

## Antibiotic Prophylaxis before Procedures

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One of our patients asked, "Should joint surgery patients take antibiotics before dental visits indefinitely?" Here's the long answer:



Prophylactic or preventative antibiotics are required for some patients prior to procedures. Patient who already have joint replacements DO NOT need antibiotic prophylaxis, but all active infections should be treated promptly. There is no evidence to suggest that patients with orthopedic hardware undergoing procedures should receive antibiotics. Specifically, researchers have looked at the risks of dental, urologic, and gastrointestinal procedures. While orthopedic physicians occasionally make this recommendation, it is not supported by the American Academy of Orthopedic Surgeons.

When are prophylactic or preventative antibiotics required prior to procedures?

Everybody

- At the start of major surgery to prevent bacteria that normally live on the skin from infecting the wound or deeper tissues

Patients with:

- Prosthetic heart valves
- Prosthetic material in their heart from valve repair
- Prior history of infective endocarditis
- Unrepaired cyanotic congenital heart disease
- Repaired congenital heart disease with residual shunts or valvular regurgitation
- Repaired congenital heart defects with catheter-based intervention involving an occlusion device or stent during the first six months after the procedure
- Valve regurgitation due to a structurally abnormal valve in a transplanted heart

Going to for:

- Dental procedures that involve manipulation of either gingival tissue or the periapical region of teeth or perforation of the oral mucosa; this includes routine dental cleaning.
- Procedures of the respiratory tract that involve incision or biopsy of the respiratory mucosa
- Gastrointestinal (GI) or genitourinary (GU) procedures in patients with ongoing GI or GU tract infection
- Procedures on infected skin, skin structure, or musculoskeletal tissue
- Surgery to place prosthetic heart valves or prosthetic intravascular or intracardiac materials

If you are having surgery, the surgeon will choose the antibiotics you require prior to surgery. Dave and I will make recommendation in your pre-operative evaluation, if you require something other the standard antibiotic (cefazolin).

Once Dave and I determine that you need antibiotics, the choice of antibiotics is determined by your allergy history and the type of procedure that you will be having. For dental or respiratory tract procedures, the preferred regimen is oral amoxicillin 2 grams, unless you have a penicillin allergy. For those with a penicillin allergy, cephalexin, clindamycin or azithromycin will work. For respiratory tract procedures involving incision or biopsy, the regimen should include an anti-staphylococcal penicillin, like dicloxacillin, or cephalosporin, like cefazolin or ceftriaxone. No antimicrobial prophylaxis is needed for gastrointestinal or genitourinary procedures. However, in patients with active gastrointestinal or genitourinary tract infection, antimicrobial therapy to prevent associated wound infection or sepsis should include an agent active against enterococci such as amoxicillin or ampicillin. Patients with skin or musculoskeletal infections undergoing procedures should receive antimicrobial therapy with activity against staphylococci and beta-hemolytic streptococci, like dicloxacillin.