

This decision support tool is effective as of October 2016. For more information or to provide feedback on this or any other decision support tool, email [certifiedpractice@crnbc.ca](mailto:certifiedpractice@crnbc.ca)

---

## ADULT PHARYNGITIS (SORE THROAT)

---

### DEFINITION

Inflammation or infection of the mucus membranes of the pharynx. It may also affect the palatine tonsils.

### POTENTIAL CAUSES

#### Infectious

##### **Viruses**

- Adenovirus
- Influenza
- Parainfluenza virus
- Epstein-Barr
- Coronavirus
- Rhinovirus
- Enterovirus
- Respiratory syncytial virus
- Metapneumovirus
- Herpes simplex virus

##### **Bacterial**

- Group A beta-haemolytic strep
- Group C and G streptococci
- Chlamydia pneumoniae
- Diphtheria
- Mycoplasma pneumonia
- *Neisseria gonorrhoea* or *chlamydia trachomatis* (related to sexual activity)

##### **Fungi**

- *Candida albicans* (immunocompromised)

CRNBC monitors and revises the CRNBC certified practice decision support tools (DSTs) every two years and as necessary based on best practices. The information provided in the DSTs is considered current as of the date of publication. CRNBC-certified nurses (RN(C)s) are responsible for ensuring they refer to the most current DSTs.

The DSTs are not intended to replace the RN(C)'s professional responsibility to exercise independent clinical judgment and use evidence to support competent, ethical care. The RN(C) must consult with or refer to a physician or nurse practitioner as appropriate, or whenever a course of action deviates from the DST.

**Non-infectious**

- Allergic rhinitis
- Sinusitis with post nasal drip
- Mouth breathing
- Trauma
- GERD (gastroesophageal reflux disease)

**PREDISPOSING RISK FACTORS**

- Previous episodes of pharyngitis or tonsillitis
- Smoking, exposure to cigarette smoke
- Overcrowding
- Immunocompromised
- Steroids, oral or inhaled
- Diabetes mellitus
- Oral sex

**TYPICAL FINDINGS OF PHARYNGITIS**

**Note:** Always consider the potential for epiglottitis and airway obstruction when a severely sore throat is out of proportion to the findings of the oropharyngeal exam.

**Bacterial*****History***

- Abrupt onset of sore throat
- Pain with swallowing
- Absence of cough
- Fever or chills
- Malaise
- Headache
- Anorexia
- May have nausea, vomiting and abdominal pain

***Physical Assessment***

- Fever
- Pulse elevated
- Client appears ill
- Posterior pharynx red and edematous
- Tonsils enlarged, may be asymmetric

- Purulent exudate may be present
- Tonsillar and anterior cervical nodes may be enlarged and tender
- Erythematous “sandpaper” rash of scarlet fever (may be present with streptococcal infection)
- Liver/spleen enlargement +/- tenderness (e.g., mononucleosis)

**Viral****History**

- Slow progressive onset of sore throat
- Mild malaise
- Cough
- Nasal congestion

**Physical Assessment**

- Temperature elevated
- Posterior pharynx red and swollen
- Purulent exudate may be present
- Tonsillar and anterior cervical nodes may be enlarged and tender
- Petechiae or purple colour on palate (mononucleosis)
- Vesicles (if herpes)

**Non-infectious**

- Slow progressive onset of sore throat
- Mild malaise
- Cough
- Persistent, recurrent
- Pain on swallowing
- Posterior pharynx red and swollen
- Tonsillar and anterior cervical nodes may be enlarged and tender
- Exudate may be present

**Note:** It is often impossible to distinguish clinically between bacterial and viral pharyngitis. Most pharyngitis is due to viruses (up to 90% in the adult population) and does not require treatment with antibiotics. For this reason it is important to utilize a sore throat score and diagnostic testing as available.

Criteria		Points
Temperature > 38° Celsius		1
Absence of cough		1
Swollen, tender anterior cervical nodes		1
Tonsillar swelling or exudates		1
Age 3-14 years		1
Age 15-44 years		0
Age 45 years and over		-1
Total Score	Risk of Streptococcal infection (%)	Suggested Management
-1 to 1	1-10 %	No culture or antibiotic required
2-3	11-35%	Perform culture or rapid strep test. Treat only if test is +
4 or more	51-53%	Start antibiotic therapy if patient situation warrants (e.g., high fever or clinically unwell) If culture or rapid strep test performed and negative, discontinue antibiotic

**Note:** Treatment with antibiotics may be warranted regardless of the score if there are concerns such as:

- household contact with streptococcal infection,
- a community epidemic of streptococcal infection,
- a client history of rheumatic fever, valvular heart disease, or immunosuppression, or
- a population in which rheumatic fever remains a problem

#### Geriatric considerations:

Treatment may also be warranted if client is 65+ years with acute cough and 2 or more of the following criteria, or 80+ years with acute cough and one or more of:

- Hospitalization in the past year
- Diabetes Mellitus
- Congestive Heart Failure
- On glucocorticoids.

#### Diagnostic Tests

- Throat swab for culture and sensitivity (C&S)
- Rapid strep test (where available)

## MANAGEMENT AND INTERVENTIONS

### Goals of Treatment

- Eradicate infection
- Prevent complications
- Prevent spread of group A streptococcus

### Non-pharmacologic interventions

- Bed rest during febrile phase
- Adequate oral intake of fluids
- Avoidance of irritants
- Gargling with warm saline (1 tsp. in 1 cup warm water)

### Pharmacological Interventions

- Analgesics for mild to moderate pain:
  - acetaminophen 325mg, 1-2 tabs po q4-6h prn, or
  - ibuprofen 200mg, 1-2 tabs po q4-6h prn
  
- Treat with oral antibiotics if streptococcal infection is suspected:
  - Penicillin VK 300 - 600 mg po tid for 10 days
- For clients with penicillin allergy or requiring a suspension (if pen V suspension not available):
  - Cephalexin 500 mg po BID for 10 days (DO NOT USE IF CLIENT HAS A SEVERE ANAPHYLACTIC REACTION TO PENICILLIN)
  
- OR
  - Azithromycin 500 mg po daily for 3 days

### Pregnant and Breastfeeding Women

- Acetaminophen, penicillin VK, cephalexin and azithromycin may be used as listed above.
- DO NOT USE ibuprofen.

**If the infection has been determined to be due to chlamydia or gonorrhea, please refer to the appropriate STI DST.**

## POTENTIAL COMPLICATIONS

- Rheumatic fever (group A strep)

- Acute Glomerulonephritis (group A strep)
- Peritonsillar abscess
- Epiglottitis
- Retropharyngeal abscess
- Otitis media
- Sinusitis

## **CLIENT EDUCATION AND DISCHARGE INFORMATION**

- Gargle frequently with warm salt water (1 tsp. in 1 cup warm water)
- Increase room humidity
- Eat soft bland foods

## **MONITORING AND FOLLOW UP**

- Return to clinic if not improved in 24-48 hours

## **CONSULTATION AND/OR REFERRAL**

- A consultation with a physician or nurse practitioner may be necessary if condition is recurrent or persistent or an undiagnosed underlying pathology is suspected.
- An immunocompromised client, or an unusual presentation of candidiasis, should be referred promptly to a physician or nurse practitioner.

## **DOCUMENTATION**

- As per agency policy

## REFERENCES

More recent editions of any of the items in the Reference List may have been published since this DST was published. If you have a newer version, please use it.

- Anti-Infective Review Panel. (2012). *Anti-infective guidelines for community-acquired infections*. Toronto, ON: MUMS Guideline Clearinghouse.
- Blondel-Hill, E., & Fryters, S. (2012). *Bugs and drugs: An antimicrobial infectious diseases reference*. Edmonton, AB: Alberta Health Services.
- Cash, J. C., & Glass, C. A. (Eds.). (2014). *Family practice guidelines* (3rd ed.). New York, NY: Springer.
- Canadian Pharmacists Association. (2014). *Therapeutic choices* (7th ed.). Ottawa, ON: Author.
- Canadian Pharmacists Association. (2014). *Therapeutic choices for minor ailments*. Ottawa, ON: Author.
- Carillo-Marquez, M. A. (2015). *Bacterial pharyngitis*. Retrieved from <http://emedicine.medscape.com/article/225243-overview>
- Chan, P. D., & Johnson, M. T. (2010). *Treatment guidelines for medicine and primary care*. Blue Jay, CA: Current Clinical Strategies Publishing.
- Chen, A., & Tran, C. (2011). *Comprehensive medical reference and review for MCCQE and USMLE II. Toronto notes form medical students*. Toronto: Toronto Notes for Medical Students, Inc.
- DynaMed. (2016, March 25). *Antibiotics for streptococcal pharyngitis*. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&AuthType=cpid&custid=s5624058&db=dme&AN=474272>
- DynaMed. (2016, March 25). *Streptococcal pharyngitis*. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&AuthType=cpid&custid=s5624058&db=dme&AN=115782>
- DynaMed. (2016, March 25). *Pharyngitis*. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&AuthType=cpid&custid=s5624058&db=dme&AN=114913>
- Gore, J. M. (2013). Acute pharyngitis. *JAAPA: Journal of the American Academy of Physician Assistants*, 26(2), 57-58. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&AuthType=cpid&custid=s5624058&db=ccm&AN=2011935160&site=ehost-live>
- Jensen, B., & Regier, L. D. (Eds.). (2014). *RxFiles: Drug comparison charts* (10<sup>th</sup> ed.). Saskatoon, SK: RxFiles
- National Institute for Health and Clinical Excellence (NICE). (2008, July). *Respiratory tract infections – antibiotic prescribing: Prescribing of antibiotics for self-limiting respiratory tract infections in adults and children in primary care*. Manchester, UK: Author. Retrieved from <https://www.nice.org.uk/guidance/CG69>

- Shepherd, A. B. (2013). Assessment and management of acute sore throat. *Nurse Prescribing*, 11(11), 549-553. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&AuthType=cpid&custid=s5624058&db=ccm&AN=2012366389&site=ehost-live>
- Shulman, S.T., Bisno, A.L., Clegg, H.W., Gerber, M.A., Kaplan, E.L., Lee, G.,... Van Beneden, C. (2012). Clinical practice guideline for the diagnosis and management of group A streptococcal pharyngitis: 2012 update by the Infectious Diseases Society of America. *Clinical Infectious Diseases*. 55(10), e86-e102. Retrieved from: <http://cid.oxfordjournals.org/content/55/10/e86.long>
- University of Michigan Health System. (2013, May). *Pharyngitis: Guidelines for clinical care: Ambulatory* (Rev.). Ann Arbor, MI: Author. Retrieved from <http://www.med.umich.edu/1info/fhp/practiceguides/pharyngitis/pharyn.pdf>