

**Practice Management Guideline  
Open Extremity Fractures**

**Open Extremity Fractures**

Urgent administration of antibiotics within 30 minutes of arrival or 3 hrs of injury

Timing & Location of I&D

**Type I/II**  
Ancef\* 100mg/kg/day  
Duration: 24 hrs

**Type III:**  
Zosyn or Ancef + aminoglycoside  
Duration: 72 hrs following injury OR 24 hrs after soft tissue coverage has been achieved

Completed in OR within 24 hrs if antibiotics were started upon ED presentation unless NV compromise or surgeon discretion for emergent treatment (compartment syndrome, level of contamination, etc.)

\*Use clindamycin in place of cephalosporin or penicillin if allergic

\*\*For known MRSA Colonization in all fracture types, utilize vancomycin 15/mg/kg IV Once

**Type I:**  
Open fracture with skin wound <1cm in length and clean

**Type II:**  
Open fracture with skin wound >1cm in length without extensive tissue damage, flaps, or avulsions

**Type III:**  
Open segmental fracture with >10cm wound with extensive soft tissue injury or traumatic amputation

**Additional testing:**

- Plain film imaging or advanced imaging will be obtained once patient is stabilized and appropriate
- Suspicions of open joint involvement should be discussed with orthopedics and if appropriate, joint challenge performed by orthopedic team

**Soft Tissue Management/Coverage:**

- If joint challenge is performed by orthopedics, the orthopedic team will be responsible for closure of the laceration. If no joint challenge indicated, trauma/ED will be responsible for appropriate washout and closure of the laceration.
- Soft tissue coverage of open fractures and joints should occur within 7 days. Plastic surgery and reconstructive surgery will be consulted for coverage requiring more extensive transfer of tissue within this time frame.

