

## ANTIBIOTIC PROPHYLAXIS

Date: \_\_\_\_\_

### To Whom It May Concern

Re:

**PATIENT'S INFORMATION**  
(Please stick patient's label)

**Diagnosis :** .....

.....

☐

He / she requires antibiotic prophylaxis against infective endocarditis for dental or surgical procedures.

☐

He / she **does NOT** require antibiotic prophylaxis against infective endocarditis for dental or surgical procedures.

Good oral hygiene (gum and dental care) is strongly recommended.

☐

The above patient is scheduled for open heart/ thoracic surgery in a month's time.

Please perform dental clearance pre-op and fill up in the section below. This is to minimize hospital stay

For the latest antibiotic prophylaxis recommendations please refer to the tables overleaf.

Thank you.

Yours sincerely,

\_\_\_\_\_

.....  
Dental Cleared.

Date : \_\_\_\_\_

Name of dental surgeon : \_\_\_\_\_

Signature of dental surgeon : \_\_\_\_\_

### Preventive measures:

Cardiac patients (especially those with structural heart disease and those with high risk of infective endocarditis) must be advised on the importance of dental and cutaneous hygiene.

### Cardiac conditions with increase risk of Infective Endocarditis

Based on the current evidence, patients who require antimicrobial prophylaxis are patients with the highest risk of Infective Endocarditis and/ or highest risk of adverse outcome from Infective Endocarditis.

- Prosthetic cardiac valves or prosthetic material used for cardiac valve repair.
- Native valvular heart disease including established rheumatic heart disease.
- Previous Infective Endocarditis.
- Unrepaired cyanotic Congenital Heart Disease, including palliative shunts and conduits.
- Completely repaired Congenital Heart Disease with prosthetic material or devices, for first 6 months after the procedure.
- Repaired Congenital Heart Disease with residual defects at the site or adjacent to the site of a prosthetic patch or device (which inhibit endothelialisation).
- Cardiac transplantation recipients who develop cardiac valvulopathy

Adapted from European Society of Cardiology, American Heart Association and Cardiac Society of Australia and New Zealand infective endocarditis guidelines.

### The indication for antimicrobial prophylaxis in high-risk patients:

### Dental procedures and recommendations for prophylaxis or endocarditis

High-risk procedures are usually those that cause bleeding or tissues damage. Viridans group of streptococci is the most common cause of endocarditis after dental or upper respiratory procedures.

Prophylaxis always required	Prophylaxis required in some circumstances	Prophylaxis not required
<ul style="list-style-type: none"> <li>• Extractions</li> <li>• Periodontal procedures including surgery, subgingival scaling and root planning</li> <li>• Replanting avulsed teeth</li> <li>• Other surgical procedures (e.g. implant placement and apicectomy)</li> </ul>	<p>Consider prophylaxis for the following procedures if multiple procedures are being conducted, the procedure is prolonged or periodontal disease is present:</p> <ul style="list-style-type: none"> <li>• Full periodontal probing for patients with periodontitis</li> <li>• Intraligamentary and intraosseous local anaesthetic injection</li> <li>• Supragingival calculus removal or cleaning</li> <li>• Rubber dam placement with clamps (where there is risk of damaging gingiva)</li> <li>• Restorative matrix band/strip placement</li> <li>• Endodontics beyond the apical foramen</li> <li>• Placement of orthodontic bands or interdental wedges</li> <li>• Subgingival placement of retraction cords, antimicrobial fibres or antimicrobial strips</li> </ul>	<ul style="list-style-type: none"> <li>• Oral examination</li> <li>• Infiltration and block local anaesthetic injection</li> <li>• Restorative dentistry</li> <li>• Supragingival rubber dam clamping and placement of rubber dam</li> <li>• Intracanal endodontic procedures</li> <li>• Removal of sutures</li> <li>• Impressions and construction of dentures</li> <li>• Orthodontic bracket placement and adjustment of fixed appliances</li> <li>• Application of gels</li> <li>• Intraoral radiographs</li> <li>• Supragingival plaque removal</li> </ul>

Adapted from Therapeutic Guidelines: antibiotic version 13 and Therapeutic Guidelines: oral and dental version 1, 2008.<sup>209</sup>

### Non dental procedures

Indication for antibiotic prophylaxis in high risk patients.

High risk procedure are usually those that cause bleeding or tissue damage.

Example:

- Invasive respiratory tract procedure that involve incision or biopsy of the respiratory tract mucosa.
- Incision and drainage of local abscess.
- Percutaneous endoscopic gastrostomy

### Antimicrobial regimes for infective endocarditis prophylaxis:

The most common pathogen for oral and respiratory tract procedures related endocarditis is alpha-haemolytic streptococci. Antimicrobial regimes for endocarditis prophylaxis are generally directed towards Viridans group of streptococci.

### Antimicrobial prophylaxis for invasive dental procedures

#### Single dose administered 30 to 60 minutes before the procedure

Situation	Antimicrobial	Adults	Children	Reference
No allergy to penicillin or ampicillin	Amoxicillin or ampicillin	2 g orally or IV	50 mg/kg orally or IV	ESC 2015 <sup>16</sup> AHA 2007 <sup>212</sup>
Allergic to penicillin or ampicillin	Clindamycin	600 mg orally or IV	20 mg/kg orally or IV	ESC 2015 <sup>16</sup> AHA 2007 <sup>212</sup>

- Alternatively, cephalexin 2 g IV for adults or 50 mg/kg IV for children, cefazolin or ceftriaxone 1 g IV for adults or 50 mg/kg IV for children.
- Cephalosporins should not be used in patients with anaphylaxis, angioedema or urticaria after intake of penicillin or ampicillin due to cross-sensitivity.
- For genitourinary and gastrointestinal procedures antimicrobials should include an agent active against enterococci, such as ampicillin or vancomycin.

### Timing of antimicrobial prophylaxis in high-risk patients:

Infective Endocarditis antimicrobial prophylaxis (when indicated) is administered as a single dose 30-60 minutes before the procedure.