

**Antibiotic Pre-Medication Guidelines for Dental Procedures
(For Prevention of Infective Endocarditis)**
Guidelines from the American Heart Association – Published April 2007

Introduction

On April 19, 2007 the American Heart Association released new guidelines for heart patients regarding the use of antibiotics before dental procedures. After an extensive review of scientific literature from 1950 to 2006, the AHA found that only an extremely small number of cases of infective endocarditis (IE) might be prevented by antibiotic pre-medication for dental procedures and that the risks of taking antibiotic pre-medication far outweighs their benefits.

Based upon these findings, both the American Heart Association and the American Dental Association now recommend that antibiotic pre-medication only be given to patients with underlying cardiac conditions associated with the highest risk of adverse outcome from infective endocarditis.

The following are the new guidelines.

New Guidelines

Patients No Longer Needing To Take Antibiotic Pre-Medication (Most Patients)	Patients Still Recommended To Take Antibiotic Pre-Medication (Few Patients)
<ul style="list-style-type: none">• Mitral valve prolapse• Rheumatic heart disease• Bicuspid valve disease• Calcified aortic stenosis• Less serious congenital heart conditions:<ul style="list-style-type: none">a. Hyperopic cardiomyopathyb. Ventricular septal defectc. Atrial septal defect	<ul style="list-style-type: none">• Artificial heart disease• History of endocarditis• Certain serious congenital heart conditions<ul style="list-style-type: none">a. Unrepaired or Incompletely repaired cyanotic congenital heart disease, including those with palliative shunts and conduits.b. 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 procedurec. Any repaired congenital heart defect with residual defect at the site or adjacent to the site of a prosthetic patch or a prosthetic device• Heart transplant patients who develop a problem in a heart valve.

In Conclusion

For most heart patients, this means you will no longer be asked to pre-medicate prior to dental treatment. For more information on this subject, you can go to

The American Dental Association

www.asa.org/public/topics/antibiotics.asp

The American Heart Association

www.americanheart.org/presenter.jhtml?identifier=11086

If a patient has been prescribed pre-meds by a medical doctor, he/she may want to inform their physician of the new guidelines and ask in which category above they belong.

Compliments of

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**Antibiotic Pre-Medication Regimens for Dental Procedures
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Situation	Agent	Regimen – Single Dose 30-60 minutes before procedure	
		Adults	Children
Oral	Amoxicillin	2 gm	50 mg/kg
Unable to take oral medication	Ampicillin OR	2 g IM or IV*	50 mg/kg IM or IV
	Cefazolin or ceftriaxone	1 g IM or IV	50 mg/kg IM or IV
Allergic to penicillins or Ampicillin – Oral regimen	Cephalexin**† OR	2 g	50 mg/kg
	Clindamycin OR	600 mg	20 mg/kg
	Azithromycin or clarityromycin	500 mg	15 mg/kg
Allergic to penicillans or ampicillin and unable to take oral medication	Cefazolin or ceftriaxone† OR	1 g IM or IV	50 mg/kg IM or IV
	Clindamycin	600 mg IM or IV	20 mg/kg IM or IV

*IM – intramuscular; IV – intravenous

**Or other first or second generation oral cephalosporin in equivalent adult or pediatric dosage.

†Cephalosporins should not be used in an individual with a history of anaphylaxis, angioedema, or urticaria with penicillins or ampicillin.

Table 3: Cardiac Conditions Associated With the Highest Risk of Adverse Outcome From Endocarditis for Which Prophylaxis With Dental Procedures Is Recommended

- Prosthetic Cardiac Valve
- Previous Infectious Endocarditis (IE)
- Congenital Heart Disease (CHD), specifically:
 - a. Unrepaired cyanotic CHD, including palliative shunts and conduits
 - b. Completely repaired congenital heart defect with prosthetic material or device, whether placed by surgery or by catheter intervention, during the first 6 months after the procedure
 - c. Repaired CHD with residual defects at the site or adjacent to the site of a prosthetic patch or prosthetic device (which Inhibit endothelialization)
- Cardiac transplantation recipients who develop cardiac valvulopathy

Table 4: Dental Procedures for Which Endocarditis Prophylaxis is Recommended for Highest Risk Patients

All dental procedures that involve manipulation of gingival tissue, or the periapical region of teeth or perforation of the oral mucosa.

The following procedures and events do not need antibiotic prophylaxis:

- Routine anesthetic injecting through noninfected tissue
- Taking dental radiographs
- Placement of removable prosthodontic or orthodontic appliances
- Adjustment of orthodontic appliances
- Placement of orthodontic brackets
- Shedding of deciduous teeth