



POLICY NO:	OPS -22
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## TRAUMA TRIAGE AND TRANSPORT

**Purpose:** To provide standard criteria for the identification and transport of major trauma patients

**Authority:** Division 2.5 Health and Safety Code. Article 2.5 Regional Trauma Systems. 1798.163

### Definitions

1. Major Trauma Victim (MTV) is an injured patient(s) who meets one or more physiologic, anatomic or mechanism of injury criteria as defined in this policy.
2. Pediatric Major Trauma Victim is an injured child <15 years of age, who meets one or more physiologic, anatomic or mechanism of injury criteria as defined in this policy. Those Pediatric Major Trauma Victims <6 years of age shall be transported to Stanford Health Care.
3. Trauma Center is a licensed hospital, accredited by the Joint Commission, which has been designated as a Level I, II, III, or IV trauma center and/or Level I or II pediatric trauma center by the local EMS agency (LEMSA) and American College Surgeons (ACS).

### San Mateo County Recognized Trauma Centers

Per the approved San Mateo County Trauma Plan, San Mateo County trauma system utilizes designated trauma centers in bordering counties: Zuckerberg San Francisco General Hospital and Stanford Health Care. Stanford Health Care is also recognized as the designated Pediatric Trauma Center.

### Trauma Center Catchment Areas

1. Zuckerberg San Francisco General Trauma Center  
Persons injured in any area north of Devils Slide; on the north side or to the north of Trousdale Avenue, from Highway 280 to El Camino Real; on the north side or to the north of Millbrae Avenue, from El Camino Real to the San Francisco Bay.
2. Stanford Health Care Trauma Center/Pediatric Trauma Center

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Persons injured in any area south of and including Devils Slide; on the south side to the south of Trousdale Avenue, from Highway 280 to El Camino Real, on the south side or to the south of Millbrae Avenue, from El Camino Real to the San Francisco Bay.

3. Eden Trauma Center

Persons injured east bound on the San Mateo Bridge or Dumbarton Bridge may be transported to Eden Medical Center in Alameda County.

**Triage Criteria**

1. Patients identified, as MTVs should be transported to a Trauma Center
  - a. Transportation to a non-trauma center should only occur if a patient has an unmanageable airway.
2. Pediatric patients <6 years of age identified as MTVs shall be transported to Stanford Health Care Trauma Center
3. If there is any question as to the trauma status of the patient, consult shall be made with the Trauma Center as early as possible in the patient's evaluation.
4. The following categories are to be used to define a MTV: physiologic, anatomic, or mechanism of injury. If a patient meets one or more of any of the following criteria, they are considered to be a MTV and shall be transported to a Trauma Center.

**Physiologic Criteria**

	<b>Adult</b>	<b>Pediatric</b>
<b>Systolic B/P</b>	<90 mmHg	<6 yrs = <60 mmHg >6 yrs = <90 mmHg
<b>Respiratory Rate</b>	<10 or >29/min	<10 or >29/min <20 /min (< 1 yr ) Requires ventilatory support
<b>Glasgow Coma Scale</b>	≤13	≤13

**Anatomic Criteria**

1. Penetrating injuries to head, neck, chest, back, abdomen, groin or extremities proximal to elbow or knee
2. Chest wall instability or deformity (e.g., flail chest)
3. Trauma with associated burns
4. Two or more proximal long bone fractures
5. Pelvic fractures
6. Open or depressed skull fracture
7. Traumatic paralysis or paresthesia
8. All gunshot wounds
9. Amputation proximal to ankle or wrist

## 10. Crushed, de-gloved, mangled, or pulseless extremity

### Mechanism of Injury

1. Falls (one story = 10 ft.)
  - a. Adult = > 20 ft.
  - b. Pediatric = > 10 ft. or 2 times the height of the child; whichever is less.
2. High risk auto crash
  - a. Death of a victim in the same passenger compartment of a vehicle
  - b. Ejection (partial or complete) from the vehicle
  - c. Extrication time > 20 minutes
  - d. Vehicle telemetry data consistent with high risk injury
  - e. Intrusion into interior compartment, including roof: >12 inches occupant side; >18 inches at any site
3. Auto-pedestrian/auto-bicycle, motorcycle
  - a. Complaint of pain
  - b. Obvious injury
  - c. Thrown, run over, or separation from cycle
4. Significant blunt force trauma to head or torso from large animal (e.g. fall or kick from horse)

### Special Considerations

1. Older Adults
  - a. Risk of injury/death increases after age 55
  - b. Systolic B/P <110 mmHg might represent shock after age 65 years
  - c. Low impact mechanisms (e.g. ground level falls) might result in severe injury
2. Children
  - a. Under 6 years of age shall be transported to Stanford Health Care Trauma Center
3. Co-morbid factors:
  - a. Hx anticoagulation therapy or with bleeding disorder
  - b. Hx cardiac, respiratory, diabetes and other metabolic diseases
  - c. Hx end-stage renal disease requiring dialysis
  - d. Pregnancy > 20 weeks
  - e. Burns
    - Without trauma mechanism: triage to a burn facility
  - f. Time sensitive extremity injury
    - Open fracture
    - Fracture with vascular compromise
  - g. CNS changes witnessed by prehospital personnel that include the following:
    - Post traumatic seizure
    - Transitory or prolonged LOC (>1 minute)
    - Repetitive questioning

- h. Patients, who in the best professional judgment of the paramedic, need to be categorized as major trauma victims.

### **Trauma Center Transportation**

1. MTVs will be transported to the appropriate Trauma Center based on the defined Trauma Center catchment areas.
2. The decision to use Code 3 transportation to the Trauma Center will be determined by the transporting paramedic.
3. The paramedic will notify the TRAUMA CENTER as soon as possible.

