

HEALTH SERVICES POLICY & PROCEDURE MANUAL

North Carolina Department Of Correction
Division Of Prisons

SECTION: Clinical Practice Guidelines

POLICY # CP-38

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SUBJECT: Antibiotic Prophylaxis
for Invasive Dental Procedures

EFFECTIVE DATE: September 2012
SUPERCEDES DATE: None

PURPOSE

To ensure that inmates with specific heart conditions or a history of joint replacement receive appropriate antibiotic prophylaxis prior to invasive dental procedures.

BACKGROUND

The American Heart Association has issued guidelines for the prevention of Infective Endocarditis and the American Academy of Orthopaedic Surgeons has an information statement entitled “Antibiotic Prophylaxis for Bacteremia in Patients with Joint Replacements.” It is recommended that patients with specific heart conditions and patients who are at risk of hematogenous total joint infection receive antibiotic prophylaxis prior to invasive dental procedures. Patients with pins, plates, screws or other orthopaedic hardware outside a synovial joint are not at increased risk of hematogenous seeding by microorganisms.

POLICY

All DPS dentists should follow these guidelines in determining the need for antibiotic prophylaxis and selection of antibiotic and dosing, if indicated. A physician should be consulted if there is uncertainty regarding the need for antibiotic coverage or if clarification of the patient’s condition, diagnosis, or health history is required. In the case of emergent treatment needs prior to determination, the patient should be appropriately pre-medicated until the need is known.

PROCEDURES

1. Antibiotic prophylaxis is recommended for patients with the following heart conditions because they have the highest risk of adverse outcome from Infective Endocarditis:
 - Prosthetic cardiac valve or prosthetic material used for cardiac valve repair
 - Previous Infective Endocarditis
 - Congenital Heart Disease (CHD) subgroups as follows:
 - (a) Unrepaired cyanotic CHD, including palliative shunts and conduits
 - (b) Completely repaired congenital heart defect with prosthetic material or device whether placed by surgery or by catheter intervention during the first six months following the procedure
 - (c) Repaired CHD with residual defects at the site or adjacent to the site of a prosthetic patch or prosthetic device (which inhibit endothelialization)
 - Cardiac transplantation recipients who develop cardiac valvulopathy

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2. Antibiotic prophylaxis is recommended for patients with a history of prosthetic joint replacement. The following risk factors increase the risk of hematogenous total joint infection:

- Immunocompromised or immunosuppressed status
- Inflammatory arthropathies (e.g. rheumatoid arthritis, systemic lupus erythematosus)
- Drug-induced immunosuppression
- Radiation-induced immunosuppression
- Patients with co-morbidities (e.g. diabetes, obesity, HIV, smoking)
- Previous prosthetic joint infections
- Malnourishment
- Hemophilia
- HIV infection
- Insulin-dependent (Type 1) diabetes
- Malignancy
- Megaprotheses

3. Antibiotic Prophylaxis Medications and Dosing Recommendations:

Regimen: Single Dose 60 minutes before procedure

<u>Situation</u>	<u>Agent</u>	<u>Adults</u>
Oral	Amoxicillin	2 g
Unable to take oral medication	Ampicillin, Cefazolin or Ceftriaxone	1 g IM or IV
Allergic to penicillin or ampicillin – oral	Cephalexin*+	2g
	Clindamycin	600 mg
	Azithromycin or Clarithromycin	500 mg
Allergic to penicillin or ampicillin and unable to take oral medication	Cefazolin or Ceftriaxone	1 g IM or IV
	Clindamycin	600 mg IM or IV

IM = intramuscular; IV = intravenous

*Or other first or second generation oral cephalosporin in equivalent adult dosage.

+Cephalosporins should not be used if the patient has a history of allergy to penicillin or ampicillin.

4. Invasive dental procedures for which prophylaxis IS RECOMMENDED include all procedures likely to cause bacteremia due to perforation of oral mucosa or manipulation of gingival/periapical tissue. This includes prophylaxis, gross debridement, Endodontic instrumentation or surgery, extractions and other oral surgery procedures.
5. Antibiotic prophylaxis IS NOT RECOMMENDED for noninvasive procedures such as routine anesthetic injections through non-infected tissue, taking radiographs, denture fabrication/adjustments and routine restorative procedures.

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6. Once the need for antibiotic prophylaxis has been established, it should be recorded on the DC-388, DC-439 (Problem List) and DC-389.
7. Please be aware that these are recommendations and guidelines only. They are not intended to be an established standard of care or a substitution for sound clinical judgment.

References: American Academy of Orthopaedic Surgeons. Information Statement 1033: Antibiotic prophylaxis for Bacteremia in patients with Joint Replacements. Feb. 2009; update June 2010: 1-4

American Heart Association. Prevention of Infective (Bacterial) Endocarditis (Wallet Card). Copyright 2008.

Wilson W. Taubert KA, et al. Prevention of Infective Endocarditis: Guidelines for the American Heart Association, Circulation AHA. Oct. 9, 2007: 1736-1754.



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