GENERAL TRAUMA

ADULT	PEDIATRIC (≤34 KG)
BLS	

• Universal Protocol #601
• Pulse Oximetry
  ○ O_2 administration per Airway Management Protocol #602
• Assess for injuries meeting Trauma Triage Guidelines Policy #153
• **Possible Spinal Injury** - Spinal Motion Restriction (SMR) Procedure #702
• **Uncontrolled Hemorrhage** - Hemorrhage Control/Tourniquet/Hemostatic Dressings Procedure #706
 	
Unstable
• Communicate if SBP ≤90mmHg at ANY time
• **Pelvic injury** – Pelvic Binder Procedure #713
  ○ **Place pelvic binder** if (all of the following):
  ▪ High-risk mechanism
  ▪ Pelvic, low back, or groin pain
  ▪ SBP ≤90 mmHg
	Same as Adult
	• Communicate ANY age specific hypotension see Universal Protocol #601 Attachment A

ALS Standing Orders	

Stable
• Monitor patient
 	
Unstable
• **Hypotension** – SBP of ≤90mmHg or if unable to palpate peripheral pulses
  ○ **Normal Saline** up to 500 mL IV
  ▪ May repeat X 1 for ongoing hypotension
  ○ **TXA** if indicated and ≥15 y/o - TXA Administration Procedure #714
  ▪ **TXA** 1 gm in 100 mL IV infusion over 10 min, no repeat
• **Tension pneumothorax** - Needle Thoracostomy Procedure #705
	Stable
	• Monitor patient
	
	Unstable
	• **Hypotension** – as identified for age group
	  ○ **Normal Saline** IV/IO 20 mL/kg not to exceed 500 mL
	  ○ May repeat x1 if no change in SBP
	  ○ If <15 y/o no TXA administration
	• **Tension pneumothorax** - Needle Thoracostomy Procedure #705

Base Hospital Orders Only	

• Additional **Normal Saline**
 	
Neurogenic Shock Refractory to Fluids
• **Push-Dose Epinephrine 10 mcg/mL**
1 mL IV/IO every 1-3 min
  ○ repeat as needed to maintain SBP >90mmHg
  ○ See notes for mixing instructions
	• Additional **Normal Saline**
	
	Neurogenic Shock Refractory to Fluids
	• **Push-Dose Epinephrine 10 mcg/mL**
	1 mL IV/IO (0.1 mL/kg if <10 kg) every 1-3 min
	  ○ repeat as needed to maintain age appropriate SBP

OR ○ **Epinephrine Drip** start at 10 mcg/min IV/IO infusion ○ Consider for extended transport ○ See formulary for mixing instructions • As needed	○ See notes for mixing instructions ***OR*** ○ **Epinephrine Drip** start at 1 mcg/kg, up to max of 10 mcg/min IV/IO infusion ○ Consider for extended transport ○ See formulary for mixing instructions • As needed

Notes

- **Mixing Push-Dose Epinephrine 10 mcg/mL (1:100,000)**: Mix 9 mL of **Normal Saline** with 1 mL of **Epinephrine 1:10,000**, mix well
- Maintain body temperature/warm as indicated
- Destination and documentation per Trauma Triage and Destination Policy #153
- Early transport with treatment en route for high risk or unstable patients
- A manual blood pressure is preferred for all unstable trauma patients
- BLS responders – when in doubt regarding pelvic injury – avoid unnecessary movement, consider preparation for placement of pelvic binder until ALS evaluation
- **Pain Control** – Pain Management Protocol #603
- Include Step Criteria with MIVT Base Hospital report – update 5 min out or with changes
- IV access large bore (>18G) with a saline lock to facilitate tubing changes at the Trauma Center
- Treatable considerations for critical trauma patients: Hypoxia, Hypovolemia, Tension Pneumothorax

GENERAL TRAUMA – ATTACHMENT A

ADULT | **PEDIATRIC (≤34 KG)**

BLS TRAUMA PROTOCOL ATTACHMENT

FACIAL TRAUMA

Head Injuries

- Hemorrhage – direct pressure and dressings or approved hemostatic dressings

Eye Injuries

- Trauma/foreign body
  - Cover both eyes with dressings – avoid direct pressure
  - Do not remove foreign body or impaled object – stabilize with bulky dressings
- Chemical Contamination – Acid or alkali
  - Flush continuously with Normal Saline for at least 15 min or until arrival at the hospital
  - Remove contact lenses if possible

Avulsed Teeth

- Place in saline gauze and transport with patient

IMPALED OBJECTS

- Immobilize the object to prevent further movement

TORSO INJURIES

Penetrating wound

- Use chest seal device or occlusive dressing

Flail Chest

- Support flail segment and monitor respirations

ABDOMINAL INJURIES

Evisceration

- Cover with moist saline dressing

PREGNANCY

- If > 20 weeks pregnant place in left lateral position for transport

EXTREMITY INJURIES

Fractures

- Splint with traction or other splinting devices after gentle realignment as indicated – see Notes
- **Neurovascular Compromise – attempt to place in anatomic position – checking for pulses and sensation pre/post alignment**
- Cover open wounds with sterile dressing

Dislocation

- Splint in position found

Amputation

- Wrap amputated part in dry dressing and place in waterproof container/bag. Place on ice/cooling pack (do not freeze) and transport with patient.
- Bandage wound and moisten with sterile saline

Mangled extremity

- Check for distal pulses and sensation before and after splinting
- Stabilize/splint after gentle realignment
- Cover with clean/sterile dressing
- See Hemorrhage Control Policy #706 for persistent or uncontrolled venous or arterial bleeding

ALS Procedures	
See General Trauma Protocol #660	
Base Hospital Orders Only	
• As needed	• As needed
Notes	
• With multiple chest wounds consider chest seal devices or occlusive dressings • Padded box splints for simple fractures preferred (facilitates imaging) • Confirm and mark distal pulses before and after splinting, traction and patient movement • Traction splints for isolated mid-shaft femur fractures without pelvic pain (closed or open) • Remove rings or other items that may cause constriction	