

Pre-Operative Considerations

Antibiotic prophylaxis to prevent endocarditis is **ONLY** recommended for patients with cardiac conditions associated with the **HIGHEST RISK** of adverse outcomes from endocarditis (See Box 1) and only for certain conditions (See Box 2).

Box 1: Cardiac conditions for which antibiotic prophylaxis to prevent endocarditis is recommended.

- > Prosthetic cardiac valve or prosthetic material used for cardiac valve repair
 - > Previous infective endocarditis
 - > Cardiac transplantation with the subsequent development of cardiac valvulopathy
 - > Rheumatic heart disease in Indigenous Australians and individuals at significant socioeconomic disadvantage
 - > Congenital heart disease, only if it involves:
 - i) unrepaired cyanotic defects, including palliative shunts and conduits;
 - ii) completely repaired defects with prosthetic material or devices, whether placed by surgery or catheter intervention, during the first six months after the procedure (after which the prosthetic material is likely to have endothelialised);
- OR
- iii) repaired defects with residual defects at, or adjacent to the site of a prosthetic patch or device (which inhibit endothelialisation).

Antibiotic prophylaxis for endocarditis **MAY** be required. **See Box 2.**

YES

Does the patient have any of the conditions listed in Box 1?

NO

Antibiotic prophylaxis for endocarditis **NOT** required.

Box 2 Procedures where antibiotic prophylaxis for endocarditis may or may not be required

Prophylaxis ALWAYS REQUIRED	CONSIDER prophylaxis	Prophylaxis IS NOT REQUIRED
<p>DENTAL PROCEDURES:</p> <ul style="list-style-type: none"> > extractions > periodontal procedures including surgery, subgingival scaling and root planning > replanting avulsed teeth > other surgical procedures (e.g. implant placement, apicoectomy). <p>RESPIRATORY PROCEDURES:</p> <p>Any invasive procedure involving incision or biopsy of respiratory mucosa, for example:</p> <ul style="list-style-type: none"> > tonsillectomy/ adenoidectomy > surgery involving bronchial, sinus, nasal or middle ear mucosa, including tympanostomy tube insertion. <p>GENITOURINARY AND GASTROINTESTINAL PROCEDURES: Any procedure where antibiotic prophylaxis is indicated for surgical reasons</p> <ul style="list-style-type: none"> > lithotripsy > 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 bacteria beforehand) > any gastrointestinal procedure in the presence of an intra- abdominal infection unless already treating enterococci > sclerotherapy for oesophageal varices. <p>OTHER PROCEDURES:</p> <ul style="list-style-type: none"> > Incision and drainage of local abscess: brain, boils and carbuncles, dacryocystitis, epidural, lung, orbital, perirectal, pyogenic liver, tooth, surgical procedures through infected skin. > Percutaneous endoscopic gastrostomy 	<p>DENTAL PROCEDURES:</p> <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"> > full periodontal probing for patients with periodontitis > intraligamentary and intraosseous local and anaesthetic injection > supragingival calculus removal or cleaning > rubber dam placement with clamps (where risk of damaging gingiva) > restorative matrix band/ strip placement > endodontics beyond the apical foramen > placement of orthodontic bands or interdental wedges > subgingival placement of retraction cords, antibiotic fibres or antibiotic strips 	<p>DENTAL PROCEDURES:</p> <ul style="list-style-type: none"> > oral examination > infiltration and block local anaesthetic injection > restorative dentistry > supragingival rubber dam clamping and placement of rubber dam > intracanal endodontic procedures > removal of sutures > impressions and construction of dentures > orthodontic bracket placement and adjustment of fixed appliances > application of gels > intraoral radiographs > supragingival plaque removal <p>RESPIRATORY PROCEDURES:</p> <ul style="list-style-type: none"> > endotracheal intubation > rigid or flexible bronchoscopy with or without incision or biopsy <p>GENITOURINARY AND GASTROINTESTINAL PROCEDURES:</p> <ul style="list-style-type: none"> > urethral catheterisation, uterine dilatation and curettage, sterilization procedures, insertion or removal of intrauterine contraceptive device > obstetric procedures > transoesophageal echocardiography > endoscopy (with or without gastrointestinal biopsy including colonoscopy)

Practice Points

Clindamycin administration

- > IV infusion – should be commenced 30-60 minutes prior to the procedure. Administer doses of 600mg over at least 20 minutes (maximum rate is 30mg/min)

Vancomycin administration

- > Give vancomycin 1g (1.5g for patients >80kg **actual body weight**) by IV infusion started 30-120 minutes before the procedure at a recommended rate of 1g per hour (1.5g over 90 minutes).

Recommended Prophylaxis

	Recommended Prophylaxis	*High risk penicillin/cephalosporin allergy
Dental procedures	amoxicillin 2g PO 1 hour prior to procedure	clindamycin 600mg PO 1 hour prior to procedure
All other procedures	amoxicillin 2g IV prior to procedure	clindamycin 600mg by IV infusion OR vancomycin 1g IV infusion (1.5g > actual body weight 80kg)

Definitions / Acronyms

DRESS Drug rash with eosinophilia and systemic symptoms

IV Intravenous

PO Per oral

SJS / TEN Stevens-Johnson syndrome / Toxic epidermal necrolysis

* High Risk penicillin/cephalosporin allergy: History suggestive of high risk (e.g. anaphylaxis, angioedema, bronchospasm, urticaria, DRESS/SJS/TEN)

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