
Alberta Public Health Disease Management Guidelines

Non-Gonococcal Urethritis

Superseded

Alberta

This publication is issued under the Open Government Licence – Alberta (<http://open.alberta.ca/licence>). Please note that the terms of this licence do not apply to any third-party materials included in this publication.

This publication is available online at <https://open.alberta.ca/publications/non-gonococcal-urethritis>

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without written permission of Alberta Health, Government of Alberta.

© Copyright of this document and its contents belongs to the Government of Alberta.

For further information on the use of this guideline contact:

Health.CD@gov.ab.ca

Health and Wellness Promotion Branch

Public Health and Compliance Branch

Alberta Health

Non-Gonococcal Urethritis | Alberta Health, Government of Alberta

© 2021 Government of Alberta | October 2021

Superseded

Contents

Case Definition	5
Confirmed Case	5
Reporting Requirements	6
Physicians, Health Practitioners and Others	6
Laboratories.....	6
Alberta Health Services - STICS.....	6
Additional Reporting Requirements for Physicians, Health Practitioners and Others	7
Epidemiology	8
Etiology	8
Clinical Presentation.....	8
Diagnosis.....	8
Treatment.....	8
Reservoir.....	9
Transmission.....	9
Incubation Period	9
Period of Communicability	9
Host Susceptibility	9
Incidence	9
Public Health Management	11
Key Investigation	11
Management of a Case.....	11
Management of Contacts.....	13
Preventive Measures	13
Appendix 1: Revision History	15
References	16

Case Definition

Confirmed Case

Either of the following:

- Inflammation of the urethra with or without a mucoid, muco-purulent or purulent urethral discharge

AND/OR

- ≥ 5 polymorphonuclear leukocytes per oil immersion field (x1000) in ≥ 5 non adjacent, randomly selected fields in a smear of urethral secretions (if available)

AND

Absent gram-negative intracellular diplococci on gram stain of urethral secretions (if available)

AND

Negative tests for gonorrhea and chlamydia

Superseded

Reporting Requirements

Health Practitioners

Note: This section includes the First Nations and Inuit Health Branch

Physicians, health practitioners and others shall notify the Sexually Transmitted Infection (STI) Medical Director^(A) via Sexually Transmitted Infection Centralized Services (STICS), of all confirmed cases within 48 hours (two business days) by forwarding a completed [Notification of STI](#) form.

Laboratories

All laboratories shall report all positive laboratory results by mail, fax or electronic transfer within 48 hours (two business days) to the:

- STI Medical Director via STICS, and
- Chief Medical Officer of Health (CMOH) (or designate).

Alberta Health Services - STICS

**Contact Information: Toll free: 1-855-945-6700 option 4
Fax: 780-670-3624**

- The STI Medical Director/STICS are responsible for ensuring investigation and follow-up of all reported confirmed cases.
- The STI Medical Director/STICS shall forward the initial Notification of STI form of all confirmed cases to the CMOH (or designate) within two weeks of notification and the final Notification of STI form within four weeks.
- For out-of-province and out-of-country reports, the following information (when available) should be forwarded to the CMOH (or designate) by phone, fax or secure/encrypted electronic transfer as soon as possible:
 - name,
 - date of birth,
 - out-of-province health care number,
 - out-of-province address and phone number,
 - positive laboratory report, and
 - other relevant clinical/epidemiological information.
- For out-of-province and out-of-country contacts the following information (when available) should be forwarded to the CMOH (or designate) as soon as possible:
 - name,

^(A) The STI Medical Director is the Provincial Medical Director of Alberta Health Services' Sexually Transmitted Infection Centralized Services (STICS) and is also a Medical Officer of Health.

- date of birth,
- date of exposure, and
- out-of-province/country contact information.

Additional Reporting Requirements for Health Practitioners

In all cases, where a person under 18 is suspected or confirmed to have an STI, an assessment should be carried out by the clinician to determine if additional reporting is required.

To Alberta Child and Family Services

- The clinician should determine whether there are reasonable and probable grounds to believe that they are in contact with “a child in need of intervention” [as per Section 1(2) of the [Child, Youth and Family Enhancement \(CYFE\) Act](#)] and shall report to a director pursuant to Section 4 of the *CYFE Act*.
- Reporting is done by contacting the local Child and Family Services office or calling the **CHILD ABUSE HOTLINE: 1-800-387-5437 (KIDS)**. For local office contact information see the [ministry’s website](#).

To Law Enforcement Agency

- Consent is a key factor in determining whether any form of sexual activity is a criminal offence. Children under 12 do not have the legal capacity to consent to any form of sexual activity. The law recognizes that the age of consent for sexual activity is 16. However, the law identifies the exception for minors between 12 and 16 years as having the ability to consent, in “close in age” or “peer group” situations.
- Reporting is done by contacting your local City Police Detachment or [RCMP Detachment](#).
- For additional information:
 - Alberta [Child, Youth and Family Enhancement Act](#)
 - Age of Consent to Sexual Activity at www.justice.gc.ca/eng/rp-pr/other-autre/clp/faq.html
 - Criminal Code of Canada at www.laws-lois.justice.gc.ca/eng/acts/C-46/

Epidemiology

Etiology

Non-gonococcal urethritis (NGU) is one of the most common STI reported in men. Yet, in many cases (20–50% of cases) the cause of the infection is not identified.⁽¹⁾ When causal agents are identified, they may include *Mycoplasma genitalium* (15–25% of cases), *Ureaplasma urealyticum* (< 15% of cases), *Trichomonas vaginalis* (approximately 5–15% of cases) and more rarely, herpes simplex virus (2–4% of cases).⁽²⁾

Clinical Presentation

Symptoms of NGU are often mild. Infection generally presents with dysuria, urethral discharge (may range from clear to mucopurulent), or urethral itching/meatal erythema. Up to 25% of cases are asymptomatic.⁽³⁾ Occasionally, the onset may be more acute, manifesting with dysuria, frequency and copious purulent discharge. Proctitis and pharyngitis may develop after rectal and orogenital contact.⁽⁴⁾ Epididymo-orchitis, prostatitis and sexually acquired reactive arthritis/Reiter's syndrome have also been reported. 9 Without treatment, NGU caused by *Ureaplasma urealyticum* resolves in one to six months.⁽³⁾

Diagnosis

Diagnosed by examining urethral discharge. The diagnosis is usually based on failure to demonstrate *Neisseria gonorrhoeae* or *Chlamydia trachomatis* by smear or culture.

Treatment

- Refer to the [Alberta Treatment Guidelines for Sexually Transmitted Infections \(STI\) in Adolescents and Adults](#) for specific treatment guidance.
- All patients should be tested for gonorrhoea and chlamydia.
- If NGU is diagnosed clinically, immediate treatment is recommended. **Treat presumptively for gonorrhoea and chlamydia pending laboratory results.**
- If the patient is already known to be negative for gonorrhoea, treat only for chlamydia.
- Note that a case is classified as NGU for surveillance purposes if the case meets clinical criteria for urethritis and tests are negative for gonorrhoea and chlamydia OR if no tests for gonorrhoea or chlamydia are done.

Considerations

- If symptoms persist or recur after completed therapy (one week after initiation of therapy), the patient should be re-evaluated.

Pediatric Cases

- It is recommended that all children < 14 years of age be referred to a pediatrician and, because of the high risk of sexual abuse, be managed in consultation with one of the following referral centres.

Edmonton

Child and Adolescent Protection Centre
Stollery Children's Hospital
1C4.24 Mackenzie Health Sciences Centre
8440-112 Street
Edmonton, Alberta T6G 2B7
Tel: 780-407-1240

Calgary

Child Abuse Service
Child Development Centre
Suite 200, 3820-24 Ave NW
Calgary, Alberta. T2N 1N4
Tel: 403-955-5959

Reservoir

Humans are the only known reservoir.⁽⁵⁾

Transmission

Direct sexual contact.⁽⁵⁾

Incubation Period

The incubation period is one to five weeks (usually two to three weeks) after sexual contact.⁽⁴⁾

Period of Communicability

Unknown.⁽²⁾

Host Susceptibility

Susceptibility is universal, and recurrences are common.⁽²⁾

Incidence

General

NGU occurs worldwide and is one of the most common STIs. In the United States and most of the developed world, NGU is more common than gonorrhoea. There is an increase in incidence in the summer months, presumably because of a seasonal increase in sexual activity. Most of the cases are seen among college students.⁽⁶⁾

Canada

NGU is not nationally reportable.⁽³⁾

Alberta

In 2011, NGU was the third most frequently reported STI, after chlamydia and gonorrhoea.⁽⁷⁾ Since 2004, case numbers have ranged from 1,200–1,400 annually. The annual rate fluctuates from 69–80 cases per 100,000 males. Males aged 20–24 years have the highest rates (267.8/100,000 males) of reported NGU, followed by males aged 25–29 years (240/100,000 males).

Refer to the [Interactive Health Data Application](#) for more information.

Superseded

Public Health Management

Key Investigation

The diagnosis and treatment is performed by community health care providers.

- Determine the presence or absence of symptoms.
- Determine if behaviors that increase risk for NGU are present:
 - sexual contact with person(s) with known infection or compatible syndrome,
 - new sexual partner or more than two sexual partners in preceding year,
 - previous STI, and/or
 - vulnerable populations (e.g., injection drug use (IDU), incarcerated individuals, people involved in exchanging goods for sex, street involved youth, etc.).
- Offer testing for HIV and other STI.
- Counsel and identify partners, including locating information.

Management of a Case

- Cases should be interviewed for history of exposure, risk assessment, and sexual partner(s) identification.
- All cases should be instructed about infection transmission. Patients should be counseled about the importance of abstaining from unprotected intercourse until seven days after completion of treatment of both case and partner(s).⁽³⁾
- All cases should be provided with individualized STI prevention education, targeted at developing knowledge, skills, attitudes and behaviors to reduce the risk and prevent recurrences of STI.
- Immunization against hepatitis A may be recommended, and if not already given, immunization against hepatitis B is recommended. Refer to the [Alberta Immunization Policy](#) for immunization eligibility.
- All patients with a notifiable STI qualify for provincially funded medications.
 - STICS will send replacement medication upon receipt of a Notification of STI Form when the health care provider mailing address is indicated on the form.
 - Health care providers may order additional quantities of most medications by contacting STICS.
- For advice on management of your case, call **STICS toll free 1-855-945-6700, option 4.**
- Sexual assault in adults should be managed in conjunction with local Sexual Assault Services and other appropriate community support services.

Recalcitrant Patients

The [Public Health Act](#) (sections 39 through 52) authorizes detention of recalcitrant patients for medical examination, treatment and/or counselling.

- The CMOH (or designate) or MOH (or designate) may issue a certificate to detain an individual who is believed to be infected and refuses or neglects to comply with treatment.
- In order to enact this provision, there must be proof of infection or contact with an infected person and:

- documentation of failure to comply with prescribed treatment and medical examination, or
- non-compliance for testing and/or treatment.

Superseded

Management of Contacts

Partner Notification

- Partner notification will identify those at risk, reduce disease transmission/re-infection and ultimately prevent disease sequelae.
- **It is mandated under the *Communicable Disease Regulation* that every attempt is made to identify, locate, examine and treat partners/contacts of all cases.**
- All sexual partners of the index case from 60 days prior to symptom onset or date of diagnosis (if asymptomatic) should be tested and empirically treated regardless of clinical findings and without waiting for test results. If there was no partner during this period, then the last partner should be tested and treated.
- All contacts should be:
 - screened for HIV and other STI,
 - instructed about infection transmission, and
 - provided with individualized STI prevention education targeted at developing knowledge, skills, attitudes and behaviors to reduce the risk and prevent recurrences of STI.
- Health care providers are required to provide partner names and locating information on the Notification of STI form and forward to STICS.
- If testing and/or treatment of partner(s) are not confirmed on the Notification of STI form, STICS will initiate follow up by a Partner Notification Nurse (PNN).
 - PNNs are specially trained to conduct notification of partners and contacts in a confidential manner that protects the identity of the index case.
 - The phone number for your designated PNN is available by calling **STICS toll free 1-855-945-6700, option 4.**
 - STICS will follow-up on any incoming referrals of cases and partner(s) from all out of province/country referrals.

Preventive Measures

Reference 3 applies to this section.

- Ensure appropriate treatment of cases.
- Interview case, identify and ensure appropriate treatment and follow-up of NGU for sexual partner(s).
- Ensure STI care is culturally appropriate, inclusive, readily accessible, and acceptable.
- Include information about risk for STI during pre-travel health counseling.
- Educate the case, sexual partners, and the public on methods of personal protective measures, in particular the correct and consistent use of condoms and discuss safer sex options including:
 - delaying onset of sexual activity,
 - developing mutually monogamous relationships,
 - reducing the numbers of sexual partners, and
 - discouraging behaviors associated with the acquisition and transmission of STI.

Superseded

Appendix 1: Revision History

Revision Date	Document Section	Description of Revision
October 2021	General	<ul style="list-style-type: none">• Updated Template• Etiology, Clinical Presentation, Diagnosis and Treatment sections moved to Epidemiology• Key Investigation section moved to Public Health Management (formerly called Control)• Updated web links and removed references where applicable.
	Reporting	<ul style="list-style-type: none">• Revised to reflect current practice
	Incidence	<ul style="list-style-type: none">• Removed graph as outdated

Superseded

References

1. Bradshaw CS, Tabrizi SN, Read TRH, Garland SM, Hopkins CA, Moss LM, et al. Etiologies of Nongonococcal Urethritis: Bacteria, Viruses, and the Association with Orogenital Exposure. *J Infect Dis*. 2006;(193):336–45.
2. Martin DH. Urethritis in Males. In: Holmes KK, Sparling PF, Stamm WE, Poit P, Wasserheit JN, Corey L, et al., editors. *Sexually Transmitted Diseases*. New York: McGraw Hill Medical; 2008. p. 1107–26.
3. Public Health Agency of Canada. Canadian Guidelines on Sexually Transmitted Infections [Internet]. 2008. Available from: <http://www.phac-aspc.gc.ca/std-mts/sti-its/pdf/sti-its-eng.pdf>
4. The Merck Manual Online. Chlamydial, Mycoplasmal, and Ureaplasma Infections. 2011.
5. American Academy of Pediatrics. *Ureaplasma urealyticum* Infections. In: Pickering LK, Baker CJ, Kimberlin DW, Long SS, editors. *Red Book: 2009 Report of the Committee on Infectious Diseases*. Grove Village, IL.: American Academy of Pediatrics; 2009. p. 712–4.
6. McCormack WM. Urethritis. In: Mandell GL, Bennett JE, Dolin R, editors. *Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases*. Philadelphia, PA: Churchill Livingstone Elsevier; 2010. p. 1453–89.
7. Government of A. Notifiable Sexually Transmitted Infections 2011 Annual Report. 2012.