

CENTRAL CALIFORNIA
EMERGENCY MEDICAL SERVICES
A Division of the Fresno County Department of Public Health

Manual	Emergency Medical Services Administrative Policies and Procedures	Policy Number 530.23
Subject	Paramedic Treatment Protocols TRAUMA	Page 1 of 3
References	Title 22, Division 9, Chapter 4 of the California Code of Regulations	Effective Fresno County: 01/15/82 Kings County: 04/10/89 Madera County: 06/15/85 Tulare County: 04/19/05

STANDING ORDERS	
1. Control Bleeding	Immediately control life threatening hemorrhage. Apply direct pressure, wound packing, or tourniquet as needed per EMS Policy #510.23.
2. Secure Airway	Protect with position, basic airway maneuvers, pharyngeal airway, advanced airway enroute if indicated, assist respirations as needed, suction as needed.
3. Spine Immobilization	As per protocol – EMS Policy #530.02.
4. Transport	Minimize on scene time to less than 10 minutes.
5. Pain Management	As per protocol – EMS Policy #530.42
6. Oxygen	If indicated. Low flow. High flow if unstable or suspected traumatic brain injury. Refer to EMS Policy #530.02.
7. IV Access (Two 18 gauge or larger)	If indicated. Saline Lock or Lactated Ringers with standard tubing. Fluids are to be administered to keep systolic blood pressure greater than 90. Pediatrics – LR 20cc/kg if BP is less than 80 with signs/symptoms of shock. (Refer to EMS Policy #530.32, for estimated weight formulas or use Broselow tape.) NOTE: May establish IV earlier for pain management if patient is non-stat.

STANDING ORDERS – CONTINUED ON NEXT PAGE

Approved By	Daniel J. Lynch (Signature on File at EMS Agency)	Revision
EMS Division Manager		10/01/2024
EMS Medical Director	Miranda Lewis, M.D. (Signature on File at EMS Agency)	

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STANDING ORDERS

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| 8. Tranexamic Acid | 2g diluted in 100 ml NS IV/IO infusion over 10 minutes if all the following criteria are met: <ul style="list-style-type: none"> - Systolic BP < 90 mmHg - Significant blunt or penetrating trauma with uncontrolled hemorrhage - <3 hours from the time of injury - Age > 14 years Do not delay transport for administration of TXA. Infusion bag must be labeled with medication name/dose and handed off to receiving RN/MD along with verbal report that TXA was administered. |
| 9. Avoid hypothermia | Apply blanket and heat ambulance as needed. |
| 10. Cardiac Monitor | If indicated. Treat rhythm if appropriate. |
| 11. Contact Hospital | Per EMS Policy #530.02. |

BASE HOSPITAL ORDERS

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| *1. Needle Thoracostomy | If all the following are present: <ul style="list-style-type: none"> - Severe respiratory distress (apnea, severe dyspnea, SpO₂ <90%, difficulty bagging) - Lateralizing exam (decreased breath sounds on one side, tracheal deviation) - SBP <90 mmHg Refer to EMS Policy #530.02. |
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SPECIAL CONSIDERATION AND PRIORITIES

1. On-scene time must be less than 10 minutes unless multiple patients or prolonged extrication complicated the incident. (Document on Prehospital Care Report any delays at scene.)
2. Unstable or STAT patients require immediate transport with ALS treatment enroute. On-scene treatment should be limited to BLS airway management, covering an open chest wound, pressure to major bleeding, and spine immobilization. Contact Base as soon as possible with ETA.
3. Transport lights/siren all patients in shock or unstable.
4. Aggressive IV fluid resuscitation increases vascular pressure and dilutes clotting factors. IV fluids should be administered only to maintain SBP > 90 mmHg.
5. TXA Contraindications:
 - Age ≤ 14
 - >3 hours post injury
 - Traumatic arrest without ROSC
 - Known allergy to TXA
 - Hemorrhagic shock stabilized by other hemostatic interventions
 - Non-hemorrhagic shock
6. Bandage injuries enroute as time allows. Cover any open chest or airway wounds with a three-sided dressing or commercially available vented chest seal.
7. Traumatic brain injury considerations:
 - Repeated neuro exams are essential (emphasize mental status, pupils, respiratory pattern, motor response). Deteriorating neuro status is an emergency.
 - Provide high flow O₂ for all suspected TBI.

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- Vomiting can increase intracranial pressure and lead to airway compromise. Treat nausea/vomiting with Ondansetron as needed per EMS Policy #530.41.
- 8. Amputation Considerations: Wrap extremity in dry sterile gauze, place in plastic bag, and bring to hospital on ice if possible. Bleeding control with tourniquet ~2 inches proximal to amputation site, if indicated.
- 9. Evisceration considerations: Apply moist sterile dressing to eviscerations.
- 10. Hanging Considerations: The majority of EMS calls dealing with “hanging” are predominantly asphyxiation/strangulation cases. This means patients with a mechanism of injury of a hanging need spinal immobilization and trauma consideration, but should be treated as a medical cardiac arrest if found pulseless and non-breathing.
- 11. Use MIVT format when reporting to trauma staff or transfer to another unit or helicopter:
 - “M” Mechanism
 - “I” Injuries
 - “V” Vital Signs
 - “T” Treatment
- 12. There may be situations in which patient care is turned over from an agency with prehospital TXA protocols specifying only a 1 gram bolus. In the event that a patient meeting all other criteria for TXA administration received only 1 gram of TXA prior to rendezvous, an additional 1 gram of TXA diluted in 100 ml NS may be given over 10 minutes to achieve a total dose of 2 grams of TXA. Clearly communicate the total amount of TXA administered to the receiving RN/MD.