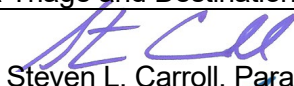



COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Trauma Triage and Destination Criteria		Policy Number: 1405	
APPROVED: Administration:	 Steven L. Carroll, Paramedic	Date: January 3, 2023	
APPROVED: Medical Director:	 Daniel Shepherd, MD	Date: January 3, 2023	
Origination Date:	July 1, 2010	Effective Date: January 3, 2023	
Date Revised:	September 1, 2022		
Date Last Reviewed:	September 1, 2022		
Review Date:	September 30, 2024		

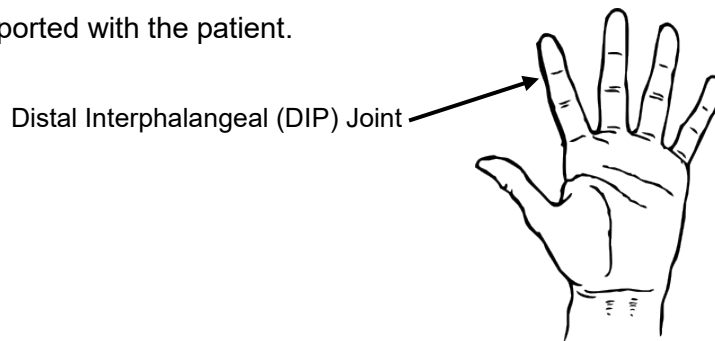
- I. PURPOSE: To guide out-of-hospital personnel in determining which patients require the services of a designated trauma center. To serve as the EMS system standard for triage and destination of patients suffering acute injury or suspected acute injury.
- II. AUTHORITY: Health and Safety Code, §1797.160, §1797.161, and §1798. California Code of Regulations, Title 22, §100252 and §100255.
- III. POLICY: These criteria apply to any patient who is injured or has a physical complaint related to trauma and is assessed by EMS personnel at the scene.
 - A. Physiologic Criteria, Step 1:
 1. Glasgow Coma Scale
 - Unable to follow commands (GCS motor < 6)
 2. Systolic Blood Pressure
 - Age 10-64 years SBP < 90 mmHg or HR > SBP
 - Age 65 and older SBP < 110 mmHg or HR > SBP
 - Age 0-9 years SBP < 70 mmHg + (2 x age years)
 3. Respiratory
 - RR < 10 or > 29 breaths/min
 - Respiratory Distress or need for respiratory support
 - Room-air pulse oximetry < 90%
 - B. Anatomic Criteria, Step 2:
 1. Penetrating injuries to the head, neck, torso, or extremities proximal to elbow or knee
 2. Chest wall instability, deformity, or suspected flail chest
 3. Suspected two or more proximal long-bone fractures (femur, humerus)
 4. Crushed, degloved, mangled or pulseless extremity
 5. Amputation proximal to wrist or ankle
 6. Suspected pelvic fracture
 7. Skull deformity, suspected skull fracture

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8. Acute paralysis, extremity weakness, or sensory loss possibly due to spinal cord injury
 9. Seat belt injury: significant bruising to neck, chest, or abdomen
 10. Diffuse abdominal tenderness as a result of blunt trauma
 11. Active bleeding requiring a tourniquet or wound packing with continuous pressure
- C. Mechanism of Injury Criteria, Step 3:
1. Falls
 - Adults: Height > 10 feet
 - < 14 years old: Height > 10 feet or two times the patient height
 2. High-risk auto crash:
 - Intrusion (including roof) > 12" patient site **or** > 18" any occupant site
 - Ejection: partial or complete from automobile
 - Death in same passenger compartment
 - Age 0-9 years unrestrained or in unsecured child safety seat
 3. Auto vs. Pedestrian/Bicycle rider: thrown, run over, with significant impact or > 20 mph
 4. Rider separated from transport vehicle with significant impact or > 20 mph (e.g. motorcycle, ATV, horse, etc.)
- D. Special Patient or System Considerations, Step 4 (these are considerations to be used by the base hospital in determining the appropriate destination hospital):
1. Age 65 years and older
 2. Low level falls with significant head impact in ages < 5 years or 65 years and older
 3. Burns with trauma mechanism
 4. Time sensitive extremity injury (open fracture, neurovascular compromise)
 5. Pregnancy > 20 weeks with known or suspected abdominal trauma
 6. Prehospital care provider or MICN judgment
 7. Amputation or partial amputation of any part of the hand¹
 8. Penetrating injury to the globe of the eye, at risk for vision loss
 9. Anticoagulation use²
- IV. PROCEDURE:
- A. Any patient who is suffering from an acute injury or suspected acute injury shall have the trauma triage criteria applied.
 - B. For patients who meet trauma triage criteria listed in Sections A, B, or C above, the closest trauma center is the base hospital for that patient. Paramedics shall make base hospital contact and provide patient report directly to the trauma center.
 - C. Transportation units (both ground and air) shall transport patients who meet at least one of the trauma triage criteria in Sections A or B to the closest appropriate designated trauma

center. If the closest trauma center is on internal disaster, these patients shall be transported to the next closest appropriate trauma center. If the closest trauma center is on CT diversion, the paramedic shall make early base contact and the MICN shall determine the most appropriate destination.

- D. For patients who meet trauma triage criteria in Section C, the paramedic shall make base hospital contact with the closest designated trauma center. Based on the paramedic's report of the incident and the patient's assessed injuries, the trauma center MICN or ED physician shall direct destination to either the trauma center or the closest appropriate hospital.
- E. Paramedics providing care for patients who are injured but meet only the trauma triage criteria listed in Section D above will contact the base hospital in whose catchment area the incident occurred. Destination will be determined by the base hospital MICN or ED physician. If the patient is directed other than to the regular catchment base hospital, the MICN will notify the receiving hospital or trauma center of an inbound patient and relay paramedic report.
- F. A trauma patient without an effective airway may be transported to the closest available hospital with an emergency department for airway management prior to transfer to a designated trauma center. In this rare event, the paramedic will contact the base hospital in whose catchment area the incident occurred.
- G. A patient who does not meet trauma triage criteria and who, in the judgment of a base hospital, has a high probability of requiring immediate surgical intervention or other services of a designated trauma center shall be directed to a designated trauma center.

¹For patients with isolated traumatic amputations, partial or complete, of any portion of the hand (at or proximal to the DIP joint of any finger or any part of the thumb) as long as bleeding is controlled, and the amputated part may be transported with the patient.



²For a complete list of anticoagulant and antiplatelet drugs that should be considered for inclusion criteria in Step 4.9, please consult VC EMSA approved list.



Ventura County Field Triage Decision Scheme

For patients with visible or suspected traumatic injuries

STEP 1

Measure vital signs and level of consciousness

- 1.1 Glasgow Coma Scale**
- Unable to follow commands (GCS motor < 6)
- 1.2 Systolic Blood Pressure**
- Age 10-64 years SBP < 90 mmHg or HR > SBP
 - Age 65 years and older SBP < 110 mmHg or HR > SBP
 - Age 0-9 years SBP < 70 mmHg + (2 x age years)
- 1.3 Respiratory**
- RR < 10 or > 29 breaths/min
 - Respiratory distress or need for respiratory support
 - Room-air pulse oximetry < 90%

Yes

Contact base trauma center
Transport to trauma center

STEP 2

Assess anatomy of injury

- 2.1** Penetrating injuries to head, neck, torso, or extremities proximal to elbow or knee
2.2 Chest wall instability, deformity, or suspected flail chest
2.3 Suspected two or more proximal long-bone fractures (femur, humerus)
2.4 Crushed, degloved, mangled or pulseless extremity
2.5 Amputation proximal to wrist or ankle
2.6 Suspected pelvic fracture
2.7 Skull deformity, suspected skull fracture
2.8 Acute paralysis, extremity weakness, or sensory loss possibly due to spinal cord injury
2.9 Seat belt injury: significant bruising to neck, chest, or abdomen
2.10 Diffuse abdominal tenderness because of blunt trauma
2.11 Active bleeding requiring a tourniquet or wound packing with continuous pressure

Yes

Contact base trauma center
Transport to trauma center

STEP 3

Assess mechanism of injury and evidence of high-energy impact

- 3.1 Falls**
- Adults: Height > 10 feet
 - < 14 years old: Height > 10 feet or two times the patient height
- 3.2 High-risk auto crash**
- Intrusion (Including roof) > 12" patient site **or** > 18" any occupant site
 - Ejection: partial or complete from automobile
 - Death in same passenger compartment
 - Age 0-9 years unrestrained or in unsecured child safety seat
- 3.3 Auto vs. Pedestrian/Bicycle** thrown, run over, with significant impact or > 20 mph
3.4 Rider separated from transport vehicle with significant impact or > 20 mph (e.g., motorcycle, ATV, horse, etc.)

Yes

Contact base trauma center for destination decision

STEP 4

Assess special patient or system considerations

- 4.1** Age 65 years and older
4.2 Low level falls with significant head impact in ages < 5 years or 65 years and older
4.3 Burns with trauma mechanism
4.4 Time sensitive extremity injury (open fracture, neurovascular compromise)
4.5 Pregnancy > 20 weeks with known or suspected abdominal trauma
4.6 Prehospital care provider or MICN judgment
4.7 Amputation or partial amputation of any part of the hand¹
4.8 Penetrating injury to the globe of the eye, at risk for vision loss
4.9 Anticoagulation use²

Yes

Contact regular catchment base hospital
Consider transport to trauma center or specific resource hospital

¹See picture
²See list

Transport to closest ED or by patient preference