlamydia trachomatis (CT), Neisseria gonorrhoeae (NG) and Syphilis*

TIPS FOR STI SCREENING, TREATMENT AND FOLLOW-UP OF BACTERIAL STBBI

Do you know if the person in front of you has ever been screened for sexually transmitted and blood-borne infections (STBBI)?

In 2018, **50%** of Canadians reported that they had never been screened for STBBI.

REPORTED CASES OF STBBI IN CANADA ARE INCREASING (2019)

139,386 cases of *Chlamydia trachomatis* (CT)

- > 74% of cases are aged 15 to 29
- > 58% of cases were female

35,443 cases of *Neisseria gonorrhoeae* (NG)

- > 51% of cases are aged 15 to 29
- > 66% of cases were male

9,245 cases of Infectious Syphilis

- > 72% of cases were male
- > Among females aged 15 to 39 years, rates were 18 times higher than in 2010



NORMALIZE DISCUSSIONS ABOUT SEXUAL HEALTH AND OFFER STBBI SCREENING TO SEXUALLY ACTIVE PEOPLE AS PART OF ROUTINE CARE

- > Screening is an opportunity to discuss transmission, signs and symptoms, risk reduction and preventive strategies
- > Undiagnosed and untreated STBBI can lead to serious complications, e.g., pelvic inflammatory disease (PID), epididymo-orchitis, adverse pregnancy outcomes

OFFER ANNUAL SCREENING TO:

- Individuals < 25 years old
- Gay, bisexual and other men who have sex with men (gbMSM)
- Transgender persons

OFFER SCREENING TO PEOPLE ≥ 25 YEARS OLD BASED ON RISK FACTORS*

OFFER SCREENING ROUTINELY DURING PREGNANCY

CT and NG:

- Screen in the 1st trimester or at the 1st prenatal visit AND in the 3rd trimester
- Screen during labour if: no prenatal screening has occurred (no results are available) OR 3rd trimester screening did not occur OR follow-up for a positive result was not completed

Syphilis:

- Screen in the 1st trimester or at the 1st prenatal visit
- Screen between 28 and 32 weeks of pregnancy AND during labour in areas experiencing outbreaks AND for people at ongoing risk for infection*



MORE FREQUENT SCREENING MAY BE APPROPRIATE FOR THOSE WITH ONGOING RISK FACTORS FOR STBBI*

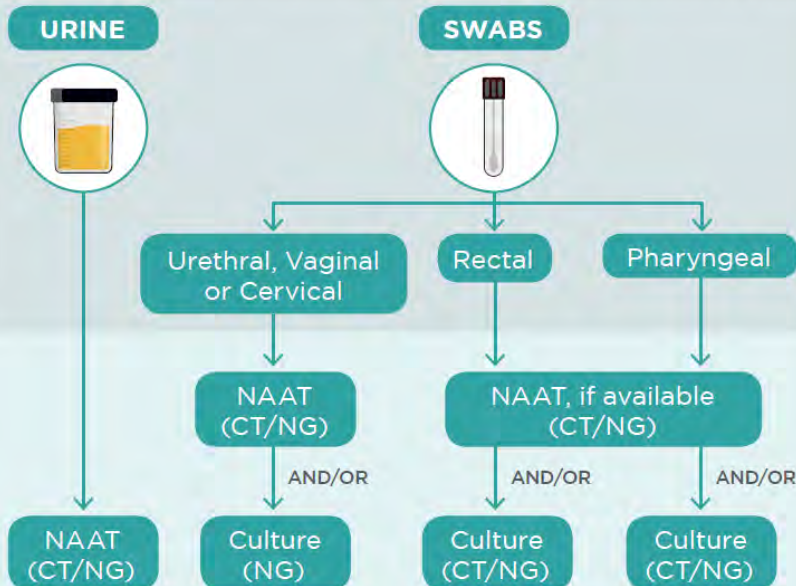
*Risk factors for STBBI acquisition include but are not limited to: previous STBBI diagnosis, new sexual partners, multiple or anonymous sexual partners, sexual partners having a STBBI, condomless sex and sex while under the influence of alcohol or drugs.

continued on next page... - 8 -

STBBI ARE OFTEN ASYMPTOMATIC. SCREEN FOR ONE STBBI, SCREEN FOR ALL!

SCREENING: Early STBBI detection in asymptomatic individuals[†]

Chlamydia trachomatis (CT) AND *Neisseria gonorrhoeae* (NG)



Syphilis

BLOOD



Laboratory will perform serology using an algorithm combining non-treponemal and treponemal tests



Offer HIV testing when screening for other STBBI[†]

TIPS

- > Nucleic Acid Amplification Test (NAAT) is highly sensitive and the test of choice when screening asymptomatic individuals for CT and NG
 - Preferred specimens for NAAT are first void urine or self-collected vaginal swab
 - Collect pharyngeal and rectal specimens from individuals with a history of performing oral sex or having receptive anal intercourse, respectively
 - Check with your laboratory for the availability of NAAT for rectal and pharyngeal specimens
- > Collect specimens for both CT and NG due to high rates of co-infection
- > When NG is suspected, collect specimens for NAAT AND culture
 - Culture permits antimicrobial susceptibility testing to guide treatment
 - Ideally, collect specimens prior to empirical/epidemiological treatment

TIPS



- > Testing algorithms may vary by province and territory



[†] For HIV specific guidance consult the [HIV Factsheet: Screening and Testing](#) available on [Canada.ca](#)

EARLY DIAGNOSIS AND TREATMENT LEAD TO BETTER HEALTH OUTCOMES

TREATMENT: Preferred STI treatment in the absence of contraindications, allergies or pregnancy

<i>Chlamydia trachomatis</i> (CT)	<i>Neisseria gonorrhoeae</i> (NG)	Syphilis
 <p>Doxycycline 100 mg PO bid for 7 days</p> <p>OR</p> <p>Azithromycin 1 g PO in a single dose</p>	<p>For anogenital and pharyngeal infections</p> <p>Ceftriaxone 250 mg IM in a single dose PLUS Azithromycin 1 g PO in a single dose</p> <p>OR</p> <p>For anogenital infections</p> <p>Cefixime 800 mg PO in a single dose PLUS Azithromycin 1 g PO in a single dose</p> <p>Note: Cefixime is considered alternate treatment in gbMSM</p>	 <p>For infectious syphilis (primary, secondary and early latent)</p> <p>Long-acting benzathine penicillin G 2.4 million units IM in a single dose</p> <p>For late latent syphilis</p> <p>Long-acting benzathine penicillin G 2.4 million units IM weekly for 3 doses</p>


TIPS

- > For NG infections, always use combination therapy to prevent resistance and treat possible CT co-infection
 - The use of two antimicrobials with different mechanisms of action may improve treatment efficacy and prevent or delay the emergence and spread of resistant NG
 - Ceftriaxone 250 mg IM in a single dose PLUS Azithromycin 1 g PO in a single dose is the recommended treatment for pharyngeal NG and for gbMSM
- > For CT infections, consider using Azithromycin if poor compliance is expected
- > Individuals and their partners should abstain from sexual contact until the completion of a multiple-dose treatment or for 7 days after a single-dose treatment
- > All partners who have had sexual contact with the individual within 60 days prior to specimen collection or onset of symptoms, should be tested and treated

TIPS

- > Inform individuals of potential Jarisch-Herxheimer reaction to penicillin treatment
- > Consider penicillin desensitization for individuals with a penicillin allergy, followed by treatment with long-acting benzathine penicillin G
 - There is no satisfactory alternative treatment to penicillin for the treatment of syphilis in pregnancy
- > Individuals and partners should abstain from sexual contact for 7 days after treatment
- > All sexual partners or perinatal contacts should be tested and treated according to the individual's stage of infection and date of specimen collection or onset of symptoms:
 - Primary syphilis: 3 months
 - Secondary syphilis: 6 months
 - Early latent syphilis: 1 year
 - Late latent/tertiary: individual's long-term sexual partner(s) and children as appropriate

FOLLOW-UP: Post STBBI screening and treatment interventions including test of cure (TOC)

<i>Chlamydia trachomatis</i> (CT)	<i>Neisseria gonorrhoeae</i> (NG)	Syphilis
<p>TOC using NAAT 3-4 weeks after the completion of treatment is recommended only when:</p> <ul style="list-style-type: none"> ▶ Compliance to treatment is suboptimal ▶ Unresolved or persistent symptoms are present ▶ Alternate treatment regimen was prescribed ▶ Individual is pregnant or prepubertal 	<p>Routine TOC is recommended:</p> <ul style="list-style-type: none"> ▶ Using culture, 3-7 days after completion of treatment; and/or ▶ Using NAAT 2-3 weeks after completion of treatment <p>TOC is of particular importance when:</p> <ul style="list-style-type: none"> ▶ Treatment failure and resistant NG are suspected ▶ Compliance to treatment is suboptimal ▶ Unresolved or persistent symptoms are present ▶ Alternate treatment regimen was prescribed ▶ Individual is pregnant or prepubertal ▶ Pharyngeal infection was detected 	<p>Indications for post-treatment monitoring and follow-up serology:</p> <ul style="list-style-type: none"> ▶ Infectious syphilis (primary, secondary and early latent): 3, 6 and 12 months ▶ Late latent and tertiary syphilis: 12 and 24 months ▶ Neurosyphilis: 6, 12 and 24 months ▶ Co-infection with HIV: 3, 6, 12 and 24 months and yearly thereafter ▶ Pregnancy: <ul style="list-style-type: none"> • Primary, secondary and early latent syphilis: if at risk of re-infection, monthly until delivery; otherwise 1, 3, 6 and 12 months • Late latent syphilis: at time of delivery and 12 and 24 months

TIPS

- > When test of cure (TOC) is indicated, specimens should be collected from all positive sites
- > TOC using NAAT should be performed at recommended post-treatment interval to avoid detection of residual genetic material
- > In addition to TOC, repeat screening is recommended 3 to 6 months post-treatment due to risk of reinfection

TIPS

- > Post-treatment serology is used to assess treatment response
- > Consult a colleague or specialist experienced in syphilis management if the serologic response to treatment is inadequate

Consult the **STBBI: Guides for health professionals** for more detailed information

Recommendations do not supersede any provincial/territorial legislative, regulatory, policy and practice requirements or professional guidelines that govern the practice of health professionals in their respective jurisdictions, whose recommendations may differ due to local epidemiology or context.

ADDITIONAL INFO

- > [STBBI: Guides for health professionals](#)
- > [HIV Fact Sheet: Screening and Testing \(PHAC\)](#)
- > [Discussing sexual health, harm reduction and STBBIs: A guide for service providers \(CPHA\)](#)
- > [Reducing stigma and discrimination through the protection of privacy and confidentiality \(CPHA\)](#)

Learn more: visit Canada.ca and search **SEXUAL HEALTH** or download the **STBBI Guides** mobile application

Chlamydia: Treatment



The following treatment options are recommended in the absence of contraindication. Consult product monographs for contraindications and side effects.

Caution: Refer to the health advisory issued by Health Canada about azithromycin and risk of cardiovascular complications and death.

Anogenital and conjunctival chlamydia

Non-pregnant and non-lactating adults

Preferred treatment	Alternative treatment
<ul style="list-style-type: none">• Doxycycline 100 mg PO BID for 7 days [A-I] or• Azithromycin 1 g PO in a single dose [A-I]	<ul style="list-style-type: none">• Levofloxacin 500 mg PO once a day for 7 days [B-III]

Note: Azithromycin may be preferred when poor compliance is anticipated.

Pregnant and lactating people

- **Azithromycin** 1 g PO in a single dose [B-I]
Or
- **Amoxicillin** 500 mg PO TID for 7 days [A-I]
Or
- **Erythromycin** 2 g/day PO in divided doses for 7 days [B-I]
Or
- **Erythromycin** 1 g/day PO in divided doses for 14 days [B-I]

Notes:

- Data are limited regarding the use of azithromycin in pregnancy, however many experts believe it has an acceptable risk-benefit profile.
- Data on neonatal outcomes are limited.
- Erythromycin dosage refers to the use of erythromycin base. Equivalent dosages of other formulations may be substituted.
- Estolate formulation is contraindicated in pregnancy.
- Doxycycline and quinolones are contraindicated in pregnancy and in lactating women.

Nine (9) to 18 years of age

Preferred treatment	Alternative treatment
<ul style="list-style-type: none">• Doxycycline 5 mg/kg/day PO in divided doses (max. 100 mg BID) for 7 days [A-I] or• Azithromycin 12–15 mg/kg (max. 1 g) PO in a single dose [A-I], if poor compliance is expected	<ul style="list-style-type: none">• Erythromycin base 40 mg/kg/day PO in divided doses (max. 500 mg QID for 7 days or 250 mg QID for 14 days) [B-I] or• Sulfamethoxazole 75 mg/kg/day PO in divided doses (max. 1 g BID) for 10 days [B-II]

Notes:

- Erythromycin is associated with significantly higher gastrointestinal side effects than other treatment regimens.
- Equivalent dosages of other formulations may be substituted for erythromycin base.
- Topical therapy for conjunctivitis is inadequate, systemic treatment is sufficient.

Consult with a pediatric specialist or an experienced colleague and relevant clinical guidelines when chlamydia is diagnosed in a child. Perinatally acquired *C. trachomatis* can persist for up to three years. Consider sexual abuse when a chlamydial infection is diagnosed in any prepubertal child.

Note: Suspected sexual abuse of children must be reported to the local child protection agency.

Gonorrhea Treatment Quick Reference

For Adolescents and Adults

Public
Health
Ontario

Santé
publique
Ontario

The purpose of this quick reference document is to support uptake of recommendations outlined in the [Ontario Gonorrhea Testing and Treatment Guide](#), which was developed based on Ontario-specific data. Ontario clinicians should use the gonorrhea treatment recommendations outlined in the Guide and this quick reference document. Treatment of other sexually-transmitted infections (STI) should follow [national guidance](#). Individual case counselling and STI risk-reduction strategies should be provided in addition to treatment. Please see product monographs for how to prepare medication and potential adverse events.

Gonorrhea, uncomplicated anogenital and pharyngeal cases

See the Canadian Guidelines for Sexually-Transmitted Infections ([CGSTI](#)) for treatment of children and complicated cases.

First-line Treatment

Ceftriaxone 250mg intramuscular (IM) **PLUS** Azithromycin 1g by mouth (PO), given at the same visit.

Alternative Treatments^a

Only if first-line not possible and must have a test of cure.

Any of these therapies:

- Cefixime^b 400mg PO **PLUS** Azithromycin 1g PO
- Gentamicin 240mg IM in 2 separate 3-mL IM injections of 40mg/mL **PLUS** Azithromycin 2g PO
- Azithromycin 2g PO monotherapy^c

First-line Treatment in Pregnancy

Must have follow up, including test of cure.

Ceftriaxone 250mg IM **PLUS** Azithromycin 1g PO, given at the same visit. If first-line treatment is not possible, consider consultation with a specialist.

Follow-up Recommendations (Assuming no ongoing signs/symptoms and no re-exposure).

Test of Cure: Recommended if first-line therapy not used, pregnancy, pharyngeal infection and other clinical situations. (Please see the [Ontario Gonorrhoea Testing and Treatment Guide](#) for a full list).

- Culture is first-line (3-7 days post-treatment)
- Nucleic acid amplification test (NAAT) is second-line (2-3 weeks post-treatment)

Re-screen: All cases should be re-screened 6 months after treatment.

Report: Suspected or confirmed gonorrhoea treatment failures must be reported to the health unit.

Footnotes:

^a Gemifloxacin 320mg PO PLUS Azithromycin 2g PO is an alternative treatment but it is currently unavailable in Canada. Once available in the United States, it will be accessible in Ontario through Health Canada's Special Access Program.

^b Alternative treatments are not as effective as first-line therapy using ceftriaxone and azithromycin. The use of cefixime can also accelerate resistance to ceftriaxone, threatening the usefulness of the last potent antibiotic for gonorrhoea.

^c Azithromycin monotherapy is the least preferred option due to reduced susceptibility of *N. gonorrhoeae* isolates to azithromycin in Ontario and evidence in support of dual therapy.

This quick reference document is current as of June 2019.

If you have any questions, please contact Public Health Ontario at cd@oahpp.ca.

Syphilis: Treatment



Recommended treatment of syphilis in non-pregnant adults		
Stage	Preferred treatment	Alternative treatment for people with penicillin allergies
Primary, secondary and early latent syphilis	Benzathine penicillin G-LA 2.4 million units IM as a single dose [A-II]	<ul style="list-style-type: none"> • Doxycycline 100 mg PO BID for 14 days [B-II] • In exceptional circumstances and when close follow-up is assured: <ul style="list-style-type: none"> ○ Ceftriaxone 1 g IV or IM daily for 10 days [B-II]
Latent, late latent, cardiovascular syphilis and gumma	Benzathine penicillin G-LA 2/4 million units IM weekly for three (3) doses [AII]	<ul style="list-style-type: none"> • Consider penicillin desensitization <ul style="list-style-type: none"> ○ Doxycycline 100 mg PO BID for 28 days [B-II] • In exceptional circumstances and when close follow-up is assured: <ul style="list-style-type: none"> ○ Ceftriaxone 1 g IV or IM daily for 10 days [C-III]
All adults: Neurosyphilis	<ul style="list-style-type: none"> • Refer to a neurologist or infectious disease specialist 	

Recommended treatment for infectious syphilis in pregnancy	
Preferred treatment	Alternative treatment for people with penicillin allergies
Benzathine penicillin G-LA 2.4 million units IM as a single dose [B-II] or Benzathine penicillin G-LA 2.4 million units IM as a single dose weekly for two (2) doses [C-III]	<ul style="list-style-type: none"> • Strongly consider penicillin desensitization followed by treatment with penicillin [A-III] • There is no satisfactory alternative to penicillin for the treatment of syphilis in pregnancy. Insufficient data exist to recommend ceftriaxone in pregnancy

Congenital syphilis

All neonates potentially exposed to syphilis should be assessed at delivery by an infectious disease specialist. If a specialist is not available, consult an experienced colleague knowledgeable in the treatment of congenital syphilis.

Infants should be treated at birth if:

- Symptomatic
- The infant's NTT is at least four (4)-fold higher than their birthing parent at birth
- Maternal treatment was inadequate, did not contain penicillin, is unknown or occurred in the last month of pregnancy, or if maternal serologic response is inadequate
- Adequate follow-up of the infant cannot be ensured

For recommendations on the treatment of congenital syphilis or neonates exposed to syphilis, refer to the Canadian Paediatric Society article [Congenital syphilis: no longer just of historic interest.](#)

Section B: The WECHU Reporting, Referral, & Medication Ordering Forms

This section consists of forms to:

- Report chlamydia, gonorrhea, and syphilis to the Health Unit; and
- Order free STI medications.

These forms may be subject to change. Please visit www.wechu.org/forms for the most updated version.

CHLAMYDIA TRACHOMATIS (CT)

HEALTH CARE PROVIDER INVESTIGATION & REPORTING FORM

The Health Protection and Promotion Act 1990 (HPPA), R.S.O., 1990, and Ontario Reg. 135/18, outlines the requirements for physicians, practitioners, and institutions to report any **disease of public health significance** to the Medical Officer of Health.

Completion of both pages of this form is required. The form is to be faxed by the next working day from the initial patient visit, to the Windsor-Essex County Health Unit – Infectious Disease Prevention Department (fax: 226-783-2132). Refer to the *Canadian Guidelines on Sexually Transmitted Infections (STIs)* for diagnosis and management of STIs.

DATE REPORTED (YY/MM/DD)		REPORTING PROVIDER NAME		PHONE NUMBER () - ext.	
SECTION A: PATIENT INFORMATION					
PATIENT NAME (FIRST) (MIDDLE) (LAST)			SEX	DATE OF BIRTH (YY/MM/DD)	AGE
ADDRESS (STREET) (CITY) (POSTAL CODE)					
HOME PHONE: () -			ALTERNATE PHONE: () -		

<input type="checkbox"/> Yes <input type="checkbox"/> No	Has the client been notified of the laboratory result, indicating infection?
<input type="checkbox"/> Yes <input type="checkbox"/> No	Is the client pregnant? If yes, indicate gestational age: _____ weeks

SECTION B: PRESENTING SYMPTOMS			
✓ FEMALES	Onset Date (YY/MM/DD)	✓ MALES	Onset Date (YY/MM/DD)
<input type="checkbox"/> Asymptomatic (most common)		<input type="checkbox"/> Asymptomatic (most common)	
<input type="checkbox"/> Lower abdominal pain		<input type="checkbox"/> Conjunctivitis	
<input type="checkbox"/> Cervicitis		<input type="checkbox"/> Dysuria	
<input type="checkbox"/> Conjunctivitis		<input type="checkbox"/> Testicular pain	
<input type="checkbox"/> Dyspareunia		<input type="checkbox"/> Urethral discharge	
<input type="checkbox"/> Dysuria		<input type="checkbox"/> Urethral itch	
<input type="checkbox"/> Vaginal discharge		<input type="checkbox"/> Urethritis	
<input type="checkbox"/> Other, specify: _____		<input type="checkbox"/> Other, specify: _____	

SECTION C: RISKS FOR INFECTION AND COMPLICATIONS	
✓ RISK FACTORS	
<input type="checkbox"/> Sexual contact of a confirmed chlamydia case	<input type="checkbox"/> No condom use
<input type="checkbox"/> Those with street involvement/homeless	<input type="checkbox"/> Condom breakage
<input type="checkbox"/> Anonymous sex partners	<input type="checkbox"/> Alcohol and/or drug use
<input type="checkbox"/> Multiple sex partners	<input type="checkbox"/> Sex trade worker
<input type="checkbox"/> New sexual contact in the past 2 months	<input type="checkbox"/> Sex with same sex
<input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Other, specify: _____

Continued on page 2



SECTION D: INFECTION MANAGEMENT	
<input type="checkbox"/> Yes <input type="checkbox"/> No	Was treatment provided to the client? If yes, specify medication & date below. If patients have a positive test, are symptomatic, or have a known positive contact, treatment is warranted. Empirical co-treatment is indicated when diagnosed with gonorrhoea without waiting for test results of CT due to high probability of co-infection. NOTE: Free STIs medications can be ordered from the Health Unit to have in your office for prompt treatment.
TREATMENT PER GUIDELINES FOR NON-PREGNANT AND NON-LACTATING ADULTS (refer to the Canadian Guidelines on STIs for all other cases)	
<input type="checkbox"/> Azithromycin 1 g PO single dose OR	DATE GIVEN (YY/MM/DD):
<input type="checkbox"/> Doxycycline 100 mg PO BID for 7 days	DATE GIVEN (YY/MM/DD):
<input type="checkbox"/> Other, specify:	DATE GIVEN (YY/MM/DD):
<input type="checkbox"/> Yes <input type="checkbox"/> No	Advise client to inform sexual partners to see a health care provider for testing and treatment. Inform client that WECHU can assist with anonymous partner notification.
#: _____	# of sexual partners identified by the client 60 days prior.

SECTION E: PATIENT EDUCATION	
<input type="checkbox"/>	Counsel client regarding transmission and prevention methods. Advise client/contacts to abstain from or have protected intercourse of all types (anal, oral, and vaginal) until treatment of both partners is complete (i.e. after completion of multiple-dose treatment or for 7 days after single-dose therapy).
<input type="checkbox"/>	Inform client to return for test of cure if: symptoms or signs persist post-therapy; treatment compliance is suboptimal; the preferred treatment regimen was not used; the person is prepubertal; or the person is pregnant. When a test of cure is recommended, NAAT should be performed 3-4 weeks after completion of treatment. A test of cure is not routinely indicated if recommended treatment is taken AND symptoms and signs disappear AND there is no re-exposure to an untreated partner.
<input type="checkbox"/>	Inform client that repeat testing for CT is recommended 3 months post-treatment, because the risk of reinfection is high.
<input type="checkbox"/>	Inform client that a nurse from the WECHU may be contacting them.

* The **Public Health Lab Service Desk (1-877-604-4567)** is available to answer questions regarding specimen collection. An online test information index is also available at www.publichealthontario.ca.

REPORTING HEALTH CARE PROVIDER'S SIGNATURE: _____

The most current form is available on our website:

<https://www.wechu.org/forms/>

For more information: 519-258-2146 ext. 1420
 Infectious Disease Prevention
www.wechu.org
 MARCH 2022/COMMUNITY/CHLAMYDIA



GONORRHEA

HEALTH CARE PROVIDER INVESTIGATION & REPORTING FORM

The Health Protection and Promotion Act 1990 (HPPA), R.S.O., 1990, and Ontario Reg. 135/18, outlines the requirements for physicians, practitioners, and institutions to report any **disease of public health significance** to the Medical Officer of Health.

Completion of both pages of this form is required. The form is to be faxed by the next working day from the initial patient visit, to the Windsor-Essex County Health Unit (WECHU) – Infectious Disease Prevention Department (fax: 226-783-2132). Refer to the *Canadian Guidelines on Sexually Transmitted Infections (STIs)* for diagnosis and management of STIs.

DATE REPORTED (YY/MM/DD)		REPORTING PROVIDER NAME		PHONE NUMBER () - ext.	
SECTION A: PATIENT INFORMATION					
PATIENT NAME (FIRST) (MIDDLE) (LAST)			SEX	DATE OF BIRTH (YY/MM/DD)	AGE
ADDRESS (STREET) (CITY) (POSTAL CODE)					
HOME PHONE: () -			ALTERNATE PHONE: () -		

<input type="checkbox"/> Yes <input type="checkbox"/> No	Has the client been notified of the laboratory result, indicating infection?
<input type="checkbox"/> Yes <input type="checkbox"/> No	Is the client pregnant? If yes, indicate gestational age: _____ weeks

SECTION B: PRESENTING SYMPTOMS			
✓ FEMALES	Onset Date (YY/MM/DD)	✓ MALES	Onset Date (YY/MM/DD)
<input type="checkbox"/> Asymptomatic (most common)		<input type="checkbox"/> Asymptomatic	
<input type="checkbox"/> Lower abdominal pain		<input type="checkbox"/> Dysuria	
<input type="checkbox"/> Deep dyspareunia		<input type="checkbox"/> Testicular pain	
<input type="checkbox"/> Dysuria		<input type="checkbox"/> Urethral discharge	
<input type="checkbox"/> Rectal pain/discharge and proctitis		<input type="checkbox"/> Urethral itch	
<input type="checkbox"/> Abnormal vaginal bleeding		<input type="checkbox"/> Rectal pain/discharge and proctitis	
<input type="checkbox"/> Vaginal discharge		<input type="checkbox"/> Other, specify:	
<input type="checkbox"/> Other, specify:			

SECTION C: RISKS FOR INFECTION AND COMPLICATIONS	
✓ RISKS	
<input type="checkbox"/> Sexual contact of a confirmed gonorrhoea case	<input type="checkbox"/> No condom use
<input type="checkbox"/> Those with street involvement/homeless	<input type="checkbox"/> Condom breakage
<input type="checkbox"/> Anonymous sex partners	<input type="checkbox"/> Unprotected sex while travelling to endemic area
<input type="checkbox"/> Multiple sex partners	<input type="checkbox"/> Sex trade worker
<input type="checkbox"/> New sexual contact in the past 2 months	<input type="checkbox"/> Sex with same sex
<input type="checkbox"/> Alcohol and/or drug use	<input type="checkbox"/> Other, specify: _____

Continued on page 2



SECTION D: INFECTION MANAGEMENT							
<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Was treatment provided to the client? If yes, specify medication & date below.</p> <p>All confirmed cases need to be treated and suspected cases should be considered for treatment.</p> <p>NOTE: <i>Free STIs medications can be ordered from the Health Unit to have in your office for prompt treatment.</i></p> <p>TREATMENT PER GUIDELINES FOR UNCOMPLICATED ANOGENITAL AND PHARYNGEAL INFECTION IN ADULTS AND YOUTH ≥ 9 YRS OF AGE (Refer to the Canadian Guidelines on STIs for all other cases)</p> <table border="1"> <tr> <td> <input type="checkbox"/> Ceftriaxone 250 mg IM single dose AND <input type="checkbox"/> Azithromycin 1 g PO single dose </td> <td>DATE GIVEN (YY/MM/DD)</td> </tr> <tr> <td> Alternative Treatments (Only if first-line not possible and must have a test of cure) <input type="checkbox"/> Azithromycin 2 g PO single dose OR <input type="checkbox"/> Cefixime 400 mg PO AND Azithromycin 1g PO OR <input type="checkbox"/> Gentamicin 240 mg IM in 2 separate 3-mL injections of 40mg/ml AND Azithromycin 2 g PO (Gentamicin only available through special order at the health unit) </td> <td>DATE GIVEN (YY/MM/DD)</td> </tr> <tr> <td> <input type="checkbox"/> Other: </td> <td>DATE GIVEN (YY/MM/DD)</td> </tr> </table>	<input type="checkbox"/> Ceftriaxone 250 mg IM single dose AND <input type="checkbox"/> Azithromycin 1 g PO single dose	DATE GIVEN (YY/MM/DD)	Alternative Treatments (Only if first-line not possible and must have a test of cure) <input type="checkbox"/> Azithromycin 2 g PO single dose OR <input type="checkbox"/> Cefixime 400 mg PO AND Azithromycin 1g PO OR <input type="checkbox"/> Gentamicin 240 mg IM in 2 separate 3-mL injections of 40mg/ml AND Azithromycin 2 g PO (Gentamicin only available through special order at the health unit)	DATE GIVEN (YY/MM/DD)	<input type="checkbox"/> Other:	DATE GIVEN (YY/MM/DD)
<input type="checkbox"/> Ceftriaxone 250 mg IM single dose AND <input type="checkbox"/> Azithromycin 1 g PO single dose	DATE GIVEN (YY/MM/DD)						
Alternative Treatments (Only if first-line not possible and must have a test of cure) <input type="checkbox"/> Azithromycin 2 g PO single dose OR <input type="checkbox"/> Cefixime 400 mg PO AND Azithromycin 1g PO OR <input type="checkbox"/> Gentamicin 240 mg IM in 2 separate 3-mL injections of 40mg/ml AND Azithromycin 2 g PO (Gentamicin only available through special order at the health unit)	DATE GIVEN (YY/MM/DD)						
<input type="checkbox"/> Other:	DATE GIVEN (YY/MM/DD)						
<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Advise client to inform sexual partners to see a health care provider for testing and treatment. Inform client that WECHU can assist with anonymous partner notification.</p>						
#: _____	# of sexual partners identified by the client 60 days prior.						
SECTION E: PATIENT EDUCATION							
<input type="checkbox"/>	<p>Counsel client regarding transmission and prevention methods. Advise client/contact(s) to abstain from or have protected intercourse of all types (anal, oral, and vaginal) until at least 7 days after completion of <i>appropriate</i> treatment and the clients/contact(s) are asymptomatic.</p>						
<input type="checkbox"/>	<p>Inform client to return for a test of cure for all positive sites, especially if symptomatic, treatment compliance is suboptimal, alternative treatment used, treatment failure, contact of antimicrobial resistant case, re-exposure, for all prepubertal children and pregnant women, pharyngeal and complicated/disseminated gonorrhea, case has pelvic inflammatory disease, and/or case is undergoing therapeutic abortion.</p> <p>Test of cure should be completed by culture 3-7 days after treatment (preferred) or by NAAT 2-3 weeks after treatment (if culture is unavailable).</p>						
<input type="checkbox"/>	<p>Inform client that repeat testing for gonorrhea is recommended 6 months post-treatment, as reinfection is high.</p>						
<input type="checkbox"/>	<p>Inform client that a nurse from the WECHU may be contacting them.</p>						

* The **Public Health Lab Service Desk (1-877-604-4567)** is available to answer questions regarding specimen collection. An online test information index is also available at www.publichealthontario.ca.

REPORTING HEALTH CARE PROVIDER'S SIGNATURE: _____

The most current form is available on our website:

<https://www.wechu.org/forms/>

For more information: 519-258-2146 ext. 1420

Infectious Disease Prevention

www.wechu.org

August 2021/COMMUNITY/GONORRHEA

SYPHILIS

HEALTH CARE PROVIDER INVESTIGATION & REPORTING FORM

Completion of this form is required and faxed by the next working day from the initial patient visit, to the Windsor-Essex County Health Unit – Clinical Services (fax: 226-783-2132). **Refer to the Health Unit or *Canadian Guidelines on Sexually Transmitted Infections* for diagnosis and management of STIs, including complex cases.**

DATE REPORTED (YY/MM/DD)		REPORTING PROVIDER NAME		PHONE NUMBER () - ext.	
SECTION A: PATIENT INFORMATION					
PATIENT NAME (FIRST) (MIDDLE) (LAST)			SEX	DATE OF BIRTH (YY/MM/DD)	AGE
ADDRESS (STREET) (CITY) (POSTAL CODE)					
HOME PHONE: () -			ALTERNATE PHONE: () -		
SECTION B: INFECTION MANAGEMENT					
Reason for Testing	<input type="checkbox"/> Asymptomatic with risk factors, other than contact <input type="checkbox"/> Symptomatic <input type="checkbox"/> Contact tracing <input type="checkbox"/> Immigration Screening <input type="checkbox"/> Routine – Prenatal Screen <input type="checkbox"/> Routine – Medical Procedure <input type="checkbox"/> Other, specify: _____				
<input type="checkbox"/> Yes <input type="checkbox"/> No	Was the client tested for HIV? Date (YY/MM/DD): _____ Results: _____				
<input type="checkbox"/> Yes <input type="checkbox"/> No	Is the client pregnant? If yes, gestational age: _ weeks				
<input type="checkbox"/> Yes <input type="checkbox"/> No	Has the client been notified of the laboratory result, indicating infection?				
Working diagnosis	<input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Early Latent <input type="checkbox"/> Late Latent <input type="checkbox"/> Tertiary <input type="checkbox"/> Neurosyphilis <input type="checkbox"/> Client was previously diagnosed, appropriately treated, and there is no chance of re-infection (i.e., new exposure). No additional follow up is required. Do not complete the rest of the form.				
How are you treating the client?	STAGE OF SYPHILLIS	MEDICATION, DOSE, FREQUENCY		EFFECTIVE DATE (YY/MM/DD)	
	<input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Early latent (<1 year)	<input type="checkbox"/> Benzathine penicillin G (Bicillin-LA) 2.4 million units IM once (NOTE: Not to be confused with short-acting benzylpenicillin (penicillin G)) <input type="checkbox"/> Other: _____			
	<input type="checkbox"/> Late latent	<input type="checkbox"/> Benzathine penicillin G (Bicillin-LA) 2.4 million units IM weekly x 3 doses <input type="checkbox"/> Other: _____			
	<input type="checkbox"/> Neurosyphilis	<input type="checkbox"/> Penicillin G _____ million units IV q4h x _____ days			
<input type="checkbox"/> Tertiary	<input type="checkbox"/> Refer to Infectious Diseases Specialist.		N/A		
SECTION C: PATIENT EDUCATION					
<input type="checkbox"/>	Counsel client regarding how syphilis is transmitted and prevention methods, including safer sex. Advise clients and contacts to abstain from unprotected intercourse of all types (anal, oral, and vaginal) during infectious stages until treatment of both partners complete and an adequate serologic response is determined.				
<input type="checkbox"/>	Inform client that follow-up serology tests need to be performed to monitor infection. Refer to <i>Canadian Guidelines</i> for follow-up serology test schedule for various stages of syphilis.				
<input type="checkbox"/>	Advise client to inform sexual partners to follow up with a health care provider to get testing and treatment. The Health Unit can assist with contact tracing and anonymous partner notification.				
<input type="checkbox"/>	Inform client/parent that a nurse from the Health Unit will be contacting them. They may also call the Health Unit directly at 519-258-2146 ext. 1420.				

PRESENTING SIGNS AND SYMPTOMS OF PRIMARY, SECONDARY, OR LATENT: Varies, depending on stage of syphilis			
√ SIGNS & SYMPTOMS	Onset Date (YY/MM/DD)	√ SIGNS & SYMPTOMS	Onset Date (YY/MM/DD)
<input type="checkbox"/> Asymptomatic		<input type="checkbox"/> Malaise	
<input type="checkbox"/> Patchy or diffuse alopecia		<input type="checkbox"/> Meningitis	
<input type="checkbox"/> Chancre		<input type="checkbox"/> Mucus lesions	
<input type="checkbox"/> Condyloma lata		<input type="checkbox"/> Rash	
<input type="checkbox"/> Fever		<input type="checkbox"/> Retinitis	
<input type="checkbox"/> Headaches		<input type="checkbox"/> Uveitis	
<input type="checkbox"/> Lymphadenopathy		<input type="checkbox"/> Other, specify:	

RISK FACTORS: Routinely screen individuals who are pregnant or planning a pregnancy. It is recommended that a diagnosis of syphilis should be considered in anyone with compatible signs or symptoms and also for those with risk factors.	
√ Risks	√ Risks
<input type="checkbox"/> Sexual contact with a known case of syphilis	<input type="checkbox"/> Originated from or had sex with individual from endemic country
<input type="checkbox"/> For men, a history of sex with other men	<input type="checkbox"/> Those with street involvement/homeless
<input type="checkbox"/> Multiple and/or anonymous sexual partnering.	<input type="checkbox"/> Injection drug use
<input type="checkbox"/> Sex workers	<input type="checkbox"/> Sexual partners of individuals with any risk factors
<input type="checkbox"/> History of syphilis, HIV, and other STIs	<input type="checkbox"/> Other, specify:

REPORTING HEALTH CARE PROVIDER'S SIGNATURE: _____

The Health Protection and Promotion Act 1990 (HPPA), R.S.O., 1990, and Ontario Reg. 135/18, outlines the requirements for physicians, practitioners, and institutions to report any **disease of public health significance** to the Medical Officer of Health.

For more information: 519-258-2146 ext. 1420
 Infectious Disease Prevention
www.wechu.org
 January 2022/COMMUNITY/SYPHILIS



519-258-2146 Ext. 1420 | www.wechu.org

STI Medication Order Form

Fax Completed Form to 226-783-2132

Allow one week for processing. Please call for expedited ordering.

The Windsor-Essex County Health Unit provides provincially funded medications to healthcare providers for the treatment of Sexually Transmitted Infections at **NO COST**.

Clinicians are encouraged to maintain an appropriate amount of stock based on client needs.

Office/Clinician: _____	Telephone #: _____
Address: _____	
Contact Person: _____	Fax: _____
Date of order: _____	Pick-up: <input type="checkbox"/> Windsor <input type="checkbox"/> Leamington

Pick up between 08:30 and 4:30 Monday to Friday at Health Unit Lobby Window

Medications based on Treatment Guidelines To be used for STI infections Only	# of Doses	Expiry and Lot Number (office use)
Azithromycin 1 gram po- single dose 250 mg tablets (4 tablets per dose)		
Doxycycline 100 mg po bid x 7 days		
Ceftriaxone 250 mg for injection		
Diluent for ceftriaxone <input type="checkbox"/> Lidocaine Hydrochloride injection 1% OR <input type="checkbox"/> Sterile Water		
Gentamycin is only available through Health Canada's Special Access Program Please call the Health Unit at 519-258-2146 x 1420 for inquiries		

For WECHU Office Use Only:	
Date Order Received: _____	Processed by: _____
Date Order Ready: _____	Contacted physician office: _____ (date & initials)
Date picked up: _____	Picked-up by: _____

Section C: Public Health Ontario Laboratory Testing

This section consists of the Public Health Ontario resources related to specimen collection. Other laboratories may have alternative procedures and testing kits. These resources are subject to change. For more detailed and up-to-date information about Public Health Ontario Laboratory Services, call the Public Health Lab Service Desk (1-877-604-4567) or visit www.publichealthontario.ca.

Requisition for Specimen Containers and Supplies

Please note: Specimen containers and supplies are supplied to submitters exclusively for samples that are to be tested by the Public Health Ontario Laboratories.
Current version of Public Health Laboratory requisitions are available at www.publichealthontario.ca/requisitions.

Requisitioner's name:	
Telephone no.:	Fax no.:
Date:	Authorized Signature:

Ship to (include Client name, Address and Postal code):

Name	Kits	Item #	UoM	Quantity
Chlamydia trachomatis & Neisseria gonorrhoeae NAA testing	Roche cobas® PCR Urine Sample kit	300316	Box of 100	
	Roche cobas® PCR Media Dual Swab Sample kit	300317	Box of 100	
DF	Direct Fluorescence	390047	EA.	
Enteric Outbreak kit	2 vials: Green-Enteric Bacteriology and White-Virology / Toxin testing	390036	EA.	
FAECES	Enteric Bacteriology – Health Units Only (Cary Blair)	390049	EA.	
GL	Gastric Lavage - M. tuberculosis	390043	EA.	
PARA	Faeces - Routine Parasitology	390033	PKG / 3	
TB	TB kit Sputum Body fluids and tissues (90 ml sterile container)	390042	EA.	
CD	C. difficile analysis or toxin studies (90 ml sterile container)	390054	EA.	
Virus Culture (tissue)	Universal Transport Media (UTM)	390075	EA.	
Water	Private Citizen Water - bacteriological	390040	EA.	
	Sterile - Water bottles - 250 ml (Official Agency Use Only)	300013	EA.	
PWO kit	Pinworm Ova Kit	390045	EA.	
BL-S	Blood, clotted Serology - Syphilis / Virus / Other	390044	PKG / 6	
BP	Bordetella pertussis (Whooping cough)	390052	PKG / 2	
CHL(C)	Female, Chlamydia trachomatis culture (Universal Transport Media-UTM)	390083	PKG / 6	
	Male, Chlamydia trachomatis culture (Universal Transport Media-UTM)	390084	PKG / 6	
MP / CP - Resp	Mycoplasma pneumoniae / Chlamydia pneumoniae - Respiratory	390085	PKG / 6	
F	Fungus culture kit (superficial / dermatophyte)	390048	PKG / 6	
GC	Neisseria gonorrhoeae culture	390051	PKG / 6	
MP	Genital Mycoplasma / Ureaplasma culture (Universal Transport Media-UTM)	390064	PKG / 6	
Prenatal	Rubella, Syphilis, Hep.B, HIV	390050	PKG / 6	
Virus Culture - Herpes / STI	Swab in transport medium (Universal Transport Media-UTM)	390081	PKG / 6	
Virus - Respiratory / Influenza	Nasopharyngeal swab in transport medium (Universal Transport Media-UTM)	390082	PKG / 6	
Virus - Enteric	Virus culture/electron microscopy / PCR & direct antigen testing	390087	PKG / 6	

Description	Item#	UoM	Quantity
Biohazard Bags - Clinical Specimens (Self-Seal)	300008	PKG / 100	
Test Requisition Bacterial Analysis of Water (Private Citizen - single sample) (Form # 3743-44)	300087	PKG / 100	
Test Requisition Bacterial Analysis of Water (Official Agency - multiple sample) (Form # 4321-44)	300089	PKG / 100	
General Test Requisition (Form # 97-44) PHL	300122	PKG / 100	
Test Requisition Prenatal (Form # 1739-44)	300086	PKG / 100	

Comments:

Date order received (yyyy/mm/dd):
Order filled by:
Date order shipped (yyyy/mm/dd):

Fax completed requisitions to your closest Public Health Ontario Laboratory

Public Health Ontario Laboratories

Toronto (Warehouse)	81 Resources Road Etobicoke ON M9P 3T1	Email: PHOL.Warehouse@oahpp.ca Fax: 416 235-5753
Hamilton	250 Fennell Avenue West Box 2100 Hamilton ON L8N 3R5	Tel.: 905 385-5379 Fax: 905 385-0083 Toll free: 1-866-282-7376
Kingston	181 Barrie Street Box 240 Kingston ON K7L 4V8	Tel.: 613 548-6630 Fax: 613 547-1185 Toll free: 1-855-546-4745
London	850 Highbury Avenue Box 5704, Station A London ON N6A 4L6	Tel.: 519 455-9310 Fax: 519 455-3363 Toll free: 1-877-204-2666
Orillia	750 Memorial Avenue Box 600 Orillia ON L3V 6K5	Tel.: 705 325-7449 Fax: 705 329-6001 Toll free: 1-877-611-6998
Ottawa	2380 St. Laurent Boulevard Ottawa ON K1G 6C4	Tel.: 613 736-6800 Fax: 613 736-6820
Peterborough	99 Hospital Drive Box 265 Peterborough ON K9J 6Y8	Tel.: 705 743-6811 Fax: 705 745-1257
Sault Ste. Marie	160 McDougald Street Sault Ste. Marie ON P6A 3A8	Tel.: 705 254-7132 Fax: 705 945-6873 Toll free: 1-800-263-0409
Sudbury	1300 Paris Street Suite 2 Sudbury ON P3E 6H3	Tel.: 705 564-6917 Fax: 705 564-6918 Toll free: 1-888-564-6917
Thunder Bay	336 South Syndicate Avenue Thunder Bay ON P7E 1E3	Tel.: 807 622-6449 Fax: 807 622-5423
Timmins	67 Wilson Avenue Timmins ON P4N 2S5	Tel.: 705 267-6633 Fax: 705 360-2006 Toll free: 1-888-267-7181
Customer Service Centre	General inquiries	Email: CustomerServiceCentre@oahpp.ca Tel.: 416 235-6556 Toll-free: 1-877-604-4567

General Test Requisition

ALL sections of the form must be completed by [authorized](#) health care providers for each specimen submitted, or testing may be delayed or cancelled. Verify that all **testing requirements** are met before collecting a specimen. For **HIV, respiratory viruses, or culture isolate** requests, use the dedicated requisitions available at: publichealthontario.ca/requisitions

For Public Health Ontario's laboratory use only:

Date Received (yyyy-mm-dd): PHO Lab No.:

Ordering Healthcare Provider Information

Licence No.: Healthcare Provider Full Name:

Org. Name: Address:

City: Postal Code: Province:

Tel: Fax:

Copy to Lab / Health Unit / Other Authorized Healthcare Provider

Licence No.: Lab / Health Unit / Other Authorized Provider Name:

Org. Name: Address:

City: Postal Code: Province:

Tel: Fax:

Patient Setting

Clinic / Community ER (Not Admitted / Not Yet Determined) ER (Admitted)

Inpatient (Non-ICU) ICU / CCU Congregate Living Setting

Testing Indication(s) / Criteria

Diagnosis Screening Immune Status Follow-up / Convalescent

Pregnancy / Perinatal Impaired Immunity Post-mortem

Other (Specify):

Signs / Symptoms

No Signs / Symptoms **★ Onset Date (yyyy-mm-dd):**

Fever Rash STI

Gastrointestinal Respiratory Hepatitis Meningitis / Encephalitis

Other (Specify):

Relevant Exposure(s)

None / Not Applicable Most Recent Date (yyyy-mm-dd):

Occupational Exposure / Needlestick Injury (Specify): Source Exposed

Other (Specify):

Relevant Travel(s)

None / Not Applicable Most Recent Date (yyyy-mm-dd):

Travel Details:

Patient Information

Health Card No.:

Date of Birth (yyyy-mm-dd): Sex: Male Female

Medical Record No.:

Last Name (per health card):

First Name (per health card):

Address: Postal Code:

City: Tel:

Investigation / Outbreak No. from PHO or Health Unit (if applicable):

Specimen Information

★ Date Collected (yyyy-mm-dd): **Submitter Lab No.:**

<input type="checkbox"/> Whole Blood	<input type="checkbox"/> Serum	<input type="checkbox"/> Plasma
<input type="checkbox"/> Bone Marrow	<input type="checkbox"/> Cerebrospinal Fluid (CSF)	<input type="checkbox"/> Nasopharyngeal Swab (NPS)
<input type="checkbox"/> Oropharyngeal / Throat Swab	<input type="checkbox"/> Sputum	<input type="checkbox"/> Bronchoalveolar Lavage (BAL)
<input type="checkbox"/> Endocervical Swab	<input type="checkbox"/> Vaginal Swab	<input type="checkbox"/> Urethral Swab
<input type="checkbox"/> Urine	<input type="checkbox"/> Rectal Swab	<input type="checkbox"/> Faeces

Other (Specify type AND body location):

Test(s) Requested

Enter each assay as per the publichealthontario.ca/testdirectory:

-
-
-
-
-
-

For routine hepatitis A, B or C serology, complete this section instead:

Hepatitis A	<input type="checkbox"/> Immune Status (HAV IgG)	<input type="checkbox"/> Acute Infection (HAV IgM, signs/symptoms info)
Hepatitis B	<input type="checkbox"/> Immune Status (anti-HBs)	<input type="checkbox"/> Chronic Infection (HBsAg + total anti-HBc)
	<input type="checkbox"/> Acute Infection (HBsAg + total anti-HBc + IgM if total is positive)	<input type="checkbox"/> Pre-Chemotherapy Screening (anti-HBs + HBsAg + total anti-HBc)
Hepatitis C	<input type="checkbox"/> Current / Past Infection (HCV total antibodies) No immune status test for HCV is currently available.	

The personal health information is collected under the authority of the Personal Health Information Protection Act, s.36 (1)(c)(iii) for the purpose of clinical laboratory testing. If you have questions about the collection of this personal health information please contact the PHO's Laboratory Customer Service at 416-235-6556 or toll free 1-877-604-4567. F-SD-SCG-1000, version 004 (September 2023).



A Guide to Complete the PHO General Test Requisition

ALL sections of the form must be completed legibly for each specimen submitted, or testing may be delayed or cancelled.

The use of pre-populated fields is not recommended as the fields may be outdated or erroneously used for other patients. If pre-populated requisitions are used, make sure that all the fields are still applicable and current.

For HIV, respiratory viruses, cultured isolates, or environmental samples, please use the dedicated requisitions available at www.publichealthontario.ca/requisitions.

Ordering Healthcare Provider Information

1. The ordering healthcare provider must be authorized to order laboratory tests in Ontario as per the [Laboratory and Specimen Collection Licensing Act](#) O. Reg. 45 s. 18.
2. Fill all ordering healthcare provider information accurately for the test to be approved and results to be transmitted to the correct provider.
3. In settings where rotating healthcare providers take charge of patients, include the name of the attending healthcare provider.
4. **Licence number field:** fill with the OHIP billing number, CPSO number, or other regulated healthcare professions' college registration number.
5. **Copy To field:** in addition to the main ordering healthcare provider, if a copy of the results needs to be provided to another provider, check the Copy To box and complete the additional fields.

Patient Setting

1. Check the setting most applicable to the current patient encounter. Examples of congregate living settings include long-term care homes, shelters, group homes, and correctional facilities.

Testing Indication(s) / Criteria

1. Check or write the reason(s) for testing. This may assist in assay selection or interpretation at PHO.

Signs / Symptoms

1. Some tests may not be approved unless clinical information is detailed. Refer to the test menu for approval criteria.
2. **Onset Date field:** the star is a visual reminder to fill this field if signs or symptoms are present, as the field is often missed by submitters.

Relevant Exposure(s) / Relevant Travel(s)

1. Some tests may not be approved unless exposure or travel information is provided. Refer to the test menu for approval criteria.
2. **Occupational Exposure/Needlestick Injury field:** if applicable, specify whether the specimen is collected from the source of exposure or the exposed individual.

Patient Information

1. Fill all patient information accurately for the test to be approved and results to be assigned to the correct patient.
2. The patient identifiers on the specimen container must be identical to those on the requisition, or testing will be cancelled.
3. When a result is positive for a disease of public health significance, a report will be issued to the health unit where the patient resides as per the [Health Protection and Promotion Act](#) O. Reg. 569 s. 3. If the patient has no address listed, the report will be issued to the health unit where the ordering provider is located.
4. **Health Card number field:** Do not leave blank. Instead, write "not available" if unknown.
5. **Investigation/Outbreak number field:** if a number was assigned to the patient encounter by PHO or a health unit for the purpose of investigations, fill and make sure the number is accurate and current.

Specimen Information

1. **Date Collected field:** the star is a visual reminder to fill this field, as this field is often missed by submitters.
2. **Submitter Lab number field:** Provide if available.
3. **Other field:** specify both the type of specimen (e.g. skin swab, lymph node biopsy, synovial fluid aspirate, unstained smear) and the body location (e.g. right arm, supraclavicular, left knee, vaginal).

Test(s) Requested

1. Enter each assay name individually as per PHO's current test menu: www.publichealthontario.ca/testdirectory. Test names must be CLEAR and LEGIBLE. Be as specific as possible. For assays with multiple organisms tested (i.e. multiplex testing), enter the assay name instead (for example, gastroenteritis virus detection).
2. Verify that the specimen type, collection, storage, and transport requirements are met before submission as per the test menu.
3. If testing requires pre-approval, contact PHO's laboratory Customer Service Centre (see below) for approval.
4. **Routine hepatitis A, B, and C Serology testing section:** for routine hepatitis A, B, or C serology requests, check one of the applicable boxes. If additional individual markers are required (e.g. HBsAg only for occupational exposures, HBeAg/anti-HBe for hepatitis B infection follow-up), these may be ordered individually in the free text fields above under Test(s) Requested. For acute hepatitis A and B infection testing, clinical information is required or testing may be cancelled or delayed.
5. PHO's laboratory only performs tests that are insured services within the meaning of Ontario's [Health Insurance Act](#), s. 11.
6. No additional test will be added to the previously submitted specimens except under exceptional circumstances. If additional tests are required, please submit another specimen and requisition.

Public Health Ontario's Laboratory

Customer Service Centre

Monday to Friday 7:30 am – 7:00 pm EST/EDT
Saturday 8:00 am – 3:45 pm EST/EDT

Tel.: 416-235-6556
Toll Free: 1-877-604-4567
Email: customerservicecentre@oahpp.ca
Website: www.publichealthontario.ca



Chlamydia & Gonorrhoeae Culture

There are different specimen collection kits for culture testing for chlamydia and gonorrhoeae. Fluids and tissue samples should be collected in a sterile container. Figure 1 and Figure 2 are sample specimen collection kits for genital and non-genital swabs used by Public Health Ontario Laboratories (PHOL). This is subject to change, while other laboratories may use alternative kits. PHOL provide free supplies for specimen collection to those submitting samples to PHOL for testing. Call Public Health Lab Service Desk (1-877-604-4567) or visit www.publichealthontario.ca for more information.

Figure 1. Chlamydia genital and non-genital swabs for culture.



Figure 2. Gonorrhoeae genital and non-genital swabs for culture.



LABSTRACT – Updated May 2022

Chlamydia trachomatis and *Neisseria gonorrhoeae* - Nucleic Acid Amplification Testing

Audience

Health care providers submitting specimens to the Public Health Ontario (PHO) laboratory for the detection of *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (NG) by nucleic acid amplification testing (NAAT).

Update

As of December 2021, PHO's laboratory changed CT/NG NAAT to the Roche cobas® CT/NG assay from the Hologic® Aptima Combo 2® assay. Since the change in assays was implemented, additional information have been updated:

1. Rectal and pharyngeal collections with the Roche cobas® CT/NG assay are now Health Canada approved. Performance data have been included in Table 2: Manufacturer reported test performance of the Roche cobas® assay for CT and NG. Performance data is for clinician collected specimens only. Results must be interpreted with caution if clinicians request patients to perform self-collection of rectal and pharyngeal specimens outside of a clinical setting.
2. The Canadian STI guidelines have been updated to recommend test of cure (TOC) testing for all *Neisseria gonorrhoeae* positive sites.

Test Information Sheets with a complete NAAT menu are available on the PHO website at publichealthontario.ca/en/laboratory-services/test-information-index.

The following information is provided in this Lababstract:

- Overview
- Specimen Collection Kits
- Limitations
- Medico-legal Investigations
- Confirmatory Testing
- Test of Cure
- Reporting
- Sensitivity and Specificity Data

Overview

PHO's laboratory accepts male or female urine, clinician-collected endocervical, clinician and patient-collected vaginal, rectal and pharyngeal site specimens for *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (NG) for testing by NAAT. Urethral and penile meatal swabs are not included as part of the Roche cobas® assay and will not be accepted. NAAT is the recommended method for initial screening or testing of CT and NG collected from the approved anatomical sites listed above.

Neisseria gonorrhoeae (NG) culture is recommended plus NAAT when suspecting antimicrobial resistance, test of cure, symptomatic patients, pelvic inflammatory disease (PID), pregnancy, and sexual abuse/sexual assault.

Testing from all other anatomical sites require a CT or NG culture collection kit to be submitted. Specimens submitted for culture using a NAAT collection kit will be rejected. Specimens submitted using a NAAT collection kit for anatomical sites not listed above will be rejected.

Rectal and/or pharyngeal testing is recommended for individuals who have had unprotected sexual exposures at these sites and are in specific at-risk groups or have risk factors, including:

- gay, bisexual, and men who have sex with men, including trans women;
- individuals engaged in sex work or who have had sexual contact with someone engaging in sex work;
- individuals who are known contacts of those infected with CT or NG;
- individuals who have signs or symptoms of rectal or pharyngeal infection

Rectal and/or pharyngeal testing in individuals who have had exposures at these sites and are not in specific risk groups above may be considered in individual circumstances based on clinical evaluation or local epidemiology.

Please refer to [PHO's Bacterial STI Testing: Quick Reference Guide](#) for guidance on testing based on risk factors and clinical presentation.

Rectal bacterial sexually transmitted infections, including CT and NG, have been associated with increased risk of HIV infection in gay, bisexual, and other men who have sex with men, and transgender women. Screening for HIV is highly recommended in these individuals. Details about HIV serology testing at PHO can be found here: [HIV Serology Test Information Sheet](#). Consider initiation of Pre-Exposure Prophylaxis (PrEP) for HIV-negative individuals. For more information on PrEP visit ontarioprep.ca.

Specimen Collection Kits: NAAT for CT and NG at PHO's laboratory is performed using the Roche cobas® CT/NG assay and two collection kits are available for specimen collection and submission.

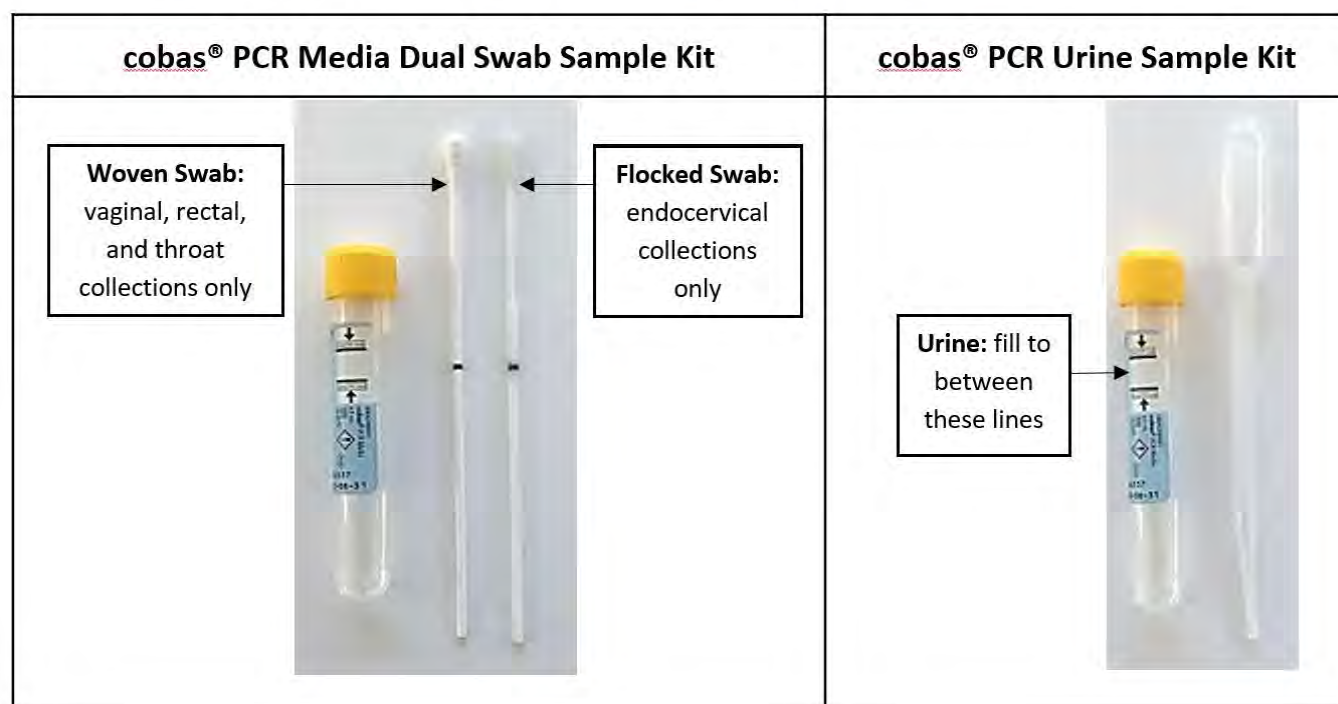
- The Roche cobas® Media Dual Swab Sample Kit contains two swabs, a flocked swab and a woven swab. The **flocked swab is only to be used for female endocervical swab collection** and the woven swab for all other swab collections as outlined below. Incoming primary swab specimen tubes with no swabs or with two swabs have not been collected according to the collection instructions and therefore will not be tested.
- The Roche cobas® Urine Sample Kit is used for urine specimen collection. Neat urine specimens will not be accepted and clients must transfer the appropriate amount of specimen to the approved collection kit (fill to between indicated lines on tube).
- Collection instructions using the Roche cobas® kits can be found here: [Roche Educational Resources](#)

Table 1: Acceptable Specimen Collection Sites and Associated Collection Kits for CT and NG NAAT

Collection Site	Collection Kit	Collection Kit - swab
Female endocervical	Roche cobas® PCR Media Dual Swab Sample Kit	Flocked swab
Clinician or patient-collected specimens in a clinical setting <ul style="list-style-type: none"> • Female vaginal • Rectal • Pharyngeal 	Roche cobas® PCR Media Dual Swab Sample Kit	Woven swab
Male and female urine	Roche cobas® PCR Urine Sample Kit	

Note: Patient-collected specimen collection for women is not designed to replace cervical exams and endocervical specimens for the diagnosis of female urogenital infections. Patients may have cervicitis, urethritis, urinary tract infections, or vaginal infections due to other causes or concurrent infections with other agents. Women who have symptoms suggesting pelvic inflammatory disease (PID) should not use a self-collected swab to obtain patient-collected vaginal swab specimens as a replacement for a pelvic exam. The patient-collected swab specimen collection is limited to health care facilities where support or counseling is available to explain the procedures and precautions. PHO’s laboratory does not accept at-home patient self-collection.

Figure 1: Acceptable Specimen Collection Kits for CT and NG NAAT



Limitations: The following specimens should be recollected at the time of specimen collection or they will be rejected if received in the laboratory.

- Swab specimens grossly contaminated with blood or feces.
- Swab specimen tubes with no swabs or with two swabs.
- Urine specimens with volumes outside the two black lines on the tube label.

Medico-legal investigations: CT and NG culture is the preferred and recommended method for medico-legal investigations; however, NAAT specimens will also be accepted. A positive NAAT result requires confirmation by another NAAT using a different set of primers as per the current [Public Health Agency of Canada \(PHAC\) Canadian Guidelines on Sexually Transmitted Infections](#). Specimens received on patients <14 years of age have not been validated by the manufacturer; however, they will be tested by PHO with a disclaimer added.

Confirmatory testing:

- NG confirmatory testing will be performed on NG-positive specimens for extragenital sites, children <12 years of age, cases of sexual abuse/sexual assault, and medico-legal investigations. Confirmatory testing for NG is performed using the Roche cobas® omni Utility Channel with the PivNG Assay V2 (IDT). This assay is not currently approved by Health Canada but has been validated for use at PHO's laboratory.

- CT confirmatory testing will be performed on CT positive specimens for children <12 of age, cases of sexual abuse/sexual assault, and medico-legal investigations. CT confirmatory testing is performed using the Cepheid Xpert® CT/NG assay.

Test of cure (TOC): General guidelines for NG and CT are described below. Refer to the [PHAC Canadian Guidelines on Sexually Transmitted Infections](#) for additional information.

- **NG:** TOC is recommended for all positive sites and culture is the preferred method. Obtain cultures 3 to 7 days after treatment is complete. If culture is not available and NAAT is used as a TOC, it should be performed 2 to 3 weeks after completion of treatment. Repeat screening is recommended 6 months post-treatment for all individuals with NG infection.
- **CT:** TOC by NAAT is recommended 3 to 4 weeks after completion of treatment when compliance to treatment is suboptimal, an alternative treatment regimen is used, for those with persisting signs or symptoms post-treatment, or the individual is prepubertal or pregnant. For LGV, TOC is recommended 3 weeks after completion of treatment. Follow LGV-infected individuals until TOC for CT is negative and symptoms have resolved. In rare circumstances, CT DNA may persist for longer than 4 weeks and therefore must be considered when interpreting positive TOC results. Repeat screening is recommended 3 months post-treatment for all individuals with CT infection.

Test Information Sheets for NAAT and culture testing are available by accessing [PHO's Laboratory Test Information Index](#).

Reporting: Positive CT or NG laboratory test results are reported to the Medical Officer of Health at the local public health unit.

Assay Sensitivity and Specificity

Table 2 below provides sensitivity and specificity information for the Roche cobas® assay for the detection of CT and NG at urogenital and extragenital sites.

Clinic-based patient-collected swabbing at vaginal, rectal and pharyngeal sites has the same performance characteristics as clinician-collected swabbing when performed correctly. For collection instructions on patient-collected swabbing, refer to the following link: [Roche Educational Resources](#)

Table 2: Manufacturer reported test performance of the Roche cobas® assay for CT and NG (% (95% CI))^{1,2}

	CT Sensitivity	CT Specificity	NG Sensitivity	NG Specificity
Female: Urine	100% (98.7%-100%)	99.1% (98.6%-99.5%)	100% (85.2%-100%)	99.8% (99.6%-100%)
Female: Clinician-collected vaginal swab	100% (95.8%-100%)	98.6% (97.7%-99.2%)	100% (83.2%-100%)	99.9% (99.5%-100%)
Female: Self-collected vaginal swab	100% (96.0%-100%)	98.7% (97.8%-99.3%)	100% (81.5%-100%)	99.7% (99.2%-99.9%)
Female: Endocervical swab	100% (96.8%-100%)	99.2% (98.6%-99.5%)	95.7% (78.1%-99.9%)	99.9% (99.7%-100%)
Male: Urine	100% (96.8%-100%)	99.6% (98.8%-99.9%)	96.8% (83.3%-99.9%)	100% (99.5%-100%)
Male: Urine	100% (96.8%-100%)	99.6% (98.8%-99.9%)	96.8% (83.3%-99.9%)	100% (99.5%-100%)
Pharyngeal	100% (87.9%-100%)	99.8% (99.6%-99.9%)	100% (96.2%-100%)	98.9% (98.4%-99.2%)
Rectal	95.1% (90.2%-97.6%)	99.2% (98.8%-99.5%)	99.0% (94.6%-99.8%)	99.3% (98.9%-99.6%)

References

¹ cobas® CT/NG, Qualitative nucleic acid test for use on the cobas® 6800/8800 Systems, Package Insert 08978905001-01EN. Doc Rev 1.0. 05/2019

² cobas® CT/NG, Qualitative nucleic acid test for use on the cobas® 6800/8800 Systems, Package Insert 07997981001-03EN. Doc Rev 3.0. 11/2021

For further information

- Contact the PHO Laboratory Customer Service Centre at 416-235-6556 or 1-877-604-4567 (toll- free), or by email at customerservicecentre@oahpp.ca
- For specimen collection information and previous Labstracts, refer to [publichealthontario.ca/test directory](http://publichealthontario.ca/test-directory)
- The current version of the PHO's Laboratory General Test Requisition and other forms are available at publichealthontario.ca/Requisitions
- To subscribe to future Labstracts, [register on our website](#)
- To register for Autofax and receive laboratory reports by fax directly from our laboratory information system as soon as they are released, contact the PHO Laboratory Customer Service Centre.

Labstract – November 2020

Syphilis (*Treponema pallidum*) Serologic Testing Update - Changes to Rapid Plasma Reagin (RPR) Confirmatory Test and Algorithm

Audience

Health Care Providers who order syphilis serology testing.

Overview

Effective November 2020:

- Public Health Ontario's (PHO) laboratory is changing the syphilis confirmatory serology testing methodology on serum from manual Rapid Plasma Reagin (RPR) testing to an automated RPR test system utilizing the Gold Standard AIX1000 RPR analyzer.
- PHO's laboratory follows the reverse syphilis serologic testing algorithm. Currently a treponemal test, Chemiluminescent Micro-particle Immunoassay (CMIA) is used as the screening test followed by both a non-treponemal test (RPR) and a treponemal test, *Treponema pallidum* particulate agglutination (TPPA) for confirmation. PHO's laboratory is changing its syphilis confirmatory algorithm by performing RPR first followed by TPPA only for those samples that test RPR non-reactive.

Background Information

Syphilis is a disease caused by infection with the bacterium *Treponema pallidum* (TP). Route of transmission is primarily through sexual contact, but it can also be transmitted from mother to fetus, or rarely, through blood and blood product and/or organ transplant. Syphilis typically follows a progression of stages including primary, secondary, latent and rarely tertiary stages that can last for weeks, months or even years. Serologic testing is the primary method for routine diagnosis and monitoring of treatment.

Change to Syphilis RPR Confirmatory Testing

As the number of syphilis cases continues to rise, the need to fully automate all steps in the **syphilis testing** algorithm increases, and RPR testing has become an excellent candidate for **lab automation**.

The Gold Standard Diagnostics AIX1000 Rapid Plasma Reagin (RPR) Automated Assay is a non-treponemal flocculation test for the qualitative and semi-quantitative determination of reagin antibodies in human serum or plasma to aid in the diagnosis of syphilis.

Syphilis (*Treponema pallidum*) Serologic Testing Update

LAB-SD-057-003

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The advantages of the automated RPR system include:

- Results are interpreted by pattern recognition software which is objective and consistent
- Complete traceability from sample to result
- Archived images of results are linked to samples

Results will be reported as either ‘Reactive’, ‘Non-reactive’ or ‘Invalid’ for the detection of reagin antibodies. As per the studies conducted by the manufacturer, precision and reproducibility are at 98.8 % and 100% respectively.

Change to the Syphilis Serology Test Algorithm

An initial screening (CMIA) with a treponemal serology test is followed by a non-treponemal Rapid Plasma Reagin (RPR) test. If RPR test fail to confirm a reactive screening result, a treponemal test, *Treponema pallidum* Particle Agglutination (TPPA) is performed. Samples from patients with previously confirmed TPPA results will be excluded from testing.

Interpretation of the Most Common Results Using the Revised Syphilis Algorithm

Screening Test (CMIA)	Confirmatory Test	Confirmatory Test (TPPA)	Possible Interpretations/ Recommendations
Non-reactive	Not tested	Not tested	<p>No confirmatory testing is performed if syphilis screen result is non-reactive</p> <ul style="list-style-type: none"> • Early incubating syphilis can be non-reactive before antibodies have developed. • If clinical suspicion of early syphilis, suggest single repeat serology in 4 weeks if not repeated already.
Reactive	Reactive	Reactive	Consistent with recent or prior syphilis infection
Reactive	Non-reactive	Reactive	Consistent with recent or prior syphilis infection
Reactive	Non-reactive	Non-Reactive	<p>Inconclusive syphilis serology results</p> <ul style="list-style-type: none"> • Results consistent with false reactive screening test. • Rare alternate interpretations include early syphilis, previously treated, or late latent syphilis. • Repeat serology in 4 weeks if not already repeated.
Reactive	Non-reactive	Indeterminate	<p>Inconclusive syphilis serology results</p> <ul style="list-style-type: none"> • Possible interpretations include false positive, or early, old treated or untreated syphilis. • Repeat serology in 4 weeks if not already repeated.
Reactive	Reactive	Non-Reactive	<p>Inconclusive syphilis serology results</p> <ul style="list-style-type: none"> • Possible interpretations include false positive, or early, old treated or untreated syphilis. • Repeat serology in 4 weeks if not already repeated.
Reactive	Reactive	Indeterminate	Consistent with recent or prior syphilis infection

Screening Test (CMIA)	Confirmatory Test (RPR)	Confirmatory Test (TPPA)	Possible Interpretations/ Recommendations
Reactive	Invalid	Not Tested	Inconclusive syphilis serology results <ul style="list-style-type: none"> Advise Follow-up sample
Age < 12 Months Reactive	Reactive	Reactive	<ul style="list-style-type: none"> Maternal antibody (can be present in infant for up to 12 months) Congenital infection If congenital or early syphilis is suspected, consider ordering repeat serology at the recommended intervals according to the PHAC Canadian Guidelines on Sexually Transmitted Infections, Section 5-10, Table 8(b) (see references)
Age < 12 Months Reactive	Non- reactive	Reactive	<ul style="list-style-type: none"> Maternal antibody (can be present in infant for up to 12 months) Does not rule out congenital infection If congenital or early syphilis is suspected, consider ordering repeat serology at the recommended intervals according to the PHAC Canadian Guidelines on Sexually Transmitted Infections, Section 5-10, Table 8(b) (see references)

Specimen collection requirements

Human serum is acceptable for syphilis serology testing. Whole blood should be allowed to clot. Serum separator tubes (SST) are acceptable. Liquid anticoagulants may have a dilution effect resulting in lower concentrations for individual patient specimens. Heat inactivated, haemolysed, icteric, lipemic or microbially contaminated sera are not recommended for testing.

Note: This document does not apply to testing for syphilis in primary lesions and cerebrospinal fluid (CSF). Syphilis testing information for primary lesions and CSF is available at:

http://www.publichealthontario.ca/en/ServicesAndTools/LaboratoryServices/Pages/Syphilis_Chancere_Direct_Fluorescence.aspx;

http://www.publichealthontario.ca/en/ServicesAndTools/LaboratoryServices/Pages/Syphilis_CSF.aspx

Testing Turnaround time (TAT)

TAT may be up to 6 days.

References

1. Centers for Disease Control and Prevention. Sexually transmitted disease surveillance 2014 <http://www.cdc.gov/std/stats14/> (Accessed on February 06, 2017)
2. Hicks CB, Clement M. Syphilis: Screening and diagnostic testing. In: UpToDate, Hynes NA, Mitty J (Ed), UpToDate, Waltham, MA. (Accessed on April 03, 2017)
3. Levett PN, Fonseca K, Tsang RSW, et al. Canadian Public Health Laboratory Network laboratory (CPHLN) guidelines for the use of serological tests (excluding point-of-care tests) for the diagnosis of syphilis in Canada. *Can J Infect Dis Med Microbiol* 2015;26(Suppl A):6A-12A.
4. PHAC Canadian Guidelines on Sexually Transmitted Infections; Section 5-10: Management and Treatment of Specific Infections, Table 8(b) at <https://www.canada.ca/en/public-health/services/infectious-diseases/sexual-health-sexually-transmitted-infections/canadian-guidelines/sexually-transmitted-infections/canadian-guidelines-sexually-transmitted-infections-27.html>

For further information

- Contact the PHOL Customer Service Centre at 416-235-6556 or 1-877-604-4567 (toll-free), or by email at CustomerServiceCentre@oahpp.ca
- For PHOL specimen collection information and previous Labstracts, refer to publichealthontario.ca/Labs
- The current version of the PHOL General Test Requisition and other forms are available at publichealthontario.ca/Requisitions
- To subscribe to future Labstracts, email labstracts@oahpp.ca
- To register for Autofax and receive laboratory reports by fax directly from our laboratory information system as soon as they are released, contact the PHOL Customer Service Centre.

CHLAMYDIA & GONORRHEA:

Did You Know?

- Chlamydia and Gonorrhea are sexually transmitted infections that can be present in the **THROAT** and **RECTUM** through **ORAL** and **ANAL** sex;
- Can be transmitted through unprotected vaginal, anal, and oral sex;
- Infection can be found in the throat, anus, penis, AND vagina;
- Most people with Chlamydia and Gonorrhea are ASYMPTOMATIC;
- Common symptoms include burning while urinating, yellow/green discharge, abdominal pain, pain during sex, and painful/swollen testicles;
- Chlamydia and Gonorrhea can be tested via urine samples and **SWABBING** of the throat, anus, or cervix; and
- Sexual health history and safe sex practices should be part of routine care.

1

Preparing the Swab

(Offer self-swabbing to patient)

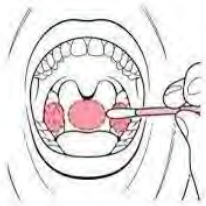
1. Open the swab package and remove the clean swab.
2. Do NOT hold the swab shaft below the score line.
3. Do NOT touch the soft tip or lay the swab down.



2

Oral/ Throat Swab

Cotton Swab Only



- Have the patient open their mouth wide, so the back of the throat is visible.
- Gently swab the tonsils (or tonsil region if they have been removed) bilaterally AND the back of the throat (highlighted in pink).
- Do NOT touch the cheeks or tongue when retracting swab.

Rectal Swab

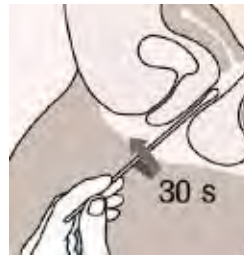
Cotton Swab Only

- Have the patient stand or lay on their left side, and gently insert the swab about 1-2 inches (3-5cm) into the anus.
- Gently rotate the swab against the rectal wall 3 times (5-10 seconds).



Vaginal Swab

Cotton Swab Only

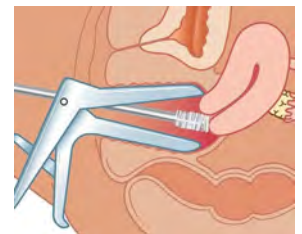


- Have the patient lay flat and insert the clean swab into the vagina about 2 inches (5cm).
- Gently rotate against the vaginal wall for 10-30 seconds.

Cervical Swab

Brush (Flocked) Swab

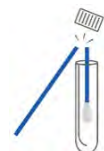
- Have the patient lay flat and use the clean **COTTON** swab to remove excess mucus from the cervical site.
- Discard the cotton swab, and insert the **BRUSH** swab into the endocervical canal
- Gently rotate against the cervix 5 times.



3

Capping the Swab

1. Remove the cap from the tube included in the package, place the swab (cotton side down) into the tube, and break the swab shaft at the score line.
(Do NOT spill the liquid contents inside)
2. Securely return the cap to the tube, perform hand hygiene, and follow company policy to send to lab for testing.
3. **Specimens will be rejected** if there is presence of 2 swabs in the same tube, no swab in tube, or excess of blood (>5%).



Section D: **Patient Resources**

This section consists of fact sheets to provide to patients for general information about chlamydia, gonorrhoea, and syphilis.

Chlamydia

What is chlamydia?

Chlamydia is a sexually transmitted infection (STI) caused by bacteria (germs), called *chlamydia trachomatis*. It is one of the most common bacterial STIs.

How does chlamydia spread?

Chlamydia spreads through unprotected oral, vaginal, and/or anal sex with an infected partner. Mothers may also pass it to their newborn baby during a vaginal birth.

What are the symptoms of chlamydia?

- Change in discharge from the penis, vagina, or rectum
- Itching, pain, or burning sensation when peeing
- Itching or pain around the tip of the penis
- Pain during intercourse
- Lower abdominal pain
- Abnormal vaginal bleeding, such as bleeding during or after sex
- Pain or swelling of the testes
- Redness or swelling of the conjunctiva (white part of the eye) if exposed.

Most people do not show any symptoms, but can still spread the germs to others without knowing it. Testing may then be the only the way to know that you have chlamydia. Symptoms usually appear in about 2 weeks, but can take up to six weeks after the germs enter your body.

What are complications of chlamydia?

If left untreated, the germs can spread and cause an infection of the uterus, fallopian tubes, and ovaries, known as pelvic inflammatory disease (PID). Even without symptoms, it can lead to serious complications, such as:

- Chronic pelvic pain
- Ectopic pregnancy (fertilized egg attaches outside of the uterus)
- Infertility (unable to get pregnant)
- During pregnancy, early labour, and infection of the eyes and lungs of the newborn.

Infections, including chlamydia, of the genital area may increase the risk of getting human immunodeficiency virus (HIV).

How do I get tested for chlamydia?

A urine sample and/or swabs of the cervix, urethra, throat, or rectum may be collected by a health care provider to test for chlamydia.

How is chlamydia treated?

- If you have these symptoms, see a health care provider as soon as possible.
- Tell your health care provider about any type of unprotected sex (oral, vaginal, or rectal).
- Treatment includes antibiotics (medications that kill bacteria) and it is important to take the medication as prescribed by your health care provider.
- Do not have sex for 7 days after start of the treatment.
- Your partners will need to receive treatment and wait seven days before having sex again.
- The Health Unit can help you notify your partners, while keeping your identity confidential.
- You can also be re-infected with chlamydia after treatment, so it is recommended that you repeat testing 6 months after treatment.

How do I prevent the spread of chlamydia?

Ways to prevent infection include:

- Practicing safer sex, such as:
 - Abstinence (not taking part in any types of sex),
 - Mutual monogamy (both partners agree to only have sex with each other and have been tested for sexually transmitted and bloodborne infections (STBBIs)), and
 - Using latex and polyurethane male and female condoms and dental dams. **Condoms are available for free at the Health Unit.**
 - Not sharing sex toys or thoroughly washing them with disinfectants between use
- Getting tested for STBBIs, if you had unprotected sex or are not sure if you or your partners have a STBBI.



For more information, contact the Health Unit or speak to your health care provider.

- SexualHealthOntario (also has live online chat and Sexual Health Infoline): www.sexualhealthontario.ca; 1-800-668-2437
- The Society of Obstetricians and Gynaecologists of Canada – Sex & U: <https://www.sexandu.ca/>
- Government of Canada: <https://www.canada.ca/en/public-health/services/diseases/chlamydia.html>

References:

- Government of Canada. (2019). Section 5-2: Canadian guidelines on sexually transmitted infections - Management and treatment of specific infections: Chlamydial infections. Retrieved from <https://www.canada.ca/en/public-health/services/infectious-diseases/sexual-health-sexually-transmitted-infections/canadian-guidelines/sexually-transmitted-infections/canadian-guidelines-sexually-transmitted-infections-30.html>.
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Gonorrhea

What is gonorrhea?

Gonorrhea is a sexually transmitted infection (STI) caused by bacteria (germs), called *Neisseria gonorrhoeae*. It is one of the most common bacterial STIs.

How does gonorrhea spread?

Gonorrhea spreads through unprotected oral, vaginal, and/or anal sex with an infected partner. Mothers may also pass it to their newborn baby during a vaginal birth.

What are the symptoms of gonorrhea?

- Thick discharge from the penis, vagina, or rectum
- Itching, pain, or burning sensation when peeing
- Itching or pain around the tip of the penis or rectum
- Pain during intercourse
- Lower abdominal pain
- Abnormal vaginal bleeding, such as bleeding during or after sex
- Pain or swelling of the testes
- Sore throat
- Redness or swelling of the conjunctiva (white part of the eye) if exposed.

Many people do not show any symptoms, but can still spread the germs to others without knowing it. Testing may then be the only way to know that you have gonorrhea. Symptoms usually appear 1 to 14 days after the germs enter your body.

What are complications of gonorrhea?

If left untreated, the germs can spread and cause an infection of the blood (septicemia). It can also cause an infection of the uterus, fallopian tubes, and ovaries, known as pelvic inflammatory disease (PID). Even without symptoms, this can lead to serious complications, such as:

- Chronic pelvic pain
- Ectopic pregnancy (fertilized egg attaches outside of the uterus)
- Infertility (unable to get pregnant)
- During pregnancy, early labour, and infection of the eyes and lungs of the newborn.
- Arthritis (inflammation of the joints)
- Skin lesions
- Meningitis (inflammation of the lining of the brain and spinal cord)
- Endocarditis (inflammation of the lining of the heart)

Infections, including gonorrhea, of the genital area may increase the risk of getting human immunodeficiency virus (HIV).

How do I get tested for gonorrhea?

A urine sample and/or swabs of the cervix, urethra, throat, or rectum may be collected by a health care provider to test for gonorrhea.

How is gonorrhea treated?

- If you have these symptoms, see a health care provider as soon as possible.
- Tell your health care provider about any type of unprotected sex (oral, vaginal, or rectal) and if you or your partners have been travelling.
- Treatment includes antibiotics (medications that kill bacteria). In Canada, gonorrhea may be resistant to some antibiotics. It is important to take the medication as prescribed by your health care provider. You may also need to have a follow up test to make sure that the medications have worked. See your health care provider if the symptoms do not go away after treatment.
- Your partners will also need to receive treatment.
- Do not have any type of sex for 3 days after you and your partners have completed treatment. Do not have sex if you or your partners still have any symptoms.
- The Health Unit can help you notify your partners, while keeping your identity confidential.
- You can also be re-infected with gonorrhea after treatment, so it is recommended that you repeat testing 6 months after treatment.



How do I prevent the spread of gonorrhea?

Ways to prevent infection include:

- Practicing safer sex, such as:
 - Abstinence (not taking part in any types of sex),
 - Mutual monogamy (both partners agree to only have sex with each other and have been tested for sexually transmitted and bloodborne infections (STBBIs)), and
 - Using latex and polyurethane male and female condoms and dental dams. **Condoms are available for free at the Health Unit.**
 - Not sharing sex toys or thoroughly washing them with disinfectants between use
- Getting tested for STBBIs, if you had unprotected sex and/or are not sure if you or your partners have a STBBI.

For more information, contact the Health Unit or speak to your health care provider.

- SexualHealthOntario (also has live online chat and Sexual Health Infoline): www.sexualhealthontario.ca; 1-800-668-2437
- The Society of Obstetricians and Gynaecologists of Canada – Sex & U: <https://www.sexandu.ca/>

References:

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Syphilis

What is syphilis?

Syphilis is a sexually transmitted infection (STI) caused by bacteria (germs), called *Treponema pallidum*.

How does syphilis spread?

Syphilis mostly spreads through contact with a contagious sore or rash during unprotected oral, vaginal, and/or anal sex. It may not be obvious that an infected person has syphilis. A person can spread the infection without knowing it.

Mothers may also pass it to their newborn baby during pregnancy. It rarely spreads through sharing of needles and injection equipment or blood transfusions.

What are the symptoms of syphilis?

Syphilis goes through four stages, if left untreated. Each stage may have different symptoms.

Stage	Symptoms
Primary	Usually appears 3 weeks after the germs enter your body <ul style="list-style-type: none"> • Painless sore(s) around exposed area (in and around the mouth, genitals and/or rectum) • Swelling of lymph nodes
Secondary	Usually appears 2 to 12 weeks after the germs enter your body <ul style="list-style-type: none"> • Rash on the palms of the hands, soles of the feet, or the torso • Flu-like symptoms (e.g., fever, sore throat, feeling unwell, headaches) • Patches of sores in the mouth or other mucous membranes • Swelling of lymph nodes • White, smooth wart-like bumps around the genital area
Latent	<ul style="list-style-type: none"> • There may not be any symptoms, but the infection can still spread to others.
Tertiary	Can take 1 to 46 years before the effects of the infection are seen. <ul style="list-style-type: none"> • If left untreated, the infection can cause serious illness, affecting your heart, skin, brain, bones, and other organs. • Symptoms depend on which organs the infection has spread.

How do I get tested for syphilis?

A health care provider will do blood tests to test for syphilis. If needed, the health care provider may also arrange to test the fluid from the spine in the lower back to see if the infection has spread to your brain and spinal cord.

How is syphilis treated?

If you have these symptoms, see a health care provider as soon as possible.

- Tell your health care provider about any type of unprotected sex (oral, vaginal, or rectal).

- Treatment includes antibiotics (medications that kill bacteria). Treatment may require a few visits to your health care provider. It is important to go every time and complete your treatment. Even if your symptoms lessen, you will still need to continue treatment.
- You will need to have follow up tests to make sure that the medications have worked. Blood results may always be positive even after you have been treated and cured. It is important to tell your health care providers that you had prior treatment for syphilis.
- It is important that you inform all of your sexual partners. They will also need to be tested and treated.
- Do not have sex until you and your partners are treated and the blood tests show that the medications have worked.
- The Health Unit can notify your partners, while keeping your identity confidential.

How do I prevent the spread of syphilis?

You can be re-infected with syphilis after treatment. Ways to prevent infection include:

- Practicing safer sex, such as:
 - Abstinence (not taking part in any types of sex),
 - Mutual monogamy (both partners agree to only have sex with each other and have been tested for sexually transmitted bloodborne infections [STBBI]),
 - Use latex and polyurethane male and female condoms and dental dams. Condoms are available for free at the Health Unit, and
 - Not sharing sex toys or thoroughly washing them with disinfectants between use
- Getting tested for STBBIs, if you had unprotected sex and/or are not sure if you or your partners have a STBBI. Infections, including syphilis, of the genital area may increase the risk of getting human immunodeficiency virus (HIV).



For more information, contact the Health Unit or speak to your health care provider.

- SexualHealthOntario (also has live online chat and Sexual Health Infoline): www.sexualhealthontario.ca; 1-800-668-2437
- The Society of Obstetricians and Gynaecologists of Canada – Sex & U: <https://www.sexandu.ca/>

References:

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DISEASES OF PUBLIC HEALTH SIGNIFICANCE

REPORT DISEASES LISTED BELOW TO:

Phone: 519-258-2146 or Fax: 226-783-2132

(8:30 a.m. to 4:30 p.m., Monday to Friday)

After hours, weekends, and holidays phone: 519-973-4510



Timely reporting of communicable diseases is essential for their control. If you suspect or have confirmation of the following specified "Diseases of Public Health Significance" or their "etiologic agents," (as per Ontario Reg 135/18 and amendments under the Health Protection and Promotion Act), please report them to the local Medical Officer of Health.

REPORT IMMEDIATELY	REPORT BY THE NEXT WORKING DAY		
Anthrax Botulism Brucellosis Creutzfeldt-Jakob Disease, all types Diphtheria Group A Streptococcal disease, invasive Haemophilus influenzae disease, all types, invasive Hantavirus Pulmonary Syndrome Hemorrhagic fevers, including: 1. Ebola virus disease 2. Marburg virus disease 3. Lassa Fever 4. Other viral causes Hepatitis, viral 1. Hepatitis A Measles Meningococcal disease, invasive Novel coronavirus diseases, including: 1. Severe Acute Respiratory Syndrome (SARS) 2. Middle East Respiratory Syndrome (MERS) 3. Coronavirus disease (COVID-19) Plague Poliomyelitis, acute Q Fever Rabies Smallpox and other Orthopoxviruses including MPox (Monkeypox)	Acquired Immunodeficiency Syndrome (AIDS) Acute flaccid paralysis (AFP) Amebiasis Anaplasmosis Babesiosis Blastomycosis Campylobacter enteritis Carbapenemase-producing Enterobacteriaceae (CPE), infection or colonization Chancroid Chickenpox (Varicella) Chlamydia trachomatis infections Cholera Clostridium difficile Infection (CDI) outbreaks in public hospitals Cryptosporidiosis Cyclosporiasis Echinococcus Multilocularis infection Encephalitis, including: 1. Post-infectious 2. Vaccine-related 3. Subacute sclerosing panencephalitis 4. Unspecified 5. Primary, viral	Food poisoning, all causes Gastroenteritis outbreaks in institutions and public hospitals Giardiasis, except asymptomatic cases Gonorrhoea Group B Streptococcal disease, neonatal Hepatitis, viral 1. Hepatitis B 2. Hepatitis C Influenza Legionellosis Leprosy Listeriosis Lyme Disease Meningitis, acute 1. viral 2. other 3. bacterial Mumps Ophthalmia neonatorum Paralytic shellfish poisoning (PSP) Paratyphoid Fever Pertussis (Whooping Cough) Pneumococcal disease, invasive Powassan	Psittacosis/Ornithosis Respiratory infection outbreaks in institutions and public hospitals Rubella Rubella, congenital syndrome Salmonellosis Shigellosis Syphilis Tetanus Trichinosis Tuberculosis Tularemia Typhoid Fever Verotoxin-producing E. coli infection including: Haemolytic Uraemic Syndrome (HUS) West Nile Virus Illness Yersiniosis

For more information: Windsor-Essex County Health Unit
 519-258-2146 | wechu.org

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