

## Prevention of Infective Endocarditis

The Canadian Dental Association supports the American Heart Association's (AHA) 2007 guidelines for antibiotic prophylaxis prior to dental procedures to prevent infective endocarditis.

The guidelines are based on a growing body of scientific evidence that shows the risks of taking preventive antibiotics outweigh the benefits for most patients. The risks include adverse reactions to antibiotics that range from mild to potentially severe and the development of drugresistant bacteria.

The AHA guidelines emphasize the importance of achieving and maintaining excellent oral health and practising daily oral hygiene. For most patients, taking preventive antibiotics before a dental visit is not indicated.

The guidelines state that prophylactic antibiotics, which were routinely administered to certain patients in the past, are no longer needed for patients with:

- mitral valve prolapse
- rheumatic heart disease
- bicuspid valve disease
- calcified aortic stenosis
- congenital heart conditions such as ventricular septal defect, atrial septal defect and hypertrophic cardiomyopathy.

Only those at greatest risk of developing infective endocarditis — an infection of the heart's inner lining or the heart valves — should receive short-term preventive antibiotics before common, routine dental and medical procedures. People who should take antibiotics include those with:

- 1. prosthetic cardiac valve or prosthetic material used for cardiac valve repair
- 2. a history of infective endocarditis
- 3. certain specific, serious congenital (present from birth) heart conditions, including
  - unrepaired or incompletely repaired cyanotic congenital heart disease, including those with palliative shunts and conduits
  - a completely repaired congenital heart defect with prosthetic material or device, whether placed by surgery or by catheter intervention, during the first six months after the procedure
  - o any repaired congenital heart defect with residual defect at the site or adjacent to the site of a prosthetic patch or a prosthetic device
- 4. a cardiac transplant that develops a problem in a heart valve.

Antibiotic prophylaxis is recommended for patients with the above conditions who undergo any dental procedure that involves manipulation of gingival tissues or the periapical region of a tooth and for those procedures that perforate the oral mucosa. The following procedures and events do **not** need prophylaxis:

- routine anesthetic through noninfected tissue
- dental radiographs
- placement of removable prosthodontic or orthodontic appliances
- adjustment of orthodontic appliances
- placement of orthodontic brackets
- shedding of deciduous teeth
- bleeding from trauma to the lips or mucosa

The AHA guidelines, which include antibiotic regimens prior to dental procedures for patients at risk for infective endocarditis, are found at:

http://circ.ahajournals.org/content/116/15/1736.full.pdf (accessed 2013-05-16)

CDA Board of Directors

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