

ANTIBIOTIC PROPHYLAXIS FOR THE PREVENTION OF INFECTIVE ENDOCARDITIS

Risk factors for developing IE include:

- Unrepaired cyanotic congenital heart defect (birth defects with oxygen levels lower than normal)
- repaired congenital heart defect, with residual shunts or valvular regurgitation at the site adjacent to the site of a prosthetic patch or prosthetic device.
- Previous heart valve surgery including replacement and including transcatheter-implanted prostheses and homografts.
- Previous history of IE
- Hypertrophic cardiomyopathy
- Heart transplant
- Intravenous drug use

AHA Guidelines

People with the highest risk for poor outcomes from IE may be prescribed antibiotics (IE prophylaxis) prior to certain dental procedures including

- procedures that involve manipulation of gingival (gum) tissue, or
- the periapical region (area around the roots) of teeth, or
- perforation of the oral mucosa.

Except for the conditions listed above, antibiotic prophylaxis before dental procedures is not recommended for any other types of congenital heart disease.

Nice guidelines

Antibiotic prophylaxis against infective endocarditis is not recommended routinely:

- for people undergoing dental procedures
- for people undergoing non-dental procedures at the following sites:
 - upper and lower gastrointestinal tract

PAEDIATRIC ANAESTHESIA

- genitourinary tract; this includes urological, gynaecological and obstetric procedures, and childbirth
- upper and lower respiratory tract; this includes ear, nose and throat procedures and bronchoscopy. [2015]

The evidence reviews for this guideline covered only procedures at the sites listed in this recommendation. Procedures at other sites are outside the scope of the guideline

Antibiotic Regimens for a Dental Procedure Regimen: Single Dose 30-60 Minutes Before Procedure

Situation	<u>Agent</u>	<u>Adult</u>	<u>Children</u>
Oral	Amoxicillin	2 g	50 mg/kg
Unable to take oral medication	Ampicillin OR	2 g IM or IV	50 mg/kg IM or IV
	Cefazolin or Ceftriaxone	1 g IM or IV	50 mg/kg IM or IV
Allergic to Penicillin or Ampicillin - Oral	Cephalexin* ⁺ OR	2 g	50 mg/kg
	Azithromycin or Clarithromycin OR	100 mg	15 mg/kg
	Doxycycline	100 mg	<45 kg, 2.2 mg/kg >45 kg, 100mg
Allergic to Pencillin or Ampicillin and unable to take oral medication	Cefazolin or Ceftriaxone ⁺	1 g IM or IV	50 mg/kg IM or IV

Clindamycin is no longer recommended for antibiotic prophylaxis for a delta procedure.

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IM indicates intramuscular and IV indicates intravenous.

*Or other first- or second-generation oral Cephalosporin in equivalent adult or pediatric dosing.

†Cephalosporins should not be used in an individual with a history of anaphylaxis, angioedema, or urticarial with a history of anaphylaxis, angiodema, or urticarial with penicillin or amppcillin.

References

1. Prophylaxis against infective endocarditis: antimicrobial prophylaxis against infective endocarditis in adults and children undergoing interventional procedures. London: National Institute for Health and Care Excellence (NICE); 2016 Jul. (NICE Clinical Guidelines, No. 64.)
2. Wilson WR;Gewitz M;Lockhart PB;Bolger AF;DeSimone DC;Kazi DS;Couper DJ;Beaton A;Kilmartin C;Miro JM;Sable C;Jackson MA;Baddour LM; ; (n.d.). Prevention of viridans group streptococcal infective endocarditis: A scientific statement from the American Heart Association. Circulation.
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