

# Urethral discharge: diagnostic measures and pharmacological treatment

English summary

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# SUMMARY

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### Introduction

Urethritis is an inflammation of the urethra. It can be caused, among other things, by a viral, fungal or bacterial infection. Sexually transmitted infections (STIs) have been identified as the most common cause of urethritis. According to the Public Health Agency of Canada (PHAC), *Neisseria gonorrhoeae* is found in 30% of cases of acute urethritis. For non-gonococcal urethritis, *Chlamydia trachomatis* is found in 15% to 40% of cases, and *Mycoplasma genitalium* is found in 15% to 25% of cases. The other possible infectious causes include *Trichomonas vaginalis*, the herpes simplex virus, adenoviruses and *Candida albicans*. Nearly half of the cases of non-gonococcal urethritis do not have a precise etiology.

The involvement of all qualified professionals, including nurses, in the management of urethral discharge is important because it is a relatively common syndrome that often results from communicable diseases. Consequently, to support clinicians, the Ministère de la Santé et des Services sociaux (MSSS) asked the Institut national d'excellence en santé et en services sociaux (INESSS) to carry out work aimed at updating the Québec's national medical protocol (NMP) and the collective prescription (CP) template with regard to diagnostic measures and pharmacological treatment in a person with a urethral discharge. These two items were last updated in 2018.

### Methodology

A systematic review of the literature on the best clinical practices for managing urethral discharge was conducted according to INESSS's usual standards. The data were analyzed from the perspective of contextualizing Québec practice, using mainly legislative, regulatory and organizational contextual elements specific to Québec, and the perspectives of the different stakeholders consulted. To gather these perspectives, an advisory committee consisting of clinicians from different specialties and areas of expertise was created. Lastly, the overall quality of the work, its acceptability and its applicability were assessed by external reviewers specializing in the field of interest, and by future users who did not participate in the work.

### Results

Upon completion of the analysis of all the gathered data and the iterative process with the advisory committee's members, the following key findings and messages were considered to have the potential to support the harmonization of clinical practice and to facilitate the management of persons with a urethral discharge.

**The national medical protocol applies to persons aged 14 years and older with a purulent, mucopurulent or mucoid urethral discharge, but also, for certain STIs, to their asymptomatic sexual partners.**

The protocol applies to persons with a purulent, mucopurulent or mucoid urethral discharge and to asymptomatic individuals identified as sexual partners of a person with a syndrome consistent with a *C. trachomatis* or *N. gonorrhoeae* infection or of a person who has a laboratory-confirmed *C. trachomatis* or *N. gonorrhoeae* infection. It also applies to asymptomatic individuals identified as the current sexual partners of a person with a laboratory-confirmed *T. vaginalis* or *M. genitalium* infection. It does not cover individuals under the age of 14 years. The previous version of the NMP applied only to persons with a purulent, mucopurulent or mucoid urethral discharge and to asymptomatic sexual partners of a person with a laboratory-confirmed *T. vaginalis* infection. The update has therefore broadened the scope of the NMP.

**The person's health status must be assessed in order to optimally manage the urethral discharge and to identify any complicated infections**

The signs and symptoms, health history and medication history are the first elements to be examined in a person with a purulent, mucopurulent or mucoid urethral discharge. Among other things, a physical examination serves to describe the appearance of the urethral discharge and to identify signs of any complicated infection. When updating the protocol, the section on the health status assessment was made easier to understand and more user-friendly.

**Specimens and laboratory tests will generally confirm or rule out the presumed etiology of a urethral discharge**

Depending on the health status assessment of a person with a purulent, mucopurulent or mucoid urethral discharge, certain microbiological tests should be ordered. It is important to consult the facility's list of the laboratory tests to see what tests are available locally and their details. Test results permit optimal management that is suited to the type of infection confirmed by the test. To adjust the section on specimens and tests to the broadening of the clinical situation included in the updated NMP, some material was added, for example, screening for *M. genitalium* infection, if indicated.

**The therapeutic approach should include checking the treatment indications and prescribing an appropriate pharmacological treatment**

When an STI is suspected or confirmed, pharmacological treatment should be initiated to cure the symptoms, but also to prevent transmission of the infection. The recommended treatment varies according to the identified or presumed infection or according to the infection to which the asymptomatic partner has been exposed through sexual contact. As part of the update of the NMP, the treatment indications and the recommended treatments have been updated in light of the latest evidence.

## **Recommendations and clinical tools**

Following the iterative process with the advisory committee's members, during which the clinical data and recommendations from the literature, the contextual information and the perspectives of the different stakeholders consulted were triangulated, a series of findings and recommendations were drawn up regarding the management of a purulent, mucopurulent or mucoid urethral discharge. These recommendations have been placed in boxes throughout this report, and they have been integrated into the clinical tools stemming from this project, namely, a national medical protocol and an accompanying collective prescription template.

## **Conclusion**

The update of the NMP and CP template on urethral discharge is based on clinical practice recommendations, which were enriched with the perspectives of the stakeholders consulted and contextualized for Québec practice. These tools should help improve and harmonize the practice and contribute to the effective management of persons with a urethral discharge and, in certain situations, of their asymptomatic sexual partners.

However, the improvement and harmonization of the practice will depend on:

- The dissemination of the updated NMP and CP template;
- The adherence to the changes and the uptake of the recommendations by the health professionals concerned;
- The commitment of family medicine group administrators, nursing departments, and councils of physicians, dentists and pharmacists to adopting or adapting the INESSS collective prescription template accompanying the NMP;
- The establishment of winning conditions for interprofessional work in the different care settings, in particular, front-line settings;
- The availability of training when required; and
- The promotion of these tools within the health and social services system.

## **Update**

The advisability of updating the recommendations will be determined in 4 years from the date of publication of this guide on the basis of the advances in the scientific data, the evolution of clinical practices, the listing of new drugs or significant changes to the coverage criteria in the public prescription drug insurance plan, and the health and social services system's needs.

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