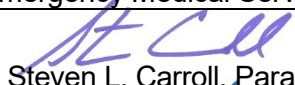



To: ALL VENTURA COUNTY EMS POLICY MANUAL HOLDERS

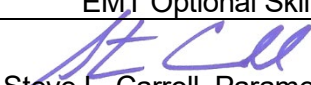
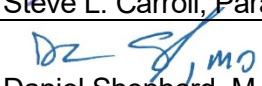
DATE: April 30, 2021

| Policy Status | Policy # | Title/New Title | Notes |
|---------------|----------|--|---|
| Replace | 100 | Local Emergency Medical Services Agency | Policy reviewed by PSC – no changes |
| Replace | 303 | EMT Optional Skills | Policy reviewed by PSC – no changes |
| Replace | 310 | Paramedic Scope of Practice | Revised to reflect California Code of Regulations Changes (April 2020). Added language related to paramedic students and local optional scope approval. |
| Replace | 334 | Prehospital Personnel Mandatory Training Requirements | Updated training requirements and terminology |
| Replace | 342 | Notification of Personnel Changes - Provider | Updated language in section III of policy |
| Replace | 504 | BLS and ALS Equipment and Supplies | Added nasal cannula capnography requirement for ALS equipment |
| Replace | 601 | Medical Control at the Scene: EMS Prehospital Personnel | Policy reviewed by PSC – no changes |
| Replace | 629 | Hospice Patient Care | Language related to cancellation of hospice services has been removed. Page 2, Section IV.3.d |
| Replace | 701 | Medical Control: Paramedic Liaison Physician | Policy reviewed by PSC – no changes |
| Replace | 705.12 | Heat Emergencies | Shifted communication failure protocols related to persistent hypotension into existing ALS standing orders. |
| Replace | 705.13 | Cold Emergencies | Updated BLS procedures and terminology. Minimize movement of extremities. Cut off wet clothing, as opposed to <i>remove</i> wet clothing. |
| Replace | 705.14 | Hypovolemic Shock | Moved comm failure protocols for persistent signs of shock into ALS Standing Orders and incorporated with existing Normal Saline orders. |
| Add | 711 | Prehospital Capnography | New policy that outlines the use capnography in the assessment and treatment of EMS patients. |
| Replace | 717 | Intraosseous Infusion | Policy reviewed by PSC – no changes |
| Replace | 727 | Transcutaneous Cardiac Pacing | Heart rate changed from less than 45 BPM down to less than 40 BPM |
| Maintain | 737 | Public Health Emergency Vaccine Administration | This policy was effective in January 2021. Existing language remains the same, but we wanted to include it in the packet for review. |
| Replace | 1105 | Mobile Intensive Care Nurse Developmental Course and Examination Procedure | Topics in section III.B updated to reflect new priorities and changes in terminology to existing items. |
| Replace | 1403 | Trauma Registry and Data | Changes made to trauma center data reporting requirements. |

| Policy Status | Policy # | Title/New Title | Notes |
|---------------|----------|--|---|
| Replace | 1404 | Guidelines for Interfacility Transfer of Patients to a Trauma Center | Criteria added to Section IV.A for conditions that warrant transfer to a trauma center. Criteria also added for emergent trauma transfers. |
| Replace | 1405 | Trauma Triage and Destination Criteria | Policy reviewed by TORC – no changes |
| Replace | 1602 | Public Safety First Aid (PSFA) Optional Skills Approval and Training | Additional skills (DuoDote, Epinephrine, OPA/NPA, supplemental oxygen) added to policy for those PSFA agencies that wish to implement them. |

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| COUNTY OF VENTURA HEALTH CARE AGENCY | | EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES | |
| Policy Title: Local Emergency Medical Services Agency | | Policy Number 100 | |
| APPROVED: Administration: |  Steven L. Carroll, Paramedic | Date: December 1, 2017 | |
| APPROVED: Medical Director: |  Daniel Shepherd, MD | Date: December 1, 2017 | |
| Origination Date: | July 1, 1980 | | |
| Date Revised: | October, 2003 | Effective Date: December 1, 2017 | |
| Last Reviewed: | February 11, 2021 | | |
| Review Date: | February 28, 2024 | | |

- I. PURPOSE: To establish a local EMS agency as required for the development of an emergency medical services program in Ventura County.
- II. AUTHORITY: Health and Safety Code, Sections 1797.94 and 1797.200. Ventura County Board of Supervisors Board Letter dated July 1, 1980.
- III. POLICY: The Ventura County Health Care Agency is designated as the Local Emergency Medical Services Agency for Ventura County. The Ventura County Emergency Medical Services Agency (VCEMS) has primary responsibility for administration of emergency medical services in Ventura County.
 - A. Organizational History of the VC EMS Agency:
 - 1980 EMS Coordinator reports directly to the County Health Officer
 - 1987 VCEMS is made a department of Public Health
 - 1989 VCEMS is made a department of the Health Care Agency
 - 1996 VCEMS is made a department of Public Health



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| COUNTY OF VENTURA HEALTH CARE AGENCY | | EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES | |
| Policy Title: EMT Optional Skills | | Policy Number 303 | |
| APPROVED: Administration: |  Steve L. Carroll, Paramedic | Date: December 1, 2017 | |
| APPROVED: Medical Director: |  Daniel Shepherd, M.D. | Date: December 1, 2017 | |
| Origination Date: | July 13, 2017 | Effective Date: December 1, 2017 | |
| Date Revised: | July 13, 2017 | | |
| Date Last Reviewed: | March 11, 2021 | | |
| Review Date: | March 31, 2024 | | |

- I. PURPOSE: To define the process related to authorizing EMT optional skills and EMT trial studies
- II. AUTHORITY: Health and Safety Code, Section 1797.107, 1797.109, 1797.160, 1797.170, and California Code of Regulations, Title 22, Division 9, Section 100064
- III. POLICY:
 - A. In addition to the skills outlined in VCEMS Policy 300 – EMT Scope of Practice, the VCEMS Medical Director may establish policies and procedures for local accreditation of an EMT student or certified EMT to perform any or all of the following optional skills specified in this policy. Accreditation for EMTs to practice optional skills shall be limited to those whose EMT certification is active and are employed within the County of Ventura by an employer who is part of the organized EMS system.
 1. Administration of epinephrine by prefilled syringe and/or drawing up the proper drug dose into a syringe for suspected anaphylaxis and/or severe asthma.
 - a. Training in the administration of epinephrine by prefilled syringe and/or drawing up the proper drug dose into a syringe for suspected anaphylaxis and/or severe asthma shall consist of no less than two (2) hours to result in the EMT being competent in the use and administration of epinephrine by prefilled syringe and/or drawing up the proper drug dose into a syringe and managing a patient of a suspected anaphylactic reaction and/or experiencing severe asthma symptoms. Included in the training hours listed above shall be the following topics and skills:
 - 1) Names
 - 2) Indications and contraindications
 - 3) Complications

- 4) Side/adverse effects and interactions
 - 5) Routes of administration
 - 6) Dosage calculation
 - 7) Mechanisms of drug actions
 - 8) Medical asepsis
 - 9) Disposal of contaminated items and sharps
 - 10) Medical administration
- b. At the completion of this training, the student shall complete a competency based written and skills examination for the use and/or administration of epinephrine by prefilled syringe and/or drawing up the proper drug dose into a syringe, which shall include:
- 1) Assessment of when to administer epinephrine,
 - 2) Managing a patient before and after administering epinephrine,
 - 3) Using universal precautions and body substance isolation procedures during medication administration,
 - 4) Demonstrating aseptic technique during medication administration,
 - 5) Demonstrating preparation and administration of epinephrine by prefilled syringe and/or drawing up the proper drug dose into a syringe, and
 - 6) Proper disposal of contaminated items and sharps
2. Administration of Atropine and Pralidoxime Chloride, utilizing the DuoDote auto-injector following an exposure to a nerve-agent.
- a. In addition to a basic weapons of mass destruction training, the DuoDote training shall consist of no less than two (2) hours of didactic and skills training to result in competency. Training in the profile of the medications contained in the DuoDote auto-injector shall include, but not limited to:
- 1) Indications and contraindications
 - 2) Side/adverse effects
 - 3) Routes of administration
 - 4) Dosages
 - 5) Mechanisms of drug action
 - 6) Disposal of contaminated items and sharps
-

- 7) Medication administration
- b. At the completion of this training, the student shall complete a competency based written and skills examination for the administration of the Duo-dote auto-injector.
 - 1) Assessment of when to administer the DuoDote auto-injector,
 - 2) Managing a patient before and after administering the DuoDote auto-injector
 - 3) Using the universal precautions and body substance isolation precautions during medication administration,
 - 4) Demonstrating aseptic technique during medication administration,
 - 5) Demonstrating the preparation and administration of medications by the intramuscular (IM) route, and
 - 6) Proper disposal of contaminated items and sharps.
- B. Competency training in procedures and skills for all EMT optional skills shall be completed at least every two (2) years.
- C. VCEMS shall develop and maintain specific plans for each optional skill permitted. These plans will include:
1. A description of the need for use of the optional skill
 2. A description of the geographic area within which the optional skills will be utilized
 3. A description of the data collection methodology which shall also include an evaluation of the effectiveness of the optional skill
 4. The policies and procedures to be instituted by the LEMSA regarding medical control and use of the optional skill
- D. For an accredited EMT who fails to demonstrate competency in any of the optional skills outlined in this policy:
1. EMT accreditation shall be immediately suspended pending clinical remediation
 2. Employer agency will submit a written plan of action to VCEMS to include: method of remediation, course curriculum, date(s) and location(s) of remediation training.
 3. VCEMS will review and approve written plan of action prior to commencement of remediation training
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4. Once complete, evidence of satisfactory training and minimum competency in the optional skills will be submitted to VCEMS prior to the reinstatement of the EMT accreditation.

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| COUNTY OF VENTURA HEALTH CARE AGENCY | | EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES | |
| Policy Title: Paramedic Scope of Practice | | Policy Number: 310 | |
| APPROVED: Administration: |  Steven L. Carroll, Paramedic | Date: June 1, 2021 | |
| APPROVED: Medical Director: |  Daniel Shepherd, M.D. | Date: June 1, 2021 | |
| Origination Date: | May, 1984 | Effective Date: June 1, 2021 | |
| Date Revised: | March 11, 2021 | | |
| Date Last Reviewed: | March 11, 2021 | | |
| Review Date: | March 31, 2023 | | |



- I. PURPOSE: To define the scope of practice of a Paramedic accredited and practicing in Ventura County.
- II. AUTHORITY: Health and Safety Code Section 1797.172 and 1797.185. California Code of Regulations, Division 9, Chapter 4, Sections 100145, 100146 and 100147.
- III. POLICY:
 - A. A paramedic may perform any activity identified in the Scope of Practice of an EMT or Advanced EMT (AEMT) as defined in regulations governing those certification levels.
 - B. The medical director of the LEMSA may develop policies and procedures or establish standing orders allowing the paramedic to initiate any paramedic activity in the approved scope of practice without voice contact for medical direction from a physician, authorized registered nurse, or mobile intensive care nurse (MICN), provided that an EMSQIP is in place
 - C. A paramedic student or a licensed paramedic, as part of an organized EMS system, while caring for patients in a hospital as part of his/her training or continuing education (CE) under the direct supervision of a physician, registered nurse, or physician assistant, or while at the scene of a medical emergency or during transport, or during interfacility transfer, may perform the following procedures or administer the following medications when such are approved by the medical director of the LEMSA and are included in the written policies and procedures of the LEMSA.:
 - D. Basic Scope of Practice:
 1. Utilize electrocardiographic devices and monitor electrocardiograms (ECG), including 12-lead ECG.
 2. Perform pulmonary ventilation by use of lower airway multi-lumen adjuncts, the esophageal airway, perilaryngeal airways, stomal intubation, and adult oral endotracheal intubation..
 3. Utilize mechanical ventilation devices for continuous positive airway pressure (CPAP)/bi-level positive airway pressure (BPAP) and positive end expiratory pressure (PEEP) in the spontaneously breathing patient.

4. Institute intravenous (IV) catheters, saline locks, needles or other cannulae (IV) lines, in peripheral veins.
5. Monitor and access pre-existing peripheral and central vascular access lines.
6. Institute intraosseous (IO) needles or catheters.
7. Administer IV or IO glucose solutions and normal saline solutions.
8. Obtain venous blood samples
9. Use laboratory devices, including point of care testing, for pre-hospital screening use to measure lab values including, but not limited to: glucose, capnometry, capnography, and carbon monoxide when appropriate authorization is obtained from State and Federal agencies, including from the Centers for Medicare and Medicaid Services pursuant to the Clinical Laboratory Improvement Amendments (CLIA).
10. Administer approved medications by the following routes: IV, IO, intramuscular, subcutaneous, inhalation, transcutaneous, rectal, sublingual, endotracheal, intranasal, oral or topical
11. Administer the following medications:
 - a. Activated charcoal
 - b. Adenosine
 - b. Amiodarone
 - c. Aspirin
 - d. Atropine sulfate
 - e. Bronchodilators, nebulized beta-2 specific
 - f. Calcium chloride
 - g. Dextrose, 5%, 10%, 25%, and 50%
 - h. Diazepam
 - i. Diphenhydramine hydrochloride
 - j. Dopamine hydrochloride
 - k. Epinephrine
 - l. Fentanyl
 - m. Glucagon hydrochloride
 - n. Heparin (interfacility transfers only)
 - o. Hydroxocobalamin
 - p. Ipratropium bromide
 - q. Lidocaine hydrochloride
 - r. Lorazepam

- s. Magnesium sulfate
 - t. Midazolam
 - u. Morphine sulfate
 - v. Naloxone hydrochloride
 - w. Nitroglycerin preparations: oral, IV (interfacility transfers only)
 - x. Ondansetron
 - y. Pralidoxime Chloride
 - z. Sodium bicarbonate
 - aa. Tranexamic Acid
12. Perform defibrillation
 13. Perform synchronized cardioversion
 14. Perform transcutaneous pacing
 15. Visualize the airway by use of the laryngoscope and remove foreign body(ies) with Magill forceps
 16. Perform Valsalva maneuver
 17. Perform nasogastric and orogastric tube insertion and suction
 18. Monitor thoracostomy tubes
 19. Monitor and adjust IV solutions containing potassium equal to or less than 40 mEq/L.
 20. Perform needle thoracostomy
- E. Local Optional Scope of Practice
1. The medical director of the LEMSA shall submit a written request to the Director of the California EMS Authority (CalEMSA) for approval of any procedures or medications proposed for use in accordance with Section 1797.172(b) of the Health and Safety Code prior to implementation.
 2. CalEMSA shall, within fourteen (14) days of receiving request, notify the medical director of the LEMSA that the request has been received and shall specify what information, if any, is missing.
 3. The Director of CalEMSA, in consultation with the Emergency Medical Services Medical Directors Association of California's (EMDAC) Scope of Practice Committee, shall approve or disapprove the request for additional procedures and/or administration of medications and notify the LEMSA medical director of the decision within ninety (90) days of receipt of the completed request. An approved status shall be in effect for a period of three (3) years. An approved status may be renewed for another three (3) year period, upon the CalEMSA's

receipt of a written request that includes, but is not limited to, the following information:

- a. the utilization of the procedure(s) or medication(s),
 - b. beneficial effects,
 - c. adverse reactions or complications,
 - d. statistical evaluation,
 - e. general conclusion
4. The Director of CalEMSA, in consultation with the EMDAC Scope of Practice Committee, may suspend or revoke approval of any previously approved additional procedure(s) or medication(s) for cause.

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| COUNTY OF VENTURA HEALTH CARE AGENCY | | EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES | |
| Policy Title: Pre-Hospital Personnel Mandatory Training Requirements | | Policy Number: 334 | |
| APPROVED: Administration: |  Steven L. Carroll, Paramedic | Date: June 1, 2021 | |
| APPROVED: Medical Director |  Daniel Shepherd, MD | Date: June 1, 2021 | |
| Origination Date: | September 14, 2000 | Effective Date: June 1, 2021 | |
| Date Revised: | April 8, 2021 | | |
| Date Last Reviewed: | April 8, 2021 | | |
| Review Date: | April 30, 2023 | | |

- I. PURPOSE: To define the requirements for mandatory training sessions for EMTs, Paramedics, EMT-ALS Assist SAR EMTs, MICNs and Flight Nurses in Ventura County.
- II. AUTHORITY: Title 22, California Code of Regulation, Division 9, Section 100175 and Chapter 6. Health and Safety Code Section 1797.214, 1797.220 and 1798.200.
- III. POLICY: All pre-hospital personnel have requirements for on-going authorization or accreditation to provide pre-hospital care in Ventura County. These requirements are outlined in VCEMS Policy 318 for Paramedics, 306 and 803 for EMTs, 1201 for Flight Nurses and SAR EMTs and 322 for MICNs.
- III. PROCEDURE:
 - A. EMS Updates – Applies to all personnel listed above except EMTs.
Personnel shall attend mandatory education and/or testing on updates to local policies and procedures (EMS Update), which will be presented by the Base Hospitals in May and November each year (minimum of 12 opportunities to attend each session).
Prehospital Services Committee members who attend 75% of the scheduled meetings over the previous 6 months may have this requirement waived.
 - B. MCI Training – Applies to all personnel listed above.
Personnel shall attend initial Basic or Advanced MCI training within 6 months of initially starting the certification or accreditation process and complete bi-annual refreshers as indicated in VC EMS Policy 131.
 - C. Resuscitation Training – Applies to Paramedics, MICN’s, and Flight Nurses only.
 1. Adult Resuscitation– Paramedic, MICN, and Flight Nurse providers must obtain AHA ACLS certification or American Red Cross ALS certification within three months of initially starting the certification or accreditation process. Adult resuscitation certification must be maintained as current while practicing in Ventura County.
 2. Pediatric – All personnel listed above with the exception of MICN’s, shall obtain a Handtevy Pediatric Provider course completion certification within 3 months of

initially starting the accreditation process. Course completion must be maintained as current while practicing in Ventura County. MICN's who have received Handtevy Orientation training may utilize AHA or American Red Cross Pediatric Advanced Life Support (PALS), Pediatric Education for Prehospital Providers (PEPP), or Emergency Nurse Pediatric Course (ENPC), to meet the pediatric resuscitation training requirement. In all cases certification must be maintained as current while practicing in Ventura County.

D. Paramedic Skills Refresher – Applies to Paramedics only

1. Paramedics shall attend one skills refresher session during the first year of licensure and one skills refresher in the second year of licensure.
2. Skills Refreshers will be offered at least 4 times in March and 4 times in September and will be offered over a 3 week period. Dates, times, and locations for the Skills Refreshers will be published one year in advance. Late arrivals will not be admitted into the Skills Refresher.

E. Failure to complete mandatory requirements:

1. Level II Paramedics who fail to complete any of these requirements will immediately revert to a Level I Paramedic according to VCEMS Policy 318. The Paramedic's accreditation to practice in Ventura County will be suspended after the State required 15 day notice until the following remediation criteria has been met. All other required personnel who fail to complete these requirements will have their authorization immediately suspended.
2. Reinstatement of authorization or accreditation:
 - a. Personnel who have not completed or maintained MCI, adult resuscitation, or pediatric resuscitation training requirements as outlined above must complete the requirements and provide documentation of completion to VCEMS for determination on reinstatement.
 - b. Personnel not attending EMS Update must complete the following remediation criteria.
 - 1) Personnel will attend a make-up session to be scheduled by VC EMS within 2 weeks of the last regularly scheduled EMS Update session.
 - 2) Personnel will submit a written statement to VC EMS explaining the circumstances why this requirement could not be met.
 - 3) Submit a \$125.00 fine

- 4) A written post-test will be administered, and must be successfully completed by achieving a minimum passing score of 85%.
- 5) If the VC EMS make up session is not attended, the employer may elect to assist the person in completing the requirement.
 - a) The employer shall use the materials and test supplied by VC EMS.
 - b) The employer will be responsible to forward the written statement and \$125.00 fine to VC EMS.
 - c) The employer will administer the written test and will forward it to VC EMS for scoring. Minimum passing score will be 85%.
 - d) A make-up session arranged by an employer will be approved by VC EMS before it is presented.
- c. Paramedics not attending Skills Refresher must complete the following remediation criteria.
 - 1). Paramedic will submit a written statement to VC EMS explaining the circumstances why this requirement could not be met.
 - 2) Submit a \$125.00 fine.
 - 3) Paramedic will attend a remediation session on documentation and review of VC EMS Policy 318 to be administered by VC EMS.
 - 4) ALS provider will confirm paramedic has read and reviewed VC EMS Policy and Procedure Sections 6 & 7.
 - 5) ALS provider will be responsible to coordinate a Skills Refresher make-up session conducted by either an ALS Service Provider Medical Director, base hospital physician or their designee. Skills Refresher make-up will include all skills covered at the most recent Skills Refresher.
 - 6) ALS provider will submit a written plan of action to VC EMS to include: course curriculum, date and location of Skills Refresher make-up, equipment to be used and names of instructors.
 - 7) Completed reinstatement checklist, will be submitted to VC EMS for review and determination on reinstatement of paramedic accreditation.

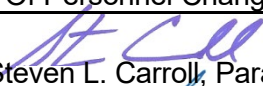

PARAMEDIC SKILLS REFRESHER REINSTATEMENT CHECKLIST

Paramedic Name: _____

CA License No.: _____

| Action | Date | Signature |
|--|------|-----------|
| 1. Read and reviewed EMS Policy and Procedure Sections 6 & 7 (signed by provider). | | |
| 2. Orientation at EMS Office, Policy 318 review. | | |
| 3. Documentation Station: Administered by EMS | | |
| 4. Skills refresher verification: The skills must be signed off by a BH physician or Medical Director associated with your employer. | | |
| a. | | |
| b. | | |
| c. | | |
| d. | | |
| e. | | |
| f. | | |
| g. | | |

After the above is completed, please forward the checklist to the EMS Agency for review and determination on reinstatement of paramedic accreditation.

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| COUNTY OF VENTURA HEALTH CARE AGENCY | | EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES | |
| Policy Title: Notification Of Personnel Changes-Provider | | Policy Number 342 | |
| APPROVED: Administration: |  Steven L. Carroll, Paramedic | Date: June 1, 2021 | |
| APPROVED: Medical Director: |  Daniel Shepherd, MD | Date: June 1, 2021 | |
| Origination Date: | May 15, 1987 | | |
| Date Revised: | April 8, 2021 | Effective Date: June 1, 2021 | |
| Last Review: | April 8, 2021 | | |
| Review Date: | April 30, 2024 | | |

I. PURPOSE



To define a procedure to assure that the Ventura County Emergency Services Agency is notified of hiring, leave of absence, or termination of employment of an EMT, Paramedic or MICN.

II. AUTHORITY:

Health and Safety Code, Chapter 1, Article 1.

III. POLICY

Each provider of prehospital EMS services shall notify, Emergency Medical Services Administrative Office, in writing or by e-mail, of hiring, leave of absence, or termination of employment of an EMT, Paramedic or MICN within 5 working days of taking action.

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| COUNTY OF VENTURA HEALTH CARE AGENCY | | EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES | |
| Policy Title: BLS And ALS Unit Equipment And Supplies | | Policy Number: 504 | |
| APPROVED: Administration: |  Steven L. Carroll, Paramedic | Date: June 1, 2021 | |
| APPROVED: Medical Director |  Daniel Shepherd, MD | Date: June 1, 2021 | |
| Origination Date: | May 24, 1987 | Effective Date: June 1, 2021 | |
| Date Revised: | April 8, 2021 | | |
| Last Reviewed: | April 8, 2021 | | |
| Review Date: | April 30, 2022 | | |

- I. PURPOSE: To provide a standardized list of equipment and supplies for response and/or transport units in Ventura County.
- II. POLICY: Each response and/or transport unit in Ventura County shall be equipped and supplied according to the requirements of this policy.
- III. AUTHORITY: California Health and Safety Code Section 1797.178, 1797.204, 1797.218, 1797.221 and California Code of Regulations Sections 100148, 100306, 100404
- IV. PROCEDURE:
The following equipment and supplies shall be maintained on each response and/or transport unit in Ventura County.

Deviation from the standards outlined in this policy shall only be authorized with written approval (see attached Equipment/Medication Waiver Request form) from the VCEMS Medical Director. Mitigation attempts should be documented in the comment section on the waiver request form, such as what vendors were contacted, etc.



| | ALS / BLS Unit Minimum Amount | PSV/CCT Minimum Amount | FR/ALS Minimum Amount | Search and Rescue Minimum Amounts |
|---|----------------------------------|------------------------------|-----------------------------|--|
| A. ALL BLS AND ALS RESPONSE AND/OR TRANSPORT UNITS | | | | |
| Clear masks in the following sizes: Adult Child Infant Neonate | 1 each | 1 each | 1 each | 1 adult 1 infant |
| Bag valve units Adult (1,000 mL) Child (500 mL) Infant (240 mL) | 1 each | 1 each | 1 each | 1 adult |
| Nasal cannula Adult | 3 | 3 | 3 | 3 |
| Nasopharyngeal airway (adult and child or equivalent) | 1 each | 1 each | 1 each | 1 each |
| Continuous positive airway pressure (CPAP) device | 1 per size | 1 per size | 1 per size | 1 per size |
| Nerve Agent Antidote Kit | 9 | 9 | 9 | 0 |
| Blood glucose determination devices (<i>optional for non-911 BLS units</i>) | 2 | 1 | 1 | 1 |
| Oral glucose 15gm unit dose | 1 | 1 | 1 | 1 |
| Oropharyngeal Airways Adult Child Infant Newborn | 1 each size | 1 each size | 1 each size | 1 each size |
| Oxygen with appropriate adjuncts (portability required) | 10 L/min for 20 minutes | 10 L/min for 20 mins. | 10 L/min for 20 mins. | 10 L/min for 20 mins. |
| Portable suction equipment | 1 | 1 | 1 | 1 |
| Transparent oxygen masks Adult nonrebreather Child Infant | 3 3 2 | 2 2 2 | 2 2 2 | 2 2 2 |
| Bandage scissors | 1 | 1 | 1 | 1 |
| Bandages <ul style="list-style-type: none"> • 4"x4" sterile compresses or equivalent • 2",3",4" or 6" roller bandages • 10"x 30" or larger dressing | 12 6 | 12 2 0 | 12 6 2 | 5 4 2 |
| Blood pressure cuffs Thigh Adult Child Infant | 1 1 1 1 | 1 1 1 1 | 1 1 1 1 | 1 1 1 1 |
| Emesis basin/bag | 1 | 1 | 1 | 1 |
| Flashlight | 1 | 1 | 1 | 1 |
| Traction splint or equivalent device | 1 | 1 | 1 | 1 |
| Pneumatic or rigid splints (<i>capable of splinting all extremities</i>) | 4 | 4 | 4 | 4 |
| Potable water or saline solution | 4 liters | 4 liters | 4 liters | 4 liters |
| Cervical spine immobilization device | 2 | 2 | 2 | 2 |
| Spinal immobilization devices | | | | |

| | ALS / BLS Unit Minimum Amount | PSV/CCT Minimum Amount | FR/ALS Minimum Amount | Search and Rescue Minimum Amounts |
|--|----------------------------------|------------------------------|-----------------------------|--|
| KED or equivalent 60" minimum with at least 3 sets of straps | 1 1 | 1 0 | 1 1 | 1 |
| Sterile obstetrical kit | 1 | 1 | 1 | 1 |
| Tongue depressor | 4 | 4 | 4 | 4 |
| Cold packs | 4 | 4 | 4 | 4 |
| Tourniquet | 1 | 1 | 1 | 1 |
| 1 mL, 5 mL, and 10 mL syringes with IM needles | 4 | 4 | 4 | 4 |
| Automated External Defibrillator (if not equipped with ALS monitor/defibrillator) | 1 | 1 | 1 | 1 |
| Personal Protective Equipment per State Guideline #216 | | | | |
| Rescue helmet | 2 | 1 | 0 | 0 |
| EMS jacket | 2 | 1 | 0 | 0 |
| Work goggles | 2 | 1 | 0 | 0 |
| Tyvek suit | 2 L / 2 XXL | 1 L / 1 XXL | 0 | 0 |
| Tychem hooded suit | 2 L / 2 XXL | 1 L / 1 XXL | 0 | 0 |
| Nitrile gloves | 1 Med / 1 XL | 1 Med / 1 XL | 0 | 0 |
| Disposable footwear covers | 1 Box | 1 Box | 0 | 0 |
| Leather work gloves | 3 L Sets | 1 L Set | 0 | 0 |
| Field operations guide | 1 | 1 | 0 | 0 |
| OPTIONAL EQUIPMENT | | | | |
| Occlusive dressing or chest seal | | | | |
| Hemostatic gauze per EMSA guidelines | | | | |
| B. TRANSPORT UNIT REQUIREMENTS | | | | |
| Ambulance cot and collapsible stretcher; or two stretchers, one of which is collapsible. | 1 | 0 | 0 | 1 |
| Straps to secure the patient to the stretcher or ambulance cot, and means of securing the stretcher or ambulance cot in the vehicle. | 1 Set | 0 | 0 | 1 Set |
| Soft Ankle and wrist restraints. | 1 | 0 | 0 | 0 |
| Sheets, pillow cases, blankets and towels for each stretcher or ambulance cot, and two pillows for each ambulance | 1 | 0 | 0 | 0 |
| Bedpan | 1 | 0 | 0 | 0 |
| Urinal | 1 | 0 | 0 | 0 |

| | ALS / BLS Unit Minimum Amount | PSV/CCT Minimum Amount | FR/ALS Minimum Amount | Search and Rescue Minimum Amounts |
|---|---|-------------------------------|-------------------------------|--|
| C. ALS UNIT REQUIREMENTS | | | | |
| Cellular telephone | 1 | 1 | 1 | 1 |
| Supraglottic Airway Devices: I-Gel with passive oxygenation port Sizes 1, 1.5, 2, 2.5, 3, 4, 5 | 2 of each | 1 of each | 1 of each | 1 of each |
| I-Gel Airway Support Straps | 2 | 2 | 2 | 2 |
| Arm Boards 9" 18" | 3 3 | 0 0 | 1 1 | 0 0 |
| CO ₂ monitor Infant (<0.5 mL sidestream or <1 mL mainstream adaptor) Pediatric / Adult (6.6 mL sidestream or < 5 mL mainstream adaptor) | 2 of each | 2 of each | 2 of each | 2 of each |
| CO ₂ Monitor Adult size EtCO ₂ sampling nasal cannula Pediatric size EtCO ₂ sampling nasal cannula | 1 of each | 1 of each | 1 of each | 1 of each |
| Colorimetric CO ₂ Detector Device | 1 | 1 | 1 | 1 |
| Defibrillator pads or gel | 3 | 3 | 3 | 1 adult – No Peds. |
| Defibrillator w/adult and pediatric paddles/pads | 1 | 1 | 1 | 1 |
| EKG Electrodes | 10 sets | 3 sets | 3 sets | 6 sets |
| Endotracheal intubation tubes, sizes 6.0, 6.5, 7.0, 7.5, 8.0 with stylets | 1 of each size | 1 of each size | 1 of each size | 4, 5, 6, 6.5, 7, 7.5, 8 |
| EZ-IO intraosseous infusion system | 1 Each Size | 1 Each Size | 1 Each Size | 1 Each Size |
| Intravenous Fluids (in flexible containers) • Normal saline solution, 100 ml • Normal saline solution, 500 ml • Normal saline solution, 1000 ml | 2 2 6 | 1 1 2 | 1 1 4 | 1 1 3 |
| IV admin set - macrodrip | 4 | 1 | 4 | 3 |
| IV catheter, Sizes I4, I6, I8, 20, 22, 24 | 6 each 14, 16, 18, 20 3 each 22 3 each 24 | 2 each | 2 each | 2 each |
| Laryngoscope, replacement bulbs and batteries Curved blade #2, 3, 4 Straight blade #1, 2, 3 | 1 set 1 each 1 each | 1 set 1 each 1 each | 1 set 1 each 1 each | 1 set 1 each 1 each |
| Magill forceps Adult Pediatric | 1 1 | 1 1 | 1 1 | 1 1 |
| Intranasal mucosal atomization device | 2 | 2 | 2 | 2 |
| Nebulizer | 2 | 2 | 2 | 2 |
| Nebulizer with in-line adapter | 1 | 1 | 1 | 1 |
| Needle Thoracostomy kit | 2 | 2 | 2 | 2 |
| Pediatric length and weight tape | 1 | 1 | 1 | 1 |
| SpO ₂ Monitor (If not attached to cardiac monitor) | 1 | 1 | 1 | 1 |
| SpO ₂ Adhesive Sensor (Adult, Pediatric, Infant) | 1 of each | 1 of each | 1 of each | 1 of each |
| Flexible intubation stylet | | | | |

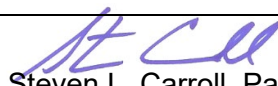
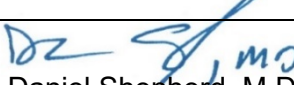
| | ALS / BLS Unit Minimum Amount | PSV/CCT Minimum Amount | FR/ALS Minimum Amount | Search and Rescue Minimum Amounts |
|---|----------------------------------|------------------------------|-----------------------------|--|
| OPTIONAL ALS EQUIPMENT (No minimums apply) | | | | |
| Cyanide Antidote Kit | | | | |

| | BLS Unit Minimum Amount | ALS Unit Minimum Amount | PSV/CCT Minimum Amount | FR/ALS Minimum Amount | Search and Rescue Minimum Amounts |
|--|-------------------------|-------------------------|------------------------|-----------------------|-----------------------------------|
| D. MEDICATION, MINIMUM AMOUNT | | | | | |
| Adenosine, 6 mg | | 3 | 3 | 3 | 3 |
| Albuterol 2.5mg/3ml | | 6 | 2 | 3 | 1 |
| Aspirin, 81mg | | 4 ea 81 mg | 4 ea 81 mg | 4 ea 81 mg | 4 ea 81 mg |
| Amiodarone, 50mg/ml 3ml | | 6 | 3 | 6 | 3 |
| Atropine sulfate, 1 mg/10 ml | | 2 | 2 | 2 | 2 |
| Diphenhydramine (Benadryl), 50 mg/ml | | 2 | 1 | 1 | 2 |
| Calcium chloride, 1000 mg/10 ml | | 2 | 1 | 1 | 1 |
| Dextrose | | | | | |
| • 5% 50ml, AND | | 2 | 1 | 2 | 1 |
| • 10% 250 ml, OR | | 5 | 2 | 2 | 2 |
| • 50%, 25 GM/50 | | 2 | 1 | 2 | 1 |
| Epinephrine | | | | | |
| • Epinephrine , 1mg/ml | | | | | |
| • 1 mL ampule / vial, OR | 2 | 5 | 5 | 5 | 5 |
| • Adult auto-injector (0.3 mg), AND | 2 | 4 | 2 | 2 | 2 |
| • Peds auto-injector (0.15 mg) | 2 | 4 | 2 | 2 | 2 |
| • Epinephrine 0.1mg/ml (1 mg/10ml preparation) | | 6 | 3 | 6 | 4 |
| Fentanyl, 50 mcg/mL | | 2 | 2 | 2 | 2 |
| Glucagon, 1 mg/ml | | 2 | 1 | 2 | 1 |
| Lidocaine, 100 mg/5ml | | 2 | 2 | 2 | 2 |
| Magnesium sulfate, 1 gm per 2 ml | | 4 | 4 | 4 | 4 |
| Midazolam Hydrochloride (Versed) | | 5 mg/ml 2 vials | 5 mg/ml 2 vials | 5 mg/ml 2 vials | 5 mg/ml 2 vials |
| Morphine sulfate, 10 mg/ml (Only required during a Fentanyl shortage) | | 2 | 2 | 2 | 2 |
| Naloxone Hydrochloride (Narcan) | | | | | |
| • IN concentration - 4 mg in 0.1 mL (optional for ALS and non-911 BLS units), OR | 2 | 5 | 5 | 5 | 5 |
| • IM / IV concentration – 2 mg in 2 mL preload (optional for non-911 BLS units) | 2 | 5 | 5 | 5 | 5 |
| Nitroglycerine preparations, 0.4 mg | | 1 bottle | 1 bottle | 1 bottle | 1 bottle |
| Normal saline, 10 ml | | 2 | 2 | 2 | 2 |
| Ondansetron (Zofran) | | | | | |
| • 4 mg IV single use vial | | 4 | 4 | 4 | 4 |
| • 4 mg oral | | 4 | 4 | 4 | 4 |
| Sodium Bicarbonate, 1 mEq/mL | | 2 | 1 | 1 | 1 |
| Tranexamic Acid (TXA) 1 gm/10 mL | | 2 | 1 | 1 | 1 |

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| COUNTY OF VENTURA HEALTH CARE AGENCY | | EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES | |
| Policy Title: MEDICAL CONTROL AT THE SCENE: EMS PREHOSPITAL PERSONNEL | | Policy Number: 601 | |
| APPROVED: Administration: |  Steven L. Carroll, Paramedic | Date: December 1, 2017 | |
| APPROVED: Medical Director |  Daniel Shepherd, MD | Date: December 1, 2017 | |
| Origination Date: | October 1, 1993 | Effective Date: December 1, 2017 | |
| Date Revised: | September 14, 2017 | | |
| Date Last Reviewed: | April 8, 2021 | | |
| Review Date: | April 30, 2024 | | |

- I. PURPOSE: To establish guidelines for medical control at the scene of a medical emergency.
- II. AUTHORITY: California Health and Safety Code, Sections 1797.220, and 1798.6
- II. POLICY: Authority for patient health care management in an emergency shall be vested in that licensed and/or certified health care professional, which may include any paramedic or other prehospital emergency medical personnel, at the scene of an emergency who is most medically qualified specific to the provision of rendering emergency medical care. If no licensed or certified health care professional is available, the authority shall be vested in the most appropriate medically qualified representative of public safety agencies who may have responded to the scene of the emergency.
(Health and Safety Code, Section 1796(a))
- III. PROCEDURE: The following shall be utilized to determine authority for medical control on scene:
 - A. Prehospital care personnel, certified and/or accredited in Ventura County, have authority for health care management in the following ascending order:
 1. EMT
 3. EMT-ALS Assist
 4. Paramedic, operating in accordance with established Ventura County EMS Agency policies and procedures, under medical control from a BH, or who is providing care under the direct order of a physician on scene.
 - a. This does not allow the paramedic to receive orders from medical personnel at the scene who are not MD's or DO's. This order is determined by training hours, scope of practice, and available supplies and equipment.

6. The first paramedic on scene assumes initial medical control of the patient. Medical Control of the patient and the best course of patient care will be determined by paramedics on scene, in conjunction with the base hospital MICN/base physician (when indicated). In all cases, transfer of medical control and/or patient care will be done in a coordinated fashion.

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| COUNTY OF VENTURA HEALTH CARE AGENCY | | EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES | |
| Policy Title: Hospice Patient Care | | Policy Number: 629 | |
| APPROVED: Administration: |  Steven L. Carroll, Paramedic | Date: June 1, 2021 | |
| APPROVED: Medical Director: |  Daniel Shepherd, M.D. | Date: June 1, 2021 | |
| Origination Date: | October 10, 2019 | | |
| Date Revised: | April 8, 2021 | | |
| Date Last Reviewed: | April 8, 2021 | Effective Date: June 1, 2021 | |
| Next Review Date: | April 30, 2023 | | |



- I. PURPOSE: To define the management of patients enrolled in hospice.

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

- III. POLICY:
 - A. EMS personnel shall evaluate and treat patients enrolled in hospice programs with the goal of enabling them to remain at home and continue their desired treatment plan according to the following procedures.

- IV. PROCEDURE:
 - A. Patient Management:
 1. The responding EMS personnel will evaluate the presenting complaint, confirm that the patient is on hospice and identify the current hospice provider.
 2. A phone call shall be established between EMS and the on-call hospice provider to communicate on scene findings.
 3. EMS and Hospice communication will be centered around the following goals;
 - a. Identifying a need for the hospice provider to respond to the scene

- b. Identifying EMS interventions or actions which may facilitate patient comfort and prevent transport.
 - c. Identifying hospice resources or interventions which may facilitate patient comfort and prevent transport.
 - d. Identifying the unique cases where transport is necessary for hospital treatment or diagnostics which are required in order to best continue in home treatment.
- B. Resources / response:
- 1. Most often transport can be avoided and comfort optimized utilizing only the initial paramedic response along with follow up from the hospice agency.
 - 2. EMS providers should consult with or request a response from one of the following:
 - a. Online medical direction from base hospital physician
 - b. Community paramedic response
 - c. EMS supervisor response

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| COUNTY OF VENTURA HEALTH CARE AGENCY | | EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES | |
| Policy Title: Medical Control: Paramedic Liaison Physician | | Policy Number 701 | |
| APPROVED: Administration:  Steven L. Carroll, Paramedic | | Date: June 1, 2014 | |
| APPROVED: Medical Director:  Daniel Shepherd, MD | | Date: June 1, 2014 | |
| Origination Date: August 1, 1988 | | Effective Date: June 1, 2014 | |
| Date Revised: January 9, 2014 | | | |
| Date Last Reviewed: February 11, 2021 | | | |
| Review Date: February 28, 2024 | | | |

- I. PURPOSE: To define the role and responsibility of the Paramedic Liaison Physician (PLP) with respect to EMS medical control.
- II. AUTHORITY: Health and Safety Code Sections 1707.90, 1798, 1798.2, 1798.102, and 1798.104. California Code of Regulations, Title 22, Sections 100147 and 100162
- III. POLICY: The Base Hospital shall implement the policies and procedures of VCEMS for medical direction of prehospital advanced life support personnel. The PLP shall administer the medical activities of licensed and accredited prehospital care personnel and ensure their compliance with the policies, procedures and protocols of VCEMS. This includes:
 - A. Medical direction and supervision of field care by:
 1. Ensuring the provision of medical direction and supervision of field care for Base Hospital physicians, MICNs, PCCs, and Paramedics.
 2. Ensuring that field medical care adheres to current established medical guidelines, and that ALS activities adhere to current policies, procedures and protocols of VC EMS.
 - B. Education by ensuring the development and institution of prehospital education programs for all EMS prehospital care personnel (MDs, MICNs, Paramedics).
 - C. Audit and evaluation by:
 1. Providing audit and evaluation of Base Hospital Physicians, MICNs, PCCs, and ALS field personnel. This audit and evaluation shall include, but not be limited to:
 - a. Clinical skills and supervisory activities pertaining to providing medical direction to ALS field personnel.
 - b. Compliance with current policies, procedures and protocols of the

- local EMS agency.
 - c. Base Hospital voice communication skills.
 - d. Monthly review of all ALS documentation when the patient is not transported.
- D. Investigations according to VC EMS Policy 150.
- E. Recordkeeping by ensuring that proper accountability and records are maintained regarding:
- 1. The activities of all Base Hospital physicians, MICNs and Paramedics.
 - 2. The education, audit, and evaluation of base hospital personnel
 - 3. Communications by base hospital personnel
- F. Communication equipment operation by ensuring that the base hospital ALS field personnel communication/ telemetry equipment is staffed and operated at all times by personnel who are properly trained and authorized in its use according to the policies, procedures and protocols of VC EMS.
- G. Base Hospital liaison by ensuring:
- 1. Base Hospital physician and PCC representation at Prehospital Services Committee and other appropriate committee meetings
 - 2. Ongoing liaison with EMS provider agencies and the local medical community.
 - 3. On-going liaison with the local EMS agency.
- H. Ensuring compliance with Base Hospital Designation Agreement.

| Heat Emergencies | |
|--|---|
| ADULT | PEDIATRIC |
| BLS Procedures | |
| <p>Place patient in cool, shaded environment Initiate active cooling measures</p> <ul style="list-style-type: none"> • Remove clothing • Fan the patient, or turn on air conditioner • Apply ice packs to axilla, groin, back of neck • Other active cooling measures as available <p>Administer oxygen as indicated If patient is altered, determine blood glucose level If less than 60 mg/dl refer to Policy 705.03</p> | |
| ALS Standing Orders | |
| <p>If patient is altered, determine blood glucose if not already performed by BLS personnel or post oral glucose administration</p> <p>If less than 60 mg/dl, refer to Policy 705.03</p> <p>IV/IO access</p> <p>Normal Saline</p> <ul style="list-style-type: none"> • IV/IO bolus – 1 Liter <ul style="list-style-type: none"> ○ Caution with cardiac and/or renal history ○ Repeat x 1 for persistent hypotension | <p>If patient is altered, determine blood glucose if not already performed by BLS personnel or post oral glucose administration</p> <p>If less than 60 mg/dl, refer to Policy 705.03</p> <p>IV/IO access</p> <p>Normal Saline</p> <ul style="list-style-type: none"> • IV/IO bolus – 20 mL/kg <ul style="list-style-type: none"> ○ Caution with cardiac and/or renal history ○ Repeat x 1 for persistent hypotension |
| Base Hospital Orders only | |
| Consult with ED Physician for further treatment measures | |

Cold Emergencies

BLS Procedures

Gently move patient to warm environment and begin passive warming

Minimize movement of extremities

Attempt to maintain supine position

Increase ambulance cabin heat, if applicable

Cut off wet clothing and cover patient, including head, with dry blankets

Administer oxygen as indicated

If patient is altered, determine blood glucose level

If less than 60 mg/dl refer to Policy 705.03

Monitor vital signs for 1 minute. If vital signs are within the acceptable range for severe hypothermia, do not initiate respiratory assistance or chest compressions

- Acceptable range for severe hypothermia:
 - Respiratory Rate: at least 4 breaths per minute
 - Heart rate: at least 20 beats per minute
- Expedite transport if no shivering (indicates core temp below 90°)

ALS Standing Orders

If patient is altered, determine blood glucose if not already performed by BLS personnel or post oral glucose administration

If less than 60 mg/dl, refer to Policy 705.03

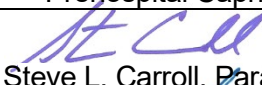

IV/IO access (if needed for medication or fluid administration)

- If administering fluid, avoid administering cold fluids.

Base Hospital Orders only

Consult with ED Physician for further treatment measures

| Hypovolemic Shock | |
|--|--|
| ADULT | PEDIATRIC |
| BLS Procedures | |
| Place patient in supine position Administer oxygen as indicated | Place patient in supine position Administer oxygen as indicated |
| ALS Standing Orders | |
| IV/IO access Normal Saline <ul style="list-style-type: none"> • IV/IO bolus – 1 Liter <ul style="list-style-type: none"> ○ Caution with cardiac and/or renal history ○ Repeat x 1 for persistent signs of shock <u>Traumatic Injury</u> <ul style="list-style-type: none"> • Do not delay transport for IV/IO attempts • Tranexamic Acid – For patients 15 years of age and older as indicated in VCEMS Policy 734 <ul style="list-style-type: none"> ○ IV/IOPB - 1gm TXA in 100mL NS over 10 minutes • Refer to Policy 705.01- Trauma Treatment Guidelines, for permissive hypotension <ul style="list-style-type: none"> ○ Goal is to maintain palpable peripheral pulses (SBP of greater than 80 mmHg) • Attempt second IV/IO during transport to ED | IV/IO access Normal Saline <ul style="list-style-type: none"> • IV/IO bolus – 20 mL/kg <ul style="list-style-type: none"> ○ Caution with cardiac and/or renal history ○ Repeat x 1 for persistent signs of shock <u>Traumatic Injury</u> <ul style="list-style-type: none"> • Do not delay transport for IV/IO attempts • Attempt second IV/IO while during transport to ED |
| Base Hospital Orders only | |
| Consult with ED Physician for further treatment measures | |

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| COUNTY OF VENTURA HEALTH CARE AGENCY | | EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES | |
| Policy Title: Prehospital Capnography | | Policy Number 711 | |
| APPROVED: Administration: |  Steve L. Carroll, Paramedic | Date: June 1, 2021 | |
| APPROVED: Medical Director: |  Daniel Shepherd, M.D. | Date: June 1, 2021 | |
| Origination Date: | April 8, 2021 | | |
| Date Revised: | | Effective Date: June 1, 2021 | |
| Date Last Reviewed: | | | |
| Review Date: | April 30, 2022 | | |

- I. PURPOSE: To outline the use capnography in the assessment and treatment of EMS patients.

- II. 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. PRINCIPLES:
 1. Ventilation is an active process, which is assessed with end-tidal CO₂ measurement. End-tidal CO₂ measurement is an indication of air movement in and out of the lungs. The “normal” value of exhaled CO₂ is 35-45 mmHg.
 2. Oxygenation is a passive process, which occurs by diffusion of oxygen across the alveolar membrane into the blood. The amount of oxygen available in the bloodstream is assessed with pulse oximetry.
 3. Capnography provides both a specific value for the end-tidal CO₂ measurement and a continuous waveform representing the amount of CO₂ in the exhaled air. A normal capnography waveform is square, with a slight upslope to the plateau phase during exhalation. (See figures below) The height of the waveform at its peak corresponds to the ETCO₂.
 4. Capnography is necessary to monitor ventilation. For patients requiring positive pressure ventilation, capnography is most accurate with proper mask seal (two-hand mask hold for adults during bag-mask ventilation) or with an advanced airway.
 5. Capnography can also be applied via a nasal cannula device to measure end-tidal CO₂ in the spontaneously breathing patient. It is useful to monitor for hypoventilation, in patients who are sedated either due to ingestion of substances or treatment with medication with sedative properties such as midazolam, opioids, or alcohol.
 6. Capnography is standard of care for confirmation of advanced airway placement. Unlike simple colorimetric devices, capnography is also useful to monitor the airway position over time, for ventilation management, and for early detection of return of spontaneous circulation (ROSC) in patients in cardiac arrest.

7. Capnography is the most reliable way to immediately confirm advanced airway placement. Capnography provides an instantaneous measurement of the amount of CO₂ in the exhaled air. The absence of a waveform, and/or values < 10 mmHg, suggest advanced airway misplacement. However, patients in cardiac arrest or profound shock may also have end-tidal CO₂ values <10 despite proper airway placement.
8. Capnography provides the most reliable way to continuously monitor advanced airway position. The waveform provides a continuous assessment of ventilation over time. A normal waveform which becomes suddenly absent suggests dislodgement of the airway and requires clinical confirmation.
9. The value of exhaled CO₂ is affected by ventilation (effectiveness of CO₂ elimination), perfusion (transportation of CO₂ in the body) and metabolism (production of CO₂ via cellular metabolism). In addition to the end-tidal CO₂ value, the ventilation rate as well as the size and shape of the capnograph must be used to interpret the results.
10. Decreased perfusion will reduce the blood flow to the tissues, decreasing offload of CO₂ from the lungs. Therefore, patients in shock and patients in cardiac arrest will generally have reduced end-tidal CO₂ values.
11. A sudden increase in perfusion will cause a sudden rise in end-tidal CO₂ values and is a reliable indicator of ROSC. It is common to have an elevated ETCO₂ reading after ROSC. Hyperventilation should not be done in an attempt to normalize the ETCO₂.
12. Ventilation can have varied effect on CO₂ measurement. Generally, hyperventilation will reduce end-tidal CO₂ by increasing offload from the lungs. Hypoventilation and disorders of ventilation that reduce CO₂ elimination (e.g., COPD), will cause CO₂ to build up in the body.
13. End-tidal CO₂ can be detected using a colorimetric device (ETCO₂ detector). These devices provide limited information about ETCO₂ as compared to capnography. Colorimetric devices do not provide continuous measurement of the value of CO₂ in the exhaled air and cannot be used in ongoing monitoring. Colorimetric devices should only be used for confirmation of endotracheal tube placement if capnography is unavailable due to equipment failure.

IV. POLICY:

1. Capnography monitoring is indicated and shall be used for patients meeting any of the following indications:
 - a. Patients receiving positive pressure ventilation via CPAP or BVM.
 - b. Patients at risk of developing respiratory failure, hypoventilation, or apnea.
 - c. Patients in cardiac arrest.
 - d. Advanced airway confirmation per policy 0710
 - e. Paramedic judgement

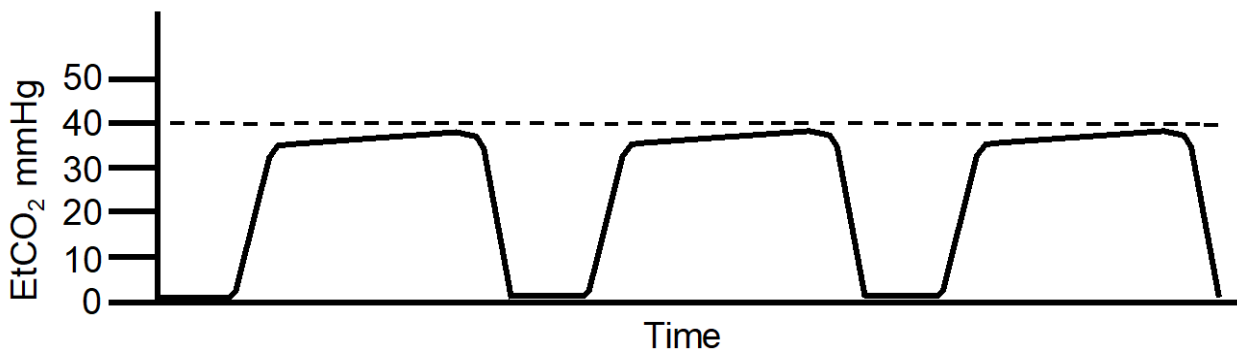
2. Capnography may also be utilized when the paramedic determines it may aid the clinical assessment.
3. Providers will initiate capnography monitoring as soon as feasible and ensure that the capnography waveform is visible on screen throughout patient care or until no longer indicated.
4. Once initiated, ALS providers will continuously evaluate the capnography waveform and intervene accordingly..

V. PROCEDURE:

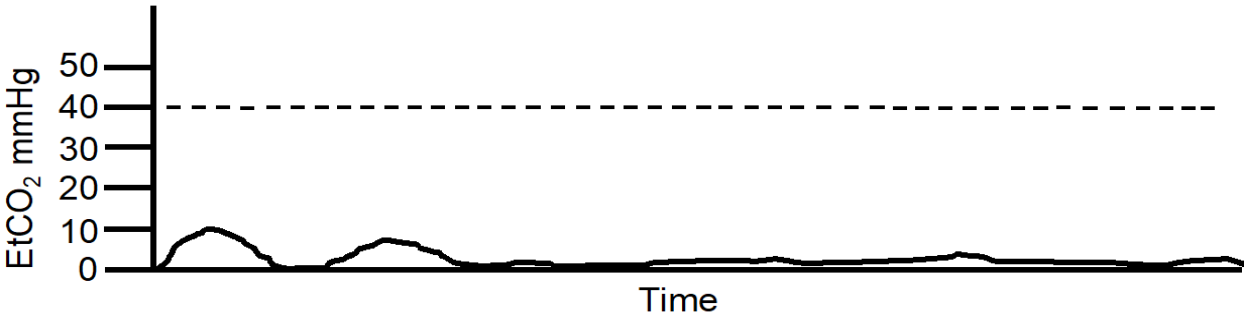
1. Chose the appropriate CO2 measuring device;
 - a. Nasal cannula device for spontaneously breathing patients with or without CPAP
 - b. Sidestream or mainstream inline measuring device for patients receiving BVM ventilations via BLS or ALS airway adjunct.
2. Attach measuring device to the monitor, wait for device to initialize, then attach to patient.
3. Assess that a capnography waveform is present with each breath prior to considering measurements to be accurate.
4. Assess EtCO2 value.
5. Assess for abnormalities in capnography waveform or EtCO2 value initially and for trends over time.
6. Endotracheal tube confirmation: per policy 710

VI. WAVEFORM INTERPRETATION

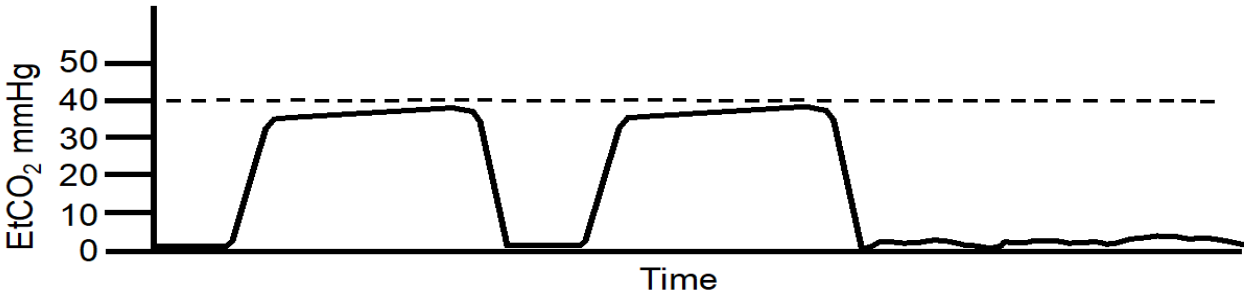
1. Normal shape of the capnograph is depicted below



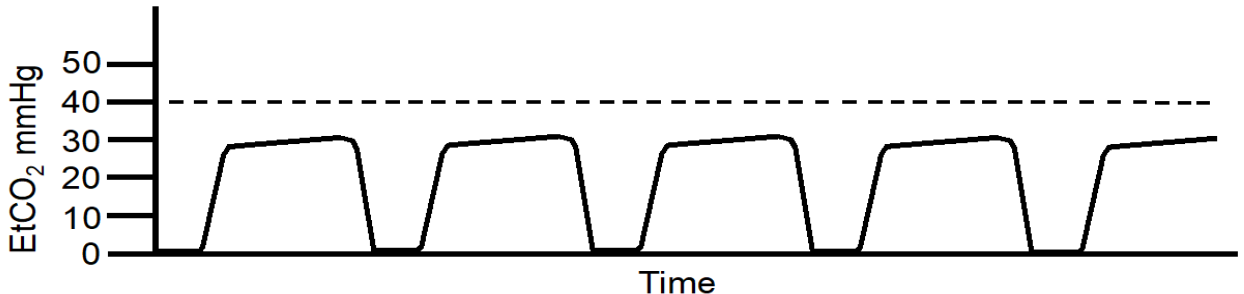
2. Esophageal Intubation (Low values and irregular waveform or flat line).



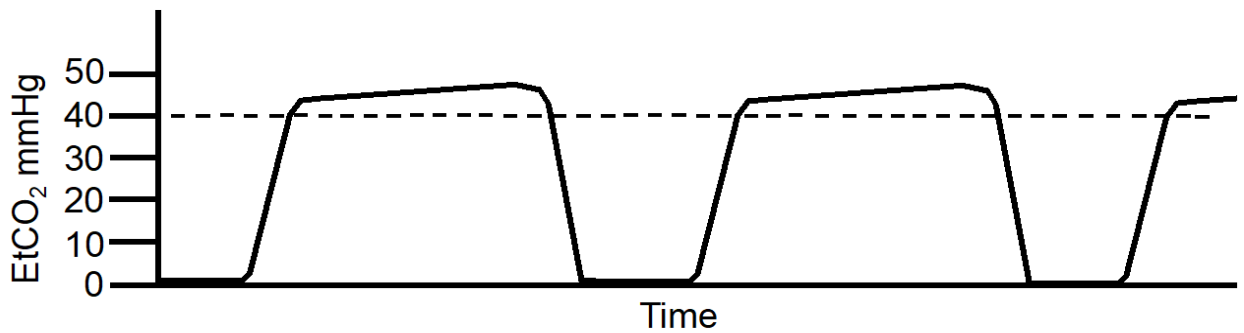
3. Obstructed or dislodged endotracheal tube (sudden loss of normal waveform followed by low irregular waveform or flat line).



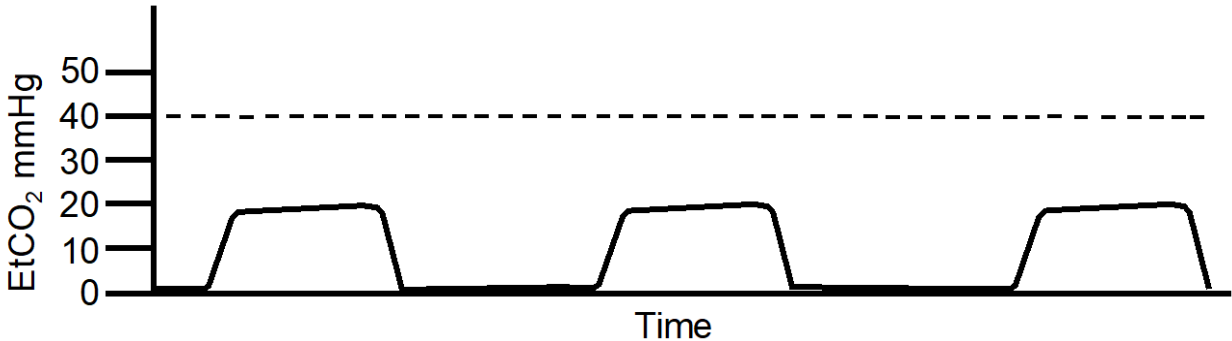
4. Hyperventilation (Normal waveform with reduced height, < 35 mmHg, and high ventilation rate)



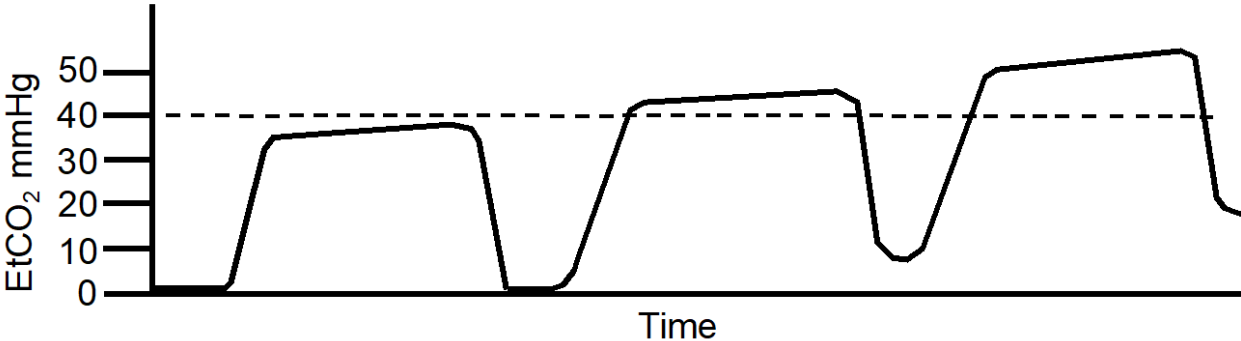
5. Hypoventilation/ Bradypnea (Normal waveform with increased height, > 45 mmHg)



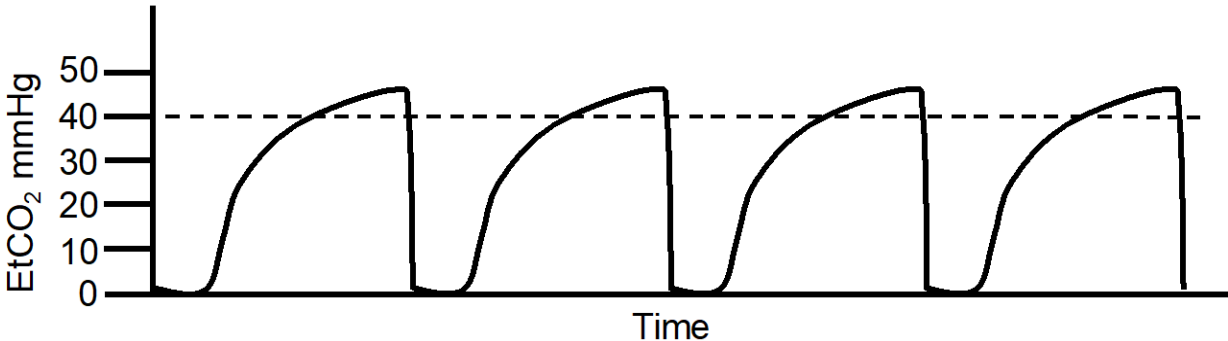
- 6. Hypoventilation/ Low tidal volumes (Normal waveform with reduced height, < 35 mmHg, and slow ventilation rate; A similar reduced height waveform can also be seen with shock - see progressive hypotension below).



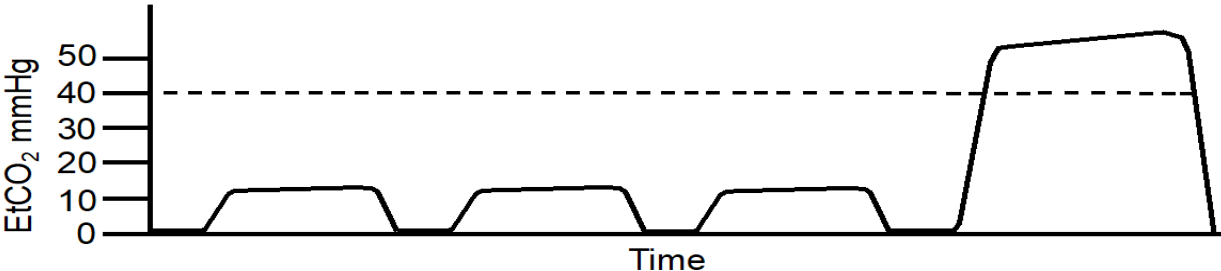
- 7. Air Trapping / Breath Stacking (Box wave forms that show increasing values with each successive breath)



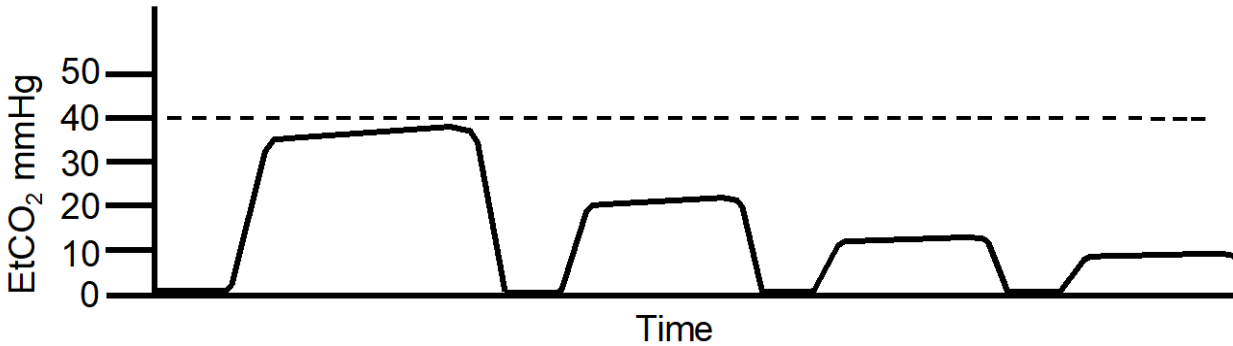
- 8. Bronchospasm ("Shark Fin Pattern")

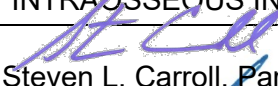
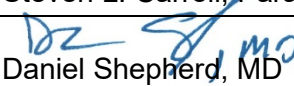


- 9. Return of Spontaneous Circulation (Sudden increase in values in a patient in cardiac arrest)



10. Progressive Hypotension or Re-arrest (Progressive decrease in values with each successive breath)



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| COUNTY OF VENTURA HEALTH CARE AGENCY | EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES | |
| Policy Title: INTRAOSSEOUS INFUSION | | Policy Number: 717 |
| APPROVED: Administration: |  Steven L. Carroll, Paramedic | Date: September 1, 2017 |
| APPROVED: Medical Director: |  Daniel Shepherd, MD | Date: September 1, 2017 |
| Origination Date: | September 10, 1992 | Effective Date: September 1, 2017 |
| Date Revised: | April 13, 2017 | |
| Date Last Reviewed: | March 11, 2021 | |
| Review Date: | March 31, 2023 | |

- I. **PURPOSE:** To define the indications, procedure, and documentation for intraosseous insertion (IO) and infusion by paramedics.
- II. **AUTHORITY:** Health and Safety Code, Sections 1797.178, 1797.214, 1797.220, 1798 and California Code of Regulations, Title 22, Sections 100145 and 100169.
- III. **POLICY:** IO may be performed by paramedics who have successfully completed a training program approved by the EMS Medical Director.
 - A. **Training**
The EMS service provider will ensure their paramedics successfully complete an approved training program and will notify EMS when that is completed.
 - B. **Indications**
Patient with an altered level of consciousness (ALOC) or in extremis AND there is an urgent need to administer intravenous fluids or medications AND venous access is not readily available.
 1. Manual IO: For patients less than 8 years of age.
 2. EZ-IO device: For patients of all ages.
 - C. **Contraindications**
 1. Recent fracture (within 6 weeks) of selected bone.
 2. Congenital deformities of selected bone.
 3. Grossly contaminated skin or infection at the insertion site.
 4. Excessive adipose tissue at the insertion site with the absence of anatomical landmarks.
 5. IO in same bone within previous 48 hours.
 6. History of significant orthopedic procedures at insertion site (ex. prosthetic limb or joint).

IV. PROCEDURE:

A. Manual IO insertion

1. Assemble the needed equipment
 - a. 16-18 gauge IO needle (1.5 inches long)
 - b. Alcohol wipes
 - c. Sterile gauze pads
 - d. Two (2) 5 mL syringes and a primed IV line (with or without stopcock)
 - e. IV fluids: 500 mL NS only
 - f. Tape
 - g. Splinting device
2. Choose the appropriate insertion site. Locate the landmarks approximately 2 cm below the patella and 1 cm medial, on the anteromedial flat bony surface of the proximal tibia.
3. Prepare the site utilizing aseptic technique with alcohol wipe.
4. Fill one syringe with NS
5. To insert the IO needle:
 - a. Stabilize the site.
 - b. Grasp the needle with obturator and insert through skin over the selected site at a 90° angle to the skin surface.
 - c. Once the bone has been reached, continue to apply pressure rotating and gently pushing the needle forward.
 - d. When the needle is felt to 'pop' into the bone marrow space, remove the obturator, attach the empty 5 mL syringe and attempt to aspirate bone marrow.
 - e. For responsive patient infuse 2% cardiac lidocaine prior to fluid/medication administration for pain management:
0.5 mg/kg (max 40 mg) slow IVP over 60 seconds.
 - f. Attach the 5 mL syringe containing NS and attempt to flush the IO needle. If successful, remove the syringe, connect the IV tubing and secure the needle.
 - g. Infuse NS and/or medications.
 - h. Splint and secure the IO needle.
 - i. Document distal pulses and skin color to extremity utilized for IO insertion before and after procedure. Monitor for complications.

B. EZ-IO insertion

1. Assemble the needed equipment
 - a. Choose appropriate size IO needle
 - 1) 15 mm needle sets (pink): 3-39 kg
 - 2) 25 mm needle sets (blue): \geq 40 kg
 - 3) 45 mm needle sets (yellow): For humerus insertion or patients with excessive adipose tissue at insertion site
 - b. Alcohol wipes
 - c. Sterile gauze pads
 - d. 10 mL syringe
 - e. EZ Connect tubing
 - f. IV fluids
 - 1) 3-39 kg: 500 mL NS
 - 2) \geq 40 kg: 1 L NS
 - g. Tape or approved manufacturer securing device
2. Prime EZ Connect tubing with 1 mL fluid
 - a. If unresponsive use normal saline.
 - b. If responsive prime with cardiac lidocaine as instructed below.
3. Locate the appropriate insertion site. The proximal tibia site is preferred. The proximal humerus is an acceptable alternative for adult patients (18 years of older).
4. For a proximal tibia IO the correct insertion site is on the anteromedial flat surface of the proximal tibia.
 - a. Pediatric: 2 cm below the patella, 1 cm medial
 - b. Adult: 2 cm medial to the tibial tuberosity
5. The correct insertion site for the proximal humerus is on the most prominent portion of the greater tubicle, 1-2cm above the surgical neck.
6. Prepare the site utilizing aseptic technique with alcohol wipes.
7. To insert the EZ-IO needle at the proximal tibia:
 - a. Connect appropriate size needle set to the EZ-IO driver.
 - b. Stabilize the site.
 - c. Position the EZ-IO needle at 90° to the underlying bone and insert it into the skin. Continue to insert the needle until contacting the bone. Ensure at least one black band is visible above the skin.

- d. Once contact with the bone is made, activate the driver and advance the needle with light steady pressure until the bone has been penetrated.
- e. Once properly placed, attach primed EZ Connect tubing and attempt to aspirate bone marrow.
- f. For responsive patients, slow infusion of 2% cardiac lidocaine **over 60 seconds** prior to fluid/medication administration for pain management.
 - 1) 3-39 kg: 0.5 mg/kg
 - 2) ≥40 kg: 40 mg
 - 3) Adjust for EZ-IO connector tubing
- g. Flush with 10 mL NS to assess patency. If successful, begin to infuse fluid.
- h. Splint the IO needle with tape or an approved manufacturer stabilization device.
- i. Document time of insertion on included arm band and place on patient's wrist.
- j. Document distal pulses and skin color before and after procedure and monitor for complications.
- k. Manual insertion can be attempted in the event of driver failure.

8. To insert the EZ-IO at the proximal humerus:

- a. Connect the yellow (45mm) needle to the EZ-IO driver.
- b. Locate and stabilize the site.
- c. Point the needle set tip at a 45-degree angle to the anterior plane and posteromedial. Insert the needle into the skin until you contact bone. Ensure at least one black band (5mm) is visible above the skin.
- d. Activate the driver and advance the needle with light, steady pressure until the bone has been penetrated.
- e. Once properly placed, attach primed EZ Connect tubing and attempt to aspirate bone marrow.
- f. For responsive patients, slow infusion of 2% cardiac lidocaine over 60 seconds prior to fluid/medication administration for pain management.
 - 1) 3 – 39 kg: 0.5 mg/kg

2) ≥ 40 kg: 40 mg

3) Adjust for EZ-IO connector tubing

- g. Flush with 10 ml NS to assess patency. If successful, begin to infuse fluid.
 - h. Splint the IO needle with tape or an approved manufacturer stabilization device. Maintain adduction of the arm and avoid extension of the shoulder.
 - i. Document time of insertion on included arm band and place on patient's wrist.
 - j. Document distal pulses and skin color before and after procedure and monitor for complications.

C. IO Fluid Administration

- 1. Active pushing of fluids may be more successful than gravity infusion. Use of a pressure to assist with fluid administration is recommended, and usually needed, but not required.
- 2. Fluid administration on smaller patients should be given via syringe boluses to control/monitor amount infused. Close observation of the flow rate and total amount of fluid infused is required.
- 3. If infiltration occurs or the IO needle is accidentally removed, stop the infusion, leave the connector tubing attached.

D. Documentation

- 1. Document any attempt(s) at establishing a peripheral IV prior to attempting/placing an IO infusion in the Ventura County Electronic Patient Care Report (VCePCR) system.
- 2. The site and number of attempts, success, complications, and any applicable comments related to attempting an IO infusion shall be documented on the VCePCR. Any medications administered shall also be documented in the appropriate manner on the VCePCR.

E. Quality Assurance

Each use of an IO infusion will be reviewed by EMS. Data related to IO attempts will be collected and analyzed directly from the VCePCR system.





VENTURA COUNTY EMERGENCY MEDICAL SERVICES AGENCY

Skills Assessment

Name _____ Agency _____ Date _____

- Demonstrates, proper body substance isolation
- States indication for EZ-IO use
- States contraindication for EZ-IO use
- Correctly locates target site
- Cleans site according to protocol
- Considers 2% cardiac lidocaine for patients responsive to pain
- Correctly assembles EZ-IO Driver and Needle Set
- Stabilizes the insertion site, inserts EZ-IO Needle Set, removes stylet and confirms placement
- Demonstrates safe stylet disposal
- Connects primed extension set and flushes the catheter
- Connects appropriate fluid with pressure infuser and adjusts flow as instructed
- Demonstrates appropriate securing of the EZ-IO
- States requirements for VC EMS documentation

Instructor Signature: _____ Date _____

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| COUNTY OF VENTURA HEALTH CARE AGENCY | | EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES | |
| Policy Title: Transcutaneous Cardiac Pacing | | Policy Number: 727 | |
| APPROVED: Administration: |  Steven L. Carroll, Paramedic | Date: June 1, 2021 | |
| APPROVED: Medical Director |  Daniel Shepherd, MD | Date: June 1, 2021 | |
| Origination Date: | December 1, 2008 | Effective Date: June 1, 2021 | |
| Date Revised: | March 11, 2021 | | |
| Date Last Reviewed: | March 11, 2021 | | |
| Next Review Date: | March 31, 2023 | | |

- I. **PURPOSE:** To define the indications, procedure and documentation for the use of transcutaneous cardiac pacing by paramedics
- II. **AUTHORITY:** Health and Safety Code, Sections 1797.220 and 1798. California Code of Regulations, Title 22, Sections 100145 and 100169.
- III. **POLICY:** Paramedics may utilize transcutaneous cardiac pacing (TCP) on adult patients (age > 12) in accordance with Ventura County Policy 705 – Symptomatic Bradycardia, Adult.
- IV. **PROCEDURE:**
 - A. **Training:** Prior to using TCP the paramedic must successfully complete a training program approved by the VC EMS Medical Director, which includes operation of the device to be used.
 - B. **Indications:** Symptomatic bradycardia (heart rate less than 40 bpm with one or more of the following signs or symptoms):
 1. Altered level of consciousness
 2. Chest pain
 3. Abnormal skin signs
 4. Profound weakness
 5. Shortness of breath
 6. Hypotensive (Systolic BP less than 90mm Hg)
 - C. **Contraindications:**
 1. Absolute
 - a. Asystole
 2. Relative:
 - a. Hypothermia – patient warming measures have precedence. (Base Hospital contact required).



D. Patient Treatment

1. Patient assessment and treatment per 705: Bradycardia treatment protocol. If IV/IO access not promptly available, proceed to pacing.
2. Explain procedure to the patient.
3. Place pacing electrodes and attach pacing cable to pacing device per manufacturer's recommendations.
4. Set pacing mode to demand mode, pacing rate to 70 BPM, and current at 40 milliamps (mA), or manufacturer recommendation.
5. If required, provide patient pain relief. Patients with profound shock and markedly altered level of consciousness may not require pain relief
6. Activate pacing device and increase the current in 10 mA increments until capture is achieved (i.e., pacemaker produces pulse with each paced QRS complex).
7. Assess patient for mechanical capture and clinical improvement (BP, pulses, skin signs, LOC).

NOTE: Patients with high grade AV block (second degree type II or third-degree block) who do not have symptoms do not require pacing. However, equipment should be immediately available if symptoms arise. Patients with symptoms who respond initially to atropine should have pacing equipment immediately available.

E. Documentation

1. The use of TCP must be documented.
 2. Vital signs must be documented every 5 minutes.
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| COUNTY OF VENTURA HEALTH CARE AGENCY | | EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES | |
| Policy Title: Public Health Emergency Vaccine Administration | | Policy Number 737 | |
| APPROVED: Administration: |  Steve L. Carroll, Paramedic | Date: January 15, 2021 | |
| APPROVED: Medical Director: |  Daniel Shepherd, M.D. | Date: January 15, 2021 | |
| Origination Date: | September 28, 2020 | | |
| Date Revised: | January 14, 2021 | | |
| Date Last Reviewed: | January 14, 2021 | Effective Date: January 15, 2021 | |
| Review Date: | December 31, 2021 | | |

- I. PURPOSE: Authorizes Emergency Medical Technicians (EMTs) and Paramedics to administer the intramuscular inactivated influenza and/or COVID-19 vaccine to adult patient populations (14 or older) when authorized by the Ventura County EMS Agency (VCEMSA) during the COVID-19 emergency declaration.
- II. AUTHORITY: California Health and Safety Code, Sections 1797.220 and 1798. California Code of Regulations, Title 22, Sections 100145 and 100169. State of California Emergency Proclamation for COVID-19
- III. POLICY: EMTs certified in the State of California, non-accredited Paramedics working as vaccinators in coordination with VCEMSA, and Paramedics accredited by VCEMSA are approved for this local optional scope of practice. Upon completion of the VCEMSA approved training to administer intramuscular influenza and/or COVID-19 (when available) vaccines, authorized individuals may provide vaccinations to persons as directed by VCEMSA Medical Director in conjunction with the Ventura County Public Health Department. These vaccination policies and procedures shall only be authorized and valid for individuals that have been approved to utilize this local optional scope during the California COVID-19 emergency proclamation.
 - A. EMTs administering the COVID-19 vaccine shall only be authorized to do so while under the supervision of an on-site Paramedic, Registered Nurse, or Physician. EMTs shall not be the only authorized vaccinators staffing a vaccine administration site.
 - B. Any individual administering vaccine under the Local Optional Scope of Practice shall complete a minimum two-hour training, in addition to vaccine-specific training that will occur at the assigned administration site prior to working first shift as a vaccinator.
 - C. Agencies that train individuals as vaccinators under this local optional scope of practice will

submit completed training rosters to VCEMSA.

IV. PROCEDURE:

A. Vaccine Administration

1. Assess the need for the vaccine in question utilizing the current guidance on that vaccination, which will be provided by the Ventura County Public Health Department. (also see CDC information regarding the seasonal flu vaccine <https://www.cdc.gov/flu/prevent/keyfacts.htm>)
2. Screen for contraindications and precautions of inactivated vaccine (listed below).
3. Collect and review Vaccine Consent/Record of Administration sheet.
 - a. Confirm that the consent has been signed.
4. Vaccinate patients while they are seated or lying down and observe them for at least 15 minutes after receipt of the vaccine. Patients who have a history of anaphylaxis or have had any immediate allergic reaction to any vaccine or injectable will be monitored for a period of at least 30 minutes.
5. Vaccinators must maintain aseptic technique when administering the influenza or COVID vaccines.
6. The screening questionnaire must be completed prior to administration of the influenza or COVID vaccine.
7. Equipment Required:
 - a. Vaccine
 - b. 23-25 g, 1-inch needle
 - i. For larger patients, 1.5-inch needle length may be more appropriate.
 - ii. See “Needle Gauge/Length and Injection Site Guidance” below for additional information.
 - iii. COVID-19 vaccine may come as prefilled/ready to administer or require other injection supplies or sizes.

| Needle Gauge/Length and Injection Site Guidance | | | |
|--|---------------------|-------------------------------|---|
| Gender, Age, Weight of Pt. | Needle Gauge | Needle Length (inches) | Injection Site |
| 14 to 18 years | 22-25 | 5/8* – 1 1 – 1 ½ | Deltoid muscle of arm Anterolateral thigh muscle |
| Female or male less than 130 lbs | 22–25 | 5/8*–1" | Deltoid muscle of arm |
| Female or male 130–152 lbs | 22–25 | 1" | Deltoid muscle of arm |
| Female 153–200 lbs | 22–25 | 1–1 1/2" | Deltoid muscle of arm |
| Male 153–260 lbs | 22–25 | 1–1 1/2" | Deltoid muscle of arm |
| Female 200+ lbs | 22–25 | 1 1/2" | Deltoid muscle of arm |
| Male 260+ lbs | 22–25 | 1 1/2" | Deltoid muscle of arm |

* A 5/8" needle may be used in patients weighing less than 130 lbs (<60 kg) for IM injection in the

deltoid muscle with the skin is stretched tight, the subcutaneous tissue not bunched, and at a 90-degree angle to the skin, although specific differences may be required by various COVID-19 manufacturers.

8. Hand hygiene and don gloves
9. Check expiration date of vaccine
10. Cleanse the area of the deltoid muscle with the alcohol prep.
 - a. Deltoid landmarks: 2-3 finger widths down from the acromion process; bottom edge is imaginary line drawn from axilla.
11. Insert the needle at a 90-degree angle into the muscle.
 - a. Pulling back on the plunger prior to injection is not necessary.
12. Inject the vaccine into the muscle.
13. Withdraw the needle, and using the alcohol prep, apply slight pressure to the injection site.
14. Do not recap or detach needle from syringe. All used syringes/needles should be placed in puncture-proof containers.
15. Monitor the patient for any symptoms of allergic reaction.
16. Document the following information:
 - a. Date of vaccination
 - b. Name of patient
 - c. Injection site
 - d. Vaccine lot number
 - e. Vaccine manufacturer
17. Complete Appropriate Documentation:
 - a. **Vaccine Consent/Record of Administration form:** ensure this is completed, retained and appropriately submitted after administration.
 - i. Note that medical records/charts should be documented and retained in accordance with applicable state laws and regulations. If vaccine was not administered, record the reason(s) for non-receipt of the vaccine (e.g., medical contraindication, patient refusal). Discuss the need for vaccine with the patient (or, in the case of a minor, their parent or legal representative) at the next visit.
 - b. **Vaccine Information Statement:** document the publication date and the date it was given to the patient.
 - c. **Patient's medical record:** if accessible, record vaccine information (above) in the patient's medical record.
 - d. **Personal immunization record card:** record the date of vaccination and

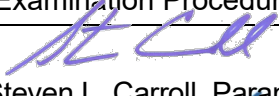

name/location of administering clinic.

- e. **Immunization Information System (IIS), or “registry”**: Report the vaccination to the appropriate state/local IIS, if available.
 - f. **VAERS**: report all adverse events following the administration of a vaccine to the federal Vaccine Adverse Event Reporting System (VAERS).
 - i. To submit a VAERS report online (preferred) or to download a writable PDF form, go to <https://vaers.hhs.gov/reportevent.html>. Further assistance is available at (800) 822-7967.
18. Give patient vaccine information sheet, using the appropriately translated sheet for non-English speaking client; these can be found at www.immunize.org/vis.
19. Advise patient when to return for subsequent vaccination, if appropriate.

B. Contraindications, Relative Contraindications, and Considerations for Vaccine Administration

- 1. Contraindications for Use of Vaccines
 - a. Do not administer vaccines to a person who has an allergic reaction or a serious systemic or anaphylactic reaction to a prior dose of that vaccine or to any of its components. For a list of vaccine components, refer to guidance specific to this vaccine provided by the manufacturer and/or VCEMSA.
 - b. The manufacturer’s package insert contains a list of ingredients (www.immunize.org/fda) and these are also listed at www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf
 - c. Contraindications for Live Attenuated Vaccines are not pertinent as these are not being administered under this local optional scope of practice
- 2. Relative Contraindications for Use of Vaccines
 - a. Moderate or severe acute illness with or without fever
 - b. History of Guillain-Barré syndrome within 6 weeks of a previous vaccination
 - c. People with egg allergies can receive any licensed, recommended age-appropriate influenza vaccine (IIV, RIV4, or LAIV4) that is otherwise appropriate. People who have a history of severe egg allergy (those who have had any symptom other than hives after exposure to egg) should be vaccinated in a medical setting, supervised by a health care provider who is able to recognize and manage severe allergic reactions. Two completely egg-free (ovalbumin-free) flu vaccine options are available: quadrivalent recombinant vaccine and quadrivalent cell-based vaccine.

3. Considerations for Vaccine Administration
 - a. Treatment of medical emergencies related to the administration of vaccine will be in accordance with VCEMSA Policies and Procedures.

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| 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 | |
| APPROVED: Administration: |  Steven L. Carroll, Paramedic | Date: June 1, 2021 | |
| APPROVED: Medical Director: |  Daniel Shepherd, MD | Date: June 1, 2021 | |
| Origination Date: | July 2, 1984 | | |
| Date Revised: | March 11, 2021 | | |
| Date Last Reviewed: | March 11, 2021 | Effective Date: June 1, 2021 | |
| Next Review Date: | March 31, 2024 | | |

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:

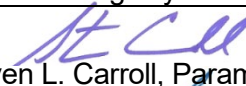

1. VCEMS Overview
2. MICN Role
3. Communication Protocol/Terminology
4. Legal Issues
5. Documentation
6. Paramedic Reporting
7. Hazmat
8. EMS Overview
9. Pharmacology
10. All VCEMS Policy 705 Treatment Guidelines, as well as policies referenced within 705 Policies
11. STEMI
12. Stroke including ELVO

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.

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| COUNTY OF VENTURA HEALTH CARE AGENCY | | EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES | |
| Policy Title: Trauma Registry and Data | | Policy Number 1403 | |
| APPROVED: Administration: |  Steven L. Carroll, Paramedic | Date: June 1, 2021 | |
| APPROVED: Medical Director: |  Daniel Shepherd, M.D. | Date: June 1, 2021 | |
| Origination Date: | July 14, 2015 | | |
| Date Revised: | December 3, 2020 | Effective Date: June 1, 2021 | |
| Date Last Reviewed: | December 3, 2020 | | |
| Review Date: | December 31, 2023 | | |

- I. **PURPOSE:** To standardize data elements collected from trauma care facilities to monitor, review, evaluate, and improve the delivery of prehospital advanced life support and hospital trauma care services.
- II. **AUTHORITY:** Health and Safety Code, §1797.160, §1797.161, and §1798, and California Code of Regulations, Title 22, §100255.
- III. **POLICY:** The following information shall be collected by Ventura County designated Trauma Centers and Community Hospitals and reported to the Ventura County EMS Agency.
- IV. **INCLUSION CRITERIA**
 - A. **Diagnostic code for any injury included in the following range:**
ICD-10-CM: S00-S99, T07, T14, T20-T28, T30-T32 and T79.A1-T79.A9
AND
At least one injury with a diagnostic code outside the following range:
S00, S10, S20, S30, S40, S50, S60, S70, S80, S90
 - B. **Meets at least ONE of the following criteria:**
 - a. Death
 - b. Hospital admission as either observation or inpatient status
 - c. Interfacility transfer to provide a higher level of trauma care (in or out)
 - d. Meets prehospital trauma triage criteria for Step 1-4
 - e. Trauma centers ONLY: full or limited trauma team activation

C. Data element description

1. Trauma Centers

- a. Current data components for NTDS® (National Trauma Data Standard)
- b. Ventura County specific data
 - 1. Hospital account number for ED visit
 - 2. If transported to trauma center by ambulance
 - A. ImageTrend incident number
 - B. Trauma Step assigned by EMS

2. Community Hospitals

- a. Date of birth
- b. Date of ED arrival
- c. Date of admission
- d. Hospital account number
- e. ICD-10 codes
- f. Hospital outcome



D. Reporting

1. Trauma Centers

- a. Complete spreadsheets as requested by EMS each quarter
- b. Upload trauma patient data into Ventura County trauma registry by the 15th of each month. Each upload should include patient records from the previous 6 months so that any incomplete records uploaded are overwritten in subsequent uploads.
- c. Complete on-line transfer form (refer to VCEMS Policy 1404) for any transfer of trauma patients for a higher level of care
- d. Comply with data collection as needed by EMS

2. Community Hospitals

- a. Complete on-line transfer form (refer to VCEMS Policy 1404) for any Emergent/Urgent trauma transfer
- b. Comply with data collection as needed by EMS

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| COUNTY OF VENTURA HEALTH CARE AGENCY | | EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES | |
| Policy Title: Guidelines for Interfacility Transfer of Patients to a Trauma Center | | Policy Number 1404 | |
| APPROVED: Administration: |  Steven L. Carroll, Paramedic | Date: June 1, 2021 | |
| APPROVED: Medical Director: |  Daniel Shepherd, M.D. | Date: June 1, 2021 | |
| Origination Date: | July 1, 2010 | Effective Date: June 1, 2021 | |
| Date Revised: | March 4, 2021 | | |
| Date Last Reviewed: | March 4, 2021 | | |
| Review Date: | March 31, 2024 | | |

- I. PURPOSE: To establish guidelines for the transfer of a trauma patient from a hospital in Ventura County to a Level II trauma center.
- II. AUTHORITY: Health and Safety Code, §1797.160, §1797.161, and §1798, and California Code of Regulations, Title 22, §100255.
- III. DEFINITIONS:
 - A. **EMERGENT** Transfer: A process by which a patient with potential life-or-limb threatening traumatic injuries is transferred to a trauma center. The patient requires an immediate procedure at a trauma center, and a delay in transfer will result in deterioration of the patient's condition, and the treating physician requests immediate transport to a trauma center.
 1. Trauma Call Continuation: A process by which a patient with potential life-or-limb threatening traumatic injuries who has been taken to the emergency department by ALS ambulance is transferred to a trauma center. The patient requires an immediate procedure at a trauma center, the ALS ambulance is still on the premises, and the treating physician requests immediate transport to a designated trauma center.
 - B. **URGENT** Transfer: A process by which a patient with time-critical traumatic injuries is transferred to a trauma center. The patient requires a timely procedure at a trauma center, and a lengthy delay will result in deterioration of the patient's condition, and the treating physician requests prompt transport to a trauma center.

- IV **POLICY:** The following criteria will be used as a guideline for the transfer of a trauma patient to a trauma center.
- A. For patients who are in the emergency department at a community hospital and have one or more of the following injuries, if the referring physician requests transfer to a trauma center, the trauma center will immediately accept the patient.
1. Carotid or vertebral arterial injury
 2. Torn thoracic aorta or great vessel
 3. Cardiac rupture
 4. Bilateral pulmonary contusion with PaO₂ to FiO₂ ratio less than 200
 5. Major abdominal vascular injury
 6. Grade IV, V or VI liver injuries
 7. Grade III, IV or V spleen injuries
 8. Unstable pelvic fracture
 9. Fracture or dislocation with neurovascular compromise
 10. Penetrating injury or open fracture of the skull
 11. Glasgow Coma Scale score <14 or lateralizing neurologic signs
 12. Unstable spinal fracture or spinal cord deficit
 13. >2 unilateral rib fractures or bilateral rib fractures with pulmonary contusion
 14. Open long bone fracture
 15. Significant torso injury with advanced co-morbid disease (such as coronary artery disease, chronic obstructive pulmonary disease, type 1 diabetes mellitus, or immunosuppression)
 16. Amputations or partial amputations of any portion of the hand¹
 17. Injury to the globe at risk for vision loss²
 18. Requiring Blood transfusion
 19. ABC Score-anticipated Mass Transfusion Protocol (MTP)
meets 2 or more criteria below:
 - a) SBP < 90
 - b) HR > 120
 - c) + Fast exam
 - d) Penetrating trauma to torso
- B. **Ventura County Level II Trauma Centers:**
1. Agree to immediately accept from Ventura County community hospitals, patients with conditions included in the guidelines above.

2. Will publish a point-of-contact phone number for an individual authorized to accept the transfer of a patient with a condition included in the guidelines above, or to request consultation with a trauma surgeon.
3. Will establish a written interfacility transfer agreement with every hospital in Ventura County.
4. Immediately post on ReddiNet and notify EMS Administrator on-call when there is no capacity to accept trauma patients due to:
 - a. Diversion for internal disaster
 - b. CT scanner(s) non-operational
 - c. Primary and back-up trauma surgeons in operating rooms with trauma patients

C. **Community Hospitals:**

1. Are not required to transfer patients with conditions included in the guidelines above to a trauma center when resources and capabilities for providing care exist at their facility.
2. Will enter into a written interfacility transfer agreement with every trauma center in Ventura County.

D. **EMERGENT Transfers**

1. **EMERGENT** transfers are indicated for patients with life-or-limb threatening injuries in need of emergency procedures at a trauma center. Criteria **MUST** include at least one of the following:
 - a. Indications for an immediate neurosurgical procedure.
 - b. Penetrating injury to head or torso.
 - c. Penetrating or blunt injury with shock.
 - d. Vascular injuries that cannot be stabilized and are at risk of hemorrhagic shock or loss of limb acutely (excluding fingers/toes).
 - e. Pregnancy with indications for an immediate Cesarean section.
 - f. Blood Product given
2. For **EMERGENT** transfers, trauma centers will:
 - a. Publish a single phone number (“hotline”), that is answered 24/7, for an individual authorized to accept the transfer of patients who have a condition as described in Section D.1 of this policy.
 - b. Immediately upon initial notification by a transferring physician, accept in transfer all patients who have a condition as described in Section D.1 of this policy.

3. For **EMERGENT** transfers, community hospitals will:
 - a. Assemble and maintain a “Emergency Transfer Pack” in the emergency department to contain all of the following:
 1. Checklist with phone numbers of Ventura County trauma centers.
 2. Patient consent/transfer forms.
 3. Treatment summary sheet.
 4. Ventura County EMS “Emergency Trauma Patient Transfer QI Form.”
 - b. Have policies, procedures, and a quality improvement system in place to track and review all **EMERGENT** transfers and Trauma Call Continuations.
 - c. Maintain an ambulance arrival to emergency department (ED) departure time of no longer than ten minutes.
 - d. Establish policies and procedures to make personnel available, when needed, to accompany the patient during the transfer to the trauma center.
4. For **EMERGENT** transfers, Ventura County Fire Communications Center (FCC) will:
 - a. Respond to an **EMERGENT** transfer request by immediately dispatching the closest available ALS ambulance to the requesting hospital.
 - b. Consider Trauma Call Continuation transfers to be a follow-up to the original incident, and will link the trauma transfer fire incident number to the original 911 fire incident number.
5. For **EMERGENT** transfers, ambulance companies will:
 - a. Respond immediately upon request.
 - b. For “Trauma Call Continuation” requests, immediately transport the patient to a trauma center with the same ALS personnel and vehicle that originally transported the patient to the community hospital.
 - c. Not be required to consider **EMERGENT** transports as an “interfacility transport” as it pertains to ambulance contract compliance.

E. **URGENT** Transfers

1. **URGENT** transfers are indicated for patients with time-critical injuries in need of timely procedures at a trauma center.
2. For **URGENT** transfers, trauma centers will:
 - a. Publish a single phone number, that is answered 24/7, for a community hospital to request an urgent trauma transfer. Additionally, this line may be used to request additional consultation with a trauma surgeon if needed
3. For **URGENT** transfers, community hospitals will:
 - a. Maintain an ambulance arrival to emergency department (ED) departure time of no longer than twenty minutes.
4. For **URGENT** transfers, ambulance companies will:
 - a. Arrive at the requesting ED no later than thirty minutes from the time the request was received.

V. **PROCEDURE:**

A. **EMERGENT** Transfers

1. After discussion with the patient, the transferring hospital will:
 - a. Call the trauma hotline of the closest trauma center to notify of the transfer.
 - b. Call FCC, advise they have an **EMERGENT** transfer, and request an ambulance. If the patient's clinical condition warrants, the transferring hospital will call FCC *before* calling the trauma center's hotline.
 - c. Complete transfer consent and treatment summary.
 - d. Prepare copies of the ED triage assessment form and demographic information form.
2. Upon request for an **EMERGENT** transfer, the dispatch center will dispatch the closest ALS ambulance and verbalize "MEDxxx EMERGENCY Trauma Transfer from [transferring hospital]". The trauma center will be denoted in the incident comments, which will display on the mobile data computer (MDC). If a unit does not have an operational MDC, the transferring hospital will advise the responding ambulance personnel of the destination trauma center.
3. Upon notification, the ambulance will respond Code (lights and siren).

4. FCC will track ambulance dispatch, en route, on scene, en route hospital, at hospital, and available times.
5. The patient shall be emergently transferred without delay. Every effort will be made to limit ambulance on-scene time in the transferring hospital ED to ten minutes.
 - a. All forms should be completed prior to ambulance arrival.
 - b. Any diagnostic test or radiologic study results may either be relayed to the trauma center at a later time, or if time permits, copied and sent with the patient to the trauma center.
 - c. Intravenous drips may be discontinued or remain on the ED pump.

B. Trauma Call Continuation

1. Upon determination of a Trauma Call Continuation, and after discussion with the patient, the community hospital will:
 - a. Direct the ambulance personnel to prepare to continue the transport to the trauma center.
 - b. Notify the designated trauma center ED of the immediate re-triage of a trauma patient and communicate the patient's apparent injuries or reason for the re-triage, after the call is continued and the patient is en route to the trauma center.
2. Upon notification of Trauma Call Continuation, the ambulance personnel will notify FCC of their assignment to a Trauma Call Continuation. FCC will link the trauma transfer to the original 911 incident and continue tracking en-route hospital (departure from community hospital), at hospital (arrival at trauma center) and available times.
3. When the transferring physician determines the patient is ready and directs ambulance personnel to continue the transport, the ambulance will emergently transport the patient to the trauma center. The transporting paramedic will contact the trauma base hospital en route and provide updated patient information.

C. URGENT Transfers

1. After discussion with the patient, the transferring hospital will:
 - a. Call the trauma hotline for the closest trauma center to request an urgent trauma transfer. This call may be used to request additional consultation with the trauma surgeon if needed.
 - b. Call the transport provider to request an ambulance.

- c. Complete transfer consent and treatment summary.
 - d. Prepare copies of the ED triage assessment form.
 - e. Limit ambulance on-scene time in the transferring hospital ED to twenty minutes.
2. Upon request for an Urgent transfer, the transport provider will dispatch an ambulance to arrive no later than thirty minutes after the request.

D. Documentation:

For all **URGENT** or **EMERGENT** transfers, the transferring hospital will submit a completed Emergency Trauma Patient Transfer QI Form by using the link or QR Code found below, to the Ventura County EMS Agency within 72 hours. The transfer will be reviewed for appropriate and timely care and to identify opportunities for improvement. Results will be reviewed and discussed at the Countywide EMS Trauma Operational Review Committee.

¹For patients with isolated traumatic amputations or partial amputations of any portion of the hand, a community hospital may elect to transfer the patient to a Ventura County trauma center for potential replantation surgery. In these circumstances, the community hospital shall contact Los Robles Hospital and Medical Center (LRHMC) to determine the availability of a hand surgeon trained in microvascular replantation surgery. If a specialty hand surgeon is available the patient shall be preferentially transferred to LRHMC.

²Patients with isolated eye injuries needing transfer to a trauma center for potential ophthalmologic surgery shall be preferentially transferred to Ventura County Medical Center.



Emergent and Urgent Trauma Transfer QI Form

Use Link:

[Emergent and Urgent trauma Transfer QI form](#)

-OR-

Scan QR Code:





Scan QR Code for
Trauma Transfer form

Ventura County Trauma Centers

Trauma Hotlines

LRHMC (805) 370-5901

VCMC (805) 652-6777

Link for Trauma Transfer form

[Emergent and Urgent trauma Transfer QI form](#)

TRAUMA CALL Continuation

Immediate re-triage of a trauma patient by the ER physician

Ambulance crew notifies dispatch of Trauma Call Continuation

Patient remains with same ambulance crew and is placed back in ambulance and continues to trauma center per ER physician direction

EMERGENT Trauma Transfer

Immediate life-threatening condition

***Call Trauma Hotline

***If Clinical condition warrants, call FCC to request ambulance **before** calling Trauma Hotline

Call Fire Communications Center (FCC) for an ambulance (**Emergent Trauma Transfer**)
(805) 384-1500

Ambulance arrival to departure at sending ED no longer than **10 minutes**

URGENT Trauma Transfer

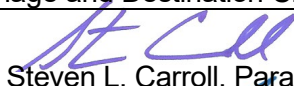

OK to wait up to 30 minutes for ambulance

Call Trauma Hotline

VCMC ONLY: If trauma surgeon has not responded within 15 minutes, call trauma hotline again

Call transport provider for ambulance (**Urgent Trauma Transfer**)
AMR/GCA (805) 485 -1231
Lifeline (805) 653- 5578

Ambulance arrival to departure at sending ED no longer than **20 minutes**

| | | | |
|---|---|---|--|
| 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: June 1, 2018 | |
| APPROVED: Medical Director: |  Daniel Shepherd, MD | Date: June 1, 2018 | |
| Origination Date: | July 1, 2010 | | |
| Date Revised: | April 12, 2018 | Effective Date: June 1, 2018 | |
| Date Last Reviewed: | March 4, 2021 | | |
| Review Date: | March 31, 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 less than 14
 2. Systolic blood pressure less than 90 mmHg
(Less than 110 mmHg in patients older than 65 years of age)
 3. Respiratory rate less than 10 or greater than 29 breaths per minute
(Less than 20 in infant younger than 1 year of age)
 - B. Anatomic Criteria, Step 2:
 1. Penetrating wounds to the head, neck, torso, or extremities proximal to the elbow or knee
 2. Flail chest
 3. Two or more proximal long bone fractures (femur or humerus)
 4. Crushed, degloved, or mangled extremity
 5. Amputations proximal to wrist or ankle
 6. Pelvic fractures
 7. Open or depressed skull fracture
 8. Paralysis
 9. Seat belt injury: significant bruising to neck, chest, or abdomen
 10. Diffuse abdominal tenderness as a result of blunt trauma
 - C. Mechanism of Injury Criteria, Step 3:

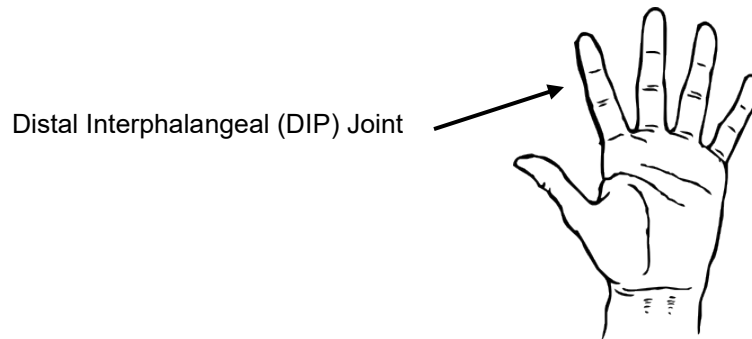
-
1. Adults: Greater than 20 feet (one story is equal to 10 feet)
Children less than 15 years old: Greater than 10 feet, or two times the height of the child
 2. High-risk auto crash:
 - a. Intrusion: interior measurement greater than 12 inches patient site or greater than 18 inches any occupant site
 - b. Ejection: partial or complete from automobile
 - c. Death in same passenger compartment
 3. Auto-pedestrian/auto-bicyclist thrown, run over, or with greater than 20 mph impact
 4. Unenclosed vehicle (e.g. motorcycle, bicycle, skateboard) crash greater than 20 mph
- D. Other Criteria, Step 4 (these are considerations to be used by the base hospital in determining the appropriate destination hospital):
1. Age greater than 65 years old
 2. Head injury with loss of consciousness AND on an anticoagulant or antiplatelet drug¹
 3. Burns with trauma mechanism
 4. Time sensitive extremity injury (open fracture, neurovascular compromise)
 5. Pregnancy greater than 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 hand²
 8. Penetrating injury to the globe of the eye, at risk for vision loss³
- V. 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 considered to be 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 a complete list of anticoagulant and antiplatelet drugs that should be considered for inclusion criteria in Step 4.2, please consult VC EMSA approved list.

²For 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) ^{see illustration}, as long as bleeding is controlled and the amputated part may be transported with the patient, the regular catchment base hospital MICN may contact Los Robles Hospital and Medical Center (LRHMC) to determine the availability of a hand surgeon trained in microvascular replantation surgery. If a specialty hand surgeon is available at LRHMC and not at the regular catchment hospital, the MICN shall direct the patient to LRHMC.

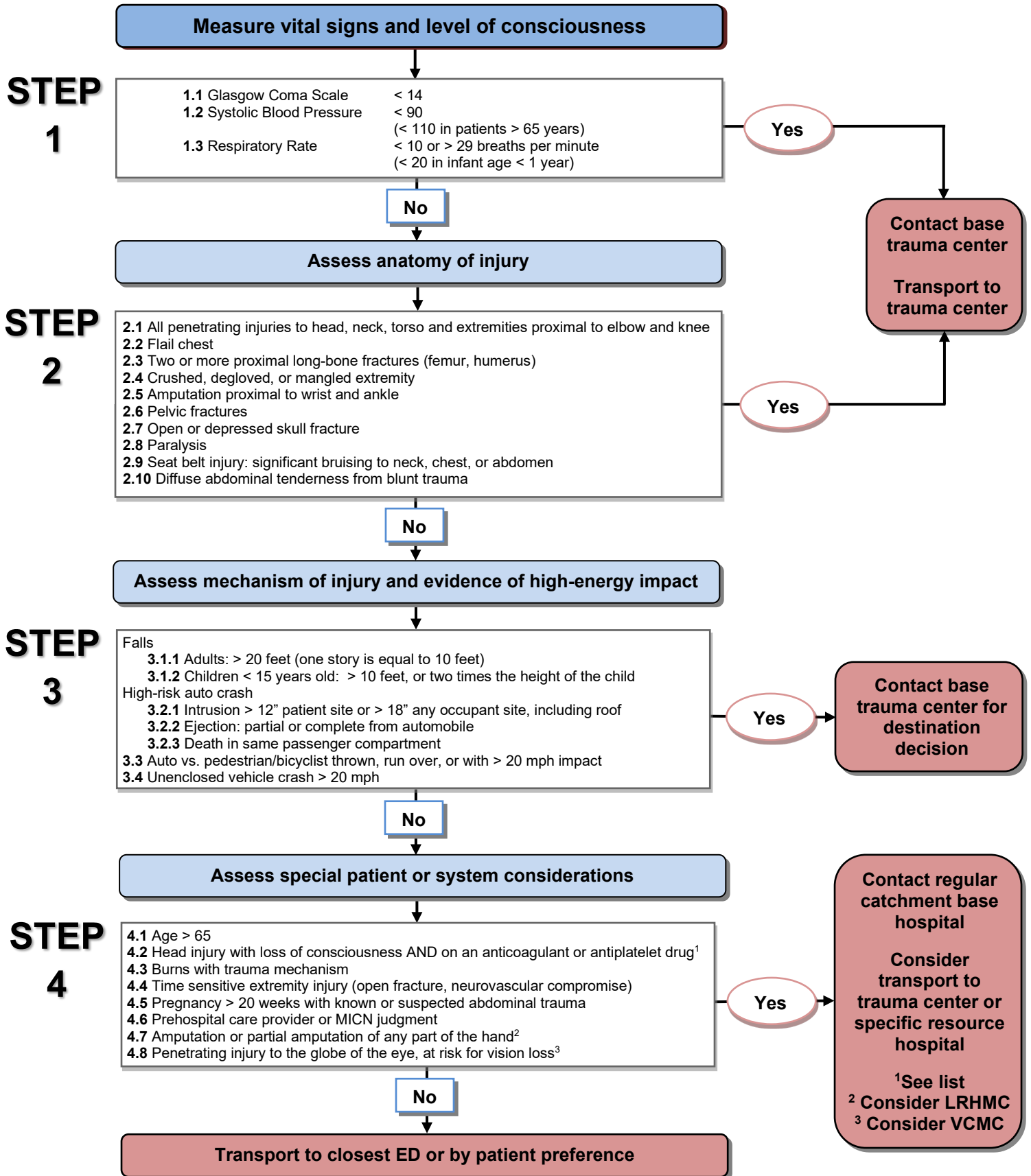


³For patients with isolated penetrating injury to the globe of the eye, at risk for vision loss, the regular catchment base hospital MICN may direct the patient to Ventura County Medical Center (VCMC) for specialized ophthalmologic care and possible surgical intervention.



Ventura County Field Triage Decision Scheme

For patients with visible or suspected traumatic injuries



| | | | |
|--|--|---|--|
| COUNTY OF VENTURA HEALTH CARE AGENCY | | EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES | |
| Policy Title: Public Safety First Aid Optional Skills Approval and Training | | Policy Number 1602 | |
| APPROVED: Administration: Steve L. Carroll, Paramedic | | Date: June 1, 2021 | |
| APPROVED: Medical Director: Daniel Shepherd, M.D. | | Date: June 1, 2021 | |
| Origination Date: July 13, 2017 | | Effective Date: June 1, 2021 | |
| Date Revised: February 11, 2021 | | | |
| Date Last Reviewed: February 11, 2021 | | | |
| Review Date: February 28, 2023 | | | |

- I. PURPOSE: To establish the application and approval process for the utilization of optional skills by Public Safety First Aid (PSFA) agency personnel in Ventura County, and to establish the requirements and responsibilities of the Ventura County EMS Agency (VCEMS) approved PSFA optional skill providers
 - A. The PSFA program shall be operated by approved providers in accordance with Title 22, Division 9, Chapter 1.5 of the California Code of Regulations and with all applicable VCEMS policies and procedures.
 - B. This program shall be implemented and maintained under the authority of the Ventura County EMS Medical Director.
- II. AUTHORITY: California Health and Safety Code Sections 1797.220 and 1798; California Code of Regulations, Title 22, Section 100019
- III. POLICY:
 - A. Any PSFA agency utilizing optional skills shall be approved by the VCEMS Medical Director, and continually meet all requirements outlined in the California Code of Regulations and VCEMS policies and procedures.
 - B. No entity may operate as a PSFA optional skills agency or provide optional skills unless authorized by the VCEMS Medical Director.
 - C. PSFA optional skills providers must be employed by a government public safety agency functioning within Ventura County as a part of the EMS system and may only provide optional skills while on duty.
 - D. Providers must meet the requirements and perform each optional skill as described in this policy.
 - E. The following optional skills are authorized for use by a PSFA agency:
 1. Administration of epinephrine by auto-injector for suspected anaphylaxis

2. Supplemental oxygen therapy using a non-rebreather face mask or nasal cannula, and bag-valve-mask ventilation
3. Administration of auto-injectors containing atropine and pralidoxime chloride for nerve agent exposure for self or peer care.
4. Administration of intranasal (IN) naloxone for suspected narcotic overdoses with respiratory depression.
5. Use of oropharyngeal airways (OPAs) and nasopharyngeal airways (NPAs)

IV. PROCEDURE:

A. PSFA Optional Skills Application and Approval Process

1. Providers requesting to utilize PSFA optional skills shall submit an application to VCEMS for approval. A complete application shall include the following:
 - a. Identification of optional skill(s) being requested for authorization
 - b. A letter of intent to provide the PSFA optional skill(s) being applied for, signed by a chief officer of the agency, agreeing to adhere to all applicable VCEMS policies and procedures.
 - c. A description of the geographic area within which the PSFA Optional Skill(s) will be utilized (size, population, population distribution and any other unique characteristics associated with the area that may impact the program, such as; tourist impact, recreational activities, etc.).
 - d. A description of the need for use of the PSFA Optional Skill(s), including the number of patients that may have benefited from the use of PSFA optional skill(s) for the previous year.
 - e. A description of the plans for initial training and ongoing PSFA Optional Skills competency verification for authorized PSFA personnel.
 - f. Procedures for collection and retention of required medical records.
 - g. Written procedure for ongoing Quality Improvement activities specific to each skill utilized with a staff member assigned to complete this responsibility on a regular and on-going basis.
 - h. Identification of the individual at the agency responsible for program oversight and coordination of quality improvement.

B. Program Notification

1. VCEMS shall notify the PSFA agency within seven (7) working days of receipt of the request for PSFA optional skills approval and shall specify what information, if any, is missing.

2. PSFA optional skills approval or denial shall be made within thirty (30) calendar days of receipt of all required application materials.
 3. PSFA Optional Skill(s) providers shall notify VCEMS of any instructor change. Any new instructor shall be approved by VCEMS prior to providing course instruction.
- C. PSFA Optional Skill(s) Provider Requirements and Responsibilities
1. Training Requirements
PSFA optional skills provider agencies shall:
 - a. Provide initial PSFA Optional Skills training and testing utilizing curriculum approved and provided by VCEMS
 - b. Provide all necessary training equipment (manikins, audiovisual aids, training auto-injectors, etc.).
 - c. Ensure that each authorized PSFA individual demonstrates competency in the utilization of all approved optional skills, a minimum of once every twelve (12) months.
 - d. Maintain on file a course completion record for all personnel successfully completing the approved training, for a minimum of four (4) years. This record shall be made available to VCEMS upon request
 2. Records and Data Collection Requirements:
 - a. A PSFA Optional Skills Utilization Patient Care Report (Appendix A) shall be completed for each patient on whom any of the PSFA Optional Skill(s) are utilized and submitted within 24 hours to the EMS Agency via secure email or fax as specified on the form.
 - b. The provider shall develop procedures for collection, disposition, and retention of all pertinent medical records
 - c. The PSFA provider agency shall submit an annual report, no later than January 31st of each year that summarizes program activities and performance for the previous calendar year. At a minimum, this report shall include:
 - i. Competency records for all PSFA optional skill providers working within the agency
 - ii. An update of any and all program changes or updates that occurred within the PSFA optional skills provider agency over the

previous twelve months, as it relates to the utilization of PSFA optional skills.

- D. Continuous Quality Improvement (CQI) Requirements
1. PSFA optional skills provider agencies shall maintain adequate program staff to ensure:
 - a. There is a timely and adequate review of each incident in which an optional skills has been utilized
 - b. There is adequate documentation of each incident in which an optional skill has been utilized
 - c. Each utilization of an optional skills has been in accordance with VCEMS policies and procedures.
 2. A monthly report outlining all utilizations of any PSFA optional skills over the previous calendar month shall be completed by the PSFA provider agency and submitted to VCEMS by the fifteenth (15th) day of each month.
- E. Denial, Revocation, or Suspension of Program Approval
1. Non-compliance with any criteria required for PSFA training program approval, use of any unqualified teaching personnel, or noncompliance with any other applicable provisions of the California Code of Regulations, may result in suspension, or revocation of PSFA program approval by VCEMS.
 2. VCEMS will notify PSFA program in writing of any deficiency and shall correct any identified problem within thirty (30) days.
 3. Failure to correct deficiencies and/or otherwise respond to directions will be cause for VCEMS to place the program on a probationary status with conditions for improvement, or deny, revoke, or suspend the program approval.



VENTURA COUNTY EMERGENCY MEDICAL SERVICES AGENCY



PUBLIC SAFETY FIRST AID OPTIONAL SKILLS APPLICATION

| | | | | |
|--|---|----------------------------------|-----------------|-------------|
| Application Type | <input type="checkbox"/> Initial | <input type="checkbox"/> Renewal | | |
| PSFA Agency Name | | | | |
| Mailing Address | Street | City | Zip | |
| Phone Number | | | | |
| Chief Officer | | | | |
| Principal Instructor | | | | |
| Program Eligibility | <input type="checkbox"/> Local Government Public Safety Agency approved by the Ventura County EMS Agency, in compliance with Title 22, Division 9, Chapter 1.5 of the California Code of Regulation and Ventura County EMS Agency policies and procedures. | | | |
| Optional Skills Requested | <input type="checkbox"/> Administration of epinephrine by auto-injector for suspected anaphylaxis <input type="checkbox"/> Supplemental oxygen therapy using non-rebreather face mask or nasal canula, and bag-valve-mask (BVM) ventilation <input type="checkbox"/> Administration of auto-injectors containing atropine and pralidoxime chloride for nerve agent exposure for self or peer care <input type="checkbox"/> Administration of intranasal (IN) naloxone for suspected opioid overdose with respiratory depression. <input type="checkbox"/> Use of oropharyngeal airways (OPAs) and nasopharyngeal airways (NPAs) | | | |
| Description of Geographic Area Naloxone will be Deployed | | | | |
| Description of Department Need | | | | |
| Letter of Intent | I certify that I have read and understood the requirements in VCEMS Policies and Procedures to be an approved PSFA Optional Skills Provider, and will comply with the requirements as described. I certify that all information contained in this application, to the best of my knowledge, is true and correct. I understand that failure to comply with the requirements outlined in VCEMS policies and procedures may result in revocation of this program approval. | | | |
| Chief Officer Signature | | | Date | |
| Email Address | | | Phone | |
| <i>VCEMS Use Only</i> | | | | |
| App. Received Date | App. Review Date | Approval Date | Expiration Date | Reviewed By |
| | | | | |

| <i>Supporting Documents Attached</i> | | | |
|---|------------------------------|-----------------------------|---------------------------------------|
| PSFA Agency Training Plan | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Items Needed |
| PSFA Agency Standard Operating Procedures | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Items Needed |