In-person **2240 E. Gonzales Road #200** **Oxnard, CA**	Pre-hospital Services Committee Agenda	August 8, 2024 9:30 a.m.

I.	**Introductions**	
II.	**Approve Agenda**	
III.	**Minutes**	
IV.	**Medical Director Report**	
	A. Updates	
V.	**New Business or Policies for Review *with Proposed Changes***	
	A. 1105 – MICN dev Course Exam	Karen Beatty
VI.	**Old Business**	
	A. 319 – Paramedic Preceptor (Policy will be distributed at meeting)	Chris Rosa
	B. 420 – Receiving and Stand By Hospital Standards	Karen Beatty
	C. 705.01 – Trauma Treatment Guidelines	Karen Beatty
	D. 705.14 – Hypovolemic Shock	Karen Beatty
	E. 734 – Tranexamic Acid Administration	Karen Beatty
VII.	**Informational/Discussion Topics or Policies Approved at Specialty Care Committees**	
	A. Cardiac Arrest Survival Update	Andrew Casey
VIII.	**Policies Due for Review (*No proposed changes*)**	
	A. 627 – Fireline Medic	
	B. 715- - Needle Thoracostomy	
	C. 716 – Use of Preexisting Vascular Access	
IX.	**Agency Reports**	
	A. Fire Departments	
	B. Ambulance Providers	
	C. Base Hospitals	
	D. Receiving Hospitals	
	E. Law Enforcement	
	F. ALS Education Program	
	G. EMS Agency	
	H. Other	
X.	**Closing**	

In Person 2240 E. Gonzales rd. #200 Oxnard	Pre-hospital Services Committee Minutes	June 13, 2024 9:30 a.m.

Topic	Discussion	Action	Approval
I. Introductions	Dr. Scheer is the new Medical Director at Los Robles. Bret McClure is new at CMH ER.	Welcome	
II. Approve Agenda		Approved	Motion: Tom O'Connor Seconded: Todd Larsen Passed: Unanimous
III. Minutes		Approved	Motion: Chris Sikes Seconded: John Gillett Passed: Unanimous
IV. **Medical Issues**			
A. Other			
V. New Business			
A. 705.09 – Chest Pain	Karen Beatty noted the addition of Pulsara to this policy.	Approved	Motion: Todd Larsen Seconded: Mark Martinez Passed: Unanimous
B. 705.14 – Hypovolemic Shock		Tabled. Bring to next meeting.	
C. 717 – Intraosseous Infusion		Approved	Motion: Jeff Winter Seconded: Kyle Blum Passed: Unanimous
D. 714 - TXA		Approved	Motion: Tom O'Connor Seconded: Todd Larsen Passed: Unanimous
VI. Old Business			
VII. Informational			
A. Cardiac Arrest Survival Data Presentation	Andrew Casey presented the Cardiac Arrest Survival Data. The committee was concerned with the Lucas data. Andrew will share data with committee and give regular briefings at PSC meetings.		

B. Safety Event Data Presentation	The EMS Agency is working on the development of an internal review process for these reports. This may include a monthly virtual meeting to review each report with designated committee members. The committee suggested the EMS Agency chooses 1 representative each from Fire agencies, Ambulance and Hospitals.		
VIII. Policies for review			
A. 319 – Paramedic Preceptor	Chris Rosa will send out the amendment to preceptors.	Approved	Motion: Todd Larsen Seconded: Tom O'Connor Passed: Unanimous
B. 323 – MICN Authorization Challenge		Approved	Motion: Mike Sanders Seconded: Jaime Villa Passed: Unanimous
C. 333 - Denial of Prehospital Care Certification or Accreditation		Approved	Motion: Chris Sikes Seconded: Tom O'Connor Passed: Unanimous
D. 615 – Organ Donor		Approved	Motion: Jeff Winter Seconded: Erica Gregson Passed: Unanimous
E. 618 – Unaccompanied Minors		Approved	Motion: Jeff Winter Seconded: Tom O'Connor Passed: Unanimous
F. 619 – Safely Surrendered Baby		Approved	Motion: Adam Strong Seconded: Erica Gregson Passed: Unanimous
G. 624 - Patient Medications		Approved	Motion: Jeff Winter Seconded: Tom O'Connor Passed: Unanimous
H. 705.27 – Sepsis Alert		Approved	Motion: Todd Larsen Seconded: Neil Canby Passed: Unanimous
I. 725 – Patient Care after Taser	Change Taser to Conducted Electrical Weapon	Approved with changes	Motion: Jeff Winter Seconded: Neil Canby Passed: Unanimous
IX. Agency Reports			
Fire departments	**VCFD** – Moved into Newbury Park office. No longer at Camarillo Airport. **VFD** – Preparing for x-games. **OFD –** Soft launch next month of EMT class for at risk students. Full launch in the 1st quarter of 2025. Jaime will reach out by e-mail for education experienced instructors. **Fed. Fire** – N/A		

	FFD – N/A		
A. B. Transport Providers	**AMR/GCA/LMT** – Over 100% staffed at GCA. Just under 100% staffing at AMR. **All Town** – N/A		
C. Base Hospitals	**AHSV** – N/A **LRRMC** – 7 new MICN's. Many new OB doctors. **SJRMC –** N/A **VCMC** – N/A		
D. Receiving Hospitals	**SJHC** – N/A **SPH** – N/A **CMH** / **OVCH** –		
E. Law Enforcement	**AIR RESCUE –** N/A **VCSO –** N/A **CSUCI PD** – N/A **Parks –** N/A		
F. ALS Education Programs	**Ventura College** – N/A **Moorpark College** – N/A		
G. EMS Agency			
H. Other			
X. Closing	**Meeting adjourned at 11:51am**		Motion: Chris Sikes Seconded: Tom O'Connor Passed: Unanimous
	Meeting audio recording and transcript available upon request.		

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Mobile Intensive Care Nurse Developmental Course and Examination Procedure	Policy Number 1105
APP ROVED: Administration: Steven L. Carroll, Paramedic	Date: December 1, 2024~~June 1, 2021~~
APPROVED: Medical Director: Daniel Shepherd, MD	Date: December 1, 2024~~June 1, 2021~~
Origination Date: July 2, 1984 Date Revised: March 11, 2021 Date Last Reviewed: March 11, 2021 Next Review Date: March 31, 2024	Effective Date: December 1, 2024~~June 1, 2021~~

I. PURPOSE: To prepare nurses for their role in directing the prehospital care activities of paramedics. In order for the nurse to attain these necessary skills, practical as well as didactic (including field care audit) sessions shall be provided. Only nurses who fulfill the criteria in Policy 321 are eligible to take the course. The Ventura County EMS Agency shall approve all programs.

II. AUTHORITY: Health and Safety Code 1797.56 and 1797.58

III. COURSE REQUIREMENTS:

A. Minimum of 40 hours in length, only one class day may be missed.

B. Topics will include:

1. VCEMS Overview
2. MICN Role
3. Communication Protocol/Terminology
4. Legal Issues
5. Documentation
6. Paramedic Reporting
7. Hazmat
8. EMS Overview
9. Pharmacology
10. All VCEMS Policy 705 Treatment Guidelines, as well as policies referenced within 705 Policies
11. STEMI
12. Stroke including ELVO

13. Ventura County Trauma System/Trauma Triage/Trauma Treatment Guidelines
14. AED/Dispatch
15. CISM
16. Cardiac Arrest/Dysrhythmias
17. CAM and Post ROSC
18. MICN Practice
19. MCI/Triage
20. Diversion/ReddiNet
21. Pediatrics (may be presented as its own topic or incorporated into each of the above)
22. BRUE
23. Weapons of Mass Destruction

C. Course shall be coordinated by a Prehospital Care Coordinator (PCC) from a Ventura County Base Hospital, in consultation with an Emergency Department Physician involved in prehospital care.

D. Individual topics may be taught by allied health and/or medical/nursing personnel with recent Advanced Life Support prehospital care and teaching experience. The course coordinator must approve all instructors.

E. Each topic shall have predetermined behavioral objectives which clearly specify the relevancy of the material to the MICN's role.

F. The course shall be reviewed and revised annually to keep up with additions and/or changes to policies and protocol.

IV. COUNTY EXAMINATION:

A. Only those candidates who successfully pass the MICN Course will be eligible to sit for the County Examination for purposes of working as an MICN in a Base Hospital.

B. The exam shall consist of 100 questions covering all of the topics listed above in III.B.

C. Candidates shall pass the exam with an overall score of 80%.

D. The exam shall be compiled and reviewed by the EMS Medical Director and the PCC's. The Course Coordinator or individual instructors may submit questions for the exam. Each question shall be correlated to the Objectives, and be based on current standards of care in ALS services.

E. The Exam shall be given as needed. Scheduling of the exam shall be the responsibility of the Course Coordinator. The EMS Agency will administer the test.

COUNTY OF VENTURA EMERGENCY MEDICAL SERVICES	HEALTH CARE AGENCY POLICIES AND PROCEDURES
Policy Title: Receiving and Stand-By Hospital Standards	Policy Number 420
APPROVED Administration: Steven L. Carroll, Paramedic	Date: June 1, 2024
APPROVED Medical Director: Daniel Shepherd, MD	Date: June 1, 2024
Origination Date: April 1, 1984 Date Revised: April 11, 2024 Date Last Reviewed: April 11, 2024 Review Date: April 30, 2027	Effective Date: June 1, 2024

I. PURPOSE: To define the criteria, which shall be met by an acute care hospital in Ventura County for Receiving Hospital (RH) designation.

II. AUTHORITY: Health and Safety Code, Division 2.5, Sections 1798, 1798.101, 1798.105, 1798.2 and California Code of Regulations, Title 22, Section 100175.

III. POLICY:

A. A RH, approved and designated by the Ventura County EMS Agency, shall:

1. Be licensed by the State of California as an acute care hospital.
2. Meet the requirements of the Health and Safety Code Sections 1250-1262 and Title 22, Sections 70411, 70413, 70415, 70417, 70419, 70649, 70651, 70653, 70655 and 70657 as applicable.
3. Be accredited by a CMS accrediting agency.
4. Operate an emergency department (ED) that is designated by the State Department of Health Services as a “Comprehensive Emergency Department,” “Basic Emergency Department” or a “Standby Emergency Department.”
5. Have an intensive care service with adequate monitoring and therapeutic equipment
6. Surgical services shall be immediately available for life-threatening situations.
7. Have radiology and laboratory services as defined in Title 22, Section 7041
8. Access and triage patients arriving by ambulance upon arrival.
9. Attempt to offload patients from the ambulance gurney to the hospital gurney within twenty minutes.

10. Meet the statutory requirements for ambulance patient offload outlined in Health and Safety Code 1797.120.5-7

~~Evaluate all ambulance transported patients promptly, either by RH Physician, Private Physician or other qualified medical personnel designated by hospital policy.~~

11~~9~~. Always have the capability to communicate with the ambulances and the Base Hospital (BH).

12~~0~~. Maintain multiple forms of redundant communication, in the event a widespread disaster disables traditional methods.

a. Existing amateur radio sites established in each receiving facility will be maintained in coordination with local emergency management agency and amateur radio organizations

13~~1~~. Designate an ED Medical Director who shall be a physician on the hospital staff, licensed in the State of California and have experience in emergency medical care. The Medical Director shall:

a. Be regularly assigned to the ED.

b. Have knowledge of VCEMS policies and procedures.

c. Coordinate RH activities with BH, Prehospital Services Committee (PSC), and VCEMS policies and procedures.

d. Attend, or have designee attend, PSC meetings.

e. Provide ED staff education.

f. Schedule medical staffing for the ED on a 24-hour basis.

14~~2~~. Cooperate with and assist the PSC and EMS Medical Director in the collection of statistics for program evaluation.

15~~3~~. Agree to maintain all prehospital data in a manner consistent with hospital data requirements and provide that the data be integrated with the patient's chart. Prehospital data shall include the Ventura County Electronic Patient Care Report (VCePCR), Paramedic Base Hospital communication form (from the BH), and documentation of a BH telephone communication with the RH.

16~~4~~. Participate with the BH in evaluation of paramedics for reaccreditation.

17~~5~~. Permit the use of the hospital helipad as an emergency rendezvous point if a State-approved helipad is maintained on hospital premises.

B. There shall be a written agreement between the RH and EMS indicating the commitment of hospital administration, medical staff, and emergency department staff to meet requirements for ALS program participation as specified by EMS policies and procedures.

C. EMS shall review its agreement with each RH at least every two years.

D. EMS may deny, suspend, or revoke the approval of a RH for failure to comply with any applicable policies, procedures, or regulations. Requests for review or appeal of such decisions shall be brought to the Board of Supervisors for appropriate action.

E. The EMS Medical Director may grant an exception to a portion of this policy upon substantiation of need by the PSC that, as defined in the regulations, compliance with the regulation would not be in the best interests of the persons served within the affected local area.

F. A hospital that applies to become a RH in Ventura County must meet Ventura County RH Criteria and agree to comply with Ventura County regulation.

1. Application:
   Eligible hospital shall submit a written request for RH approval to the VCEMS, documenting the compliance of the hospital with the Ventura County RH.
2. Approval:
   Program approval or denial shall be made in writing by EMS to the requesting RH within a reasonable period of time after receipt of the request for approval and all required documentation. This period shall not exceed three (3) months.

G. ALS RHs shall be reviewed every two years.

1. All RH shall receive notification of evaluation from the EMS.
2. All RH shall respond in writing regarding program compliance.
3. On-site visits for evaluative purposes may occur.
4. Any RH shall notify the EMS by telephone, followed by a letter within 48 hours of changes in program compliance or performance.

H. Paramedics providing care for emergency patients with potentially serious medical conditions and are within the catchment area of a hospital with a standby emergency department, shall make immediate base contact for destination determination. Examples of these patients would include, but are not limited to, patients with:

1. Patients with seizure of new onset, multiple seizures within a 24-hour period, or sustained alteration in level of consciousness
2. Chest pain or discomfort of known or suspected cardiac origin
3. Sustained respiratory distress not responsive to field treatment

4. Suspected pulmonary edema not responsive to field treatment
5. Potentially significant cardiac arrhythmias
6. Orthopedic emergencies having open fractures, or alterations of distal neurovascular status
7. Suspected spinal cord injury of new onset
8. Burns greater than 10% body surface area
9. Drowning or suspected barotrauma with any history of loss of consciousness, unstable vital signs, or respiratory problems
10. Criteria that meet stroke, LVO, STEMI, or trauma criteria for transport to a specialty care hospital

I. A RH with a standby emergency department only, offering "standby emergency medical service," is considered to be an alternative receiving facility. Patients may be transported to a standby emergency department when the use of the facility is in the best interest of patient care. Standby Emergency Departments shall be staffed and provide services in accordance with Title 22 section 70653.

1. Patients that require emergent stabilization at an emergency department may be transported to a standby emergency department if a basic emergency facility is not within a reasonable distance. These would include patients:
   a. In cardiac arrest with NO return of spontaneous circulation (ROSC) in the field
   b. With bleeding that cannot be controlled
   c. Without an effective airway
2. During hours of peak traffic, the Base Hospital MICN should make destination determinations based on predicted travel time and patient condition. Patients who meet criteria for trauma, stroke, LVO, or STEMI in the absence of a condition that meets I.1. above, will be directed to the appropriate destination.
3. A RH with a standby emergency department shall report to Ventura County EMS Agency any change in status regarding its ability to provide care for emergency patients.

COUNTY OF VENTURA
EMERGENCY MEDICAL SERVICES

RECEIVING HOSPITAL
CRITERIA COMPLIANCE CHECKLIST

Receiving Hospital: _____ Date: _____

			YES	NO
A.	Receiving Hospital (RH), approved and designated by the Ventura County EMS Agency, shall:			
	1.	Be licensed by the State of California as an acute care hospital.		
	2.	Meet the requirements of the Health and Safety Code Section 1250-1262 and Title 22, Sections 70411, 70413, 70415, 70417, 70419, 70649, 70651, 70653, 70655 and 70657 as applicable.		
	3.	Be accredited by a CMS accrediting agency		
	4.	Operate an Intensive Care Unit.		
	5.	Radiology and laboratory services meet the requirements as defined in Title 22, Section 70413		
	6.	Meet the statutory requirements for ambulance patient offload outlined in Health and Safety Code 1797.120.5-7~~Evaluate all ambulance transported patients promptly, either by RH Physician, Private Physician, or other qualified medical personnel designated by hospital policy.~~		
	7.	Have the capability at all times to communicate with the ambulances and the BH.		
	8.	Designate an Emergency Department Medical Director who shall be a physician on the hospital staff, licensed in the State of California, and have experience in emergency medical care. The Medical Director shall:		
		a. Be regularly assigned to the Emergency Department.		
		b. Have knowledge of VC EMS policies and procedures.		
		c. Coordinate RH activities with Base Hospital, Prehospital Services Committee (PSC), and VCEMS policies and procedures.		
		d. Attend or have designee attend PSC meetings.		
		e. Provide Emergency Department staff education.		
		f. Schedule medical staffing for the ED on a 24-hour basis.		
	9.	Cooperate with and assist the PSC and EMS Medical Director in the collection of statistics for program evaluation.		
	10.	Agree to maintain all prehospital data in a manner consistent with hospital data requirements and provide that the data be integrated with the patient's chart. Prehospital data shall include the VCePCR, paramedic Base Hospital communication form (from the BH), and documentation of a BH telephone communication with the RH.		
	11.	Participate with the BH in evaluation of paramedics for reaccreditation.		
	12.	Permit the use of the hospital helipad as an emergency rendezvous point if a State-approved helipad is maintained on hospital premises.		

		YES	NO
B.	There shall be a written agreement between the RH and EMS indicating the commitment of hospital administration, medical staff, and emergency department staff to meet requirements for employment as specified by EMS policies and procedures.		

COUNTY OF VENTURA
EMERGENCY MEDICAL SERVICES

STAND-BY RECEIVING HOSPITAL PHYSICIAN
CRITERIA COMPLIANCE CHECKLIST

Physician Name: _____ Date: _____

All Emergency Department physicians shall:			YES	NO
1.	Be immediately available to the RH ED at all times.			
2.	Be certified by the American Board of Emergency Medicine OR the American Osteopathic Board of Emergency Medicine OR be Board eligible OR have all of the following:			
	a.	Have and maintain current ACLS certification.		
	b.	Complete at least 25 Category I CME hours per year with content applicable to Emergency Medicine.		
	c.	Have and maintain current Advanced Trauma Life Support (ATLS) certification.		

The above named physician is:

1)	Full-time staff: A physician who practices emergency medicine 120 hours per month or more, and/or		
2)	Regular part-time staff: A physician who see 90 patients or more per month in the practice of emergency medicine (Average monthly census of acute patients divided by 720 hours equals average number of patients per hour. This figure multiplied by average hours worked by physician in emergency medicine equals patients per physician per month, Physicians working in more than one hospital may total their hours, Acute patients exclude scheduled and return visits, physicals, and patients not seen by the ED Physician)		

COUNTY OF VENTURA
EMERGENCY MEDICAL SERVICES

STAND-BY RECEIVING HOSPITAL
EMERGENCY DEPARTMENT
ADDITIONAL CRITERIA COMPLIANCE
CHECKLIST

Receiving Hospital w/Standby ED:_____ Date: _____

	EMS REVIEW	
The RH with standby ED shall:	YES	NO
A. Be staffed and provide services in accordance with Title 22 section 70653.		
B. Report to Ventura County EMS Agency any change in status regarding Its ability to provide care for emergency patients during the current 2-year evaluation period.		
E. Receive authorization by the Ventura County EMS Agency medical director to receive patients requiring emergency medical services, in order to provide for the best interests of patient care.		
COMMENTS		

Trauma Assessment/Treatment Guidelines 705.01

I. Purpose: To establish a consistent approach to the care of the trauma patient

A. Rapid trauma survey

1. Airway
   a. Maintain inline cervical stabilization
      1) Follow spinal motion restriction guidelines per VCEMS Policy 614
   b. Open airway as needed
      2) Utilize a trauma jaw thrust to maintain inline cervical stabilization if indicated
   c. Suction airway if indicated
   d. Insert appropriate airway adjunct if indicated
2. Breathing
   a. Assess rate, depth and quality of respirations
   b. If respiratory effort inadequate, assist ventilations with BVM
   c. Assess lung sounds
   d. Initiate airway management and oxygen therapy as indicated
      1) Maintain SpO2 ≥ 94%
3. Circulation
   a. Assess skin color, temperature, and condition
   b. Check distal/central pulses and capillary refill time
   c. Control major bleeding
   d. Initiate shock management as indicated
4. Disability
   a. Determine level of consciousness (Glasgow Coma Scale)
   b. Assess pupils
5. Exposure
   a. If indicated, remove clothing for proper assessment/treatment of injury location, always maintaining patient dignity
   b. Always maintain patient body temperature

B. Detailed physical examination

1. Head
   a. Inspect/palpate skull
   b. Inspect eyes, ears, nose and throat
2. Neck
   a. Palpate cervical spine
   b. Check position of trachea
   c. Assess for jugular vein distention (JVD)
3. Chest
   a. Visualize, palpate, and auscultate chest wall

4. Abdomen/Pelvis
    a. Inspect/palpate abdomen
    b. Assess pelvis, including genitalia/perineum if pertinent
5. Extremities
    a. Visualize, inspect, and palpate
    b. Assess Circulation, Sensory, Motor (CSM)
6. Back
    a. Visualize, inspect, and palpate thoracic and lumbar spines

C. Trauma care guidelines
1. Fluid Administration
    a. Maintain SBP of ≥ 90 mmHg
        1) Patients 65 years and older, maintain SBP of ≥ 100 mmHg
        2) Pediatric patients, maintain minimum systolic for respective age in Handtevy
        3) Isolated head injuries, maintain SBP of ≥ 100 mmHg
2. Tranexamic Acid (TXA) Administration
    a. As indicated in VCEMS Policy 734
3. Head injuries
    a. General treatments
        1) Evaluate head and face – maintain high index of suspicion for injury if significant mechanism of injury is present or physical examination is remarkable for findings
        2) Elevate head 30° unless contraindicated
        3) Do not attempt to intubate head injured patients unless unable to manage with BLS airway measures
        4) Do not delay transport if significant airway compromise
    b. Penetrating injuries
        1) DO NOT REMOVE IMPALED OBJECT (unless airway obstruction is present)
        2) Stabilize object manually or with bulky dressings
    c. Facial injuries
        1) Assess airway and suction as needed
        2) Remove loose teeth or dentures if present
    d. Eye injuries
        1) Remove contact lenses
        2) Irrigate eye thoroughly with suspected acid/alkali burns
        3) Avoid direct pressure
        4) Place eye shield over injured eye only
        5) Ask patient to keep eyes closed
        6) Stabilize any impaled object manually or with bulky dressing

4. Spinal cord injuries

a. General treatments
    1) Evaluate spinal column – maintain high index of suspicion for injury if significant mechanism of injury is present or physical examination is remarkable for findings
    2) Place patient in supine position if hypotension is present
b. Penetrating injuries – DO NOT REMOVE IMPALED OBJECT
    1) Stabilize object manually or with bulky dressings
    2) Control bleeding if present
    3) In the presence of isolated penetrating injuries, spinal motion restriction is contraindicated
c. Neck injuries
    1) Monitor airway
    2) Control bleeding if present

5. Thoracic Trauma
    a. General treatments
        1) Evaluate chest – maintain high index of suspicion for internal injury if significant mechanism of injury is present or physical examination is remarkable for findings
        2) Keep patients sitting high-fowlers
            i. In the presence of isolated penetrating injuries, spinal motion restriction is CONTRAINDICATED
    b. Penetrating injuries – DO NOT REMOVE IMPALED OBJECT
        1) Remove object if CPR is interfered
        2) Stabilize object manually or with bulky dressings
        3) Control bleeding if present
    c. Flail Chest/Rib injuries
        1) Assist ventilations if respiratory status deteriorates
    d. Pneumothorax/Hemothorax
        1) Keep patient sitting high-fowlers
        2) Assist ventilations if respiratory status deteriorates.
        3) Suspected tension pneumothorax should be managed per VCEMS Policy 715
    e. Open (Sucking) Chest Wound
        1) Place an occlusive dressing to wound site, secure on 3 sides only or place a vented chest seal.
        2) Assist ventilations if respiratory status deteriorates

f. Cardiac Tamponade – If suspected, expedite transport
    1) Beck's Triad

i. Muffled heart tones
ii. JVD
iii. Hypotension

g. Traumatic Aortic Disruption
   1) Assess for quality of radial and femoral pulses
   2) If suspected, expedite transport

6. Abdominal/Pelvic Trauma
   a. General Treatments
      1) Evaluate abdomen and pelvis – maintain high index of suspicion for internal injury if significant mechanism of injury is present or physical examination is remarkable for findings
   b. Blunt injuries
      1) Place patient in supine position if hypotension is present
   c. Penetrating injuries – DO NOT REMOVE IMPALED OBJECT
      1) Stabilize object manually or with bulky dressings
      2) Control bleeding if present
   d. Eviscerations
      1) DO NOT REPLACE ABDOMINAL CONTENTS
      2) Cover wound with saline-soaked dressings
      3) Control bleeding if present
   e. Pregnancy
      1) Place patient in left-lateral position to prevent supine hypotensive syndrome
   f. Pelvic injuries
      1) All providers must be knowledgeable in the application of a commercial binder or sheet. Correct application is essential.
      2) Assessment of pelvis should be only performed ***ONCE*** to limit additional injury
      3) Control external bleeding if present
      4) Place a commercial binder or sheet if pelvic injury is suspected and patient is hemodynamically unstable (see step one for parameters).
      5) Empirically place a binder or sheet if patient is in cardiac arrest due to a blunt or blast injury.
      6) **Consider** applying a binder or sheet in patients with suspected pelvic injury **without** hemodynamic instability.

7. Extremity Trauma
   a. General Treatments
      1) Evaluate CSM distal to injury

i. If decrease or absence in CSM is present:
   a) Attempt to reposition extremity into anatomical position
   b) Re-evaluate CSM
   c) If no change in CSM after repositioning, splint and expedite transport
   d) Cover open wounds with sterile dressings
   e) Place ice pack on injury area (if closed wound)
   f) Splint/elevate extremity with appropriate equipment

b. Dislocations
   1) Splint in position found with appropriate equipment

c. Penetrating injuries – DO NOT REMOVE IMPALED OBJECTS
   1) Stabilize object manually or with bulky dressings
   2) Control bleeding if present

d. Femur fractures
   1) Utilize traction splint only if isolated mid-shaft femur fracture is suspected
   2) Assess CSM before and after traction splint application

e. Amputations
   1) Clean the amputated extremity with NS
   2) Wrap in moist sterile gauze
   3) Place in plastic bag
   4) Place bag with amputated extremity into a separate bag containing ice packs
   5) Prevent direct tissue contact with the ice pack

Hypovolemic Shock

ADULT	PEDIATRIC
BLS Procedures	
Place patient in supine position Administer oxygen as indicated	
ALS Standing Orders	

IV/IO access
 	
Normal Saline
• IV/IO bolus – 1 Liter
  ○ Repeat x 1 for persistent signs of shock
 	
Hemorrhagic Shock (Atraumatic or Traumatic)
• Do not delay transport for IV/IO attempts
• Judicious use of NS is necessary for hemorrhagic shock of any cause.
  ○ Goal is to maintain SBP of ≥ 90 mmHg
  ○ Patients 65 years and older, maintain SBP of ≥ 100 mmHg.
 	
Tranexamic Acid (SBP ≤ 90 mmHg)
• Refer to Policy 734 for indications and contraindications
• IV/IOPB - 1g in 100mL NS over 10 minutes
	IV/IO access
	
	Normal Saline
	• IV/IO bolus – 20 mL/kg
	  ○ Repeat x 1 for persistent signs of shock
	
	Hemorrhagic Shock (Atraumatic or Traumatic)
	• Do not delay transport for IV/IO attempts
	• Judicious use of NS is necessary for hemorrhagic shock of any cause.
	  ○ Goal is to maintain minimum SBP for respective age in Handtevy.
	
	Tranexamic Acid (SBP less than Handtevy minimum)
	• Refer to Policy 734 for indications and contraindications
	• IV/IOPB – 15mg/kg to a max of 1g in 100mL NS over 10 minutes

Base Hospital Orders only	
Consult with ED Physician for further treatment measures	

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Tranexamic Acid (TXA) Administration	Policy Number 734
APPROVED: Administration: Steve L. Carroll, Paramedic	Date: July 1, 2024
APPROVED: Medical Director: Daniel Shepherd, M.D.	Date: July 1, 2024
Origination Date: January 10, 2019 Date Revised: June 13, 2024 Date Last Reviewed: June 13, 2024 Review Date: June 30, 2026	Effective Date: July 1, 2024

I. PURPOSE: To define the indications, contraindications, and procedure related to administration of Tranexamic Acid (TXA) by paramedics.

II. AUTHORITY: Health and Safety Code, Sections 1797.220 and 1798. California Code of Regulations, Title 22, Sections 100145 and100169.

III. POLICY: Paramedics may administer TXA to patients presenting with hemorrhagic shock in accordance with this policy and Policy 705.14. Base hospital physician may order TXA to be administered for indications other than those listed below.

IV. PROCEDURE:

A. Indications

1. Blunt or penetrating traumatic injury with SBP less than or equal to 90mmHg
2. Any significant hemorrhage not controlled by direct pressure, hemostatic agents, or tourniquet application **AND** SBP less than or equal to 90 mmHg
3. Consider for other severe hemorrhage with SBP less than or equal to 90 mmHg (e.g., GI Bleed, postpartum hemorrhage)

B. Contraindications

1. Greater than 3 hours post traumatic injury
2. Isolated neurogenic shock
3. Isolated extremity injury when bleeding has been controlled
4. Active thromboembolic event (within the last 24 hours); i.e., stroke, myocardial infarction, pulmonary embolism or DVT
5. History of hypersensitivity or anaphylactic reaction to TXA
6. Traumatic arrest without ROSC
7. Drowning or hanging victims

C. Precautions
    1. Severe kidney disease
    2. Pregnancy
D. Adverse Effects
    1. Chest Tightness
    2. Difficulty Breathing
    3. Facial flushing
    4. Swelling in hands and feet
    5. Blurred vision
    6. Hypotension with rapid IV infusion
E. Preparation
    1. Supplies Needed:
        i. 1g Tranexamic Acid (TXA) (1)
        ii. 100mL bag of 0.9% normal saline (1)
        iii. 10mL syringe (1)
    2. Maintain sterile technique
    3. Mixing Instructions
        i. Inject 1g (10mL) of TXA into 100 mL NS bag
    4. Label bag with the drug name and final concentration
        i. Example: (TXA 1g in 100mL NS)
F. Dosing Adult
    1. IV/IO - 1g in 100mL Normal Saline over 10 minutes
G. Dosing Pediatrics
    1. IV/IO – 15mg/kg to a max of 1g in 100 ml NS over 10 minutes
H. Communication and Documentation
    1. Communicate the use of TXA to the base hospital
    2. Administration of TXA and any/all associated fields will be documented in the Ventura County electronic Patient Care Report (VCePCR)

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Fireline Medic		Policy Number 627
APPROVED: Administration:	Steven Carroll, Paramedic	Date: July 1, 2022
APPROVED: Medical Director	Daniel Shepherd, MD	Date: July 1, 2022
Origination Date: Date Revised: Date Last Reviewed: Review Date:	October 5, 2011 April 14, 2022 April 14, 2022 April 30, 2024	Effective Date: July 1, 2022

I. PURPOSE: To establish procedures for a fire line paramedic (FEMP) response from and to agencies within or outside local EMS agency (LEMSA) jurisdiction when requested through the statewide Fire and Rescue Mutual Aid System, to respond to and provide advanced life support (ALS) care on the fireline at wildland fires.

II. AUTHORITY: California Health and Safety Code, Division 2.5, Sections 1797.204, 1797.220; California Code of Regulations, Title 22, Division 9, Sections 100165 and 100167

III. POLICY:

A. County accredited paramedics shall carry the ALS/BLS inventory consistent with the FIRESCOPE FEMP position description. Reasonable variations may occur; however, any exceptions shall have prior approval of the VCEMSA. The equipment lists are a scaled down version of standard inventory in order to meet workable/packable weight limitations (45 lbs including wildland safety gear, divided between a two person team. Weight limit to include the Personal Pack Inventory as outlined in FireScope).

1. It will not be possible to maintain standard ALS minimums on the fireline. The attached ALS inventory essentially prioritizes critical and probable fireline needs.

2. VCEMS accredited paramedics may function within their scope of practice, when serving in an authorized capacity assignment, as an agent of their authorized ALS fire agency.

IV. PROCEDURE:

A. Under the authority of State regulations, a paramedic may render ALS care during emergency operations as long as the following conditions are met:

1. The paramedic is currently licensed by the State of California and is accredited by the Ventura County EMS Agency.
2. The paramedic is currently employed with a Ventura County ALS provider and possesses the requisite wildland fireline skills and equipment.
3. The paramedic practices within the treatment guidelines set forth in VCEMSA ALS standing orders, policies and procedures.
4. The FEMP is expected to check in and obtain a briefing from the Logistics Section Chief, or the Medical Unit Leader (MEDL) if established at the Wildfire Incident.
5. Documentation of patient care will be completed as per VCEMSA policy 1000.
    a. Documentation of patient care will be submitted to incident host agencies. A VCePCR shall be completed for all ALS patients contacted, and shall be completed by the FEMP upon return to camp, or as soon as practical.
6. Continuous Quality Improvement activities shall be in accordance with VCEMSA standards.

APPENDIX A

FIRELINE EMERGENCY MEDICAL TECHNICIAN

BASIC LIFE SUPPORT (BLS) PACK INVENTORY

	Airway, NPA Kit (1)		Mask, Face, Disposable w/eye shield (1)
	Airway, OPA Kit (1)		Mylar Thermal Survival Blanket (2)
	Bag Valve Mask (1)		Pad, Writing (1)
	Bandage, Sterile 4 x 4 (6)		Pen and Pencil (1 ea.)
	Bandage, Triangular (2)		Pen Light (1)
	Biohazard Bag (2)		Petroleum Dressing (2)
	Burn Sheet (2)		Shears (1)
	Cervical Collar, Adjustable (1)		Sphygmomanometer (1)
	Coban Wraps/Ace Bandage (2 ea.)		Splint, Moldable (1)
	Cold Pack (3)		Splinter Kit (1)
	Combat Gauze		
	Dressing, Multi-Trauma (4)		Stethoscope (1)
	Exam Gloves (1 box)		Suction, Manual Device (1)
	Eye Wash (1 bottle)		Tape, 1 inch, Cloth (2 rolls)
	Glucose, Oral (1 Tube)		Tourniquet (1)
	Kerlix, Kling, 4.5, Sterile (2)		Triage Tags (6)
	Digital Thermometer (1)		

APPENDIX B

FIRELINE EMERGENCY MEDICAL TECHNICIAN

PARAMEDIC (ALS) PACK INVENTORY **IN ADDITION TO THE BASIC LIFE SUPPORT INVENTORY, THE FOLLOWING ADDITIONAL ITEMS OR EQUIVALENTS SHALL BE CARRIED BY THE FEMP

ALS AIRWAY EQUIPMENT:

	Endotracheal Intubation Equipment (6.0, 7.5 ET – Mac 4, Miller 4, stylette and handle)		Needle Thoracostomy Kit (1)
	End Tidal CO2 Detector		Pulse Oximeter (Optional)
	ETT Restraint		iGel Airway (1 – Size 3 and 1 – Size 4)

IV/MEDICATION ADMIN SUPPLIES:

	1 ml TB Syringe (2)		20 ga. IV Catheter (2)
	10 ml Syringe (2)		IV Site Protector (2)
	18 ga. Needle (4)		IV Administration Set-Macro-Drip (2)
	25 ga. Needle (2)		Alcohol Preps (6)
	Adult EZ-IO Kit (1)		Betadine Swabs (4)
			E-Z IO Stabilizer
	EZ Connect Tubing (2)		Glucometer Test Strips (4)
	25 mm EZ-IO Needle (1)		Lancet (4)
	45 mm EZ-IO Needle (1)		Razor (1)
	14 ga. IV Catheter (2)		Tape (1)
	16 ga. IV Catheter (2)		Tourniquet (2)
	18 ga. IV Catheter (2)		

MISCELLANEOUS:

	AMA Paper Forms (3)		PCR Paper Forms (6)
	FEMP Pack Inventory Sheet (1)		Sharps Container – Small(1)
	Narcotic Storage (per agency policy)		

BIOMEDICAL EQUIPMENT:

	Defibrillator Electrodes (2)		Glucometer (1)
	Defibrillator with ECG Waveform Display (1)		

MEDICATIONS:

	Amiodarone 50 mg/ml 3 ml (3)		Epinephrine 1mg/10ml (3)
	Albuterol – 90mcg/puff (1 MDI) with Spacer Device		Glucagon 1 mg/unit (1)
	Aspirin-Chewable (1 Bottle)		Midazolam 10 mg
	Atropine Sulfate 1mg (2)		Fentanyl 50 mcg/ml (4)
			Naloxone – 2mg (2)
	Dextrose 10% 10 G, 250ml. (1)		Nitroglycerin 1/150 gr (1)
	Diphenhydramine 50 mg (4)		Saline 0.9% IV 1,000 ml – Can be configured into two 500 ml or four 250 ml
	Epinephrine 1mg/mL (2)		5% Dextrose in Water, 50 ml (1)

COUNTY OF VENTURA EMERGENCY MEDICAL SERVICES		HEALTH CARE AGENCY POLICIES AND PROCEDURES
Policy Title: Needle Thoracostomy		Policy Number: 715
APPROVED: Administration:	Steven L. Carroll, Paramedic	Date: December 1, 2024~~July 1, 2022~~
APPROVED: Medical Director	Daniel Shepherd, M.D.	Date: December 1, 2024~~July 1, 2022~~
Origination Date: Date Revised: Date Last Reviewed: Review Date:	August 2010 June 30, 2022 June 30, 2022 June 30, 2024	Effective Date: December 1, 2024~~July 1, 2022~~

I. Purpose: To define the indications, procedure and documentation for needle thoracostomy use by paramedics.

II. Authority: Health and Safety Code, Sections 1797.220 and 1798. California Code of Regulations, Title 22, Sections 100145 and100169.

III. Policy: Paramedics may perform needle thoracostomy on patients with a suspected tension pneumothorax in accordance with this policy.

IV. Procedure:

A. Indications

1. Patients with **ALL** of the following:
   a. Clinical suspicion of pneumothorax (e.g., trauma, dyspnea, chest pain),
   b. Signs of hypoperfusion ***and/or*** systolic blood pressure less than 90 mmHg (adults) or below minimum systolic for respective age in Handtevy (pediatrics).
   c. Absent or significantly decreased breath sounds on the affected side.
2. Patients in traumatic cardiac arrest:
   a. Bilateral needle thoracostomy should be performed when patients meet criteria for resuscitation per policy 606 and have known or suspected torso trauma.

B. Contraindications: None in this setting

C. Equipment

1. Antiseptic solution
2. 10 ml syringe
3. Adults and pediatric patients over 40kg: 3-3.75 inch (8.0-8.5 cm), 10 to 14 gauge over-the-needle catheter
   Peds under 40kg: 1.25-inch (3cm), 14 to 16 gauge over-the-needle catheter
4. Connection tubing
5. Heimlich valve
6. Tape

D. Placement

1. Attach the syringe to the needle/catheter.
2. Identify and prep the site with antiseptic solution:

Preferred Adult Site:

- The lateral placement is the preferred method which is the fourth intercostal space in the anterior-axillary line (lateral to nipple).

Preferred Adult *Alternative* Site and Preferred Pediatric Site:

- If unable to access lateral placement due to patient size, position, or failed attempt, locate the second intercostal space in the mid-clavicular line.

3. Insert the needle/catheter perpendicular to the skin over the rib and direct it just over the top of the rib into the intercostal space.
4. After inserting the needle under the skin, maintain negative pressure in the syringe.
5. Advance the needle/catheter through the parietal pleura until a “pop” is felt and/or air or blood enters the syringe, then advance **ONLY** the catheter (not the syringe/needle) until the catheter hub is against the skin.

CAUTION: Do not reinsert needle into cannula due to danger of shearing cannula.

6. Hold the catheter in place and remove and discard the syringe and needle.
7. Attach tubing and Heimlich valve.
8. Secure the catheter hub to the chest wall with dressings and tape.
9. Reevaluate the patient (VS, lung sounds).

E. Documentation

1. All needle thoracostomy attempts must be documented in the Ventura County Electronic Patient Care Reporting System (VCePCR).
2. Documentation will include location, size of equipment, number of attempts, success, complications, patient response and any applicable comments.

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Use of Pre-existing Vascular Device (PVAD)		Policy Number: 716
APPROVED: Administration:	Steven L. Carroll, Paramedic	Date: December 1, 2024~~July 1, 2022~~
APPROVED: Medical Director	Daniel Shepherd, MD	Date: December 1, 2024~~July 1, 2022~~
Origination Date: Date Revised: Last Reviewed: Review Date:	March 2, 1992 June 9, 2022 June 9, 2022 June 30, 2024	Effective Date: December 1, 2024~~July 1, 2022~~

I. PURPOSE: To define the use of pre-existing vascular access devices (PVAD) by Paramedics in the prehospital setting.

II. AUTHORITY: Authority: California Health and Safety Code, §1798, §1798.2; §1798.160 and §1798.170, and California Code of Regulations, Title 22, §100145 and §100146.

III. POLICY: PVADs may be used in the prehospital setting as set forth by this document.

IV. Definition: A PVAD is a heparin/saline lock or an indwelling catheter/device placed into a vein, to provide vascular access for those patients requiring long term intravenous therapy or hemodialysis. Internal subcutaneous indwelling devices are not to be accessed by prehospital field personnel.

V. Procedure: After successful completion of an approved Ventura County training module, a Paramedic may access a PVAD and administer normal saline and medications, for a patient with the following conditions:

A. Peripheral Vein Heparin/Saline Lock

1. Any conditions requiring intravenous fluids and/or medications

B. Central line devices with externally visible access ports – PICC, tunneled catheters, or temporary dialysis catheters

1. Urgent need to administer fluids and/or medications which can only be given by the IV route and a peripheral IV site is not readily/immediately available.

C. Hemodialysis Fistula (to be used only in the absence of IO, peripheral, or central IV access):

1. Urgent need to administer fluids and/or medications which can only be given by the IV route and an alternate IV site is not readily/immediately available. Attempt to aspirate at least 5 ml of blood prior to administering any medications.