

# POLICY STATEMENT



NEWFOUNDLAND & LABRADOR  
COLLEGE OF  
DENTAL HYGIENISTS INC.

## ANTIBIOTIC PROPHYLAXIS

### PURPOSE

To clarify the dental hygiene scope of practice including assessment and treatment plan in relation to prophylactic antibiotics.

### BACKGROUND

Antibiotic prophylaxis is a treatment regimen that is used prior to dental treatment for patients with certain heart conditions and those with joint replacements.

People with the highest risk for poor outcomes from infective endocarditis (IE) may be prescribed antibiotics (IE prophylaxis) prior to certain dental procedures to reduce their risk of developing it. These include procedures that involve manipulation of gingival (gum) tissue or the periapical region (area around the roots) of teeth, or perforation of the oral mucosa.<sup>1</sup>

### POLICY STATEMENT

Registered Dental Hygienists cannot prescribe antibiotic prophylaxis.

In the event that a patient presents with a recommendation for antibiotic prophylaxis from a qualified healthcare professional (e.g., physician, cardiologist, dentist), it is ultimately still the responsibility of the Registered Dental Hygienist for making the decision whether to proceed with dental hygiene services.

#### Infective Endocarditis

Infective endocarditis (IE) prophylaxis should only be recommended for patients with underlying cardiac conditions associated with the highest risk of adverse outcomes as outlined by the American Heart Association.<sup>2</sup> Inclusion criteria include patients with or history of:

- Prosthetic cardiac valves, including transcatheter-implemented prostheses and homografts.
- Prosthetic material used for heart valve repair, such as annuloplasty rings, chords or clips.
- Previous IE.
- Unrepaired cyanotic congenital heart defect (birth defects with oxygen levels lower than normal) or repaired congenital heart defect, with residual shunts or valvular regurgitation at the site adjacent to the site of a prosthetic patch or prosthetic device.
- Cardiac transplant with valve regurgitation due to a structurally abnormal valve.

<sup>1</sup> <https://www.heart.org/en/health-topics/infective-endocarditis>

<sup>2</sup> <https://www.ahajournals.org/doi/pdf/10.1161/CIR.0000000000000969>

Except for the conditions listed above, antibiotic prophylaxis before dental procedures is not recommended for any other types of congenital heart disease. In addition, antibiotic prophylaxis is not recommended for patients with valvular heart disease who are at high risk of IE for non dental procedures (e.g., TEE, esophagogastroduodenoscopy, colonoscopy, or cystoscopy) in the absence of active infection.

### Hematogenous Joint Infection

Regarding clients with total joint replacements or orthopaedic pins, plates, and screws, routine antibiotic prophylaxis is not recommended for dental/dental hygiene procedures.<sup>3</sup>

## POLICY EXPECTATIONS

A Registered Dental Hygienist must...

1. In the case of a client presenting a recommendation for, or against, prophylactic antibiotic coverage from his/her/their physician that is not consistent with evidence-based guidelines (e.g., College of Dental Hygienists of Ontario, American Heart Association), consult with the physician (primary or specialized care provider) to determine if there are any special considerations that would affect a decision whether to pre-medicate, bearing in mind that antibiotic prophylaxis is indicated only for clients with the highest risk of adverse outcomes who undergo dental/dental hygiene procedures that involve manipulation of either gingival tissue or the periapical region of teeth or perforation of the oral mucosa.
  - a. The need for antibiotic coverage for the client should be considered on an individual basis in conjunction with the client's physician (primary or specialized care provider).
  - b. The medical/dental antibiotic recommendation/decision should be documented by the dental hygienist; however, the dental hygienist is ultimately responsible for making the decision whether to proceed with dental hygiene services.

## GUIDELINES

A Registered Dental Hygienist should...

1. Consult with the client's cardiologist to determine the need for antibiotic prophylaxis prior to invasive dental hygiene procedures if they cannot assess the need with the information that is available to them.
2. If the dental hygienist is unable to consult with the cardiologist, utilize a collaborative approach with the client's physician and/or dentist to determine the client's need. Should the physician or dentist elect to take responsibility for making this determination, the direction provided must be clearly documented in the client's chart.

## CLIENT / PATIENT EXPECTATIONS

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<sup>3</sup> This current recommendation by reputable authorities — in particular, the Canadian Orthopaedic Association [COA], the Canadian Dental Association [CDA], and the Association of Medical Microbiology and Infectious Disease [AAMI] Canada — constitutes much more restrictive use of antibiotic prophylaxis than has historically been the case.

The client can expect that a Registered Dental Hygienist can provide antibiotic prophylaxis treatment when appropriate in accordance with American Heart Association guidelines.

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