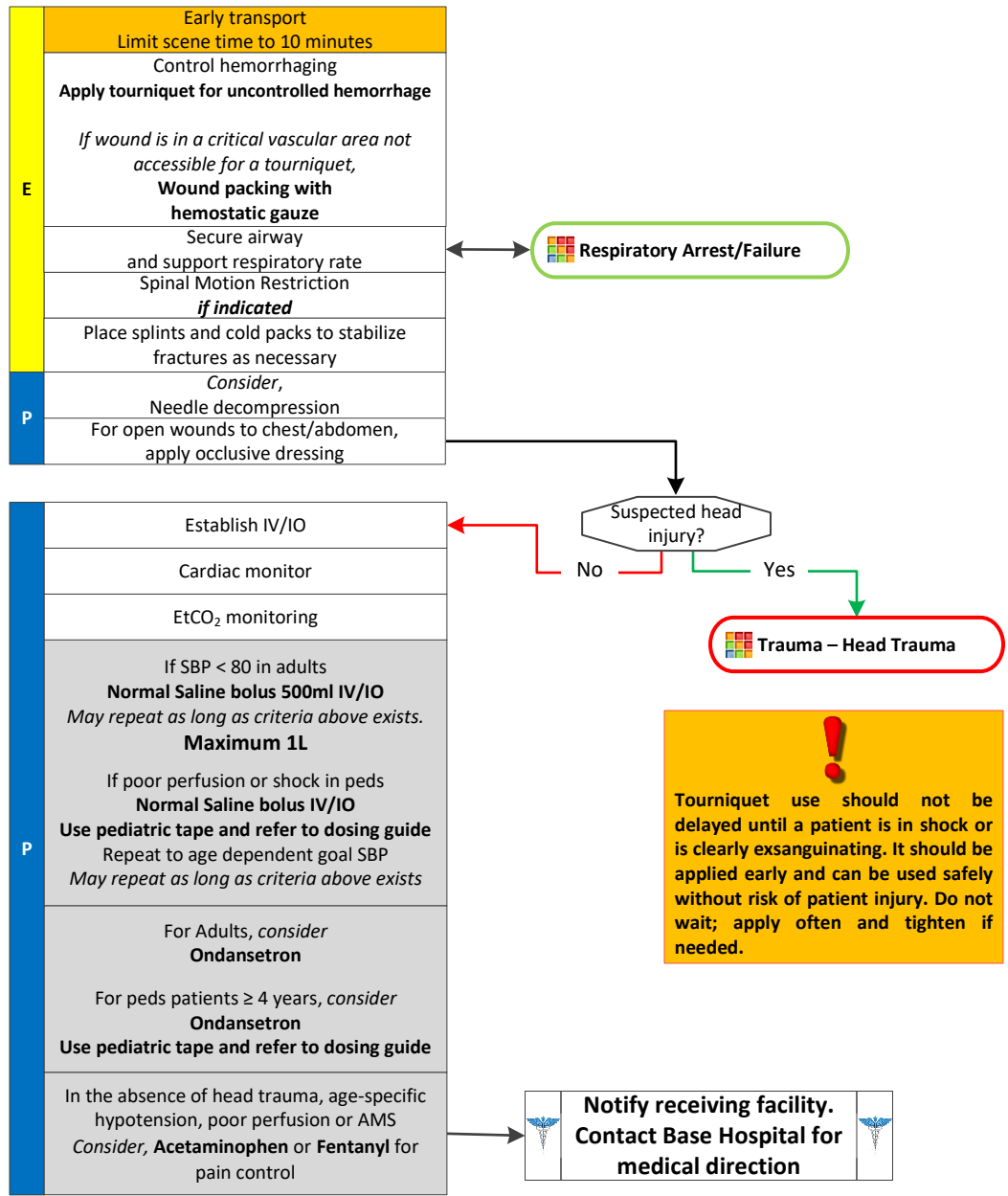


# Multi-System Trauma

For any traumatic injuries that involve multiple systems or isolated chest or abdominal injuries. For injuries involving the head, use Head Trauma protocol

<p><b>History</b></p> <ul style="list-style-type: none"> <li>• Time of injury</li> <li>• Mechanism (blunt vs. penetrating)</li> <li>• Damage to structure or vehicle</li> <li>• Location of patient in structure or vehicle</li> <li>• Restraints or protective equipment use</li> <li>• Past medical history</li> <li>• Medications</li> </ul>	<p><b>Signs and Symptoms</b></p> <ul style="list-style-type: none"> <li>• Evidence of trauma</li> <li>• Pain, swelling, deformity, lesions, or bleeding</li> <li>• AMS</li> <li>• Unconscious</li> <li>• Respiratory distress or failure</li> <li>• Hypotension or shock</li> <li>• Arrest</li> </ul>	<p><b>Differential</b></p> <ul style="list-style-type: none"> <li>• Chest:             <ul style="list-style-type: none"> <li>• Tension pneumothorax</li> <li>• Flail chest</li> <li>• Pericardial tamponade</li> <li>• Open chest wound</li> <li>• Hemothorax</li> </ul> </li> <li>• Intra-abdominal bleeding</li> <li>• Pelvis or femur fracture</li> <li>• Spinal injury</li> <li>• Head injury</li> <li>• Hypothermia</li> </ul>
---	---	--



Adult and Pediatric Trauma Treatment Protocols

# Multi-System Trauma

For any traumatic injuries that involve multiple systems or isolated chest or abdominal injuries. For injuries involving the head, use Head Trauma protocol

## Pearls

- Prevention and reversal of hypothermia associated with shock from severe traumatic injury is critical. Apply blankets early and consider activation of heater in the patient compartment of the ambulance.
- ALS procedures in the field do not significantly improve patient outcome in critical trauma patients.
- Basic airway management is preferred unless unable to effectively manage with BLS maneuvers. Utilize modified jaw thrust technique to open the airway.
- Intubation of head injury patients is best addressed at the hospital.
- Hypotension is age dependent and is not always a reliable sign. It should be interpreted in context with the patient's typical BP, if known. Shock may be present with a seemingly normal blood pressure initially.
  - Neonate: < 60mmHg or weak pulses
  - Infant: < 70mmHg or weak pulses
  - 1-10 years: < 70mmHg + (age in years x2)
  - Over 10 years: <80mmHg
  - Over 65 years: <110mmHg
- Stabilize flail segments with bulky dressing.
- Cover eviscerated bowel with dry sterile dressing.
- Stabilize impaled object(s) with bulky dressing. Do not remove.
- Avoid hyperventilation. Maintain an EtCO<sub>2</sub> of 35 or greater, which may be unreliable if the patient was subject to multisystem trauma or poor perfusion.
- An important item to monitor and document is a change in the level of consciousness by repeat examination.
- Do not overlook the possibility of associated domestic violence or abuse.

