



New Brunswick College of Pharmacists
Ordre des pharmaciens du Nouveau-Brunswick

GUIDANCE: EAR INFECTIONS and ACUTE BACTERIAL RHINOSINUSITIS

Ear Infections and Acute Bacterial Rhinosinusitis

This guidance document supports pharmacists in assessing and prescribing for acute otitis media and acute otitis externa (ear infections in the middle and external ear), as well as assessing and prescribing for acute bacterial rhinosinusitis.

Introduction

Ear infections exist on a spectrum that includes numerous bacterial and viral infections of the inner, middle and outer ear. Authorization is being given to pharmacists to assess and treat two of those infections. The first, otitis externa, involves inflammation or infection of the external ear canal and it is often associated with water exposure or trauma. The second, acute otitis media is an infection of the middle ear space and represents the second most common pediatric diagnosis in emergency departments after upper respiratory infections.

Authorization is being given to pharmacists to assess and prescribe for acute bacterial rhinosinusitis. Patients who appear to have a chronic sinus infection should be advised to consult their primary provider (symptoms lasting ≥ 8 -12 weeks, or ≥ 3 -4 episodes of acute bacterial rhinosinusitis in the last year).

Educational Requirements

To assess patients and to prescribe treatment for otitis externa, acute otitis media (ear infections) and acute bacterial rhinosinusitis, pharmacists must take the necessary steps to be competent. Pharmacists should follow these basic principles with respect to education to acquire or update the necessary competencies:

- Engage in continuous self-assessment of competence; and
- Access appropriate, relevant education¹ which may include an in-person practical component on the physical assessment of patients.

Ear infections: Additional education is mandatory for pharmacists who will assess and prescribe

¹ Appropriate education, containing an in-person practical component, includes:

- Education acquired as part of a CCAP accredited pharmacy program
- Education accredited by a recognized accrediting agency (for example, the Canadian Council on Continuing Education in Pharmacy [CCCEP], Dalhousie University Continuing Pharmacy Education [Dal CPE], or the Canadian Association of Schools of Nursing [CASN])
- Approved by another pharmacy regulatory authority in Canada

treatment for ear infections. The College does not endorse a specific program, however, affirms the program must include an in-person practical component.

Acute bacterial rhinosinusitis: Additional education is required of pharmacists whose self-assessment reveals a need in order to demonstrate competence.

NOTE: Pharmacists are reminded of their responsibility to ensure they are practising within the scope of their own knowledge and experience, and to refer patients who require the care of another health professional.

Patient Assessment

- Pharmacists must ensure they are able to recognize when the signs, symptoms and health needs of the patient require referral or emergency medical treatment.
- Acute otitis media (AOM) is to be diagnosed in accordance with a protocol that is consistent with recognized clinical practice guidelines, and that includes:
 - a physical examination using an otoscope. For patients with acute signs of bacterial infection, an additional device may be used to further support the diagnosis.
 - a detailed patient history focusing on symptoms including ear pain, fever, hearing changes and duration of symptoms.
- For otitis externa, diagnosis is based on signs and symptoms, including ear pain (especially when manipulating the pinna), itching or fullness in the ear canal, inflammation or swelling, and possible discharge.
- Patients who present with clinical red flags, as outlined in the mandatory training, may indicate a need to refer to another health professional for further evaluation and management of those symptoms.
- Pharmacists may assess and manage ear infections and acute bacterial rhinosinusitis in children six months and older. Infants under six months of age are to be referred to another health-care provider due to increased complexity and the need for specialized assessment in this age group.

- For acute bacterial rhinosinusitis, pharmacists will review the signs and symptoms with the patient to assess if the condition appears viral or bacterial in nature.
- In all recommendations, patients will be given signs/symptoms to monitor, follow up details or instructions on when to see another health-care provider if necessary.

Suggested clinical tools

- Horizon Health Network : Firstline
 - List of probable pathogens and resistance info: [Acute Otitis Media \(AOM\) in Children | Horizon Health Network | Firstline](#)
 - Contains information on managing patient and caregiver expectations and a "viral Rx pad": [Uncomplicated Otitis Media | Horizon Health Network | Firstline](#)
 - Antibigrams: Horizon, by region: [Antibiograms | Horizon Health Network | Firstline](#)
 - [Management of Patients Reporting Penicillin/Beta-Lactam Allergy | Horizon Health Network | Firstline](#)
- [Rhinosinusitis Horizon Health Network Firstline](#) Vitalité : Firstline
 - [Acute Otitis Media \(AOM\) in Children | Vitalité Health Network | Firstline](#)
 - [Rhinosinusite Vitalite Firstline](#)
- Canadian Paediatric Society Position Statement on Management of Acute Otitis Media: <https://cps.ca/documents/position/acute-otitis-media>
- TREKK (Translating Emergency Knowledge for Kids) Resources: https://cms.trekk.ca/wp-content/uploads/2023/11/2022-09-09_Acute_Otitis_Media_BLR_FINAL_v.3.0.pdf
- <https://www.bugsanddrugs.org/c3fc31a5-e2d3-49b6-94f4-74641bf6a5f6>
- [Acute Otitis Media | medSask](#) (subscription only)
- [Sinus Infection \(Acute Rhinosinusitis\) | medSask](#) (subscription only)
- <https://www.rxfiles.ca/RxFiles/uploads/documents/members/Cht-Acute-Otitis-Media.pdf> (subscription only)
- [Canadian guidelines for acute bacterial rhinosinusitis | The College of Family Physicians of Canada](#)

Educational Opportunities

- Dalhousie University: Assessment and Physical Examination of Ear Complaints & Management of Acute Otitis Media and Acute Otitis Externa

<https://registeratcontinuingeducation.dal.ca/search/publicCourseSearchDetails.do?method=load&courseId=12453560>