

# Antibiotic Prophylaxis for Endocarditis

Management Guidelines  
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The need for prophylaxis depends on the cardiac condition of the patient and the procedures being performed.

## Antibiotic prophylaxis is recommended in patients with the following cardiac conditions if undergoing a specified dental or other procedure

- prosthetic cardiac valve or prosthetic material used for cardiac valve repair
- previous infective endocarditis
- congenital heart disease *but* only if it involves:
- unrepaired cyanotic defects, including palliative shunts and conduits
- completely repaired defects with prosthetic material or devices, whether placed by surgery or catheter intervention, during the first 6 months after the procedure (after which the prosthetic material is likely to have been endothelialised)
- repaired defects with residual defects at or adjacent to the site of a prosthetic patch or device (which inhibit endothelialisation)
- cardiac transplantation with the subsequent development of cardiac valvulopathy
- rheumatic heart disease in Indigenous Australians only

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## Dental Procedures

Prophylaxis always required	Prophylaxis required in some circumstances	Prophylaxis not required
<ul style="list-style-type: none"> <li>• extraction</li> <li>• periodontal procedures including surgery, subgingival scaling and root planing</li> <li>• replanting avulsed teeth</li> <li>• other surgical procedures (eg implant placement, apicoectomy)</li> </ul>	<p><i>Consider prophylaxis for the following procedures if multiple procedures are being conducted, the procedure is prolonged or periodontal disease is present:</i></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/cleaning</li> <li>• rubber dam placement with clamps (where risk of damaging gingiva)</li> <li>• restorative matrix band/strip placement</li> <li>• endodontics beyond the apical foramen</li> <li>• placement of orthodontic bands</li> <li>• placement of interdental wedges</li> <li>• subgingival placement of retraction cords, antibiotic fibres or antibiotic 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>

## Other procedures

- incision and drainage of local abscess:
- brain (see [Brain abscess or subdural empyema](#))
- [boils and carbuncles](#)
- [dacryocystitis](#)
- [epidural](#)
- [lung](#)
- orbital (see [Orbital \(postseptal\) cellulitis](#))
- [perirectal](#)
- [pyogenic liver](#)
- tooth (see [Acute odontogenic infections](#))
- surgical procedures through infected skin (see [Cellulitis and erysipelas](#))

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### Respiratory tract procedures and their requirement for endocarditis prophylaxis in patients with cardiac conditions listed

#### Prophylaxis always required (high risk of bacteraemia)

- any invasive procedure involving incision or biopsy of respiratory mucosa. *Examples include:*
- tonsillectomy/adenoidectomy
- rigid or flexible bronchoscopy *with* incision or biopsy
- surgery involving bronchial, sinus, nasal or middle ear mucosa, including tympanostomy tube insertion

#### Prophylaxis not required (low risk of bacteraemia)

*These are examples of situations where prophylaxis of infective endocarditis would **not** be required:*

- rigid or flexible bronchoscopy *without* incision or biopsy
- endotracheal intubation

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### Genitourinary and gastrointestinal tract procedures and their requirement for endocarditis prophylaxis in patients with cardiac conditions listed in Box 2.3 (Table 2.15)

#### Prophylaxis always required (high risk of bacteraemia)

any procedure where antibiotic prophylaxis is indicated for surgical reasons (see [Prophylaxis: surgical](#))

lithotripsy

vaginal delivery with prolonged labour

any genitourinary procedure in the presence of a genitourinary infection unless already treating enterococci

(for *elective* cystoscopy or urinary tract manipulations, obtain a urine culture and treat any significant bacteriuria beforehand)

any gastrointestinal procedure in the presence of an intra-abdominal infection unless already treating enterococci

#### Prophylaxis not required (low risk of bacteraemia)

procedures not requiring surgical prophylaxis and in the absence of related infection. *Examples include:*

urethral catheterisation, uterine dilatation and curettage, sterilisation procedures, insertion or removal of intrauterine contraceptive device

vaginal delivery

transoesophageal echocardiography

endoscopy +/- biopsy, including colonoscopy

percutaneous endoscopic gastrostomy

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**Choice of Antibiotics**

Please consult latest edition of “Therapeutic Guidelines: antibiotic”