

Musculoskeletal Injuries

Adult & Pediatric

EMT STANDING ORDERS - ADULT & PEDIATRIC

E

- Routine Patient Care.
- Manually stabilize the injury.
- Control bleeding with pressure and/or tourniquet, see [Tourniquet Procedure 6.5](#). Consider hemostatic dressing for severe hemorrhage.
- Remove obvious debris, irrigate open wounds with saline solution, and cover with moist sterile dressing.
- Assess CSMs distal to injury before and frequently after immobilization.
 - Splint extremity as required.
 - Traction splinting is preferred technique for isolated adult and pediatric mid-shaft femur fractures.
 - For pain relief apply ice and elevate.
- In a patient with a high risk mechanism of injury, [Spinal Injury Protocol 4.5](#).
- Stabilize suspected pelvic fractures with commercial device (preferred) or bed sheet.

ADVANCED EMT AND PARAMEDIC STANDING ORDERS - ADULT

A/P

- Assess pain level and consider pain control measures, see [Pain Management Protocol 2.17](#).
- Administer 0.9% NaCl in 250mL boluses to maintain systolic blood pressure greater than 90 mmHg. Total volume not to exceed 2000mL without medical control consultation.

ADVANCED EMT AND PARAMEDIC STANDING ORDERS - PEDIATRIC

- Administer 0.9% NaCl in 20 mL/kg boluses to improve clinical condition (capillary refill rate, extremity pulses and warmth, mentation, and blood pressure.). Total volume not to exceed 40mL/kg without medical control consultation.

EMT/ADVANCED EMT/PARAMEDIC STANDING ORDERS- ADULT & PEDIATRIC

X

- For impaled objects of the extremities, consider removal of the object unless removal will cause significant damage and/or uncontrolled hemorrhage.
- For dislocated patella, shoulder, or digits from indirect force:
 - Attempt to reduce if evacuation will be prolonged, dangerous, or painful. (Nationally recognized training required to perform these procedures)
- For open/compound fractures consider:
 - Ceftriaxone 1 grams IV/IM, if available. (Advanced EMT/Paramedic only)
- For musculoskeletal pain consider:
 - Adult: Ibuprofen 400 – 600mg or acetaminophen 325 – 650mg by mouth; repeat every 6 hours as needed, not to exceed 3000 mg in 24 hours.
 - Pediatric: Ibuprofen or acetaminophen per [Pediatric Color Coded Appendix 3](#).



For dislocations due to direct impact, such as falls, the injury is more likely to be complicated by a fracture. Reducing these involves more risk. Splinting in place and urgent evacuation is ideal.

PEARLS:

- Use ample padding when splinting possible fractures, dislocations, sprains, and strains. Elevate injured extremities, if possible. Consider the application of a cold pack for 30 minutes.
- Musculoskeletal injuries can occur from blunt and penetrating trauma. Fractures of the humerus, pelvis and femur, as well as fractures or dislocations involving circulatory or neurological deficits, take priority over other musculoskeletal injuries.
- Hip dislocations, pelvic, knee, and elbow fracture / dislocations have a high incidence of vascular compromise.