

**Maine EMS Trauma Advisory Committee  
Consensus Statement and Clinical Advice for Trauma Management**

**TRANSFER OF PATIENTS WITH MAJOR EXTREMITY  
INJURIES**

**PART I: Key Concepts**

- A. The value of local orthopedic consultation cannot be overstated.
- B. In the absence of local consultants, care of major extremity injury must focus on basic first aid and expedient transfer.
- C. For open bone and joint injuries, give antibiotics.

**PLEASE REMEMBER:**

Transfers or consultations related to major (life- or limb-threatening) injuries – *regardless of age, comorbidities, or intended destination* – should be directed to the attending trauma surgeon at your regional trauma center. The trauma surgeon will recommend or facilitate subsequent actions or consultations as needed.

## **PART II: Annotations and Rationale**

### *A. The value of local orthopedic consultation cannot be overstated.*

As in all cases of major injury, emphasis must be placed on stabilization of the ABC's and rapid conveyance to a trauma center. Extremity trauma is rarely life-threatening; however, certain orthopedic injuries (e.g., proximal joint dislocations, compartment syndrome) are especially time-sensitive. Early assessment and intervention by an experienced clinician may have implications for outcome.

### *B. In the absence of local consultants, care of major extremity injury must focus on basic first aid and expedient transfer.*

Specific to bony injury, principles of first aid generally suffice for patients intended for transfer:

- Apply dry, sterile dressings to wounds.
- Assess, document and monitor distal circulation and sensorimotor functions.
- Reduction of fractures is recommended wherever possible.
- Reduction of dislocations is an urgent priority, but should only be attempted by, or under the direction of, an experienced clinician.
- Immobilize the affected part, to include joints above and below the suspected injuries.

In many circumstances, imaging of extremity injuries does not affect local treatment, and thus may be deferred.

### *C. For open bone and joint injuries, give antibiotics.*

Early administration of antibiotics is the best known means of preventing infectious complications in open fractures, superior even to early operative debridement and cleaning.

In the majority of cases, a first-generation cephalosporin (e.g., cefazolin/Ancef) is the drug of choice. For grossly contaminated injuries, coverage may be amplified with penicillin (or clindamycin if allergic).

When in doubt, consult the local specialist or receiving trauma surgeon.

## **Part III: References**

An HS. Orthopedic surgeon in the ER: the importance of remembering the basics. *Am J Orthop*. 2008 Mar; 37(3):E46

Holtom PD. Antibiotic prophylaxis: current recommendations. *JAAOS* 2006;14(10):S98-100.

Reuss BL, Cole JD. Effect of delayed treatment on open tibial shaft fractures. *Am J Orthop*. 2007 Apr;36(4):215-20.