

APPROVED: SIGNATURE ON FILE IN EMS OFFICE  
Executive Director  
SIGNATURE ON FILE IN EMS OFFICE  
Medical Director

EFFECTIVE DATE 1/1/2007  
SUPERSEDES:  
REVISED: 9/2006  
REVIEW DATE: 12/2011  
PAGE: 1 of 6

---

---

### TRAUMA TRIAGE AND PATIENT DESTINATION

I. AUTHORITY: Division 2.5, California Health and Safety Code, Sections 1797.222, 1798.162, 1798.163  
California Code of Regulations Section 100255.

II. DEFINITIONS:

- A. "Pediatric" or "pediatric patient" means an individual age 14 and under.
- B. "Pediatric Trauma Center" means a designated facility identified by the Mountain-Valley EMS Agency (MVEMSA) to receive pediatric trauma patients directly from the field, including:
  - 1. Children's Hospital of Central California,
  - 2. UC Davis Medical Center,
  - 3. Children's Hospital, Oakland,
  - 4. Washoe Medical Center, Reno NV
- C. "Trauma" means physical injury or wound caused by significant external force, high-energy exchange, a rapid deceleration, or violence.
- D. "Trauma Activation" means a trauma center's in-house response to a trauma notification from ALS field personnel.
- E. "Triage criteria" means a guideline for assessing the severity of a person's potential injuries that is used to direct transportation of trauma patients to the appropriate Trauma Center.

III. PURPOSE

- A. To establish guidelines for identifying trauma patients and for determining their destination.
- B. To ensure that severely injured patients are transported expeditiously to an appropriate trauma facility
- C. To ensure appropriate utilization of resources within the Mountain-Valley EMS system.
- D. To prevent overloading trauma centers beyond their ability to provide appropriate treatment.

IV. POLICY

- A. A member of the pre-hospital care team SHALL notify the DCF **IMMEDIATELY** when it is determined that the patient meets trauma triage criteria to establish destination. This notification does not have to originate from the person actually caring for the patient, but may come from another member of the patient care team.
  - 1. DCF notification SHALL include:
    - a. age
    - b. mechanism
    - c. trauma triage criteria
    - d. ETA

2. The DCF will immediately notify the destination trauma center.
3. A full Base Hospital report to the destination trauma center from the pre-hospital providers must follow the DCF notification as soon as possible.

B. Triage Upgrade:

A patient's triage status may always be upgraded if the patient's condition deteriorates during assessment or transport. A patient's triage status shall not be downgraded by a Nurse or Paramedic.

C. Adult Trauma Triage Criteria

The following criteria shall be utilized to identify adult trauma patients:

1. Physiological and Anatomical signs/symptoms
  - a. GCS of 12 or less with mechanism attributable to trauma
  - b. Systolic BP 90 mmHg or less
  - c. Respiratory compromise/obstruction and/or intubation in a patient who is not transferred from another facility
  - d. Gunshot wound or impaled object(s) in head, neck, or torso
  - e. Stab wounds to the head, neck, or torso with any of the following:
    - i. Excessive blood loss visualized
    - ii. Evisceration
  - f. Unstable pelvis or pelvic pain with mechanism attributable to trauma
  - g. Open or depressed skull fractures
  - h. Traumatic paralysis
  - i. Amputation proximal to the wrist or ankle
  - j. Two or more proximal long bone fractures (femur or humerus)
2. Mechanism of Injury **with significant complaint or obvious signs of injury**
  - a. Unrestrained rollover
  - b. Vehicle vs. pedestrian (greater than 10 mph)
  - c. Ejection from motorized vehicle (greater than 20 mph)
  - d. Fall greater than 3x patient's height
  - e. All other stab wounds to head, neck, or torso
  - f. Injuries inflicted by large animals (horse, bull, etc.)
  - g. Paramedic judgment
3. Co-morbidity **with significant mechanism of injury**
  - a. Pregnancy greater than 20 weeks with complaint
  - b. Age greater than 55 yrs.
  - c. Morbid obesity
  - d. Patients with bleeding disorders or patients who are on any anticoagulants (ie: Plavix, Aspirin, Coumadin, etc.)
  - e. Patients with major medical disorders

D. Pediatric Trauma Triage Criteria

1. Pediatric patients with any of the following shall require triage to a Pediatric Trauma Center:

- A. Anatomical and Physiological signs/symptoms
  1. GCS of 12 or less with mechanism attributable to trauma
  2. Systolic BP 80 mmHg or less if patient is 6-14 years old, systolic BP 70 mmHg or less if under 6 years old
  3. Advanced airway or continuous support of airway is being utilized
  4. Penetrating trauma to head, neck, chest, or torso
  5. Penetrating trauma proximal to elbow or knee with vascular compromise as indicated by the following:

- i. Values outside normal physiologic parameters for age with hypotension or tachycardia
  - ii. Decreased distal pulses of affected extremity
  - iii. Excessive blood loss visualized
  - iv. Decreased level of consciousness
6. Open or depressed skull fractures
  7. Flail chest
  8. New onset of traumatic paralysis
  9. Unstable pelvis or pelvic pain with mechanism attributable to trauma
  10. Amputation proximal to wrist or ankle
  11. Two or more proximal long bone fractures (femur and humerus)

2. Mechanism of Injury **with significant complaint**

- a. Trauma with burns 15% or LESS Total Body Surface Area
- b. Falls greater than 2x patient's height
- c. Vehicle vs. pedestrian accident
- d. Trauma with pregnancy greater than 20 weeks
- e. Patient ejection from a motorized vehicle
- f. Possible victim of child abuse
- g. Paramedic judgment

E. Burn Triage Criteria

A patient (adult or pediatric) whose primary injuries are burns may be transported directly to a Burn Center from the field. -These injuries include:

1. Burns (2nd or 3rd degree) involving greater than 15% TBSA without airway compromise
2. Partial/full thickness burns of face, perineum or circumferential to hands or feet
3. Significant electrical injuries
4. Electrical injuries resulting in a loss of distal pulses

All burns with airway compromise, wheezing, stridor, carbonaceous sputum, nasal singeing or significant facial edema must have an evaluation for intubation either by air ambulance personnel, or by the emergency physician at the closest appropriate receiving facility prior to transport to the Burn Center if the ground ambulance is unable to intubate the patient.

F. Destination Decisions:

1. All injured patients meeting trauma triage criteria shall be transported by the quickest, most appropriate means, ground or air.
  - a. If environmental conditions do not allow air transport, a ground ambulance shall transport to the closest Level I or Level II Trauma Center, unless the patient has a life threatening condition that overrides the need for expedient surgery. This includes, but is not limited to, conditions such as:
    - i. obstructed airways
    - ii. tension pneumothorax which has not been relieved or stabilized in the prehospital setting, and
    - iii. situations where the patient meets criteria as outlined in policy 570.20 "Determination of Death". Such patients should be transported to the closest appropriate receiving facility or pronounced in the field if they meet the criteria outlined in policy 570.20.
  - b. Pediatric patients meeting criteria to be transported to a Pediatric Trauma Center shall be transported by air ambulance if the environmental conditions allow.
2. If a Trauma Center is on Trauma Bypass, trauma patients will be transported to the next closest available Level I or Level II Trauma Center.

3. Patient Destination for Stanislaus County Trauma Centers  
The distribution of patients destined for a Stanislaus County Trauma Center shall be guided by the following:
  - a. **All** trauma patients requiring transport by air or ground ambulance to a Level II Trauma Center in Stanislaus County will follow an alternating rotation of Trauma Centers. The Stanislaus County DCF will be contacted, and will identify the Trauma Center destination. The DCF will contact the Trauma Center with the initial trauma notification. If a trauma patient requires a code three transport by ground ambulance the patient will be taken to the closest Level II Trauma Center in Stanislaus County (DCF contact must still occur)
  - b. Level II facilities, within the MVEMSA region, will be responsible for notification of the Stanislaus County DCF in the event all trauma resources are not immediately available. When trauma resources become immediately available, the Level II facility is responsible for updating the DCF.
  - c. Where response and transportation times permit, two patients requiring trauma activation should not be delivered to the same Trauma Center in the same ambulance (ground or air).
- 4.. Any disputes regarding distribution of patients should be documented on an Unusual Occurrence Report and faxed to MVEMSA within 72 hours for review.

H. Trauma Triage Cards

<b>TRAUMA TRIAGE ALGORITHM</b>
<p>A member of the pre-hospital crew <b>SHALL</b> notify the DCF <b>IMMEDIATELY</b> when it is identified that the patient meets trauma triage criteria. This notification does not have to originate from the person actually caring for the patient, but could be a notification from a second crewmember. A base hospital report should be given to the trauma center as soon as possible.</p> <p>“Trauma” is defined as a physical injury or wound caused by a significant external force, a high energy exchange, a rapid deceleration, or violence.</p>

Perform Primary Survey Assess Vital Signs & Level of Consciousness
<b>Physiological &amp; Anatomical</b>
<ol style="list-style-type: none"> <li>1. GCS 12 or less with mechanism attributable to trauma</li> <li>2. Systolic BP 90 mmHg or less</li> <li>3. Respiratory compromise/obstruction and/or intubation in a patient who is not transferred from another facility</li> <li>4. GSW or impaled objects to head, neck, or torso</li> <li>5. Stab wounds to the head, neck, or torso with the following                         <ol style="list-style-type: none"> <li>a. Excessive blood loss visualized</li> <li>b. Evisceration</li> </ol> </li> <li>6. Unstable pelvis or severe pelvic pain with mechanism attributable to trauma</li> <li>7. Open or depressed skull fractures</li> <li>8. Traumatic paralysis</li> <li>9. Amputation proximal to the wrist or ankle</li> <li>10. Two or more proximal long bone fractures (humerus or femur)</li> </ol>

Mechanism of Injury with significant complaint or obvious signs of injury	Co-Morbidity Factors with significant MOI
<ol style="list-style-type: none"> <li>1. Unrestrained rollover with significant complaint</li> <li>2. Pedestrian vs. vehicle greater than 10 mph with complaint</li> <li>3. Ejection of the patient from a motorized vehicle, greater than 20 mph</li> <li>4. Injuries inflicted by large animals (horse, bull, etc.)</li> <li>5. Fall 3x the patient’s height.</li> <li>6. All other stab wounds to the head, neck, or torso</li> </ol>	<ol style="list-style-type: none"> <li>1. Pregnancy greater than 20 weeks with complaint</li> <li>2. Age greater than 55</li> <li>3. Morbid Obesity</li> <li>4. Patients with bleeding disorders or who are taking anticoagulant meds</li> <li>5. Patients with major medical disorders</li> </ol>



<p><b>Immediately Notify the DCF and initiate rapid transport to a Trauma Center. Base Hospital contact should be completed as soon as possible</b></p>
---

