HEALTH CARE PROVIDERS'

GUIDE to Bacterial SEXUALLY TRANSMITTED INFECTIONS (STI)

WINDSOR-ESSEX COUNTY HEALTH unit
Bureau de santé de Windsor-comté d'Essex

JUNE 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
1005 Ouellette Avenue, Windsor, ON, N9A 4J8
www.wechu.org | 519-258-2146 | Fax: 226-783-2132
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

Gonorrhea, 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.

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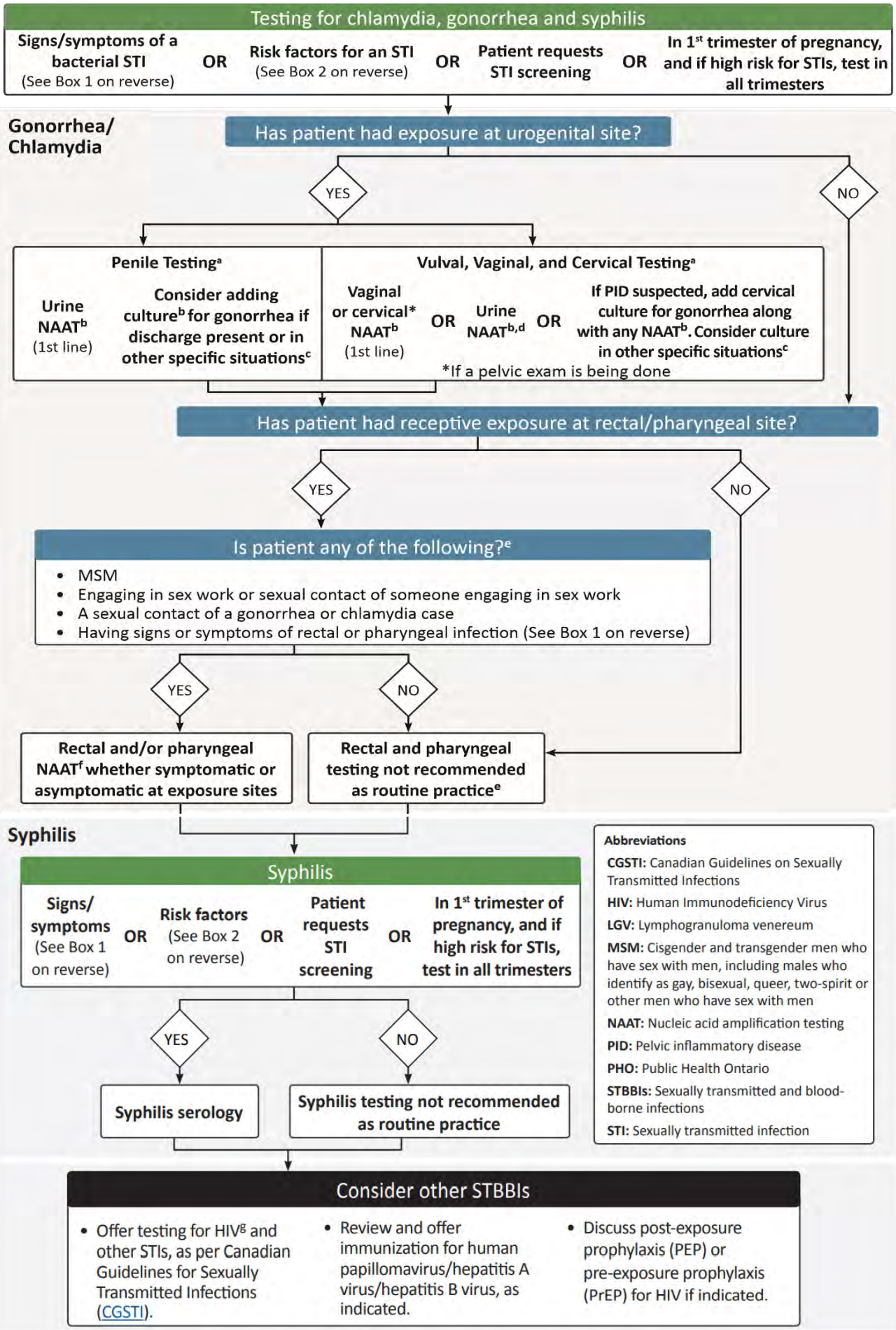

Box 1 - Common Signs/Symptoms[h]

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 resistance[i]
- 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]

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Important Considerations

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

Notes:

a) 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.
b) NAAT is more sensitive for diagnosing gonorrhea, but culture testing provides antimicrobial sensitivity information. For symptomatic patients, consider testing by culture for gonorrhea and add any urogenital NAAT, as this will concurrently test for chlamydia and gonorrhea and provides a more sensitive test.
c) Culture for gonorrhea should be used in the following situations: test of cure; if antimicrobial susceptibility testing is required; if required for medico-legal purposes; or if suspected treatment failure with ongoing signs/symptoms.
d) Urine NAAT is a second-line option in females because it is less sensitive than cervical or vaginal NAAT.
e) Rectal and/or pharyngeal testing in individuals who have had exposures at those sites and are not in specific risk groups (not MSM, not people who engage in sex work and their sexual contacts or not sexual contacts of those infected with gonorrhea or chlamydia) may be considered in individual circumstances based on clinical evaluation or local epidemiology. Infections at rectal and pharyngeal sites are often asymptomatic. A test of cure is recommended for positive cases of pharyngeal gonorrhea.
f) Lymphogranoluma 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.
g) If concurrently testing for HIV, please include a separate PHO HIV requisition.
h) For detailed signs and symptoms, please refer to the CGSTI.
i) Safer sex counselling should be considered for travelers who intend to or may have new sexual contact when abroad.
j) 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.

Ontario
Agency for Health Protection and Promotion
Agence de protection et de promotion de la santé

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

Do you know if the person in front of you has ever been screened for sexually transmitted infections (STI)?

In 2018, over **60%** of Canadians reported that they had never been screened for STI.

REPORTED CASES OF STI IN CANADA ARE INCREASING (2016)

121,244 cases of *Chlamydia trachomatis* (CT)

- 76% of cases are aged 15 to 29
- The highest increase in rates is in adults over 40

23,708 cases of *Neisseria gonorrhoeae* (NG)

- 57% of cases are aged 15 to 29
- The highest increase in rates is in adults over 30

3,829 cases of infectious Syphilis

- 92% of cases are men

Normalize discussions about sexual health and offer STI screening to sexually active people as part of routine care

- STI screening provides an opportunity to discuss transmission, signs and symptoms, risk reduction and preventive measures.

- Screen at first prenatal visit and repeat based on risk factors
- Consider repeat screening for syphilis in areas experiencing heterosexual outbreaks, regardless of risk factors

- ≥ 25 years old
- Offer screening and repeat screening based on risk factors

- < 25 years old
- Gay, bisexual, and other men who have sex with men (gbMSM) and transgender populations

+ Offer more frequent screening based on risk factors

More frequent STI screening may be appropriate for individuals with behavioural risk factors

Behavioural risk factors for STI acquisition include but are not limited to: previous STI diagnosis, new sexual partner, multiple or anonymous sexual partners, sexual partner(s) having a STI, condomless sex and sex while under the influence of alcohol or drugs.

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Public Health Agency of Canada | Agence de la santé publique du Canada

Canada

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

SCREENING: Early STI detection in asymptomatic individuals†

Chlamydia trachomatis (CT) AND *Neisseria gonorrhoeae* (NG)			Syphilis
URINE	SWABS		BLOOD
	Urethral, Vaginal or Cervical	Rectal	Pharyngeal	
NAAT (CT/NG)	NAAT (CT/NG) AND/OR Culture (NG)	NAAT, if available (CT/NG) AND/OR Culture (CT/NG)	NAAT, if available (CT/NG) AND/OR Culture (CT/NG)	Laboratory will perform serology using an algorithm combining non-treponemal and treponemal tests

Offer HIV testing when screening for other STI†

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*

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EARLY DIAGNOSIS AND TREATMENT LEAD TO BETTER HEALTH OUTCOMES

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

Chlamydia trachomatis (CT)

Doxycycline 100 mg PO bid for 7 days

OR

Azithromycin 1 g PO in a single dose

Neisseria gonorrhoeae (NG)

For anogenital and pharyngeal infections

Ceftriaxone 250 mg IM in a single dose PLUS Azithromycin 1 g PO in a single dose

OR

For anogenital infections

Cefixime 800 mg PO in a single dose PLUS Azithromycin 1 g PO in a single dose

Note: Cefixime is considered alternate treatment in gbMSM

Syphilis

For infectious syphilis (primary, secondary and early latent)

Long-acting benzathine penicillin G 2.4 million units IM in a single dose

For late latent syphilis

Long-acting benzathine penicillin G 2.4 million units IM weekly for 3 doses

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

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

Chlamydia trachomatis (CT)	*Neisseria gonorrhoeae* (NG)	Syphilis
TOC using NAAT 3–4 weeks after the completion of treatment is recommended only when: ▸ Compliance to treatment is suboptimal ▸ Unresolved or persistent symptoms are present ▸ Alternate treatment regimen was prescribed ▸ Individual is pregnant or prepubertal	**Routine TOC is recommended:** ▸ Using culture, 3–7 days after completion of treatment; and/or ▸ Using NAAT 2–3 weeks after completion of treatment **TOC is of particular importance when:** ▸ 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	**Indications for post-treatment monitoring and follow-up serology:** ▸ 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: • 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

*WECHU recommends post-treatment monitoring and follow-up serology at 1 month, as well. Note: early latent syphilis is latent syphilis where infection occurred within the past 12 months; late latent syphilis is latent syphilis where infection occurred more than 12 months ago.

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 Canadian Guidelines on Sexually Transmitted Infections 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

- Canadian Guidelines on Sexually Transmitted Infections (PHAC)
- 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 CANADIAN STI GUIDELINES mobile application

Cat.: HP40-250/2019E-PDF ISBN: 978-0-660-29553-4 Pub.: 180816

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
• **Doxycycline** 100 mg PO BID for 7 days [A-I] or • **Azithromycin** 1 g PO in a single dose [A-I]	• **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** 1g PO in a single dose [B-I]
  Or
- **Amoxicillin** 500 mg PO TID for 7 days [A-I]
  Or
- **Erythromycin** 2g/day PO in divided doses for 7 days [B-I]
  Or
- **Erythromycin** 1g/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
• **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	• **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.

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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 Gonorrhea 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 gonorrhea 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 gonorrhea.

[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**.

Ontario
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PARTNERS FOR HEALTH | PARTENAIRES POUR LA SANTÉ

Syphilis treatment

Stage		Preferred treatment
Non-pregnant adults	Primary, secondary, early latent (<1 year)	Benzathine penicillin G 2.4 million units IM as a single dose*
	Late latent, latent unknown duration, tertiary (excluding neurosyphilis)	Benzathine penicillin G 2.4 million units IM weekly for 3 doses*
	HIV positive (syphilis of any stage)	
Pregnant women	Primary, secondary, early latent (<1 year)	Benzathine penicillin G 2.4 million units IM weekly for 1-2 doses*
	Late latent, latent unknown duration, tertiary (excluding neurosyphilis)	Benzathine penicillin G 2.4 million units IM weekly for 3 doses*
Neurosyphilis		Penicillin G 3-4 million units IV q 4 h (16-24 million units/day) for 10-14 days

* Benzathine penicillin G (Bicillin) 2.4 million units comes divided with 2mL in each pre-loaded syringe therefore one dose = 2 injections

- NOTE: Congenital syphilis: complex, additional considerations; consult specialist PHAC guidelines and Canadian Pediatric Society

Source: Public Health Agency of Canada. Canadian Guidelines on Sexually Transmitted Infections, Section 5 – Management and Treatment of Specific Infections. Available at: http://www.phac-aspc.gc.ca/std-mts/sti-its/cgsti-ldcits/section-5-10-eng.php

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

This section consists of forms to:

- Report chlamydia, gonorrhoea, 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.

WINDSOR-ESSEX COUNTY HEALTH unit
Bureau de santé de Windsor-comté d'Essex

CHLAMYDIA TRACHOMATIS (CT)

HEALTHCAREPROVIDERINVESTIGATION&REPORTINGFORM

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* 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:** ( ) -		

☐ **Yes** ☐ **No**	Has the client been notified of the laboratory result, indicating infection?
☐ **Yes** ☐ **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**
☐ Asymptomatic (most common)		☐ Asymptomatic (most common)	
☐ Lower abdominal pain		☐ Conjunctivitis	
☐ Cervicitis		☐ Dysuria	
☐ Conjunctivitis		☐ Testicular pain	
☐ Dyspareunia		☐ Urethral discharge	
☐ Dysuria		☐ Urethral itch	
☐ Vaginal discharge		☐ Urethritis	
☐ Other, specify:		☐ Other, specify:	

SECTION C: RISKS FOR INFECTION AND COMPLICATIONS

✓ **RISK FACTORS**	
☐ Sexual contact of a suspected/confirmed chlamydia case	☐ No condom use
☐ Those with street involvement/homeless	☐ Condom breakage
☐ Anonymous sex partners	☐ Alcohol and/or drug use
☐ Multiple sex partners	☐ Sex trade worker
☐ New sexual contact in the past 2 months	☐ Sex with same sex
☐ Other, specify: _____	☐ Other, specify: _____

Continued on page 2

SECTION D: INFECTION MANAGEMENT		
☐ **Yes** ☐ **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 gonorrhea 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)	
	☐ Azithromycin 1 g PO single dose **OR**	**DATE GIVEN (YY/MM/DD):**
	☐ Doxycycline 100 mg PO BID for 7 days	**DATE GIVEN (YY/MM/DD):**
	☐ Other, specify:	**DATE GIVEN (YY/MM/DD):**
☐ **Yes** ☐ **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	
☐	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).
☐	Inform client to return for a test of cure by culture 1-2 weeks after treatment (preferred) or by NAAT 3-4 weeks after treatment if symptomatic, treatment compliance is suboptimal, alternative treatment was used, and/or for all prepubertal children and pregnant women. 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.
☐	Inform client that repeat testing for CT is recommended 3 months post-treatment, because the risk of reinfection is high.
☐	Inform client that a nurse from the Health Unit 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/

WINDSOR-ESSEX COUNTY HEALTH UNIT
Bureau de santé de Windsor-comté d'Essex

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.

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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:** ( ) -		

☐ **Yes** ☐ **No**	Has the client been notified of the laboratory result, indicating infection?
☐ **Yes** ☐ **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**
☐ Asymptomatic (most common)		☐ Asymptomatic	
☐ Lower abdominal pain		☐ Dysuria	
☐ Deep dyspareunia		☐ Testicular pain	
☐ Dysuria		☐ Urethral discharge	
☐ Rectal pain/discharge and proctitis		☐ Urethral itch	
☐ Abnormal vaginal bleeding		☐ Rectal pain/discharge and proctitis	
☐ Vaginal discharge		☐ Other, specify:	
☐ Other, specify:			

SECTION C: RISKS FOR INFECTION AND COMPLICATIONS

✓ **RISKS**	
☐ Sexual contact of a suspected/confirmed gonorrhea case	☐ No condom use
☐ Those with street involvement/homeless	☐ Condom breakage
☐ Anonymous sex partners	☐ Unprotected sex while travelling to endemic area
☐ Multiple sex partners	☐ Sex trade worker
☐ New sexual contact in the past 2 months	☐ Sex with same sex
☐ Alcohol and/or drug use	☐ Other, specify: _____

Continued on page 2

SECTION D: INFECTION MANAGEMENT		
☐ **Yes** ☐ **No**	Was treatment provided to the client? If yes, specify medication & date below. All confirmed cases need to be treated and suspected cases should be considered for treatment. **NOTE**: *Free* STIs medications can be ordered from the Health Unit to have in your office for prompt treatment.	
	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)	
	☐ Ceftriaxone 250mg IM single dose **AND** ☐ Azithromycin 1g PO single dose	**DATE GIVEN (YY/MM/DD)**
	Alternative Treatments (Only if first-line not possible and must have a test of cure) ☐ Azithromycin 2g PO single dose **OR** ☐ Cefixime 400mg PO **AND** Azithromycin 1g PO **OR** ☐ Gentamicin 240mg IM in 2 separate 3-mL injections of 40mg/ml **AND** Azithromycin 2g PO (Gentamicin only available through special order at the health unit)	**DATE GIVEN (YY/MM/DD)**
	☐ Other:	**DATE GIVEN (YY/MM/DD)**
☐ **Yes** ☐ **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		
☐	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 *appropriate* treatment and the clients/contact(s) are asymptomatic.	
☐	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. 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).	
☐	Inform client that repeat testing for gonorrhea is recommended 6 months post-treatment, as reinfection is high.	
☐	Inform client that a nurse from the Health Unit 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/

WINDSOR-ESSEX COUNTY HEALTH UNIT
Bureau de santé de Windsor-comté d'Essex

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	☐ Asymptomatic with risk factors, other than contact ☐ Symptomatic ☐ Contact tracing ☐ Immigration Screening ☐ Routine – Prenatal Screen ☐ Routine – Medical Procedure ☐ Other, specify: _____		
☐ Yes ☐ No	Was the client tested for HIV? Date (YY/MM/DD):_____ Results: _____		
☐ Yes ☐ No	Is the client pregnant? If yes, gestational age: _ weeks		
☐ Yes ☐ No	Has the client been notified of the laboratory result, indicating infection?		
Working diagnosis	☐ Primary ☐ Secondary ☐ Early Latent ☐ Late Latent ☐ Tertiary ☐ Neurosyphilis ☐ 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)**
	☐ Primary ☐ Secondary ☐ Early latent (<1 year)	☐ Benzathine penicillin G (Bicillin-LA) 2.4 million units IM once (**NOTE: Not to be confused with short-acting benzylpenicillin (penicillin G**) ☐ Other:	
	☐ Late latent	☐ Benzathine penicillin G (Bicilllin-LA) 2.4 million units IM weekly x 3 doses ☐ Other:	
	☐ Neurosyphilis	☐ Penicillin G____million units IV q4h x _____ days	
	☐ Tertiary	☐ Refer to Infectious Diseases Specialist.	N/A

SECTION C: PATIENT EDUCATION

☐	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.
☐	If not referring, inform client that follow-up serology tests need to be performed to monitor infection. Refer to *Canadian Guidelines* for follow-up serology test schedule for various stages of syphilis.
☐	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.
☐	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)**
☐ Asymptomatic		☐ Malaise	
☐ Patchy or diffuse alopecia		☐ Meningitis	
☐ Chancre		☐ Mucus lesions	
☐ Condyloma lata		☐ Rash	
☐ Fever		☐ Retinitis	
☐ Headaches		☐ Uveitis	
☐ Lymphadenopathy		☐ 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**
☐ Sexual contact with a known case of syphilis	☐ Originated from or had sex with individual from endemic country
☐ For men, a history of sex with other men	☐ Those with street involvement/homeless
☐ Multiple and/or anonymous sexual partnering.	☐ Injection drug use
☐ Sex workers	☐ Sexual partners of individuals with any risk factors
☐ History of syphilis, HIV, and other STIs	☐ 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

WINDSOR-ESSEX COUNTY HEALTH UNIT
Bureau de santé de Windsor-comté d'Essex

519-258-2146 Ext. 1200 |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**.

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

Office/Physician: _____ Telephone #: _____

Address: _____

Contact Person: _____ Fax: _____

Date of order: _____ Pick-up: ☐ Windsor ☐ Essex ☐ Leamington ☐ Medex

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 ☐ Lidocaine Hydrochloride injection 1% **OR** ☐ Sterile Water		
Gentamycin is only available through Health Canada's Special Access Program Please call the Health Unit at 519-258-2146 x 1299 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.

Public Health Ontario | Santé publique Ontario

Customer no.:

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 / Chlamydophila 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):

F-SD-SCG-1003-009 *(21/11/16)*

Ontario

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

Public Health Ontario | Santé publique Ontario

General Test Requisition

For laboratory use only
Date received (yyyy/mm/dd): PHOL No.:

ALL Sections of this form must be completed at every visit

1- Submitter

Courier Code
Name
Address
City & Province
Postal Code

Clinician initial/Surname and OHIP/CPSO No.:
Telephone: Fax:

cc Doctor / Qualified Health Care Provider Information
Name: Tel:
Lab / Clinic Name: Fax:
CPSO No.:
Address: Postal Code:

2 - Patient Information

Health Card No.: Sex: Male Female
Date of Birth (yyyy/mm/dd): Medical Record No.:
Last Name per health card: First Name per health card:
Address:
Postal Code: Phone Number:
Submitter Lab No.:
Public Health Unit Outbreak No.:

Public Health Investigator Information

Name:
Health Unit:
Tel: Fax:

3 - Test(s) Requested (Please see descriptions on reverse)

Enter test description below:

Hepatitis Serology

Reason for test (Check only one box):
Immune Status | Acute Infection | Chronic Infection

Indicate specific viruses (Check all that apply):
Hepatitis A | Hepatitis B | Hepatitis C*

**Testing only available for acute or chronic infection; no test for determining immunity to HCV is currently available.*

4 - Specimen Type and Site

Blood / Serum | Faeces | Nasopharyngeal
Sputum | Urine | Vaginal Smear
Urethral | Cervix | BAL
Other (Specify):

Patient Setting

Physician Office / Clinic | Inpatient (ICU)
Inpatient (Ward) | Institution
ER (Not Admitted)

5 - Reason for Test

Diagnostic | Post-mortem | Date Collected (yyyy/mm/dd):
Needle Stick | Immune Status
Prenatal | Follow-up | Onset Date (yyyy/mm/dd):
Immunocompromised | Chronic Condition
Other (Specify):

Clinical Information

Fever | Gastroenteritis | Vesicular Rash
STI | Headache / Stiff Neck | Maculopapular Rash
Pregnant | Encephalitis / Meningitis
Jaundice | Respiratory Symptoms
Other (Specify):
Influenza High Risk (Specify):
Recent Travel (Specify Location):

For HIV, please use the HIV serology form. - For referred cultures, please use the reference bacteriology form. To re-order this test requisition contact your local Public Health Laboratory and ask for form number F-SD-SCG-1000. Current version of Public Health Laboratory requisitions are available at www.publichealthontario.ca/requisitions.

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 PHOL Manager of Customer Service at 416-235-6556 or toll free 1-877-604-4567.
F-SD-SCG-1000 (05/04)

Ontario

Public Health Ontario | Santé publique Ontario

Public Health Laboratories Testing Menu

For HIV, please use the HIV Serology form.

For historical duplex code information please access website at www.publichealthontario.ca/requisitions

Test (enter in Test Description Section 3)
Adenovirus (virus detection only)
Antimicrobial Susceptibility Testing - Bacteria
Antimicrobial Susceptibility Testing - Fungi, Nocardia
Antimicrobial Susceptibility Testing - Mycobacteria
Arbovirus Serology
Arthropod identification (ticks, lice, mites from human sources)
Bacterial Culture and Sensitivity
Bacterial Vaginosis - Gram Stain
Bordetella - PCR
Cat Scratch Fever (Bacilliary angiomatosis, Bartonella)
Chlamydia trachomatis - NAAT/Culture
Chlamydophila pneumoniae - PCR
Clostridium difficile toxin
Cytomegalovirus (CMV) Culture/Early Antigen
Cytomegalovirus (CMV) IgG Immune status
Cytomegalovirus (CMV) IgG/IgM Diagnosis
Dengue Virus Serology
Diphtheria antitoxin antibody[1]
Electron microscopy
Enterovirus (Coxsackie, ECHO, Polio) (virus detection only)
Epstein Barr Virus (EBV) - EBV VCA IgG/EA/EBNA
Epstein Barr Virus (EBV) - EBV VCA IgM
Fungus - Superficial - Microscopy & Culture
Fungus - Systemic - Microscopy & Culture
Haemorrhagic Fever Serology (Yellow Fever, Ebola, Lassa)[2]
Hantavirus Serology
Helicobacter pylori serology (H. pylori)
Hepatitis A Virus Immune Status
Hepatitis A Virus Acute
Hepatitis B Virus Immune Status
Hepatitis B Virus Acute
Hepatitis B Virus Chronic
Hepatitis B - HBcIgM[3]
Hepatitis B - HBeAb[3]
Hepatitis B - HBeAg[3]
Hepatitis B Virus DNA[4]
Hepatitis C Virus Serology
Hepatitis C Virus RNA - Genotyping[4]
Hepatitis C Virus RNA - Quantitative[4]
Hepatitis D Virus (Delta Agent)
Hepatitis E Virus
Herpes Simplex Virus (HSV) IgG Immune Status
Herpes Simplex Virus (HSV) Virus Detection
Human Herpes Virus 6 (Roseola, Exanthema Subitum) - PCR
Influenza A, B (Flu) Virus Detection
Legionnaires Disease
Lyme Disease - Serology
Measles IgG Immune Status
Measles IgG/IgM Diagnosis
Measles Virus Detection
Molluscum contagiosum (Poxvirus) Virus Detection
Mycoplasma pneumoniae - Culture
Mycoplasma pneumoniae - PCR
Mumps IgG Immune Status
Mumps IgG/IgM Diagnosis
Mumps Virus Detection
Neisseria gonorrhoeae - NAAT/Culture
Norovirus Detection
Parainfluenza 1, 2, 3 (virus detection only)
Parvovirus B19 (Fifth Disease, Erythema Infectiosum) IgG Immune Status
Parvovirus B19 (Fifth Disease, Erythema Infectiosum) IgG/IgM Diagnosis
Q Fever Serology
Rabies Virus Antibody Screen
Referred Culture - Fungus Nocardia
Referred Culture - TB
Respiratory Syncytial Virus (RSV) (virus detection only)
Rickettsia (Typhus, RMSF) Serology
Rotavirus (virus detection only)
Rubella (German Measles) IgG Immune Status
Rubella (German Measles) IgG/IgM Diagnosis
Rubella (German Measles) Virus Detection
Serology - Bacterial (specify agent)
Serology - Mycotic (specify agent)
Serology - Parasitic (specify agent)
Stool parasites
Syphilis - Direct Fluorescence
Syphilis CSF (VDRL)
Syphilis screen
TB - Culture and Susceptibility (Mycobacteria culture)
Tetanus antitoxin antibody
TORCH (Toxoplasma, Rubella, CMV, Herpes Simplex) Diagnostic Screen
TORCH (Toxoplasma, Rubella, CMV, Herpes Simplex) IgG Screen
Torovirus (virus detection only)
Toxoplasmosis - Serology
Urogenital mycoplasma/ureaplasma
Varicella - Zoster (Chicken Pox) IgG Immune Status
Varicella - Zoster (Chicken Pox) IgG/IgM Diagnosis
Varicella - Zoster (Chicken Pox) Virus Detection
Viral Diarrhea (virus detection only)
Virus Isolation/Detection
West Nile Virus - Serology
Worm Identification

1. Testing is available only for the rare event of an adverse reaction to Diphtheria vaccine or the possibility of humoral immunodeficiency in the patient. This must be indicated on the test requisition in order for testing to be performed.
2. Contact Medical Officer of Health and Public Health Ontario Laboratory before ordering, 416.235.6556 or toll: 1.877.604.4567.
3. Individual Hepatitis B virus markers may be ordered individually.
4. The General Test Requisition is not required. Use the form F-C-HE-036, Hepatitis PCR Requisition and Information Form located at: www.publichealthontario.ca/requistions

Public Health Ontario Laboratories

Customer Service Centre
7:30 am - 7:00 pm, Monday to Friday
8:00 am - 3:45 pm, Saturday

Tel: 416.235.6556
Toll Free: 1.877.604.4567
Fax: 416.235.6552

Emergency After-Hours Duty Officer

Tel: 416.605.3113
Website: www.publichealthontario.ca

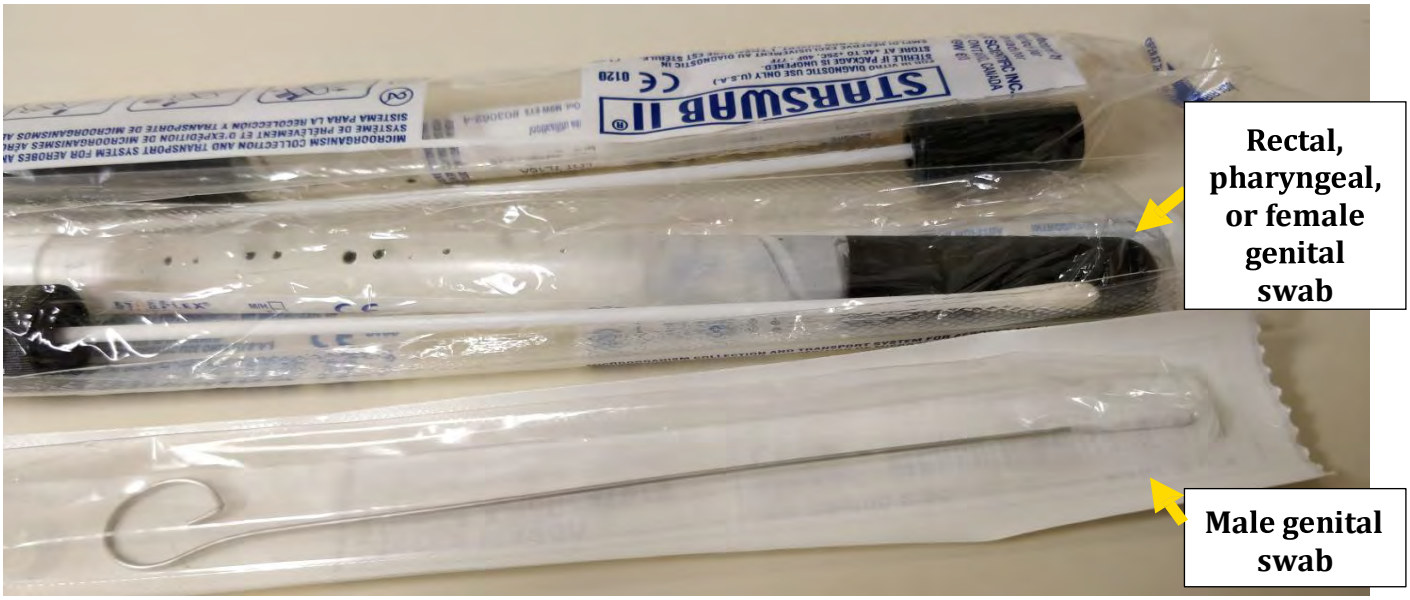
Ontario

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.



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LABSTRACT – Updated November 2021

Chlamydia trachomatis and *Neisseria gonorrhoeae* - Nucleic Acid Amplification Testing – change in test assay and collection kits

Audience

Health Care Providers submitting specimens to the Public Health Ontario (PHO) laboratory for the detection of *Chlamydia trachomatis* and *Neisseria gonorrhoeae* by nucleic acid amplification testing.

Update

As of December 1, 2021, PHO's laboratory is changing their testing assay to the Roche cobas® CT/NG assay from the Hologic® Aptima Combo 2® assay. This means that new collection kits will be required for health care providers when submitting clinical specimens for Chlamydia trachomatis (CT) and Neisseria gonorrhoeae (NG) testing by the nucleic acid amplification test (NAAT) method. Test Information Sheets with a complete NAAT menu are available on the PHO website at publichealthontario.ca/en/laboratory-services/test-information-index. Testing will be available with both assays for one month from December 1 to December 31, 2021 to allow clients to transition to the new specimen collection kits. After December 31, 2021 testing with the previous collection kits will no longer be available. Clients that are unable to meet this timeline should contact our Laboratory Customer Service Centre (contact information below).

The following information is provided in this Labstract:

- 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. A limited validation of rectal and pharyngeal specimens was performed at PHO to support NAAT for these collections as the Roche cobas® CT/NG assay is currently not approved by Health Canada for testing of extragenital sites. 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.

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.

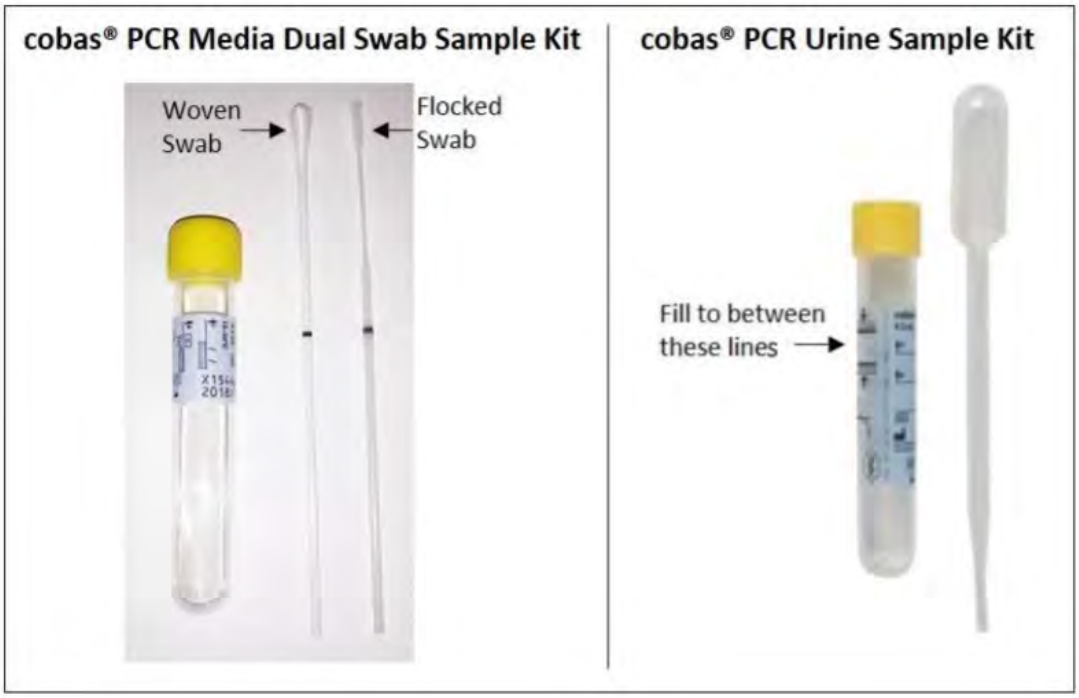
- The Roche cobas® Media Dual Swab Sample Kit contains two swabs, a flocked swab and a woven swab. The flocked swab is only to be used for female endocervical swab collection and the woven swab for all other swab collections as outlined below. Incoming primary swab specimen tubes with no swabs or with 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 • 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: Test of cure by culture testing is recommended for all cases of pharyngeal gonorrhea, suspected rectal/pharyngeal gonorrhea treatment failures, if first line treatment was not used, for CT and NG infections during pregnancy, and in cases of sexual abuse/sexual assault. Refer to the PHAC Canadian Guidelines on Sexually Transmitted Infections for additional information.

- Culture testing for NG should be performed 3-7 days after completion of treatment. If culture is not available, test of cure by NAAT will also be accepted. NAAT for NG should be performed 2-3 weeks after completion of treatment.

- In rare cases where test of cure is recommended for CT infection, NAAT should be performed 3-4 weeks after completion of treatment. In rare circumstances, CT genetic material may persist for longer than 4 weeks and therefore must be considered when interpreting positive test of cure results.

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 sites for females and males.

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]

	Chlamydia trachomatis		*Neisseria gonorrhoeae*	
	Sensitivity	**Specificity**	**Sensitivity**	**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%)

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

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 PHO Laboratory specimen collection information and previous Labstracts, refer to publichealthontario.ca/test directory

- The current version of the PHO 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.

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	No confirmatory testing is performed if syphilis screen result is non-reactive • 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	• 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	Inconclusive syphilis serology results • 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	Inconclusive syphilis serology results • 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 • Advise Follow-up sample
Age < 12 Months Reactive	Reactive	Reactive	• 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	• 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_Chancre_Direct_Fluoresce_nce.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 Mid 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

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- 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.

STIs & Swabbing

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.

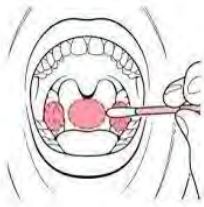
1

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

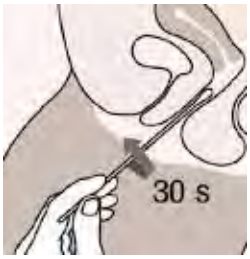


- Have the patient open their mouth wide, so the back of the throat is visible.
- Gently swab the tonsils (or tonsil region if they have been removed) bilaterally AND the back of the throat (highlighted in pink).
- Do NOT touch the cheeks or tongue when retracting swab.

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).

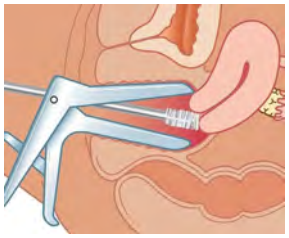
Vaginal Swab
Cotton Swab Only



- 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%).

Reference: *Cobas ® PCR dual swab sample kit: Short guide for endocervical sample collection.* Roche, Canada. Retrieved from: https://www.rochecanada.com/content/dam/rochexx/roche-ca/products/docs/education/Short%20guide%20for%20Endocervical%20sample%20collection.pdf

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.

Heymann, D.L. (Ed.). (2015). *Control of communicable diseases manual* (20th ed.). Washington, DC: American Public Health Association.

Ontario Ministry of Health and Long-Term Care. (2019). *Infectious Diseases Protocol: Appendix A – Chlamydia trachomatis infections*. Toronto, ON: Queen's Printer for Ontario.

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 the 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.

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- The Society of Obstetricians and Gynaecologists of Canada – Sex & U: https://www.sexandu.ca/

References:

Government of Canada. (2019). Section 5-6: Canadian guidelines on sexually transmitted infections - Management and treatment of specific infections: Gonococcal Infections. Retrieved from https://www.canada.ca/en/public-health/services/infectious-diseases/sexual-health-sexually-transmitted-infections/canadian-guidelines.html.

Heymann, D.L. (Ed.). (2015). *Control of communicable diseases manual* (20th ed.). Washington, DC: American Public Health Association.

Ontario Agency for Health Protection and Promotion (Public Health Ontario). (2018). *Ontario Gonorrhea Testing and Treatment Guide, 2nd Edition*. Toronto, ON: Queen's Printer for Ontario.

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 • 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 • 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	• 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. • 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).

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- The Society of Obstetricians and Gynaecologists of Canada – Sex & U: https://www.sexandu.ca/

References:

Government of Canada. (2019). Section 5-10: Canadian guidelines on sexually transmitted infections - Management and treatment of specific infections: Syphilis. Retrieved from https://www.canada.ca/en/public- health/services/infectious-diseases/sexual-health-sexually-transmitted- infections/canadian-guidelines.html.

Heymann, D.L. (Ed.). (2015). *Control of communicable diseases manual* (20th ed.). Washington, DC: American Public Health Association.

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

WINDSOR-ESSEX COUNTY HEALTH unit
Bureau de santé de Windsor-comté d'Essex

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

- 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)

REPORT BY THE NEXT WORKING DAY

- 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 Multiocularis 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
- Gonorrhea
- 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