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.

<table>
<thead>
<tr>
<th>Prenatal Screening</th>
<th>Risk Factor Screening</th>
<th>Annual Screening*</th>
</tr>
</thead>
</table>
| • Screen at first prenatal visit and repeat based on 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 |
| • Consider repeat screening for syphilis in areas experiencing heterosexual outbreaks, regardless of 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.
STI ARE OFTEN ASYMPTOMATIC. SCREEN FOR ONE STI, SCREEN FOR ALL!

SCREENING: Early STI detection in asymptomatic individuals†

<table>
<thead>
<tr>
<th>Chlamydia trachomatis (CT) AND Neisseria gonorrhoeae (NG)</th>
<th>Syphilis</th>
</tr>
</thead>
<tbody>
<tr>
<td>URINE</td>
<td>BLOOD</td>
</tr>
<tr>
<td>SWABS</td>
<td></td>
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<tr>
<td>Urethral, Vaginal or Cervical</td>
<td></td>
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<tr>
<td>NAAT (CT/NG)</td>
<td></td>
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<tr>
<td>NAAT, if available (CT/NG)</td>
<td></td>
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<tr>
<td>Culture (NG)</td>
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<td>Culture (CT/NG)</td>
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<tr>
<td>Culture (CT/NG)</td>
<td>Laboratory will perform serology using an algorithm combining non-treponemal and treponemal tests</td>
</tr>
</tbody>
</table>

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

† 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

<table>
<thead>
<tr>
<th>Chlamydia trachomatis (CT)</th>
<th>Neisseria gonorrhoeae (NG)</th>
<th>Syphilis</th>
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<tbody>
<tr>
<td>Doxycycline 100 mg PO bid for 7 days</td>
<td>Ceftriaxone 250 mg IM in a single dose PLUS Azithromycin 1 g PO in a single dose</td>
<td>For infectious syphilis (primary, secondary and early latent)</td>
</tr>
<tr>
<td>Azithromycin 1 g PO in a single dose</td>
<td>Cefixime 800 mg PO in a single dose PLUS Azithromycin 1 g PO in a single dose</td>
<td>Long-acting benzathine penicillin G 2.4 million units IM in a single dose</td>
</tr>
<tr>
<td>OR</td>
<td>OR</td>
<td>For late latent syphilis</td>
</tr>
<tr>
<td>For anogenital and pharyngeal infections</td>
<td>For anogenital infections</td>
<td>Long-acting benzathine penicillin G 2.4 million units IM weekly for 3 doses</td>
</tr>
</tbody>
</table>

Note: Cefixime is considered alternate treatment in gbMSM

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 STI screening and treatment interventions including test of cure (TOC)

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</table>
| **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 | **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 |

#### 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

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