

ANTIBIOTIC PROPHYLAXIS QUICK REFERENCE GUIDE

The new recommendations apply to many dental procedures, including teeth cleaning and extractions. Patients with congenital heart disease can have complicated circumstances. If there is any question at all as to the category that best fits their needs, these patients should check with their cardiologists before treatment.

Endocarditis Prophylaxis Recommended

Preventive antibiotics prior to a dental procedure are advised for patients with:

- Artificial heart valves
- Infective endocarditis history
- Certain specific, serious congenital (present from birth) heart conditions, including:
 - Unrepaired or incompletely repaired cyanotic congenital heart disease, as well as those with palliative shunts and conduits
 - 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
 - Any repaired congenital heart defect with residual defect at the site or adjacent to the site of a prosthetic patch or a prosthetic device
- Cardiac transplant that develops a problem in a heart valve

Endocarditis Prophylaxis Not Recommended

Patients who have taken prophylactic antibiotics routinely in the past but no longer need them include people 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

Regimen: Single Dose 30 to 60 min Before Procedure

<u>SITUATION</u>	<u>AGENT</u>	<u>ADULTS</u>	<u>CHILDREN</u>
Oral	Amoxicillin	2 g	50 mg/kg
Unable to take oral medication	Ampicillin OR Cefazolin or ceftriaxone	2 g IM* or IV+ 1 g IM or IV	50 mg/kg IM or IV 50 mg/kg IM or IV
Allergic to penicillins or ampicillin—oral	Cephalexin φδ OR Clindamycin OR Azithromycin or clarithromycin	2 g 600 mg 500 mg	50 mg/kg 20 mg/kg 15 mg/kg
Allergic to penicillins or ampicillin and unable to take oral medication	Cefazolin or ceftriaxoneδ OR Clindamycin	1 g IM or IV 600 mg IM or IV	50 mg/kg IM or IV 20 mg/kg IM or IV

* IM: Intramuscular

+ IV: Intravenous

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

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

¹American Dental Association Division of Legal Affairs.

An Updated Legal Perspective of Antibiotic Prophylaxis. The Journal of the American Dental Association. 2008; 139:10-21S.

Patients at Potential Increased Risk of Hematogenous Total Joint Infection

- All patients during the first two (2) years after prosthetic joint replacement.
- Immunocompromised/immunosuppressed patients
- Inflammatory arthropathies (e.g.: rheumatoid arthritis, systemic lupus erythematosus)
- Drug -induced immunosuppression
- Radiation-induced immunosuppression
- Patients with co-morbidities (e.g.)
- Previous prosthetic joint infections
- Malnourishment
- Hemophilia
- HIV infection
- Insulin-dependent (Type 1) diabetes
- Malignancy

**Incidence Stratification of Bacteremic Dental Procedures
Higher Incidence (Prophylaxis should be considered)**

- Dental extractions
- Periodontal procedures including surgery, subgingival placement of antibiotic fibers/strips, scaling and root planing, probing, recall maintenance
- Dental implant placement and replantation of avulsed teeth
- Endodontic (root canal) instrumentation or surgery only beyond the apex
- Initial placement of orthodontic bands but not brackets
- Intraligamentary and intraosseous local anesthetic injections
- Prophylactic cleaning of teeth or implants where bleeding is anticipated

Lower Incidence (Prophylaxis not indicated, but clinical judgment may indicate antibiotic use in selected circumstances that may create significant bleeding)

- Restorative dentistry² (operative and prosthodontic) with/without retraction cord
- Local anesthetic injections (nonintraaligamentary and nonintraosseous)
- Intracanal endodontic treatment; post-placement and buildup
- Placement of rubber dam
- Postoperative suture removal
- Placement of removable prosthodontic/orthodontic appliances
- Taking of oral impressions
- Fluoride treatments
- Taking of oral radiographs
- Orthodontic appliance adjustment
- This includes restoration of carious (decayed) or missing teeth.

Suggested antibiotic prophylaxis regimens

No second doses are recommended for any of these dosing regimens

<u>SITUATION</u>	<u>AGENT</u>	<u>DOSAGE</u>
Patients not allergic to penicillin	cephalexin, cephradine or amoxicillin	2 grams orally 1 hour prior to dental procedure
Patients not allergic to penicillin and unable to take oral medications	cefazolin 1 gram or ampicillin	2 grams IM/IV 1 hour prior to the procedure
Patients allergic to penicillin	clindamycin:	600 mg orally 1 hour prior to the dental procedure
Patients allergic to penicillin and unable to take oral medications	clindamycin	600 mg IV, 1 hour prior to the procedure