

# CARDIOVASCULAR CENTER POCKET GUIDE

## Antibiotic Prophylaxis for Prevention of Infective Endocarditis



### Revised (2007) guidelines note that:

- Infective endocarditis can result from frequent exposure to random episodes of bacteremia associated with daily activities.
- Antibiotics before procedures may prevent only a small number of cases of endocarditis.
- Maintenance of optimal oral hygiene is important to reduce the risk of endocarditis from an oral source.

### The revised guidelines recommend antibiotic prophylaxis in far fewer patients and fewer circumstances than previous guidelines and existing standard of practice:

- Dental. Antibiotics for dental procedures are recommended only for patients with:
  - Prosthetic cardiac valve.
  - Previous infective endocarditis.
  - Congenital heart disease, limited to:
    - Un-repaired cyanotic lesions (including palliative shunts and conduits),
    - Completely repaired defects for a period of 6 months after the repair procedure,
    - Repaired defects with residual defects at or near the location of prosthetic material.
  - Cardiac transplantation recipients with a cardiac valvulopathy.
- Respiratory/Skin/Musculoskeletal. Antibiotics for respiratory tract procedures or procedures involving infected skin or musculoskeletal tissue are recommended only for the same group of patients as above (dental procedures).
- GI/GU. Antibiotic prophylaxis solely to prevent infective endocarditis is not recommended for GI tract or GU tract procedures.

### Antibiotic prophylaxis for dental procedures should comprise:

- Amoxicillin 2 g PO prior to the dental procedure.
- For patients with a penicillin allergy, alternatives are:
  - Cephalexin 2 g
  - Clindamycin 600 mg
  - Azithromycin or clarithromycin 500 mg

### The revised (2007) guidelines are based of absence of data proving efficacy of antibiotic prophylaxis, not data suggesting absence of efficacy:

- Many practitioners will continue to use antibiotic prophylaxis for patients with:
  - Any significant native valve lesions (≥ moderate stenosis or ≥ moderate regurgitation of any valve).
  - Other abnormalities as outlined above.
  - Any significant valve lesion undergoing GI/GU procedures as well as dental or respiratory procedures or procedures involving infected skin or musculoskeletal tissue.

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Reference: *Circulation* 2007;116:1738-54.

*Circulation* 1997;96:358-66.

*J Am Coll Cardiol* 2006;48(3):e1-148.

REV: 2006; PRE

## Dental Procedures

Prophylactic Regimens		
Situation	Agent	Regimen
Standard	Amoxicillin	2.0g orally 1 hr before
Unable to take or absorb oral meds	Ampicillin	2.0g IM or IV 30 min before
Allergic to Penicillin	Clindamycin or Cephalexin or Cefadroxil Azithromycin or Clarithromycin	600mg PO, 1 hr before or 2.0g PO, 1 hr before or 500mg PO, 1 hr before
Allergic to penicillin and unable to take oral medications	Clindamycin or Cefazolin	600mg IV within 30 min before or 1.0g IM or IV within 30 min before

## Non Esophageal GI and GU Procedures

Situation	Agent	Regimen
ERCP with biliary obstruction Biliary tract surgery Operations that involve intestinal mucosa Colonoscopy with Biopsy Prostatic surgery Cystoscopy Urethral dilation	Ampicillin plus Gentamycin	Amp 2.0g IM/IV plus Gentamycin 1.5mg/kg (not to exceed 120mg) within 30 min of starting the procedure; 6 hrs later, Amp 1g IM/IV or Amox 1g PO.
	Allergic to Penicillin Vancomycin plus Gentamycin	Vanco 1g IV over 1-2 hrs plus Gentamycin 1.5mg/kg IV/IM (not to exceed 120mg) Complete injection/infusion within 30 min of starting the procedure.

