Enter from the Universal Patient Treatment Protocol
For specific Emergency Stabilization or Patient Management of Traumatic Injuries

Pertinent Findings

<table>
<thead>
<tr>
<th>Environment</th>
<th>History</th>
<th>Physical</th>
<th>Differential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal / patient safety</td>
<td>Mechanism of injury</td>
<td>Deformity</td>
<td>Head injury</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>Time of event</td>
<td>Contusion</td>
<td>Spinal cord / neurologic injury</td>
</tr>
<tr>
<td>Nature of event / numbers</td>
<td>Speed and details</td>
<td>Abrasion, avulsion, amputation</td>
<td>Spinal fracture</td>
</tr>
<tr>
<td>Mechanism of injury</td>
<td>Damage to vehicle/structure</td>
<td>Puncture, penetration,</td>
<td>Airway obstruction and hypoxia</td>
</tr>
<tr>
<td>Additional resources</td>
<td>Location in vehicle/structure</td>
<td>paradoxical movement</td>
<td>Tension pneumothorax</td>
</tr>
<tr>
<td>Need for special ops</td>
<td>Ejection</td>
<td>Burn</td>
<td>Pneumothorax / hemotorax</td>
</tr>
<tr>
<td></td>
<td>Seat belt / air bag / child seat</td>
<td>Laceration</td>
<td>Flail chest</td>
</tr>
<tr>
<td></td>
<td>Helmet / protective equipment</td>
<td>Swelling</td>
<td>Bleeding and/or hypovolemia</td>
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<tr>
<td></td>
<td>Others injured or dead</td>
<td>Tenderness</td>
<td>Pericardial tamponade</td>
</tr>
<tr>
<td></td>
<td>SAMPLE history</td>
<td>Instability</td>
<td>Pelvic or femur fracture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Crepitus</td>
<td>Dislocation</td>
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</tbody>
</table>

Emergency Stabilization or Patient Management

Do not delay transport with nonessential treatment of the nonentrapped, transport ready, critical trauma patient Attempt to limit scene time to 10 minutes or less when Trauma Triage Criteria are met

Suspected traumatic brain injury
Increase ventilatory rate for unequal / fixed and dilated pupils and extensor posturing / no motor response:
- Adult: 20 breaths per minute
- Child: 25 breaths per minute
- Infant: 30 breaths per minute

Impaled object
Support and stabilize object in place
Remove only if interfering with the airway or with chest compressions

Flail chest
Assist ventilations as clinically indicated
Do not attempt to stabilize the flail segment by sandbagging, splinting, and/or swathing

Eye injury
Irrigate with saline as clinically indicated
Apply protective rigid shields bilaterally
Position patient as clinically indicated to meet physiologic requirements
**Emergency Stabilization or Patient Management (continued)**

<table>
<thead>
<tr>
<th><strong>Avulsed tooth</strong></th>
<th><strong>Wound care</strong></th>
<th><strong>Fracture or dislocation</strong></th>
</tr>
</thead>
</table>
| Handle tooth by the crown  
  *Do not touch any part of the tooth that normally exists below the gum line*  
In the alert and cooperative patient, attempt to replace tooth in its socket  
If unable, wrap in milk or normal saline soaked gauze sponge and transport | Dress and bandage abrasions, lacerations, avulsions, punctures and/or penetrations as clinically indicated | **Assess distal neurovascular functions using PMS (pulse, motor, sensation) before and after manual stabilization** |
| Dress open pneumothorax with occlusive dressing  
  Briefly remove to release pressure when clinically indicated by signs of tension pneumothorax | Dress evisceration with saline soaked dressing  
  *Do not intentionally replace evisceration* | Manually stabilize and/or splint fractures and dislocations as found  
  *Do not intentionally allow exposed bone to retract and do not intentionally reduce dislocation* |
| Rinse exposed bone with saline and dress with saline soaked gauze sponge or non-adherent dressing  
  *Do not intentionally allow exposed bone to retract* | Dress injured genitalia with saline soaked dressing, applying direct pressure to control bleeding  
  Rinse amputation in saline, wrap in saline soaked dressing, bag, indirectly place on ice, and transport | **Assess distal neurovascular functions using PMS (pulse, motor, sensation) before and after manipulation/splinting** |
| | | **Return grossly angulated extremity fractures to the anatomic position as clinically indicated**  
  *Use gentle traction* |
| | | **Splint fractures as clinically indicated** |
| | | **Stabilize and/or splint mid-shaft femur fractures using a traction splint as clinically indicated** |
| | | **Splint dislocations as found** |
| | | **Contact a base hospital (BH) for any fracture or dislocation with neuro and/or vascular compromise** |
| | | **Amputation** |
| | | Rinse amputated body part(s) with normal saline  
Wrap with saline soaked dressing  
Place in a bag  
Keep part(s) cool but don’t place directly on ice | **Pain management** |
| | | **Apply disposable cold pack(s) as clinically indicated for pain associated with traumatic injury** |
### Emergency Stabilization or Patient Management (continued)

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Level</th>
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</table>
| **Fentanyl** slow IV/IO push or IM/IN (may substitute Morphine Sulfate slow IV/IO push or IM)  
For pain associated with isolated traumatic injury to an extremity or the appendicular skeleton  
While systolic BP remains greater than 90 mmHg  
See the REMSA Calculation Chart for concentration, and patient specific dosage and volume  
May repeat once  
Further repetition requires a base hospital order (BHO)  
Administration of more than one opioid requires a base hospital physician order (BHPO) | PM    |
| **Crush Injuries**  
0.9% Normal Saline IV/IO bolus  
For suspected hyperkalemia associated with crush injuries  
See the REMSA Calculation Chart for concentration, and patient specific dosage and volume  
May repeat as clinically indicated  
Use a volume control chamber IV set during pediatric administration | PM    |
| **Tranexamic Acid (TXA)**  
Traumatic injuries within 3 hours, must have either:  
Signs and symptoms of hemorrhagic shock with SBP < 90 mmHg  
Significant hemorrhage with heart rate >/= 120  
Administer IV/IVP with 50-100 ml NS over 10 minutes  
See the REMSA Calculation Chart for concentration, and patient specific dosage  
Repetition requires a base hospital order (BHO) | PM    |

### Return to Universal Patient Treatment Protocol

For continuing Scene Management, Emergency Stabilization, Patient Disposition, or Patient Management

### Base Hospital Orders

<table>
<thead>
<tr>
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</table>
| Initiate, repeat, or modify standing orders within scope of practice  
As ordered  
For traumatic injuries | EMT   |
| Albuterol 0.083% HHN or in-line with a ventilatory device; or MDI when equipped  
As ordered  
For suspected hyperkalemia associated with crush injuries | EMT   |
| Calcium Chloride 10%  
As ordered  
For suspected hyperkalemia associated with crush injuries | EMT   |
| Midazolam (may substitute Lorazepam or Diazepam)  
As ordered  
For anxiety associated with traumatic injury | EMT   |
| Morphine Sulfate (may substitute Fentanyl)  
As ordered  
For pain associated with traumatic injury other than isolated traumatic injury to an extremity | EMT   |
| Sodium Bicarbonate 8.4%  
As ordered  
For suspected hyperkalemia associated with crush injuries | EMT   |
| Assess, clarify, monitor, treat within scope of practice, and determine or change disposition and/or destination  
As ordered  
Mode of transport is an operational decision | EMT   |