Monterey County EMS System Policy



Policy Number: 5140 Effective Date: 7/1/2023 Review Date: 6/30/2026

EMERGENCY DEPARTMENT RE-TRIAGE AND RAPID TRANSFER OF TRAUMA PATIENTS TO TRAUMA CENTER

I. PURPOSE

To allow for the expedited transport and care of the Major Trauma Patient who arrives at a non-Trauma Center Emergency Department.

II. POLICY

- A. Under the Field Trauma Triage Criteria (Policy #4040), Major Trauma Patients are to be triaged by EMS personnel directly to a Trauma Center. Trauma patients who present at other facilities via EMS or another arrival mode should be considered for re-triage and transfer to a trauma center for definitive care. If patients are seriously injured, the re-triage and transfer process should be done as quickly as possible.
- B. Transferring facilities should use the attached algorithm to assist with identification of those trauma patients who would benefit from care at a Trauma Center.
- C. Transferring facilities should use the process outlined in the attached algorithm to facilitate transfer to the Trauma Center.
- D. The re-triage and transfer of trauma patients will be monitored at Trauma Evaluation Quality Improvement Committee (TEQIC) meetings.
- E. Local Receiving Hospitals shall have:
 - 1. Written transfer agreements (for both adult and pediatric patients) with an appropriate designated Level I or Level II Trauma Center.
 - Guidelines for identification of patients who should be considered for transfer to a Trauma Center that are consistent with Monterey County EMS Agency policies and protocols.
 - 3. A procedure for arranging the transfer of appropriate patients (adults and pediatrics), including but not limited to:
 - a. Notification of the receiving Trauma Center physician.
 - b. Arranging for transport by either ground or air.

F. The Trauma Center shall have:

- 1. Written transfer agreements with:
 - a. The nearest designated Level I Trauma Center.
 - b. An appropriate specialty center providing tertiary-level care for burn injuries.
 - c. An appropriate facility for patients with spinal cord injuries.

- d. The nearest designated Pediatric Trauma Center.
- 2. A procedure for arranging the transfer of appropriate patients (adult and pediatric), including but not limited to:
 - a. Notification of the receiving center physician.
 - b. Arranging for transport by either ground or air

Monterey County Emergency Trauma Re-Triage Procedure – Adult (age 15 and older)

Step 1	Determine if patient meets	See Criteria below – Adult patients are age 15 and older.		
_	Emergency Trauma Re-Triage			
	Criteria			
Step 2	Contact Adult Trauma Center	Natividad Medical Center – contact the Transfer Center. Tell the transfer center you have a "Red Box Trauma Re-Triage". Transfer		
		center will arrange report and transport. Phone 855-445-7872; Fax:		
		916-646-7100		
		Santa Clara Valley Medical Center		
		Trauma Report: 408-947-4087		
		Burn Line: 408-885-6666		
		Regional Medical Center		
		Trauma Line: 408-729-2841		
		Stanford Medical Center		
		Trauma Line: 800-800-1551		
Step 3	If not transporting to NMC:	If within paramedic scope of practice and timely transfer is needed,		
	Determine appropriate level of	contact EMS dispatch to request Emergency Interfacility Transfer. Transport should generally arrive within 10 minutes. If exceeds paramedic scope of practice, contact EMS Dispatch for CCT,		
	transport and arrange transport.			
	(Can be done simultaneously while			
	contacting the Trauma Center)			
		or arrange transport by Air Ambulance or arrange for nursing staff to		
		accompany paramedic ambulance.		
Step 4	Prepare patient, diagnostic imaging	Fax additional paperwork that is not ready at time of transport departure.		
	disc(s), and paperwork for	Do not delay transport.		
	immediate transport.			

EMERGENCY TRAUMA RE-TRIAGE CRITERIA – ADULT

- ❖ Systolic blood pressure <90 mmHg
- ❖ Glascow Coma Scale <13
- \clubsuit Respiratory rate < 10 or > 29, or need for ventilatory support
- ❖ All penetrating injuries to head, neck, torso, and extremities proximal to elbow and knee
- Chest wall instability or deformity (e.g., flail chest)
- Two or more proximal long-bone fractures
- Crushed, degloved, mangled, or pulseless extremity
- ❖ Amputation proximal to wrist or ankle
- Pelvic fractures
- Open or depressed skull fracture
- Acute paralysis
- Provider judgement: Patients who, in the judgment of the evaluating emergency physician, are anticipated to have a high likelihood of requiring emergent life- or limb-saving surgery or other intervention within 2 hours

LEVELS OF TRANSPORTATION – SCOPE OF PRACTICE – PROVIDER CONTACT NUMBERS						
	ALS	CCT-RN	AIR AMBULANCE			
Provider(s)	Paramedic (single)	Critical Care – RN & EMT	RN and Paramedic			
Scope of Care	Standard paramedic scope. No paralyzing agents or blood products. Can sedate intubated patients with midazolam. Can monitor chest tubes not to suction.	Mechanical ventilation, most medications including paralyzing agents, blood products	Mechanical ventilation, most medications including paralyzing agents, blood products			
Contact Number	AMR – 831-796-6446 831-796-6447	AMR – 831-796-6446 831-796-6447	CALSTAR/ REACH 800-252-5050 Mercy Air 800-222-3456			

Monterey County Emergency Re-Triage Procedure – Pediatric (age 14 and younger)

Step 1	Determine if patient meets Emergency	See criteria below – Pediatric patients are younger than age 15 .		
	Trauma Re-Triage Criteria			
Step 2	Contact Pediatric Trauma Center	Santa Clara Valley Medical Center		
		Trauma Line: 408-885-6666		
		Burn Line: 408-885-6666		
		Stanford Medical Center: 800-800-1551		
Step 3	Determine appropriate level of transport	If within paramedic scope of practice and timely transfer is needed, contact		
	and arrange transport. (Can be done	EMS dispatch to request <i>Emergency Interfacility Transfer</i> . Transport		
	simultaneously while contacting the Trauma	should generally arrive within 10 minutes.		
	Center.)			
		If exceeds paramedic scope of practice, contact EMS Dispatch for CCT		
		(45-minute ETA), or arrange transport by Air Ambulance, or arrange for		
		nursing staff to accompany paramedic ambulance.		
Step 4	Prepare patient and paperwork for	Fax additional paperwork that is not ready at time of transport departure.		
	immediate transport.	Do not delay transport.		

EMERGENCY TRAUMA RE-TRIAGE CRITERIA – PEDIATRIC

Blood Pressure/ Perfusion:

- Hypotension or tachycardia (based on age-appropriate chart below) or clinical signs of poor perfusion (see below)
- Need for more than two crystalloid boluses (20 ml/kg each) or need for immediate blood replacement (10 ml/kg)

GCS/Neurologic

- **♦** GCS ≤ 13
- GCS deteriorating by 2 or more during observation
- Open or depressed skull fracture
- Cervical spine injury with neurologic deficit

Anatomic Criteria

- Penetrating injuries to head, neck, chest, or abdomen
- Flail chest
- * Two or more proximal long-bone fractures
- Crushed, degloved, mangled, or amputated extremity proximal to wrist or ankle
- Burns with anatomic factors

Respiratory Criteria

* Respiratory failure or intubation required

Provider judgment

Patients who, in the judgment of the evaluating emergency physician, are anticipated to have a high likelihood for emergent life-or limb-saving surgery or other intervention within 2 hours.

Pediatric Clinical Signs of Poor Perfusion		Pediatric Glascow Coma Scale – Verbal Scale < 2 years of age					
Cool, mottled, pale or cyanotic skin		5	Coos and Babbles				
Low urine output		4	Irritable				
Lethargic		3	Only cries to pain				
Prolonged capillary refill		2	Only moans to pain				
		1	None				
Normal Vitals (Broselow)							
AGE	WEIGHT	HEART RATE	SYSTOLIC BP	BROSELOW COLOR			
Newborn	3-5 kg	80 - 190	65-104	Grey – Pink			
1 Year	10 Kg	80-160	70-112	Purple			
3 Years	15 Kg	80-140	75-116	White			
5 Years	20 Kg	75-130	80-112	Blue			
8 Years	25 Kg	70-120	80-112	Orange			
10 Years	30 Kg	65-115	85-126	Green			

Important Pediatric Re-Triage Exceptions:

- 1. Pregnant patients of any age should be transferred to an adult trauma center.
- Major burns should be preferentially transferred to one of the burn centers.
- Contact hospital first for major extremity injuries with vascular compromise.

END OF POLICY

EMS Bureau Chief

John Beuerle, M.D.

EMS Medical Director