

**POLICY and PROCEDURE:**

**ANTIBIOTIC POLICY FOR ALL TRAUMA ADMISSIONS**

**SECTION: CLINICAL**

**AFFECTED PARTIES**

Trauma Surgeon  
Trauma Residents  
Trauma Anesthesiologists  
Trauma Resuscitation Nurses  
Trauma Nurse Coordinators  
Pharmacy

**PURPOSE**

Appropriate usage of antibiotics are necessary to prevent primary infections at the site of traumatic injuries, and nosocomial infections secondary to traumatic injuries. Standardization assists improvement of patient care.

**APPROVAL BY TRAUMA MULTIDISCIPLINARY COMMITTEE**

|                               |                                 |                                |
|-------------------------------|---------------------------------|--------------------------------|
| <b>FIRST DRAFT</b>            | <b>AUTHOR</b>                   | <b>Anthony P. Borzotta, MD</b> |
|                               | <b>DATE OF COMMITTEE REVIEW</b> | <b>1/11/02</b>                 |
| <b>FINAL POLICY</b>           | <b>DATE OF COMMITTEE REVIEW</b> | <b>3/20/02</b>                 |
| <b>REVISION APPROVAL DATE</b> |                                 | _____                          |

**BETHESDA NORTH HOSPITAL TRAUMA SERVICE**

**POLICY:****ANTIBIOTIC POLICY FOR ALL TRAUMA ADMISSIONS****I. Scene Call Patients (Critical and Urgent Team activations)**

|    | <i>Status on Admission<br/>( Resuscitation)</i>                               | <i>Adult patients</i>  | <i>Pediatric patients</i>  |
|----|---|--|--|
| A. | Uncontaminated wounds<br>Chest tubes  | Ancef/Kefzol (Cefazolin)<br>2 Gm IV-one dose   | Ancef/Kefzol(Cefazolin)<br>50 mg/kg IV-one dose  |
| B. | Shock<br>Invasive catheters/tubes<br>Operations<br>(Peripheral IV's excluded) | Ancef/Kefzol (Cefazolin)<br>2 Gm IV-one dose only  | Ancef/Kefzol (Cefazolin)<br>50 mg/kg IV-one dose<br>only   |
| C. | Contaminated Wounds   |  |  |
| 1. | GI trauma<br>Perforated bowel   | Ancef/Kefzol (Cefazolin)<br>2 Gm IV q8h x1 dose<br>Flagyl (Metronidazole)<br>500 mg IV q8h x1 dose<br><b>OR</b><br>Cefotetan 2 Gm IV q12h x2                         | Ancef/Kefzol(Cefazolin)<br>50 mg/kg IV q8h x1dose<br>Flagyl (metronidazole)<br>10 mg/kg IV q8h x1 dose<br>**Consider Cleocin                         |
| 2. | Orthopedic Trauma<br>Open fractures   | Ancef/Kefzol (Cefazolin)<br>2 GmIV x1 then 1Gm IV<br>q8hours x2days<br>Gentamicin 2.5mg/kg IV<br>q12h x 2 days*<br>*For grossly contaminated<br>wounds only (Gr III) | Ancef/Kefzol(Cefazolin)<br>50 mg/kg IV q8h x 2 days<br>Gentamicin 2.5mg/kg IV<br>q12h x 2 days*<br>*For grossly contaminated<br>wounds only (Gr III) |
| 3. | Maxillofacial injuries  | Claforan (Cefotaxime)<br>2 Gm IV q8h or<br>Penicillin 1million units<br>q4h  | Claforan (Cefotaxime)<br>50 mg/kg IV q8h<br>Penicillin 25,000 units/kg<br>q4h  |
| D. | Massive Transfusion   | Redose after every 5 units<br>of PRBC  | Redose after PRBC<br>replacement of 75%<br>of patient volume   |
| E. | Prolonged Operation Time  | **Consider redosing in 4<br>hours for dilutional time  | **Consider redosing in 4<br>hours for dilutional time  |

In Case of penicillin allergies known or suspected, the preferred alternative regimen is  
Ciprofloxacin 400 mg IV q 12 hours AND metronidazole 500 mg IV q 8 hours  
OR Clindamycin 600 mg q 8 hours AND gentamicin 1.5 mg/kg IV q 12 hours

**II. Interhospital Transfer of Trauma patients to Bethesda North Hospital**

A. Review previously taken culture results

- B. Review previously administered antibiotics
- C. Review Tetanus prophylaxis
- D. Culture all open or draining wounds optional
- E. Choose antibiotic most specific for patient injuries

### III. Trauma ICU Patients

- A. Discontinue all prophylactic antibiotics started in the resuscitation area after the first 24 hours unless the patient has one or more of the following:
  - 1. Active sepsis/infection.
  - 2. Unstable hemodynamic parameters requiring continuous blood or blood product transfusions or vasopressors
  - 3. Recent implantation of prosthetic material in contaminated wounds
- B. Compound fractures should have antibiotics continued for 48 hours
- C. The choice of antibiotics after the prophylactic period
  - 1. Definitive antibiotic selection must be based on culture results
  - 2. The most reliable culture results depend on accurate, appropriate culturing techniques
  - 3. Empiric antibiotic selection should be based on historical, local microbial patterns and antibiotic sensitivity panels.

### IV. Antibiotic Order Writing

All antibiotics ordered by this protocol must include:

- A. Name of drug
- B. Dose of drug
- C. Route of drug
- D. Interval of drug therapy
- E. Stop date

The policies, procedures and protocols contained herein represent guidelines only. Clinical judgment must be exercised for each individual case.

**Copyright :** January 2002 Bethesda North Hospital Trauma Services

Requests for reprints should be submitted to Director of Trauma Services.

Originator: Dr. Anthony Borzotta