



Guideline on screening for chlamydia and gonorrhoea in primary care for individuals not known to be at high risk – Clinician Summary

POPULATION

This guideline on screening for chlamydia and gonorrhoea is intended for sexually active individuals (defined as ever having oral, vaginal or anal intercourse) under the age of 30 who are not known to belong to a high-risk group. It does not provide guidance for those specifically seeking care for a possible STI, pregnant individuals and those known to belong to a high risk group.

RECOMMENDATION

- We recommend **opportunistic screening of sexually active individuals under 30 years of age** who are not known to belong to a high-risk group, annually, for chlamydia and gonorrhoea at primary care visits, using a self- or clinician-collected sample (Conditional recommendation; very low-certainty evidence).

Clinicians should refer to relevant national, provincial, or local guidance for:

- Screening of individuals known to have specific high-risk behaviours (e.g., having multiple sexual partners, previous STIs, sex without condoms, although this will vary by jurisdiction).
- Testing of individuals seeking care for management of a possible infection.
- Screening of pregnant individuals.
- Selection of appropriate antibiotic treatment, partner notification, re-testing, and forensic testing strategies.

Putting into Practice

Clinicians in primary care settings are advised:

- To offer screening annually as feasible (recognizing the infrequency of encounters for this population in primary care) to sexually active patients under 30 years of age at **any** opportunistic primary care visit (i.e. not only during a pap smear or sexual health visit).
 - Sexual activity can be defined as ever having oral, vaginal or anal intercourse.
- Screening for sexually transmitted infection may cause feelings of embarrassment and anxiety for some patients.
- Offering screening requires sensitivity to stigmatization and fear of social disapproval, especially regarding gender, culture, behaviour and other vulnerabilities.

How to screen

- Non-invasive methods of sample collection (e.g., urine or self-collected vaginal swabs) may be preferable to improve acceptability and uptake of screening.
- Undertake informed consent for STI testing.
 - Address privacy and public health reporting requirements, including potential partner notification.

Public health

- To reduce complications and further spread of chlamydia and gonorrhoea infections, test results are automatically reported to local public health units. This is to facilitate treatment for those who test

positive and to support confidential notification of sexual partners so that they may be tested and treated as required.

- In cases of actual or suspected child abuse, clinicians are directed to their local, provincial and territorial authorities (public health offices, child protection services, pediatricians and clinical experts), for STI testing, treatment, reporting and management.

BURDEN OF ILLNESS

In Canada, *Chlamydia trachomatis* (chlamydia) and *Neisseria gonorrhoeae* (gonorrhea) **are the most commonly reported sexually transmitted bacterial infections** (STIs), with population rates increasing since 2000.

- In 2018, annual **reported cases were highest in 15-29 year-olds**, with rates of 1.0-1.9% for chlamydia and 0.2-0.3% for gonorrhea.
- Rates among individuals over 30 years old were <0.5% for chlamydia and <0.2% for gonorrhea.
- Many infected individuals, however, are **asymptomatic** or do not seek care (due to barriers of access) and are not included in reported cases.
- Taking into account underreporting, the **true chlamydia prevalence in 15-29 year-olds may be as high as 5-7%**.

Consequences of untreated chlamydia can include:

Females

- Cervicitis in 10-20%, pelvic inflammatory disease (PID) in 10-16%, infertility in up to 5%, chronic pelvic pain in 3-8%, and ectopic pregnancy in up to 2%.
- Consequences for gonorrhea may include PID rates exceeding those for chlamydia.

Males

- Epididymitis in up to 7%, with or without orchitis, and very rarely infertility.

Both sexes

- Urethritis in 4% of females and up to 3% of males, pharyngitis, proctitis, and reactive arthritis lasting longer than 6 months in 1-4% (when considering both chlamydia and gonorrhea), and disseminated gonococcal infection in <1%, which can very rarely lead to sepsis, meningitis, endocarditis or osteomyelitis.

BASIS OF RECOMMENDATION

Evidence

The available evidence on screening is uncertain, largely due to its low applicability to how opportunistic screening is delivered in Canada. For example, some studies used mailed invitations to screen, or clinic-level interventions to encourage screening, rather than directly targeting clinicians to support offers of screening to patients.

- The evidence, however, suggests that PID may be reduced through the routine offering of screening in Canadian primary care.

- Some individuals undergoing screening may experience psychosocial harms (e.g., anxiety, shame and stigma), although this evidence was also very uncertain and likely impacts a small proportion of those eligible for screening.
 - Evidence on patient preferences suggest that patients prioritize the benefits over the harms of screening, even when provided with the evidence and its uncertainty.
- Considering the uncertain but potentially important benefit of screening relative to harms, as well patient preferences for screening, the Task Force provides a **conditional recommendation in favour of opportunistic screening for chlamydia and gonorrhoea in primary care for individuals under 30 years of age**.

Rationale

The age limit of 30 years is based on almost all of the underlying evidence from studies of individuals under in this age group.

- Additionally, **rates of chlamydia and gonorrhoea are increasing among those aged 25-29 years** in Canada, with rates and total cases similar to those aged 15-19 years.
- Rates of chlamydia for those over age 30, on the other hand, are a fraction of those for individuals under 30.

The **recommendation to also screen males is based on the properties of sexual networks** (given the role of males in the transmission of these infections) and the potential to reduce chlamydia and gonorrhoea infection and its negative consequences in females (who carry the burden of health complications associated with infection).

The recommendation to also screen for gonorrhoea was made despite a lack of evidence, given that:

- Many gonorrhoea cases are asymptomatic.
- Up to 40% of those with gonorrhoea may have concurrent chlamydia.
- Current Canadian clinical and laboratory practice is to combine testing for gonorrhoea with chlamydia using a single sample (most commercial nucleic acid amplification test (NAAT) assays test for both organisms simultaneously with a single specimen).

Chlamydia and gonorrhoea clinician FAQ links:

English: <https://canadiantaskforce.ca/tools-resources/chlamydia-and-gonorrhoea-clinician-faq/>

French: <https://canadiantaskforce.ca/tools-resources/chlamydia-and-gonorrhoea-clinician-faq/?lang=fr>

Chlamydia and gonorrhoea patient FAQ links:

English: <https://canadiantaskforce.ca/tools-resources/chlamydia-and-gonorrhoea-patient-faq/>

French: <https://canadiantaskforce.ca/tools-resources/chlamydia-and-gonorrhoea-patient-faq/?lang=fr>

Chlamydia and gonorrhoea screening infographic links:

English: <https://canadiantaskforce.ca/tools-resources/chlamydia-and-gonorrhoea-infographic/>

French: <https://canadiantaskforce.ca/tools-resources/chlamydia-and-gonorrhoea-infographic/?lang=fr>