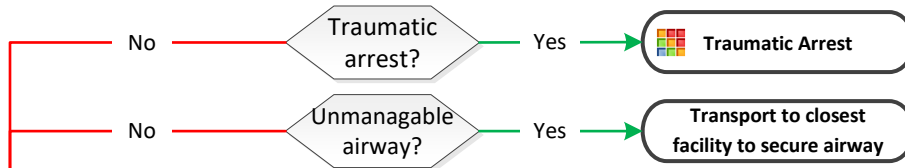


# Trauma Triage

Scene time goal is < 10 minutes

## ACTIVATION



1

### Injury Patterns

- Penetrating injuries to the head, neck, torso, and proximal extremities
- Skull deformity or suspected skull fracture
- Suspected spinal injury with new motor or sensory loss
- Chest wall instability, deformity, or suspected flail chest
- Suspected pelvic fracture
- Suspected fracture of two or more proximal long bones
- Crushed, degloved, mangled, or pulseless extremity
- Amputation proximal to wrist or ankle
- Active bleeding requiring a tourniquet or wound packing with continuous pressure

Trauma Center transport with early notification

2

### Mental Status and Vital Signs

#### All Patients

- Unable to follow commands
- RR < 10 or > 29 breaths/ min
- Respiratory distress or in need of respiratory support
- Room air SpO<sub>2</sub> < 90%

#### Age 0 – 9 years

- SBP < 70 mmHg + 2x age in years

#### Age 10 – 64 years

- SBP < 90 mmHg or
- HR > SBP

#### Age 65 years or older

- SBP < 110 mmHg or
- HR > SBP

Trauma Center transport with early notification

3

### Mechanism of Injury

- High risk auto crash
  - Partial or complete ejection
  - Significant intrusion into passenger compartment/vehicle cabin (including roof)
    - > 12 inches at occupant site OR
    - > 18 inches at any site OR
  - Need for extrication for entrapped patient
  - Death in passenger compartment
  - Child (0 – 9 years) unrestrained or in unsecured child safety seat
  - Vehicle telemetry data consistent with severe injury
- Rider separated from transport vehicle with severe impact (e.g., motorcycle, ATV, horse, etc.)
- Pedestrian/ bicycle rider thrown, run over, or with significant impact
- Fall from height > 10 feet (all ages)

Trauma Center transport with early notification

4

### EMS Judgement

#### Consider risk factors, including:

- Low-level falls in young children (age ≤ 5 years) or older adults (age ≥ 65 years) with significant head injury
- Anticoagulant use
- Suspicion of child abuse
- Special, high-resource healthcare needs
- Pregnancy > 20 weeks
- Burns in conjunction with trauma

If concerned, contact Trauma Base Hospital

Contact Trauma Base Hospital for destination

Adult and Pediatric Trauma Treatment Protocols



# Trauma Triage

Scene time goal is < 10 minutes

## Pearls

- When assessing motor GCS, if unable to follow commands, patient meets activation criteria.
- Do not let alcohol confuse the clinical picture. Persons using alcohol may have unrecognized injuries, particularly head bleeds.
- A complete hands on head-to-toe assessment is required for all trauma patients.
- Transport should be initiated within 10 minutes of ambulance arrival unless patient requires extrication.

## Age Categories

Adult Patient – Trauma patients 15 years of age and older.

Pediatric Patients – Trauma patients under the age of 15 years.

## Trauma Receiving Facilities

Adult Trauma Center catchment areas:

- Stanford Hospital – Any area south of and including Devil’s Slide; City of Millbrae south of Trousdale Drive between I-280 and El Camino Real; and south of Millbrae Avenue between El Camino Real and the San Francisco Bay.
- Zuckerberg San Francisco General Hospital – Any area north of Devil’s Slide; City of Millbrae north of Trousdale Drive between I-280 and El Camino Real; and north of Millbrae Avenue between El Camino Real and the San Francisco Bay. Includes San Francisco International Airport.
- Eden Medical Center – Eastbound on the San Mateo or Dumbarton Bridges.

Pediatric Trauma Center catchment areas:

- Stanford Hospital – **All patients  $\leq$  6 years** or any area south of and including Devil’s Slide; City of Millbrae south of Trousdale Drive between I-280 and El Camino Real; and south of Millbrae Avenue between El Camino Real and the San Francisco Bay.
- Zuckerberg San Francisco General Hospital – All patients > 6 years and any area north of Devil’s Slide; City of Millbrae north of Trousdale Drive between I-280 and El Camino Real; and north of Millbrae Avenue between El Camino Real and the San Francisco Bay. Includes San Francisco International Airport.

Receiving Facilities – Local hospitals that are not trauma receiving facilities are destinations for patients who are triaged by the Base Hospital at the time of report as not requiring trauma center care. A trauma receiving facility may also serve as the receiving facility when it is the patient’s facility of choice.

## Low Energy Mechanism Trauma

Low energy mechanism trauma may not obviously reveal significant trauma. Examples include, but are not limited to ground level or short falls, blunt assault without a weapon (e.g., closed fist), low speed motor vehicle crash, or other blunt trauma (e.g., sports injury). Symptoms or concern may include:

- Symptoms in the presence of head injury such as headache, vomiting, loss of consciousness, repetitive questioning, abnormal, or combative behavior or new onset of confusion
- Pain level greater than 5/10 related to head, neck, or torso injury
- Any concerns due to hypotension, tachycardia, or tachypnea
- Systolic BP < 110mmHg in patients 65 years of age or older
- Torso injury with tenderness of abdomen, chest/ribs or back/flank
- Suspected hip dislocation or pelvis injury

## Other Definitions

Unmanageable Airway – A patient whose airway is unable to be adequately maintained with BLS or ALS maneuvers. All trauma patients are candidates for immediate redirection to the trauma center following airway stabilization at a non-trauma receiving facility.

