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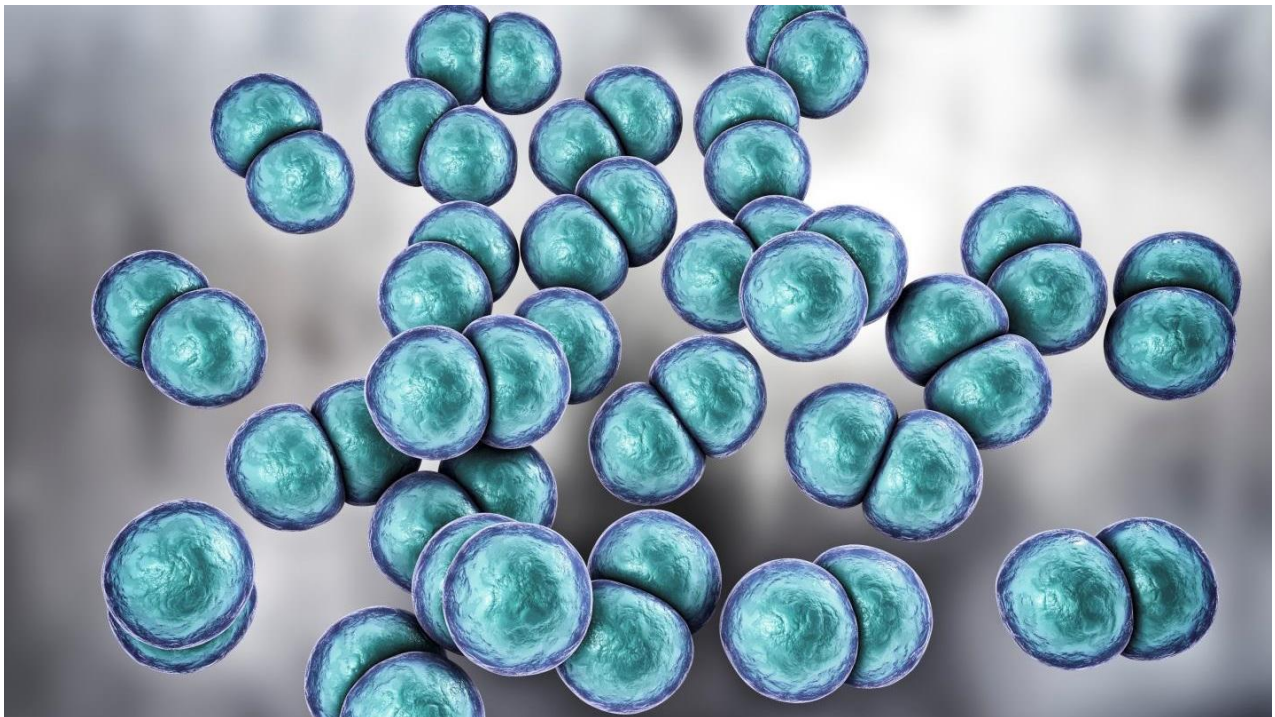
The Ontario Gonorrhea Testing and Treatment Guidelines, 2nd edition is currently under review based on new scientific and technical information that has become available.

For updated testing recommendations regarding test of cure and use of culture, please refer to Public Health Ontario's [Chlamydia Trachomatis and Neisseria Gonorrhoeae - Nucleic Acid Amplification Testing](#) and [Test Information Pages for Gonorrhea](#).

You can also refer to [Canadian Guidelines for Sexually Transmitted Infections](#).

SUMMARY OF RECOMMENDATIONS

Ontario Gonorrhoea Testing and Treatment Guide, 2nd Edition



November 2018

Testing Principles

When to Test

- Knowing an individual's sexual history is critical to informing testing decisions. Guidance on how to facilitate safe, respectful discussions about sexual health and reduce stigma is available from the [Canadian Public Health Association](#).
- All sexually active individuals who have signs and symptoms of gonorrhoea should be tested at the urogenital sites where they report unprotected sexual exposure and signs/symptoms.
- Offer screening to asymptomatic sexually active individuals with risk factors for gonorrhoea.

- Most rectal and pharyngeal gonococcal infections are asymptomatic. Testing at these sites is currently recommended among certain high risk groups when receptive sexual exposure has occurred. These groups are:
 - Men who have sex with men (MSM)
 - People who engage in sex work and their sexual contacts
 - Known sexual contacts of those infected with gonorrhoea
- Since a high proportion of individuals with gonorrhoea are at risk of co-infection with *Chlamydia trachomatis* (chlamydia), when testing for gonorrhoea, health care providers should concurrently test for chlamydia. Consider testing for other sexually transmitted and blood-borne infections (STBBIs), including Human Immunodeficiency Virus (HIV).

How to Test

- Nucleic acid amplification testing (NAAT):
 - NAAT is more sensitive than culture for gonorrhoea and chlamydia.
 - Urine NAAT is less sensitive than vaginal or cervical NAAT.
 - Most commercial NAAT assays test for gonorrhoea and chlamydia co-infection simultaneously with one specimen.
 - Antimicrobial susceptibility testing **cannot** be performed on NAAT specimens.
 - Please contact your local laboratory to enquire if vaginal NAAT is available. As of the time of writing, Public Health Ontario offers urine, cervical and extragenital NAAT, but not vaginal NAAT.
- Culture:
 - Culture is recommended in specific clinical situations, e.g., test of cure, testing for medico-legal purposes (see the full guide for when culture is recommended).
 - Culture can provide isolates to enable monitoring of local antimicrobial susceptibility trends.
 - Follow manufacturers' instructions for specimen collection.
 - Culture specimens should be received at the laboratory within 48 hours of collection for optimal specimen integrity; however, based on feasibility of transport, individual laboratories can decide to process delayed specimens. Public Health Ontario accepts specimens received up to 72 hours after collection.

- Testing and screening of people who are transgender should be informed by current anatomy and sexual behaviours.

Urogenital Testing

SYMPTOMATIC INDIVIDUALS

Applies to adults and youth with symptoms compatible with gonorrhoea at urogenital sites and assumes concurrent testing for gonorrhoea and chlamydia.

Males

- If urethral discharge present:
 - **Urine NAAT (first-line)**
 - If testing by **urethral culture**, add **urine NAAT**, which will concurrently test for chlamydia, as well as provide a more sensitive test for gonorrhoea.
- If no urethral discharge:
 - **Urine NAAT**

Females, including pregnant females

- If a pelvic exam is not being conducted:
 - **Vaginal NAAT (first-line)**
 - **Urine NAAT** is a second-line option because it is less sensitive than vaginal NAAT for gonorrhoea.
- If a pelvic exam is being conducted:
 - **Cervical NAAT or vaginal NAAT (either is first-line)**
 - Urine NAAT is a second-line option because it is less sensitive than cervical NAAT or vaginal NAAT for gonorrhoea.
 - If testing by **cervical culture**, add **any urogenital NAAT**, which will concurrently test for chlamydia, as well as provide a more sensitive test for gonorrhoea.

ASYMPTOMATIC INDIVIDUALS

Screening asymptomatic patients is only recommended in individuals with risk factors for gonorrhoea.

Males

- **Urine NAAT**

Females, including pregnant females

- If a pelvic exam is not being conducted:
 - **Vaginal NAAT (first-line)**
 - **Urine NAAT** is a second-line option because it is less sensitive than vaginal NAAT for gonorrhea.
- If a pelvic exam is being conducted:
 - **Cervical NAAT or vaginal NAAT (either is first-line)**
 - **Urine NAAT** is a second-line option because it is less sensitive than cervical NAAT or vaginal NAAT for gonorrhea.

Extragenital Testing

- **Rectal NAAT and/or pharyngeal NAAT** is recommended in the following individuals with receptive exposure at these sites, whether symptomatic or asymptomatic:
 - MSM
 - People who engage in sex work and their sexual contacts
 - Known sexual contacts of those infected with gonorrhea
- Rectal and/or pharyngeal testing in individuals who are not in the above risk groups may be considered in individual circumstances, based on clinical evaluation of symptoms, sexual behaviours and local epidemiology.
- A test of cure is recommended for laboratory-confirmed cases of pharyngeal gonorrhea.

Treatment of Gonorrhea

- Applies to individuals over nine years of age (including pregnant and breastfeeding females) with confirmed or suspected uncomplicated urogenital, rectal or pharyngeal gonorrhea and their sex partners:

Recommended first line therapy: Ceftriaxone 250 mg intramuscularly (IM) plus azithromycin 1 g orally (PO) given at the same visit.

- First-line dual therapy is the strong preference due to compelling evidence of efficacy and current antimicrobial susceptibility patterns in Ontario.
- **Alternative therapeutic options** are only to be considered **if first-line therapy is not possible** and must be followed by a **test of cure**. These are:

- Cefixime 400 mg PO plus azithromycin 1 g PO. First-line dual therapy with ceftriaxone is the strong preference because use of cefixime could potentially accelerate the development of resistance to ceftriaxone, which is the only remaining antimicrobial that is safe, well-tolerated and highly effective at all anatomic sites.
- Gentamicin 240 mg in two separate 3mL IM injections of 40 mg/mL plus azithromycin 2 g PO. If IM is not feasible, gentamicin 240 mg intravenous (IV) infused over 30 minutes is an alternative route of administration.
- Gemifloxacin 320 mg PO plus azithromycin 2 g PO (once available in the United States, will be accessible in Ontario through Health Canada's Special Access Program).
- If the dual therapies listed above are not possible, azithromycin 2 g PO monotherapy may be used. This is the *least preferred option* due to reduced susceptibility of *N. gonorrhoeae* isolates to azithromycin in Ontario and evidence in support of dual therapy.
- Please see Treatment of Individuals with a History of Penicillin or Cephalosporin Allergy or Macrolide Allergy.
- Treatment of clinical failures if first-line therapy was used should include a higher dose of both ceftriaxone and azithromycin (1 g ceftriaxone IM + 2 g azithromycin PO) given at the same visit and a test of cure using culture at three to seven days post-treatment. If first-line treatment was not used initially when treatment failure is identified, first-line treatment should be used.
- Contact your [local public health unit](#) to obtain publicly-funded sexually-transmitted infection (STI) medications.
- Please refer to product monograph for potential adverse events for each medication.

Follow-Up of Gonorrhoea Cases and Contacts

Reporting

- Gonorrhoea is a [Disease of Public Health Significance](#) (i.e., a reportable disease) in Ontario. Positive gonorrhoea laboratory test results are reported to the Medical Officer of Health of the health unit in which the case resides.
- Health care providers should **report all suspected or confirmed gonorrhoea treatment failures** to the local public health unit in which the professional services were provided.
- The local public health unit should notify PHO of suspected or confirmed treatment failures as soon as possible to discuss any further public health action that may be required.

Contact Tracing

- A plan for contact tracing should be discussed. A 60-day trace back period should be used to identify sexual contacts for notification or the last sexual contact if the index gonorrhoea case had no sexual contacts in the last 60 days.
- Sexual contacts are recommended to receive empiric treatment as soon as possible to reduce the risk of further transmission, along with appropriate STBBI testing.

Test of Cure

- A test of cure is recommended when first-line therapy is not used and in other specific clinical situations, including infection in pregnancy and pharyngeal gonorrhoea (see the full guide for a list of indications for test of cure).
- **Culture** is the first-line testing method for test of cure for gonorrhoea and should be performed **three to seven days post-treatment**. If culture is not locally available, NAAT is a second-line option for test of cure, but should be performed two to three weeks post-treatment.

Re-Screening

- Gonorrhoea cases should be re-screened **six months** after treatment. If re-screening at six months is not possible, cases should be re-screened when they next seek medical care within the next 12 months.
- For individuals at ongoing risk for STBBI, consider screening for gonorrhoea, chlamydia, syphilis and HIV at three-month intervals.

Prevention

- Strategies for the primary prevention of gonorrhoea, including counselling and risk reduction strategies can be found in the CGSTI; the Canadian Public Health Association's Discussing Sexual Health, Substance Use and STBBIs; and, the Centers for Disease Control and Prevention (CDC) Sexually Transmitted Diseases Treatment Guidelines.

Please refer to the Ontario Gonorrhoea Testing and Treatment Guide, 2nd Edition for further details.

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For a full list of acknowledgements, please refer to the Ontario Gonorrhoea Testing and Treatment Guide, 2nd Edition.

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Disclaimer

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This document is intended to assist health care providers in clinical decision-making by describing a range of generally acceptable approaches for diagnosis and management of gonorrhoea cases. This document should not be considered inclusive of all proper methods of care or exclusive of other methods of care reasonably directed at obtaining the same results. The ultimate judgment regarding care of a particular patient must be made by the health care provider in light of the individual circumstances presented by the patient. The application and use of this document is the responsibility of the user. PHO assumes no liability resulting from any such application or use.

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Public Health Ontario provides expert scientific and technical support to government, local public health units and health care providers relating to the following:

- communicable and infectious diseases
- infection prevention and control
- environmental and occupational health
- emergency preparedness
- health promotion, chronic disease and injury prevention
- public health laboratory services

Public Health Ontario's work also includes surveillance, epidemiology, research, professional development and knowledge services. For more information about PHO, visit: publichealthontario.ca.



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