D. Pre-Hospital Trauma Triage and Bypass Algorithm

Hospital bypass is defined as **transporting the patient to the nearest hospital that has the appropriate level of care for the patient’s suspected severity of injury**. The goal of the TSA-P regional trauma system plan is to deliver the right patient to the right facility in the right amount of time. To accomplish this, a “Bypass” of the nearest facility in favor of transport to a facility with the appropriate resources may be required. Bypass reduces the amount of time from injury to definitive care at a Level I Trauma Center by eliminating inter-hospital transfer issues.

The STRAC supports the Bypass of “nearest” hospital in favor of a Level I Trauma Center for those patients who are deemed to have severe injury or the potential for same. There are, however, special circumstances where Bypass may not be the optimal choice, such as areas where on-scene advanced life support is not available and the patient requires ALS procedures.

When a patient is without pulse or breath at the scene, and CPR is initiated, transport to the nearest acute care facility is again the most prudent action.

The STRAC recommends the use of the Prehospital Trauma Triage and Bypass Algorithm developed for TSA-P and based on materials published by the American College of Surgeons and approved by the Texas Department of Health. Emergency care providers at the scene should utilize the Triage Algorithm, in conjunction with on-line medical control to evaluate the level of care required by the injured person and to determine the patient’s initial transport destination. If on-line medical control is not available, then the agency’s Standard Operating Procedures (SOPs) and/or protocols should reflect decision-making based on the Triage Algorithm.

The purpose of the Hospital Bypass Guideline is to assist field personnel with selection of the appropriate destination (see next page).
Patient without a pulse and respiration at scene

- YES: Transport to closest appropriate acute care facility ***
- NO

Multi-system trauma with unstable vital signs or major anatomical injury?

- YES: Is appropriate pre-hospital unit w/ ALS/MICU available?
  - NO: Significant Mechanism of Injury?
  - YES: Transport to Level I Trauma Center
    Consider Air Transport
  - YES: Transport to closest appropriate acute care facility ***
- NO

*** Indicates that the STRAC highly encourages these transports to go to a designated trauma facility if at all possible.

See next page for definitions.
Definitions for Trauma Triage and Bypass Guidelines for TSA-P

*In February, 2003, the STRAC formally adopted the Red/Blue triage criteria to help EMS agencies identify Trauma Alert patients. (See next page)*

Multi-System Trauma with Unstable Vital Signs

Hemodynamic compromise, respiratory compromise and/or altered mentation that results in a Revised Trauma Score (RTS) ≤ 12

**Major Anatomical Injury**

1. Penetrating injury of the head, neck torso, or groin.
2. Combination of burns > 20% or involving the face, airway, hands, feet or genitalia.
3. Amputation above the wrist or ankle.
4. Paralysis.
5. Flail Chest.
6. Two or more obvious long bone fractures.
7. Open or suspected depressed skull fractures.
8. Unstable pelvis or suspected pelvic fracture.

**Significant Mechanism of Injury**

1. Ejection from vehicle.
2. Death of occupant in same vehicle.
3. Extrication time > than 20 minutes with injury.
4. Fall > than 20 feet.
5. Unrestrained passenger in vehicle rollover.
6. Pedestrian, motorcyclist or pedalcyclists thrown or run over.
**STRAC (Trauma Service Area - P)**

**TRAUMA ALERT CRITERIA**

(Adult patients > 16 years of age)

1 Red or 2 Blue Criteria = TRAUMA ALERT

**CHOOSE ALL THAT APPLY**

<table>
<thead>
<tr>
<th>RED CRITERIA</th>
<th>BLUE CRITERIA</th>
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<tbody>
<tr>
<td><strong>R1</strong> Glasgow Coma Score &lt; 12 due to trauma</td>
<td><strong>B1</strong> Reliable loss of consciousness &gt; 5 minutes</td>
</tr>
<tr>
<td><strong>R2</strong> ACTIVE airway assistance required (i.e. more than supplemental O2 w/o airway adjunct)</td>
<td><strong>B2</strong> Sustained respiratory rate &gt; 30</td>
</tr>
<tr>
<td><strong>R3</strong> No radial pulse AND heart rate &gt; 120</td>
<td><strong>B3</strong> Sustained heart rate &gt; 120 (with radial pulse) and BP &gt; 90</td>
</tr>
<tr>
<td><strong>R4</strong> Blood pressure &lt; 90 systolic</td>
<td><strong>B4</strong> Best Motor Response = 5</td>
</tr>
<tr>
<td><strong>R5</strong> Best Motor Response &lt; 4</td>
<td><strong>B5</strong> Degloving injury or flap avulsion &gt; 5 inches</td>
</tr>
<tr>
<td><strong>R6</strong> Acute paralysis or loss of sensation</td>
<td><strong>B6</strong> Single long bone fracture site due to motor vehicle collision</td>
</tr>
<tr>
<td><strong>R7</strong> Amputation proximal to wrist or ankle</td>
<td><strong>B7</strong> Single long bone fracture site due to fall from &gt; 10 feet</td>
</tr>
<tr>
<td><strong>R8</strong> 2nd and 3rd degree burns &gt; 15% TBSA</td>
<td><strong>B8</strong> Age &gt; 55</td>
</tr>
<tr>
<td><strong>R9</strong> Penetrating injury to head, neck, torso, excluding superficial wounds</td>
<td><strong>B9</strong> Ejection from vehicle (excludes open vehicles)</td>
</tr>
<tr>
<td><strong>R10</strong> Pulseless extremity</td>
<td><strong>B10</strong> Driver of vehicle with deformed steering wheel</td>
</tr>
<tr>
<td><strong>R11</strong> Two or more long bone fractures (on different extremities)</td>
<td><strong>B11</strong> Death in same vehicle</td>
</tr>
</tbody>
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