

Public Health Administration  
Large Conference Room  
2240 E. Gonzales, 2<sup>nd</sup> Floor  
Oxnard, CA 93036

Pre-hospital Services Committee  
Agenda

March 11, 2010  
9:30 a.m.

<b>I. Introductions</b>
<b>II. Approve Agenda</b>
<b>III. Minutes</b>
<b>IV. Medical Issues</b>
A. STEMI Update
1. Scan/Email of ECGs memo
B. Cardiac Arrest Improvement 2009
1. CPR Competency Testing – A. Salvucci
C. Other
<b>V. New Business</b>
A. Policy 604: Transport and Destination Guidelines
B. Policy 607: Hazardous Material Exposure: Prehospital Protocol
C. Policy 704: Guidelines For Base Hospital Contact
C. Policy 710: Endotracheal Intubation
D. Policy 717: Pediatric Intraosseous Infusion
E. Policy 1301: Public Access Defibrillation (PAD) Provider Standards
<b>VI Old Business</b>
A. Policy 612 Subcommittee status (Robin Schedlosky, Steph Huhn; Nick Clay)
B. Trauma System Update – S. Carroll
C. Impedance Threshold Device/King Airway Study – D. Chase
D. Policy 150: Unusual Occurrence – S. Lara-Jenkins
E. Policy 1000: Documentation of Pre-Hospital Care – S. Lara-Jenkins
F.. Other
<b>VII. Informational Topics</b>
A. Other
<b>VIII. Policies for Review</b>
A. No policies at this time
B. Other
<b>IX. Reports</b>
A. TAG Report
B. Policy 705 Revisions Report
<b>X. Agency Reports</b>
A. ALS Providers
B. BLS Providers
C. Base Hospitals
D. Receiving Hospitals
E. ALS Education Programs
F. EMS Agency
G. Other
<b>XI. Closing</b>



# TEMPORARY PARKING PASS

Expires March 11, 2010

Health Care Services  
2240 E. Gonzales Rd  
Oxnard, CA 93036

For use in "Green Permit Parking" Areas only, **EXCLUDES** Patient parking areas

Parking Instructions: Parking at workshop venue is limited. Arrive early to allow for offsite parking if venue parking lot is full.

**2240 Gonzales Rd. location**

If you park in a designated "green permit parking" slot, fold this flyer in half and place pass face-up on the dash of your car, to avoid receiving a ticket.

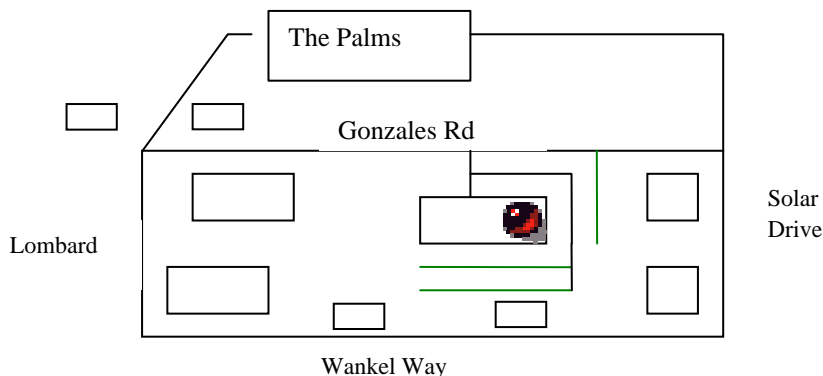
**2100 Solar Drive**

An additional amount of "Green Permit Parking" spaces (only 30) are available in adjacent parking lot, those that back-up against venue parking area, (Enter this parking lot off of Gonzales[3rd driveway] or Solar Drive). **Place this flyer on your dash.** If all of those stalls are occupied, overflow parking is available at The Palms shopping area or side streets.

**The Palms - shopping mall**

Enter The Palms at Lombard and Gonzales. Allow for a ten minute walk to venue location.

**Additional parking is available on side streets, Lombard, Solar and Wankel Way.**



Public Health Administration  
 Large Conference Room  
 2240 E. Gonzales, 2<sup>nd</sup> Floor  
 Oxnard, CA 93036

Pre-hospital Services Committee  
 Minutes

February 11, 2010  
 9:30 a.m.

Topic	Discussion	Action	Assigned
<b>I. Introductions</b>			
<b>II. Approve Agenda</b>		The agenda was approved as submitted.	
<b>III. Minutes</b> A. November 2009 B. December 2009		It was M/S/C (J. Hoffman/J. Hall) to approve the minutes as submitted.	
<b>IV. Medical Issues</b>			
A. STEMI Update 1. Scan/Email of ECGs memo	<p>The program is still going well. The SRCs are now titled Post Ventricular Resuscitation Center. We are working with all three of the hospitals to become therapeutic hypothermia centers. The program is in place at LR and still being evaluated at the other hospitals for equipment. There will be more information in the next few months. We will discuss at our next equipment meeting on whether to move that out in the field.</p> <p>ECG Strips: Dr. Salvucci stressed that he would like the ECG strips scanned and emailed to him in order to have a legible copy. When we first started the program, someone looked at all the EKGs and was able to determine the false positive, false negative and positive predictive value and so forth. We have not reviewed the information in some time. We need to bring this back for examination for our false positive rates. Dr. Salvucci would like to create a database that records true STEMI's and it will include all true positive, false positive and true negative.</p> <p>Please provide an original of the strip to the PCC not just dropped off at the hospital.</p> <p>There was a lengthy discussion regarding who should provide the scanned copy. Cath lab can scan the positive and provider would handle the false positives.</p>		Tabled
B. Cardiac Arrest Improvement 2009: CPR Competency Testing – A. Salvucci	<p>Countywide CPR competency review has been completed. First analysis was 20% for rate, depth and recoil. Everyone needs to be to 80% and we are reviewing for how often this training needs to be completed. Countywide number is 74% at this point.</p> <p>AS asks that we propose in the next 3 months training and then retesting.</p>		
C. Policy 710: Endotracheal Intubation – A. Salvucci	<p>Policy did not allow for tracheal stoma intubation and has now been added.</p> <p>Changing circulatory status will be added.          Auscultation – indicate to indicates          Another airway device 2 of 5, c3, second sentence stricken.</p>		Approved

Topic	Discussion	Action	Assigned
	<p>Page 5, 1 and 3 – change to airway attempt form – KH will e-mail language to Dr. Salvucci.</p> <p>It was M/S/C (N. Clay/T. Norton) to approve the policy with changes.</p>		
<b>V. New Business</b>			
<p>B. PSC Attendance Report – D. Haney</p>	<p>Attendance report was presented for approval. Those agencies whose representation fell below 70% will lose their voting rights and a letter will be sent to the agency director.</p> <p>It was M/S/C (N. Merman/N. Clay) to approve the report as submitted.</p>		Approved
<p>C. Policy 626: Chempack Deployment – S. Carroll</p>	<p>Three years ago we received from the federal government pre-deployed medicine for use in a terrorist attack event. VNC is the coordinator for the county. We did not finalize the policy. Monitored 24/7 for temp and humidity variances. by CDC. Two types of cache 1. EMS 2. Hospital difference: vials vs. prefilled syringes (no needles, no syringes) 6 caches in Ventura County. If more needed, we can request from our Regional resources. Mark I or DuoDote still used as front line treatment,</p> <p>It was M/S/C (T. Norton/N. Clay) to approve the policy as submitted.</p>		Approved
<p>D. EMT 2010 – Komins/Haney</p>	<p>New set of regulations will go into effect July 2010 (although they are still in draft form).</p> <p>State EMS Authority will publish a central registry to list all EMT certifications in State of CA. State EMS website will have information available to certifying entities and the public for all certified EMTs in the state. Background checks will be required on all EMTs,(FBI and DOJ) dual reporting will be available to the EMSA and Certifying Agency. Grandfathering: prior to July 1, 2010 state level DOJ backgrounds will be grandfathered.</p> <p>EMT/EMT-P relocates: must re-do Live Scanned</p> <p>Investigation: Employer may conduct investigations, findings forwarded to LMESA</p> <p>State mandated fees:</p> <p>\$75 New Cert</p> <p style="padding-left: 40px;">\$22 Central Registry</p> <p style="padding-left: 40px;">\$15 for LEMS ALJ</p> <p style="padding-left: 40px;">\$38 DOJ CORI function</p> <p>\$37 Recertification</p> <p style="padding-left: 40px;">\$22 Central Registry</p> <p style="padding-left: 40px;">\$15 LAEMSA ALJ</p> <p>\$160, then \$195: Paramedic Fees – will increase in two tiers</p> <p><b>Ventura County EMT Certification – fees will probably increase in July2010</b></p>		

Topic	Discussion	Action	Assigned
	<p>Current initial certification \$32                      Current recertification fee is \$16</p> <p>Grandfathered personnel, Live Scan with Subsequent Arrest, misdemeanor. This is still in question as they were only looking at the top four offenses, regulation was not written to preclude grandfathering. State regulation is under review.</p> <p>The change in the investigation process will change to allow the employer to handle the investigation and then the results of the investigation will be sent to Dr. Salvucci. Dr. Salvucci can either agree or disagree with the investigation conclusion.</p>		
E. Other			
<b>VI Old Business</b>			
A. CARES Update – A. Salvucci	Everything is working great. Angelo thanked everyone for submitting their data. 2009 final statistics have not been received.		
B. Trauma System Update – S. Carroll	ACS completed their visit in January. They are now compiling their report and expect it in the next month. Once it is received, a report will be presented to the BOS with the ACS recommendation.		
C. Impedance Threshold Device/King Airway Study – D. Chase	4 months of data received with extremely good spontaneous return of circulation. We are receiving assistance with statistician to review the data. Only receiving data from two providers. Outcome and end tidal CO2 data needs to be received.		
D. Policy 150: Unusual Occurrence – S. Lara-Jenkins	<p>There was discussion regarding the investigation process and responsibility of the investigator.</p> <ul style="list-style-type: none"> <li>• VCEMS retains authority to not assign and retain within our agency and act as primary investigator.</li> <li>• Single agency they would investigate if multi agency EMS would retain the investigation.</li> <li>• What is goal on who investigates? Each case is looked at individually.</li> <li>• Each investigation is taken on an individual basis for assignment.</li> </ul>	<p>Each provider would be provided a lead investigator to submit to EMS.</p> <p>S. Huhn/K. Haddock will send clarification of investigation language to S. Lara-Jenkins.</p> <p>Page 3 of 11-E2, changed to involved personnel statement.</p> <p>Page 3 of 11b, quotation mark moved to outside the period after confidential.</p> <p>Page 3 of 11-e Interview with providers will be changed to personnel statement</p> <p>Sentinel event and reportable event language should be mirrored.</p> <p>Locate flow chart.</p>	Tabled

Topic	Discussion	Action	Assigned
	<ul style="list-style-type: none"> <li>• EMS is not stopping you from investigating your own personnel. This policy deals with an assignment from EMS.</li> <li>• Each agency will be assigned a lead investigator per event. Will not share dirty laundry with another agency.</li> </ul> <p>3 of 11: removed interview with provider to involved personnel statement.</p> <p>e2) and 3) e6) stricken                      Page 4 – H. EMS office to agency.</p> <p>Sentinel changes needs to be same as reporting change from j5-10 days.</p> <p>Algorithm needs to re added.</p>		
F. Policy 920: Reddinet Policy – S. Carroll		It was M/S/C (T. Norton/N. Clay) to approve policy as submitted.	Approved
G. Policy 1000: Documentation of Pre-Hospital Care – S. Lara-Jenkins		Changes <ul style="list-style-type: none"> <li>• Fe will remain for female.</li> <li>• Yellow copy should be given to the transport agency stricken</li> <li>• MVA and MCA changed TC.</li> <li>• CVA to stroke</li> </ul> <p>Additional changes should be e-mailed to Stephanie prior to next meeting.</p>	Tabled
H. E-PCR – D. Haney	Committee is continuing to meet. A Request for Information document has been created and is with the agencies for approval. After approval it will be forwarded to interested vendors.		
I. Other			

Topic	Discussion	Action	Assigned
<b>VII. Informational Topics</b>			
A. Other	More and more calls for lift assist. It is now the policy of the convalescent homes to not pick up the patients. This is both residential care and convalescent homes. Is this a good use for EMS personnel?		
<b>VIII. Policies for Review</b>			
C. Policy 604: Transport and Destination Guidelines		STEMI and Trauma may need to be added.	Tabled
D. Policy 607: Hazardous Material Exposure: Prehospital Protocol		Page 2 of 4 G: add if known. Page 2, C4 – move to c1. Language to SC from S. Huhn	Tabled
E. Policy 704: Guidelines For Base Hospital Contact		Vehicle accident changed to Traffic collision. B.2 – suspicion of a complicated fracture (2.07)????	Tabled
F. Policy 717: Pediatric Intraosseous Infusion		7C direct needle 10-15 degree away (remove)	Tabled
G. Policy 722: Interfacility Transport of Patient with Patient with IV Heparin		It was M/S/C (N. Clay/J. Hansen) to approve the policy as submitted.	Approved
H. Other			
<b>IX. Reports</b>			
TAG Report A. 705 Policy Revisions	ALS CQI committee is continuing to work on 705 policies and will be ready for review in the next couple months.		
<b>X. Agency Reports</b>			
A. ALS Providers	FFD – Chief Herrera has joined committee and is replacing Royce Davis LMT – B Kuroda has replaced Steve Frank		
B. BLS Providers	OFD new academy starting. Next month training with tourniquet use for blood loss. NR requires 4” tourniquet and those are not available.		We will need a policy to address tourniquet use.
C. Base Hospitals	SJ – MICN course in full swing. There are 14 participants. Set to be done on March 3. Ride outs after test.		
D. Receiving Hospitals	PVH will have an interim manager		
E. ALS Education Programs	Students doing clinical rotation in the hospital. They will be going to the providers around the first of March. Students coming to the paramedic program are not getting much experience in the 911 system and we are entertaining how they can get the experience they should have in the 911 system. Possibility of providing		

Topic	Discussion	Action	Assigned
	experience prior to getting into program, have interested students call Meredith who do not have the 911 experience as she is looking at creative ways to get the experience.		
F. EMS Agency	<ul style="list-style-type: none"> <li>• Hospital preparedness program – we need to find out who the designated representative are for your agency. There was a meeting last week and only one hospital was represented. Funding is tied to your participation. The meeting will be held the first Wednesday of each month. Ensure your facility has appropriate representation.</li> <li>• Urban Area Security Initiative – this has a medical health component and we are asking for the hospital radio be replaced with a much more versatile capability</li> <li>• Many AEDs are no longer under warranty and may be replaced and we are looking at Homeland Security Funding to make the purchase.</li> <li>• The Trauma Nurse Coordinator and Deputy Administrator positions hit snags within our HR department. Hopefully the positions will be posted soon.</li> <li>• EMEDS – testing being done to new operating system and hopefully new server. Testing is being done this week to see if fully functional. No change on your side.</li> <li>• EPO – Public Health H1N1 they are doing an after action meeting on the 24th at 10 a.m.</li> <li>• Nuclear winter – symposium based on concept of nuclear explosion in LA and how it would affect Ventura County. We would be impacted by ill people coming to this county from Los Angeles as well as evacuations. The symposium is being held on 7/21/10 at Westlake Hyatt. This is a full day symposium.</li> </ul>		
G. Other			
<b>XI. Closing</b>	<b>Meeting adjourned at 12:00</b>		

Respectfully submitted  
 Debora Haney







COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Transport and Destination Guidelines		Policy Number 604	
APPROVED: Administration: Barry R. Fisher, MPPA <a href="#">Steven L. Carroll, EMT-P</a>		Date: <del>06/01/2008</del>	
APPROVED: Medical Director: Angelo Salvucci, M.D.		Date: <del>06/01/2008</del>	
Origination Date: June 3, 1986		Effective Date: <del>June 1, 2008</del>	
Date Revised: <del>January 9, 2008</del>			
Review Date: <del>January, 2010</del>			

- I. PURPOSE: To establish guidelines for determining appropriate patient destination, so that to the fullest extent possible, individual patients receive appropriate medical care while protecting the interests of the community at large by optimizing use and availability of emergency medical care resources.
- II. AUTHORITY: Health and Safety Code, Section 1317, 1797.106(b), 1797.220, and 1798 California Code of Regulations, Title 13, Section 1105(c) and Title 22, Section 100147.
- III. POLICY: In the absence of decisive factors to the contrary, patients shall be transported to the most accessible medical facility equipped, staffed, and prepared to receive emergency cases and administer emergency medical care appropriate to the needs of the patients.
- IV. PROCEDURE:
  - A. Hospitals unable to accept patients due to an internal disaster shall be considered NOT "prepared to receive emergency cases".
  - B. In determining the most accessible facility, transport personnel shall take into consideration traffic obstruction, weather conditions or other factors which might affect transport time.
  - C. Most Accessible Facility  
The most accessible facility shall ordinarily be the nearest hospital emergency department, except for:
    1. Base Hospital Direction for ALS patients
      - a. Upon establishment of voice communication, the Base Hospital is responsible for patient management until the patient reaches a hospital and medical care is assumed by the receiving hospital.
      - b. The Base Hospital may direct that the patient be transported to a more distant hospital which in the judgment of the BH physician or MICN is more appropriate to the medical needs of the patient.

- c. Patients may be diverted in accordance with Policy 402.
  2. Patients transported in BLS ambulances demonstrating conditions requiring urgent ALS care (e.g., unstable vital signs, chest pain, shortness of breath, airway obstruction, acute unconsciousness, OB patient with contractions), shall be transported to the nearest hospital emergency department prepared to receive emergency cases.
- D. "Decisive Factors to the Contrary"  
Decisive factors to the contrary include, but are not limited to, the following:
  1. Prepaid Health Plans
    - a. EMS personnel shall not request information on insurance or delay transport or treatment while determining insurance status.
    - b. A member of a group practice prepayment health care service who volunteers such information and requests a specific facility may be transported according to that plan when the BLS ambulance personnel or the ALS Base Hospital determines that the condition of the member permits such transport.
    - c. However, when it is determined that such transport would unreasonably remove the ambulance unit from the service area, the member may be transported to the nearest hospital capable of treating the member.
  2. Patient Requests
    - a. When a person or his/her legally authorized representative requests emergency transportation to a hospital other than the most accessible emergency department, the request should be honored when ambulance personnel, BH MD or MICN determines that the condition of the patient permits such transport.
    - b. When it is determined that such transport would unreasonably remove the ambulance unit from the service area, the patient may be transported to the nearest hospital capable of treating him/her.
  3. Private Physician's Requests  
When a treating physician requests emergency transportation to a hospital other than the most accessible acute care hospital, the request should be honored unless it is determined that such transport would unreasonably remove the ambulance from the service area. In such cases:

- a. If the treating physician is immediately available, ambulance personnel shall confer with the physician regarding a mutually agreed upon destination.
- b. If the treating physician is not immediately available, the patient should be transported to the nearest hospital capable of treating him/her.
- c. If Base Hospital contact has been made due to the condition of the patient and the immediate unavailability of the treating physician, and the BH MD or MICN determines that the condition of the patient does not permit such transport, BH directions shall be followed. If communication with the treating physician is possible, the BH should consult with the physician.

4. Physician on Scene per VC EMS Policy 702

5. Direct Admits

When a patient's physician has arranged direct admission to a hospital, the patient should be transported to that hospital regardless of Emergency Department diversion status unless the Base Hospital determines that the patient's condition requires that s/he be transported to a more appropriate facility.

E. "Medical facilities equipped, staffed and prepared to administer care appropriate to needs of the patients."

1. Patients that meet trauma criteria in VCEMS Policy 1405 will be transported to a designated Trauma Center.

2. Patients who meet STEMI criteria in VCEMS Policy will be transported to a STEMI Receiving Center.

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Hazardous Material Exposure: Prehospital Protocol		Policy Number: 607	
APPROVED: Administration: <del>Barry R. Fisher, EMT-P</del> <u>Steven L. Carroll, EMT-P</u>		Date: <del>06/01/2008</del>	
APPROVED: Medical Director Angelo Salvucci, MD		Date: <del>06/01/2008</del>	
Origination Date: February 12, 1987		Effective Date: <del>June 1, 2008</del>	
Date Revised: <del>November 13, 2008</del>			
Review Date: <del>March, 2010</del>			

- I. PURPOSE: This policy establishes guidelines for the response of pre-hospital care providers to incidents involving hazardous materials.
- II. AUTHORITY: Health and Safety Code, Division 2.5, Sections 1797.220 & 1798. California Code of Regulations, Title 22, Division 9, Section 100175.
- III. POLICY: The Ventura County Regional Response Team (VCRRT), under direction of the Incident Commander, assumes responsibility for control of the hazardous materials incident.  
  
The responding Emergency Medical Services personnel assume responsibility for patient care and transportation after release and/or decontamination by VCRRT. The EMS personnel and/or treatment team shall coordinate treatment/transport efforts with VCRRT so as not to jeopardize scene integrity, causing unnecessary spread of contamination to ambulance, equipment, EMS personnel and hospital personnel or citizens.
- IV. PROCEDURE:
  - A. INITIAL NOTIFICATION
    1. The responding EMS unit shall be notified by the Fire Department as soon as possible on all hazardous material incidents in order to facilitate their entry into the scene. Necessary information should include:
      - a. Radio channel/frequency for the incident
      - b. Estimated number of victims or potential victims
      - c. Urgency of the incident
      - d. Approach to the incident
      - e. Location of the staging area
      - f. Identification (radio designation) of the Incident Commander

- g. Hazardous substance involved
  - h. Request for specialized equipment needed
  - 2. While enroute, the EMS unit shall make radio contact with the Incident Commander or FCC and verify location, approach and staging information prior to their arrival on-scene.
  - 3. Upon arrival at the scene, the ambulance unit shall notify the base hospital or receiving hospital affected as to the number of patients, description of hazard, and any other pertinent information relative to hospital needs. (Note: the IC or VCRRT should provide this information upon request).
- B. ARRIVAL ON-SCENE
- 1. If the scene has not been secured and a staging area has not been established, the ambulance unit should make radio contact with the Incident Commander or FCC for staging instructions.
  - 2. In the absence of an Incident Commander and/or a staging area, EMS personnel should stay upwind and avoid entering the contaminated area.
  - 3. If the scene has been secured, the first-in ambulance unit should enter the staging area and report to the Incident Commander for direction.
- C. VICTIM DECONTAMINATION
- 1. Victims contaminated by a hazardous substance or radiation shall be appropriately decontaminated by VCRRT, despite the urgency of their medical condition, prior to being moved to the triage area for transportation  
~~Victims contaminated by a hazardous substance or radiation shall be appropriately decontaminated by VCRRT prior to being moved to the triage area for transportation.~~
  - 2. Decontamination may include removal of clothing and personal articles, washing the patient (as needed), and wrapping the patient in a protective covering.
  - 3. The transfer of the victim from the contaminated zone to the safe zone must be accomplished by trained personnel in an appropriate level of protective clothing and carefully coordinated so as not to permit the spread of contamination.

4. ~~The urgency of the situation should not have a bearing on the policies described here.~~

5.4 Contaminated clothing and personal articles shall be properly prepared for disposal by the VCRRT.

56. Every effort shall be made to preserve, protect and return personal articles.

#### D. TRANSPORTATION

1. Any equipment, including transportation units, found to have been exposed and contaminated by a hazardous substance shall be taken out of service pending decontamination and a second ambulance unit responded to transport patients to the hospital when available.
2. At no time shall ambulance personnel transport contaminated patients. If during transport a victim off-gasses a strong odor or vomits what is believed to be toxic emesis, personnel/victim shall vacate ambulance and request assistance from fire.
3. Prior to transportation of patients to the hospital, the ambulance unit shall notify the hospital of the following:
  - a. number of victims
  - b. confirmation that patients being transported have been field decontaminated
  - b. extent each patient was contaminated
  - c. materials causing contamination
  - d. extent of injuries
  - e. patient assessment
  - f. ETA
  - g. any other pertinent information

#### E. ARRIVAL AT EMERGENCY ROOM

1. Upon arrival at the hospital, emergency room personnel shall meet the patient at the ambulance in order to determine if further decontamination is needed prior to delivery of patient(s) into the emergency room.
2. All hospitals should develop a plan for receiving patients who have been decontaminated and those patients who may need additional decontamination and a contingency plan for mass decontamination.



3. If additional decontamination resources are needed, the VCRRT decontamination equipment and personnel may be requested through dispatch.

F. EMERGENCY PERSONNEL DECONTAMINATION

1. All treatment team members coming in contact with contaminated patients or contaminated materials shall take immediate measures to insure proper decontamination. Secondary decontamination is recommended which includes taking a shower and changing clothes.
2. Clothing, bedding, instruments, body fluids, etc. may be considered extremely hazardous and must be handled with care, contained and disposed of properly.
3. Follow-up monitoring of all personnel shall be conducted as deemed necessary by the Medical Director.

DRAFT

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Guidelines For Base Hospital Contact		Policy Number: 704	
APPROVED: Administration: <del>Barry R. Fisher, MPPA</del> <a href="#">Steven L. Carroll, EMT-P</a>		Date: <del>06/01/2008</del>	
APPROVED: Medical Director: Angelo Salvucci, MD		Date: <del>06/01/2008</del>	
Origination Date: October 1984			
Date Revised: <del>March 13, 2008</del>		Effective Date: <del>June 1, 2008</del>	
Review Date: <del>March, 2010</del>			

- I. PURPOSE: To define patient conditions for which EMT-Ps shall establish BH contact.
- II. AUTHORITY: Health and Safety Code Sections 1798, 1798.102 and 1798.2. [California Code of Regulations, Title 22, Section 100169.](#)
- III. POLICY: A paramedic shall contact a Base Hospital in the following circumstances:
  - A. Any patient to which ALS care is rendered under VCEMS Policy 705: County Wide Protocols.
  - B. [Trauma Cases: Patients that meet criteria in VCEMS Policy 1405.](#) ~~Any mechanism of injury where paramedics suspect or patient exhibits significant signs of injury.~~
    - ~~1. Vehicle accident~~
    - ~~2. Suspect or complicated fractures~~
    - ~~3. Injuries, which exhibit neurological or vascular compromise~~
    - ~~4. Significant penetrating head, neck, chest, abdomen or thigh~~
    - ~~5. Any abdominal pain secondary to blunt trauma~~
  - C. General Cases
    1. Significant vaginal bleeding (OB or non-OB related).
    2. Pregnant female in significant distress (e.g., symptoms of placenta previa, placenta abruptio, toxemia, retained placenta, etc.).
    3. Syncope / Near Syncope
    4. AMA involving any of the above conditions
    5. AMA including suspected altered level of consciousness
    6. Any patient who, in paramedic's opinion, would benefit from base hospital consultation.

COUNTY OF VENTURA EMERGENCY MEDICAL SERVICES		HEALTH CARE AGENCY POLICIES AND PROCEDURES	
Policy Title: Endotracheal Intubation		Policy Number: 710	
APPROVED: Administration: <del>Barry R. Fisher, MPPA</del> <a href="#">Steven L. Carroll, EMT-P</a>		Date: <del>06/01/2008</del>	
APPROVED: Medical Director Angelo Salvucci, M.D.		Date: <del>06/01/2008</del>	
Origination Date: June 1986		Effective Date: <del>June 1, 2008</del>	
Date Revised: <del>April 1, 2008</del>			
Review Date: <del>April, 2010</del>			

- I. Purpose: To define the indications, procedure and documentation for oral endotracheal tube (ETT) insertion by paramedics.
- II. Authority: Health and Safety Code, Sections 1797.220 and 1798.
- III. Policy: Paramedics may utilize oral endotracheal intubation on patients eight (8) years of age or older, in accordance with Ventura County Policy 705.
- IV. Definition: Intubation Attempt: an interruption of ventilation, with laryngoscope insertion, for the purpose of ETT placement.
- V. Procedure:
  - A. Indications
    1. Cardiac arrest – according to VCEMS Policy 705, Cardiac Arrest.
    2. Respiratory arrest or severe respiratory compromise **AND** unable to maintain an adequate airway and adequately ventilate with bag-valve-mask.
    3. After Base Hospital (BH) contact has been made, the BH Physician may order endotracheal intubation in other situations.
  - B. Contraindications
    1. Traumatic brain injury – unless unable to maintain adequate airway (e.g., persistent vomiting).
    2. Gag reflex.
  - C. Intubation Attempts
    1. There shall be no more than two (2) attempts to intubate, lasting no longer than 20 second each, prior to BH contact. The patient shall be ventilated with 100% O2 by BVM for one minute before each attempt.
    2. If endotracheal intubation cannot be accomplished in 2 attempts, the approved Alternate ALS airway device may be inserted.
    3. If ALS airway techniques are unsuccessful or contraindicated, the airway shall be managed by BLS techniques. ~~If an approved Alternate ALS airway device has been inserted and placement of an endotracheal tube is ordered, the~~

~~endotracheal tube shall be placed before the approved Alternate ALS airway device is removed.~~

- D. Flexible Stylet. A flexible stylet may be used for any ETI attempt.
1. Two Person Technique (recommended when visualization is less than ideal):
    - a. Visualize as well as possible.
    - b. Place stylet just behind the epiglottis with the bent tip anterior and midline.
    - c. Gently advance the tip through the cords maintaining anterior contact.
    - d. (Optional) Use stylet to feel for tracheal rings.
    - e. (Optional) Advance stylet past the black mark and feel for the carina.
    - f. Withdraw the stylet to align the black mark with the teeth.
    - g. Have your assistant load and advance the ETT tip to the black mark.
    - h. Have your assistant grasp and hold steady the straight end of the stylet.
    - i. While maintaining laryngoscope blade position, advance the ETT.
    - j. At the glottic opening turn the ETT 90 degrees counterclockwise to assist passage over the arytenoids.
    - k. Advance the ETT to 22 cm at the teeth.
    - l. While maintaining ETT position, withdraw the stylet.
  2. One Person Technique (recommended when visualization is good but cords are too anterior to pass ET tube).
    - a. Load the stylet into the ETT with the bent end approximately 4 inches (10 cm) past the distal end of the ETT.
    - b. Pinch the ETT against the stylet.
    - c. With the bent tip anterior, while visualizing the cords advance the stylet through the cords.
    - d. Maintain laryngoscope blade position.
    - e. When the black mark is at the teeth ease your grip to allow the tube to slide over the stylet. If available have an assistant stabilize the stylet.
    - f. At the glottic opening turn the ET tube 90 degrees counter clockwise to assist passage over the arytenoids.
    - g. Advance the ETT to 22 cm at the teeth.
    - h. While maintaining ETT position, withdraw the stylet.
- E. Confirmation of Placement. It is the responsibility of the paramedic who has inserted the endotracheal tube to confirm (using air aspiration, auscultation, and CO2 detection/measurement) and document its placement. Responsibility for the position of

the ETT shall remain with the intubating paramedic until a formal transfer of care has been made.

1. Prior to intubation, prepare both the air aspiration and the CO<sub>2</sub> measurement devices.
2. Insert ETT, advance, and hold at 22 cm at the teeth for a patient  $\geq$  5 ft. tall. For patients less than 5 ft. tall, insert the ETT so that the balloon is 2 cm past the vocal cords.
3. After inserting the ETT, in the patient requiring CPR, resume chest compressions while confirming ETT placement.
4. Before inflating ETT balloon, perform the air aspiration technique.
  - a. Deflate the bulb, connect to the ETT, and observe for refilling.
  - b. Refilling of the bulb in less than 5 seconds indicates tube placement in trachea.
  - c. If the bulb does not completely refill within 5 seconds, unless able to definitively confirm placement on repeat direct laryngoscopy, remove the ETT. Suspect delayed filling with the ETT in the trachea if the patient is morbidly obese, has fluid in the airway (pulmonary edema, aspiration, pneumonia, drowning), or the ETT is against the carina.
5. Inflate the ETT cuff, attach the CO<sub>2</sub> measurement device, and begin ventilations.
  - a. During the first 5-6 ventilations, auscultate both lung fields (in the axillae) and the epigastrium.
6. After 6 ventilations, observe the CO<sub>2</sub> measuring device:
  - a. If a CO<sub>2</sub> detector device is used, observe the color at the end of exhalation. Yellow indicates the presence of  $>5\%$  exhaled CO<sub>2</sub> and tan 2-5% CO<sub>2</sub>. Yellow or tan indicates tube placement in the trachea. Purple indicates less than 2% CO<sub>2</sub> and in the patient with spontaneous circulation is a strong indicator of esophageal intubation.
  - b. If capnography is used, a regular waveform with each ventilation should be seen with tracheal placement. If the patient has been in cardiac arrest for a prolonged time (more than 5-10 minutes) the waveform may be diminished or, rarely, absent. In the patient with spontaneous circulation, if a regular waveform with a CO<sub>2</sub> of 25 or higher is not seen, that is a strong indicator of esophageal intubation.
7. Using information from auscultation and CO<sub>2</sub> measurement, determine the ETT position.

- a. If breath sounds are equal, there are no sounds at the epigastrium, and the CO2 measuring device indicates tracheal placement, secure the ETT using an ETT holder.
  - b. If auscultation or the CO2 measuring device indicate that the ETT may be in the esophagus, immediately reevaluate the patient. If you are not CERTAIN that the ETT is in the trachea, remove the ETT.
  - c. When in doubt about the position of the ETT, the decision should be based upon the patients overall clinical status (e.g., skin color, respirations, pulse oximetry).
  - d. If breath sounds are present but unequal, the ETT position may be adjusted as needed.
8. Once ETT position has been confirmed, reassessment, using CO2 measurement, pulse oximetry (if available), and auscultation of breath sounds should be performed each time patient is moved.
  9. Continue to monitor the CO2 measurement device during treatment and transportation. If a change occurs from positive (yellow/tan) to negative (purple), or the waveform diminishes or disappears, reassess the patient for possible accidental extubation or change in circulation status.
  10. After confirmation of proper ET tube placement and prior to movement, all intubated patients shall have their head and neck immobilized in a neutral position in a manner similar to immobilization of suspected cervical spine injuries.
    - a. Reconfirm ET tube placement after head/neck immobilization, and at intervals consistent with length of treatment.
    - b. Report to nurse and/or physician that the spinal immobilization is for the purpose of securing the ETT and not for trauma.

#### F. Tracheal Stomal Intubation

- a. Select the largest endotracheal tube that will fit through the stoma without force (it should not be necessary to use lubricant).
- b. Do not use stylet.
- c. Pass endotracheal tube until the cuff is just past the stoma.
- d. Inflate cuff.
- e. Attach end-tidal CO2 detection device to the ET tube. Assess ETT placement using tools described in this policy.
- f. Secure tube.

#### F. Documentation

1. All endotracheal intubation attempts must be documented in the “ALS Airway” section of the approved Ventura County Documentation System and the Ventura County "Documentation of ~~Intubation~~ Advanced Airway Attempt" form.
2. Information not obvious from the “ALS Airway” section (e.g., vomitus in airway, suctioning, extubation and reintubation) will be documented in the narrative.
3. A “Documentation of ~~Intubation~~ Advanced Airway Attempt” form must be completed after any attempt at intubation. The form must be completed by the intubating paramedic, signed by the treating emergency physician or, if the patient is not transported, another on-scene paramedic, and delivered to the base hospital within 24 hours of the incident or the end of the paramedic’s shift, whichever occurs first. If all ETI attempts are unsuccessful, no physician signature is needed.
4. Intubation documentation must include, at a minimum, the following information in the approved Ventura County Documentation System:
  - a. Number of attempts
  - b. Position of ETT at teeth
  - c. Confirmation devices used and results
  - d. Auscultation results
  - e. How ETT secured
  - f. Head/neck immobilization
  - g. Size of ETT

Policy Title: <b>PEDIATRIC</b> INTRAOSSEOUS INFUSION		Policy Number: 717
APPROVED: Administration:	<del>Barry R. Fisher, MPPA</del> <a href="#">Steven L. Carroll, EMT-P</a>	Date: <b>06/01/2008</b>
APPROVED: Medical Director:	Angelo Salvucci, MD	Date: <b>06/01/2008</b>
Origination Date:	September 10, 1992	Effective Date: <b>June 1, 2008</b>
Date Revised:	<del>April 10, 2009</del>	
Review Date:	<del>March, 2010</del>	

- I. PURPOSE: To define [the indications, procedure and documentation for the parameters of](#) use of Intraosseous Infusion (IO) [by paramedics](#).
- II. AUTHORITY: Health and Safety Code ~~1797.178~~, [Sections](#) 1797.214, 1797.220 [and](#), 1798, and California Code of Regulations, Title 22, ~~Division 9~~, [Sections](#) 100145, [and](#) ~~100166-100169 and 100175~~.
- III. POLICY: IO infusion may be performed by paramedics ~~who have successfully completed a competency review, in its use, have been authorized by the Ventura County EMS Medical Director, and when conditions listed under indications are met.~~ [in accordance with VCEMS Policy 705](#). Only two (2) attempts at establishing an IO infusion shall be done.
- IV. Procedure:
  - A. Indications
    1. Child < 8 years of age with [ALL of the following](#):
      - [a.](#) ~~A~~ altered level of consciousness (ALOC)
      - [b.](#) ~~,~~ [and u](#)rgent need to administer fluids and/or medications which can only be given by the IV/[IO](#) route, [AND](#)
      - [c.](#) ~~and a~~ peripheral IV site is not readily ~~immediately~~ available.
  - B. Contraindications
    1. Recent fracture of involved bone
    2. [Skin injury, grossly contaminated skin, i](#)nfectious burn or cellulitis overlying the site
    3. Congenital deformities of bone
    4. ~~Grossly contaminated skin overlying site~~
    5. ~~Skin injury~~
  - C. Potential Complications
    1. Prolongation of transport time



2. ~~Local Extravasation~~infiltration of fluid/medication
3. ~~or local b~~leeding
3. Osteomyelitis or sepsis (rare)
4. Localized periosteal or bone marrow inflammation
5. Incorrect placement of the needle leading to bone growth plate damage or knee joint injury
6. Fat embolism
7. Vascular or nerve damage from large volume extravasation
8. Fluid overload

~~D. Training~~

1. ~~Field IO infusion may be performed after the paramedic has successfully completed a competency review on the indications, contraindications, potential complications, procedure and policy regarding its use.~~
2. ~~The Base Hospital Medical Director (BHMD) or designee shall notify VCEMS when an paramedic has successfully completed the initial competency review for accreditation and review skills yearly at skills refresher. The County approved IO review will be provided quarterly by the Base Hospitals (BH's) on a rotating basis.~~
3. ~~Each paramedic shall attend a review within three (3) months of Ventura County Accreditation.~~

~~E. Documentation~~

1. ~~The paramedic shall document any attempt(s) at establishing a peripheral line prior to attempting an IO line on the Prehospital Care Record (PCR) and IO Infusion Data form.~~
2. ~~Site and number of attempts to establish an IO infusion shall be documented on the PCR.~~

~~F. Quality Assurance~~

~~Each use of an IO infusion will automatically be subject to review at the BH by a quality assurance process to assess appropriateness of its use, time intervals involved with its use (e.g., time at scene, transport time), and follow-up on patient's response to therapy, medical outcome, and presence of any related complications. (See QA Form, Appendix A)~~

G. Procedure

1. IO ~~infusion~~ shall not unnecessarily prolong on scene time or transport time. ~~There shall be no more than two attempts unless ordered by BH MD.~~
2. ~~Assemble the needed equipment~~
  - a. ~~Sterile gloves~~
  - b. ~~16-18 gauge IO needle 1 1/2 inches long~~
  - c. ~~Betadine swabs or solution on gauze~~
  - d. ~~Sterile gauze pads~~
  - e. ~~Two (2) 5-cc syringes or primed IV line with or without stopcock~~
  - f. ~~IV fluids maximum 250-cc bags~~
  - g. ~~Tape~~
  - h. ~~Splinting device~~
3. ~~Locate the appropriate insertion site, a non-traumatized proximal tibia. Locate the landmarks 2-3 cm below the tibial tuberosity on the anteromedial flat bony surface of the proximal tibia.~~
4. ~~Prepare the site. Position the child so that the site is accessible. Prepare the site using betadine. Start in the center of the site and paint on betadine from the center of the site to the outer edge of the site (clean to dirty). Repeat this procedure 3 times using a new sterile swab or pad each time. Drying the site is not necessary.~~
5. ~~Fill one syringe with IV solution, keeping the needle tip sterile.~~
6. ~~Maintain sterile procedure at all times.~~
7. ~~Insert the IO needle.~~
  - a. ~~Hold the child's leg steady~~
  - b. ~~Grasp the needle with the obturator still in place and insert it through the skin at the selected site at a 90-degree angle to the skin surface~~
  - c. ~~Once the periosteum of the bone has been reached, direct the needle 10-15 degrees away from the knee, rotating and gently pushing the needle forward~~
  - d. ~~When the needle is felt to 'pop' into the bone marrow space:  
Remove the obturator, attach a dry 5-cc syringe, and attempt to aspirate bone marrow. Attach the 5-cc syringe containing the IV solution, to flush the IO needle. Connect the IV tubing and secure the needle by taping~~

OR

- ~~Remove the obturator, attach a primed IV solution set with or without a stop cock. Pinch or close to the IV solution and attempt to aspirate bone marrow. Pinch or close to the patient and draw 5 cc of fluid from the IV bag. Pinch or close to IV bag and flush IO needle. Secure the needle by taping (if unable to flush continue procedure and watch carefully for extravasation and swelling).~~
- ~~e. Once satisfactory flushing is achieved – begin to infuse fluids and/or medications.~~
- ~~f. Splint the child's leg to prevent accidental dislodging of the needle.~~
- ~~g. Document pedal pulses and skin color bilaterally before and after procedure.~~
- ~~8. Active pushing of fluids may be more successful than gravity infusion. Use the same size syringe for fluid bolus's. Close observation of the flow rate and amount is required.~~
- ~~9. If infiltration occurs, stop the infusion, remove the needle, and apply a pressure bandage to the IO site.~~
- ~~10. If the needle is accidentally removed, stop the infusion, and apply a pressure bandage to the IO site.~~

D. Documentation

1. The paramedic shall document any attempt(s) at establishing a peripheral line prior to attempting an IO on the Ventura County Approved Documentation System and IO Infusion Data form.
2. Site and number of attempts to establish an IO infusion shall be documented.

E. Quality Assurance

Each use of an IO infusion will automatically be subject to review at the BH by a quality assurance process to assess appropriateness of its use, time intervals involved with its use (e.g., time at scene, transport time), and follow-up on patient's response to therapy, medical outcome, and presence of any related complications. (See QA Form, Appendix A)

**Quality Improvement:**

~~Prehospital Care Records for all cases where intraosseous infusion is either instituted or attempted will be reviewed by the BH, provider and EMS Office. The following format will be utilized to collect data, and that data will be presented in a summarized form by the EMS Office to the Quality Improvement Committee at 6 months and 12 months for evaluation, review and recommendation.~~

INTRAOSSIOUS INFUSION DATA FORM

Date: _____	Incident Number: _____
Nature of Case:	
<input type="checkbox"/> Cardiopulmonary Arrest	<input type="checkbox"/> Shock, Non-traumatic
<input type="checkbox"/> Shock, Traumatic	<input type="checkbox"/> Other, describe _____
Age: _____	Sex: Male: _____ Female: _____ Weight: _____
Use appropriate per EMS Policies/Procedures:	Yes: _____ No: _____
Number of Attempts/Successes:	
Total _____	Attempts _____ Successes _____
PARAMEDIC #1 – License No. _____	Attempts _____ Successes: _____
PARAMEDIC #2 - License No. _____	Attempts _____ Successes _____
If line(s) started for volume resuscitation, volume infused in field: _____ c.c.	
If line started for drug therapy, drugs given via intraosseous route in field: _____	
Elapsed on Scene Time: _____ min. Base Hospital: _____	

Appendix B

Intraosseous Infusion Competency Review

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. Identifies indications for use of intraosseous infusion
2. States contraindications for use of intraosseous infusion
3. Assembles the correct equipment
4. Demonstrates the correct procedure
5. Identifies possible complications
6. States actions necessary to correct complications

Reviewer's Signature: \_\_\_\_\_

Reviewer's Printed Name: \_\_\_\_\_

License/Certificate Level: \_\_\_\_\_

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Public Access Defibrillation (PAD) Provider Standards		Policy Number 1301	
APPROVED: Administration: <del>Barry R. Fisher, MPPA</del> <a href="#">Steven L. Carroll, EMT-P</a>		Date: <del>06/01/2008</del>	
APPROVED: Medical Director: Angelo Salvucci, M.D.		Date: <del>06/01/2008</del>	
Origination Date: September 14, 2000			
Date Revised: <del>March 13, 2008</del>		Effective Date: <del>June 1, 2008</del>	
Review Date: <del>March, 2010</del>			

I. PURPOSE

- A. To provide for system wide public access defibrillation standards, review and oversight by Ventura County Emergency Medical Services.
- B. To provide structure to programs implementing automated external defibrillators for use by lay persons treating victims of cardiac arrest.
- C. To provide for integration of public access defibrillation programs in the established emergency medical services system.
- D. To provide a mechanism for PAD Quality Improvement throughout the Ventura County EMS System.

II. AUTHORITY

- A. California Health and Safety Code Sections 1797.5, 1797.107, 1797.190 and 1797.196.
- B. California Code of Regulations Title 22, Division 9, Chapter 1.8 Sections 100031 through 100042~~4~~, as revised January 8~~4~~, 2009~~6~~.

III. SERVICES PROVIDED AND APPLICABILITY

PAD programs shall be operated consistent with VCEMS policy and California State statutes and regulations.

IV. DEFINITIONS

- A. "AED Service Provider" means any agency, business, organization or individual who purchases an AED for use in a medical emergency involving an unconscious person who is not breathing. This definition does not apply to individuals who have been prescribed an AED by a physician for use on a specifically identified individual. ~~"Authorized Individual" means any person, not otherwise licensed or certified to use the automated external defibrillator, who has met the training standards of this chapter.,.~~
- B. "Automated External Defibrillator" or "AED" means an external defibrillator that after user activation is capable of cardiac rhythm analysis and which will charge and deliver a

shock, either automatically or by user interaction, after electronically detecting and assessing ~~ing and detect~~ ventricular fibrillation or rapid ventricular tachycardia, ~~charge, and, with or without further operator action, deliver an electrical shock.~~

C. “Lay Rescuer” means any person, not otherwise licensed or certified to use the automated external defibrillator, who has met the training standards of this policy.

D. “Physician Medical Director” means a physician and surgeon ~~who is currently~~ licensed in California, ~~and who~~ provides medical oversight to the AED Service Provider as set forth in California Code of Regulations, Title 22, Section 100040. ~~develops, implements, and maintains the medical control provisions specified in this policy.~~

~~E.D.~~ “Cardiopulmonary resuscitation” or “CPR” means a basic emergency procedure for life support, consisting of artificial respiration, manual external cardiac massage, and maneuvers for relief of foreign body airway obstruction. ~~“Public Access Defibrillation” or “PAD” refers to the utilization of an AED, by individuals not otherwise authorized to use the device, to treat victims of cardiac arrest in public or private venues.~~

F. “Internal Emergency Response Plan” means a written Internal Emergency Response Plan of action which utilizes responders within a facility to activate the “9-1-1” emergency system, and which provides for the access, coordination, and management of immediate medical care to seriously ill or injured individuals.

V. ~~PHYSICIAN AND PROGRAM AUTHORIZATION~~ GENERAL TRAINING PROVISIONS:  
APPLICATION AND SCOPE

A. Any training program, AED Service Provider or vendor may authorize a Lay Rescuer to apply and operate and AED on an unconscious person who is not breathing only if that Lay Rescuer has successfully completed a CPR and AED course according to the standards prescribed in this policy.

B. The training standards prescribed by this policy shall apply to employees of the AED Service Provider and not to licensed, certified or other prehospital emergency medical care personnel as defined by Section 1797.189 of the Health and Safety Code.

VI. MEDICAL DIRECTOR REQUIREMENTS

Any AED Service provider shall have a physician Medical Director who:

A. Meets the qualifications of a Medical Director per California Code of Regulations, Title 22, Section 100036.

B. Shall ensure that AED Service Provider’s Lay Rescuer CPR and AED training meets the requirements of this policy.

- C. Shall review each incident where emergency care of treatment on a person in cardiac arrest is rendered and to ensure that the Internal Emergency Response Plan, along with the CPR and AED standards that the Lay Rescuer was trained to, were followed.
- D. Is involved in developing an Internal Emergency Response Plan and to ensure compliance for training, notification, and maintenance as set forth in this policy.
- E. The Medical Director shall maintain a list of authorized individuals that s/he has trained.
- F. The Medical Director (or his/her designee) shall maintain a record of authorized individuals that are currently participating in the AED program under that physician's control. The record shall include the authorized individuals:
  - 1. Name
  - 2. Address
  - 3. Telephone Number
  - 4. Copy of CPR certificate
  - 5. Date of initial training
  - 6. Dates of retraining
- G. VCEMS may audit or review this information upon request.
- H. The Medical Director shall review each incident of application and the recordings of such.
- I. The Medical Director (or his/her designee) shall submit a "Report of CPR or AED Use" form (attachment A) to Ventura County EMS within 24 hours of a cardiac arrest incident at an AED site. Send this completed form to:

AED Program

Ventura County EMS

2220 E. Gonzales Road, Suite 130

Oxnard, CA 93036-0619

~~Any physician and surgeon licensed in California wishing to authorize an individual or AED enabling agency to apply and operate an AED in Ventura County shall apply to VCEMS. The application packet shall, minimally, include:~~

- ~~A. Documentation that s/he is currently licensed as a physician and surgeon in the State of California. The prescribing physician may demonstrate that s/he is currently licensed by providing a copy of his/her medical license.~~
- ~~B. A description of the utilization of the AED, including written medical protocols which may include, but are not limited to, authorization of personnel, standing orders and case by case reviews.~~
- ~~C. A mechanism for the training and testing of the authorized individual in the use of AED.~~



- ~~D. A quality assurance mechanism that will assure the continued competency of the authorized individual to include periodic training and skill proficiency demonstrations at least every six months monitored by either the licensed physician, or his/her designee (which may be another authorized individual).~~
- ~~E. A method of medical control to include reviews of each incident of application and the recording of such, either by means of magnetic tape or other suitable storage.~~
- ~~F. The conditions for the rescission or termination of the authorization for the utilization of the AED.~~
- ~~G. A mechanism by which the EMS system dispatcher may notify authorized users of the AED of a cardiac arrest at the AED location.~~

VII. RESPONSIBILITIES OF THE LICENSED PHYSICIAN/AED VENDOR REQUIREMENTS:

Any AED vendor who sells an AED to an AED Service Provider shall notify the AED Service Provider, at the time of purchase, both orally and in writing of the AED Service Provider's responsibility to comply with this policy.

- A. Notify the local EMS Agency of the existence, location, and type of AED at the time it is acquired. ~~The licensed physician shall maintain a list of authorized individuals that s/he has trained.~~
- B. Provide to the acquirer of the AED all information governing the use, installation, operation, training, and maintenance of the AED. ~~The licensed physician (or his/her designee) shall maintain a record of authorized individuals that are currently participating in the AED program under that physician's control. The record shall include the authorized individuals:~~

- ~~1. Name~~
- ~~2. Address~~
- ~~3. Telephone Number~~
- ~~4. Copy of CPR certificate~~
- ~~5. Date of initial training~~
- ~~6. Dates of retraining~~

~~C. VCEMS may audit or review this information upon request.~~

~~D. The licensed physician shall issue to the authorized individual a written validation or other documented proof of the authorized individual's ability to use an AED. The requirements for a "Written Validation" and "Prescription for Use" can both be satisfied by the issuance of a written certification card from an AED training program. The prescribing physician's signature shall be on file with the AED training program~~

~~authorizing the issuance of the written certification card upon successful completion of the required training.~~

~~E. The licensed physician shall review each incident of application and the recordings of such, either by means of magnetic tape or other means.~~

~~F. The licensed physician (or his/her designee) shall submit a "Report of CPR or AED Use" form (attachment A) to Ventura County EMS within 96 hours of a cardiac arrest incident at an AED site. Send this completed form to:~~

~~AED Program  
Ventura County EMS  
2220 E. Gonzales Road, Suite 130  
Oxnard, CA 93036-0619~~

VIII. AED TRAINING PROGRAM REQUIREMENTS: REQUIRED TRAINING HOURS AND TOPICS AND SKILLS

The Lay Rescuer shall maintain current CPR and AED training, as prescribed in this policy.

~~Course Content: Training for authorized individuals shall consist of not less than four hours, which shall include the following topics and skills:~~

CPR and AED training shall comply with the American Heart Association or American Red Cross CPR and AED Guidelines. The training shall include the following topics and skills:

A. Basic CPR skills;

B. Proper use, maintenance and periodic inspection of the AED;

C. ;~~The~~ ~~the~~ importance of;

1. Early activation of an Internal Emergency Response Plan

2. Early CPR

3. Early defibrillation

4. Early advanced life support, and

D. Overview of the local EMS system, including 9-1-1 access, and interaction with EMS personnel; ~~CPR, defibrillation, advanced life support, internal emergency response system, overview of the local EMS system, including 9-1-1 access, and interaction with EMS personnel.~~

E. Assessment of an unconscious patient, to include evaluation of airway and breathing, to determine ~~if cardiac arrest has occurred and the~~ appropriateness of applying and activating an AED.

F. Information relating to defibrillator safety precautions to enable the individual to administer shock without jeopardizing the safety of the patient or the Lay Rescuer ~~authorized individual~~ or other nearby persons to include, but not limited to;

1. Age and weight restrictions for use of the AED.
2. Presence of water or liquid on or around the victim.
3. Presence of transdermal medications, and
4. Implantable pacemakers or automatic implantable cardioverter-defibrillators;

~~D.G.~~ Recognition that an electrical shock has been delivered to the patient and that the defibrillator is no longer charged.

~~E.H.~~ Rapid, accurate assessment of the patient's post-shock status to determine if further activation \_\_\_ of the AED is necessary; and,-

~~E.I.~~ The ~~Authorized individual's~~ responsibility ~~for~~ continuation of care, such as continued CPR and the repeated shocks, as if necessary, and/or accompaniment to the hospital, if indicated, or until the arrival of more medically qualified personnel.

~~E.J.~~ The training standards prescribed by this section shall not apply to licensed, certified or other prehospital emergency medical care personnel as defined by Section 1797.189 of the California Health and Safety Code.

#### IX. TESTING

CPR and AED training for Lay Rescuers shall include a competency demonstration of skills on a manikin, directly observed by an instructor which tests the specified conditions prescribed in California Code of Regulations, Title 22, Section 100038.

#### XVIII. AED SERVICE PROVIDER OPERATIONAL REQUIREMENTS ~~EQUIPMENT AND MAINTENANCE SPECIFICATIONS~~

~~A. All defibrillators shall be maintained and regularly tested according to the operation and maintenance guidelines set forth by the manufacturer, and according to any applicable rules and regulations set forth by the governmental authority under the federal Food and Drug Administration and any other applicable state and federal authority.~~

A. An AED Service Provider shall ensure their internal AED programs include all of the following:

1. Development of a written Internal Emergency Response Plan which describes the procedures to be followed in the event of an emergency that may involve the use of an AED and complies with this policy. The written Internal Emergency Response Plan shall include but not be limited to, immediate notification of 9-1-1 and trained office personnel at the start of AED procedures.
2. Maintain AEDs in working order and maintain current protocols on the AEDs.
3. That all applicable VCEMS policies and procedures be followed.
4. That Lay Rescuers complete a training course in CPR and AED use and maintain current CPR and AED training that complies with requirements of this

policy at a minimum of every two years and are familiar with the Internal Emergency Response Plan.

5. For every AED acquired up to five units, no less than one Lay Rescuer per AED unit shall complete a training course in CPR and AED use that complies with the requirements of this policy. After the first five AED units are acquired, one Lay Rescuer shall be trained for each additional five AED units required. AED Service Providers shall have Lay Rescuers who should be on site to respond to an emergency that may involve the use of an AED unit during normal operating hours.
6. That the defibrillator is maintained and regularly tested according to the operation and maintenance guidelines set forth by the manufacturer, and according to any applicable rules and regulations set forth by the governmental authority under the Federal Food and Drug Administration and any other applicable state and federal authority.
7. Every AED shall be checked for readiness after each use and at least once every 30 days if the AED has not been used in the preceding 30 days. Records of these periodic checks shall be maintained.
8. That a mechanism exists to ensure that any person, either a Lay Rescuer as part of the AED Service Provider, or member of the general public who renders emergency care of treatment on a person in cardiac arrest by using the service provider's AED activates the emergency medical services system as soon as possible, and reports any use of the AED to the Medical Director and the local EMS Agency.
9. That there is involvement of a currently licensed California physician and surgeon that meets the requirements of California Code of Regulations, Title 22, Section 100040.
10. That a mechanism exists that will assure continued competency of the CPR and AED trained individuals in the AED Service Provider's employ to include periodic training and skills proficiency demonstrations.

~~B. — Every AED shall be checked for readiness after each use and at least once every 30 days if the AED has not been used in the preceding 30 days. Records of these periodic checks shall be maintained.~~

~~XI.IX. QUALITY IMPROVEMENT AND MEDICAL CONTROL PROGRAM~~ INTERNAL EMERGENCY  
RESPONSE PLAN

- A. PAD programs are required to establish and utilize an AED medical control program meeting the requirements of Title 22, Division 9, Chapter 1.8~~Article 4~~, Section 1000~~39.35~~35
- B. The Medical Director of Ventura County EMS is responsible for authorizing PAD programs, and assuring those programs comply with the medical control requirements of Title 22, Division 9, Chapter 1.8~~Article 4~~, Section 1000~~3539~~35, ~~All AED programs are required to comply with the provisions of Title 22, Chapter 1.8.~~

DRAFT

## Ventura County EMS Agency REPORT OF CPR OR AED USE

AED Program (location name)	
AED Provider (defibrillator user)	
Place of Occurrence (address and specific site)	
Date Incident Occurred	
Time of Incident	
Patient's Name (if able to determine)	
Patient's Age (Estimate if unable to determine)	
Patient's Sex (Male or Female)	
Time (Indicate best known or approximated time):	
• Witnessed arrest to CPR	
• Witnessed arrest to 9-1-1 Called	
• Witnessed arrest to first shock	
• Patient contact to first shock	
• 9-1-1 to arrival on scene	
• 9-1-1 to first shock	
• Total number of defibrillation shocks	

Was the cause of the arrest determined?	Yes	No
Was the cause of the arrest cardiac?	Yes	No
Was the arrest witnessed?	Yes	No
Was bystander CPR implemented?	Yes	No
Was there any return of spontaneous circulation?	Yes	No

Please attach any additional information that you think would be helpful.

**This form must be completed and sent to Ventura County EMS within 96-24 hours of a cardiac arrest incident at an AED site.** Send this completed form to:

Ventura County EMS - AED Program  
2220 E. Gonzales Road, Suite 130  
Oxnard, CA 93036-0619  
**FAX: 805-981-5300**

**Office Use Only**

• Date Received by EMS Agency	
• Patient prehospital outcome	
• Patient discharged from hospital?	

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Unusual Occurrence Reportable Events/Sentinel Event		Policy Number 150	
APPROVED: Administration: <del>Barry R. Fisher, EMT-P</del> <a href="#">Steven L. Carroll, EMT-P</a>		Date	
APPROVED: Medical Director: Angelo Salvucci, M.D.		Date	
Origination Date: June, 1990		Effective Date: <del>June 1, 2004</del>	
Date Revised: <del>March 11, 2004</del>			
Review Date: <del>June, 2006</del>			

- I. PURPOSE: To define Unusual Occurrences and differentiate reportable events ~~vs. from~~ Sentinel Events. To give direction for investigating and reporting ~~unusual~~ occurrences. To define the role of VC EMS in relation to these events.
- II. AUTHORITY: Health and Safety Code, Division 2.5, Section 1797.204 and [1798](#). California Code of Regulations, Title 22, ~~Division 9~~, Section [100167](#), [100168](#), [100169](#), [100402](#), [100403](#) and ~~100404~~ [100172](#).
- III. DEFINITIONS:
  - A. Unusual Occurrence: Any event or occurrence deemed to have impact or potential impact on patient care, and/or any practices felt to be outside the norm of acceptable patient care, as defined by the Ventura County EMS (VCEMS) Policies & Procedures manual. Unusual occurrences also cover events outside the “normal” flow of operations surrounding dispatch, response, rescue and disposition of all ALS and BLS calls. Unusual occurrences may or may not have life threatening impacts.
    1. Sentinel Event: The Joint Commission ~~on Accreditation of Healthcare Organizations (JCAHO)~~ defines ~~sSentinel eEvents~~ as “...an unexpected occurrence involving death or serious physical or psychological injury, or the risk thereof.” The phrase “or the risk thereof” includes any process variation for which a recurrence would carry a significant chance of a serious adverse outcome ~~Sentinel events warrant immediate investigation, and reporting to VC EMS.~~  
An Unusual Occurrence is considered a Sentinel Event if it could reasonably be considered to be the direct cause of a death or serious injury. Sentinel Events warrant immediate investigation, and reporting to VCEMS.

2. Reportable Event: A reportable event is an unexpected occurrence during the dispatch, rescue, care and transportation of a victim requiring emergency medical care that ~~does not involve~~ is not the direct cause of serious physical, psychological injury, or the risk thereof, but does require investigation for the purposes of quality improvement.

IV. POLICY: ~~Sentinel events~~ Unusual Occurrences will be reported, investigated, and followed up according to the following procedures. VCEMS will participate in the review, tracking and resolution of all ~~sentinel events~~ Unusual Occurrences.

V. PROCEDURE:

~~A. SENTINEL EVENTS~~

~~1A.~~ Reporting

1. The discovering party will report the event to VCEMS by fax, phone or e-mail. Sentinel Events shall be reported immediately. Reportable Events shall be reported within 24 hours.

2. If the event occurs after business hours, or on the weekends, reporting will be to VCEMS Duty Officer through Ventura County Fire Communications Center (805-388-4279) ~~his paging system~~. If fax or email is used, and protected health information is being transmitted, place "CONFIDENTIAL" in the subject section.

~~If the event is deemed "sentinel", the report shall be immediate. The discovering party will report the event upon discovery to VC EMS by fax, phone or e-mail. If the event occurs after business hours, or on the weekends, reporting will be to VC EMS Administrator through his paging system. If fax or email is used, and protected health information is being transmitted, place "CONFIDENTIAL" in the subject section.~~

B. Investigation:

- 1.a. Following notification of an ~~sentinel event~~ Unusual Occurrence, VCEMS will assign the case to an appropriate entity for investigation. ~~Complex cases may be investigated in a multidisciplinary format as determined by VC EMS. If the investigation is assigned to an entity or entities other than VCEMS, that Agency will notify all parties~~ when and to whom the case has been assigned. ~~of their assignment.~~



- ~~2.b.~~ ~~The investigating entity will notify all parties directly involved in the incident by phone, fax or email.~~—When documents containing protected health information are being transmitted by written or electronic mail, they must be marked “CONFIDENTIAL”.
- 3.e. VC EMS retains the authority to become the primary Investigator of any Sentinel or Reportable Event.
- 4.d. The investigating party will be responsible for completing the process by collecting all required elements described in this policy and formulating an initial Plan of Action. ~~No portion of the completed investigation will be made available to parties other than VC EMS.~~
- 5.e. The following are **required elements** in investigating sentinel events and must be submitted to VC EMS
- a.1) Policies
  - b.2) ~~Interview with providers~~ Written statement by involved personnel
  - c.3) ~~Documentation of occurrence by providers~~ EMEDS
  - d.4) ~~Action Plan~~ Patient Care Record-ED if applicable
  - e.5) CAD sheets if applicable
  - f.6) ~~VC EMS Unusual Occurrence Form~~ Rhythm strips if applicable
  - g.7) ~~Patient Care Records (EMEDS and ED)~~ Dispatch recordings if applicable
  - h.8) ~~Rhythm strips when applicable~~ MICN taped runs if applicable
  - 9) ~~Dispatch recordings if applicable~~
  - 10) ~~MICN taped runs if applicable~~
  - i.12) Diversion status print out (Reddinet) if applicable
- 6.f. Complete report of the Sentinel Event investigation ~~shall~~ **will** be submitted to VC EMS within **5 working days.** Reportable Events shall be submitted to VC EMS within 10 working days.
- 7.g. ~~Root Cause Analysis will be conducted in a reasonable amount of time following submission of investigation to the EMS Agency.~~  
~~The investigating party will organize the event and it will be held at a neutral location with an agent of the EMS office acting as~~

~~facilitator to the meeting.~~ If the investigating party is unable to comply with this time frame, VCEMS will be notified and every reasonable attempt will be made to adjust this requirement according to VCEMS, hospital and provider needs.

8.h. Upon completion, the report will be submitted to VCEMS, where a final conclusion and or recommendation will be made on the case.

9. VCEMS will determine if a Root Cause Analysis is appropriate. If needed, it shall be conducted within a reasonable time period. VCEMS will organize the event and it will be held at a neutral location with a representative of the VCEMS Agency acting as facilitator to the meeting.

~~2. Reporting~~

~~If the event is deemed "sentinel", the report shall be immediate. The discovering party will report the event upon discovery to VC EMS by fax, phone or e-mail. If the event occurs after business hours, or on the weekends, reporting will be to VC EMS Administrator through his paging system. If fax or email is used, and protected health information is being transmitted, place "CONFIDENTIAL" in the subject section.~~

~~C.3.~~ Follow Up

1.a. PROVIDER AGENCY: Agencies will track all Sentinel events and Reportable Events ~~they have investigated~~ for the purpose of quality assurance. If there has been no recurrence, tracking may end after a two year period. When ~~follow~~ follow-up reevaluation is part of the plan of action, an updated d report will be forwarded to VCEMS.

2.b. VCEMS

a.1) The Quality Improvement Coordinator will be responsible for receiving ~~sentinel event~~ Unusual Occurrence investigations and assuring they are complete.

b.2) All ~~sentinel events~~ Unusual Occurrences will be reviewed by the EMS Administrator, EMS Medical Director and the CQI Coordinator

c.3) ~~Sentinel Events~~ Unusual Occurrences will be tracked and analyzed for quality improvement purposes

- d.4) The EMS Medical Director will issue a recommendation including, but not limited to, disciplinary action when indicated.
- 5) ~~VC EMS will categorize all sentinel events according to the following criteria:~~
- ~~a) **Trend:** Any event determined to be an isolated occurrence, with no indication of system-wide implications. These will be monitored for two years. Events with no similar occurrence will be removed from tracking, with no further investigation. Reoccurring events will be evaluated by VC EMS Medical Director, VC EMS Administrator, and VC EMS CQI Coordinator to determine if a continuing trend exists and recommend further action as appropriate. These occurrences will be in the category of reportable events only.~~
  - ~~b) **Investigate:** An event that appears to be part of a larger trend. Events categorized as Investigate are referred to the CQI Coordinator who will assure a complete investigation is conducted, and who will track an event as a possible indicator in a CQI study. Both reportable and sentinel events may fall into this category.~~
  - ~~c) **Disciplinary Event:** Any event that requires the need for disciplinary intervention, by VC EMS, or the State EMS Authority. Incidents involving individual disciplinary action, or change in accreditation status will be handled per VC EMS policy. These occurrences will be in the category of sentinel event.~~
- e.6) Once the event is reviewed by VCEMS, a letter of acknowledgement, conclusion, and/or recommendation will be sent to all involved agencies and the case will be tracked for a period of two years. If no further incidence, the case will be considered closed.

## ~~B. REPORTABLE EVENTS~~

### ~~1. Investigation~~

- ~~a. Following notification of a reportable event, VC EMS will assign the case to an appropriate entity for investigation.~~
- ~~b. The investigating entity will notify all parties having direct involvement in the incident by phone, fax or email. When documents containing protected health information are being transmitted by written or electronic mail, they must be marked "CONFIDENTIAL".~~
- ~~c. No portion of the completed investigation will be made available to parties other than VC EMS.~~
- ~~d. Once the investigation is complete, all required documentation as described in this policy will be submitted to VC EMS where a conclusion and or recommendation will be made. No portion of the completed investigation will be made available to parties other than VC EMS.~~
  - ~~1) The following are required elements in investigating reportable events.~~
    - ~~a) Policies~~
    - ~~b) Interview with providers~~
    - ~~c) Documentation of occurrence by providers~~
    - ~~d) Action plan if warranted~~
    - ~~e) CAD sheets if applicable~~
    - ~~f) VC EMS Unusual Occurrence Form~~
    - ~~g) Patient Care Record (EMEDS and ED)~~
    - ~~h) Rhythm Strips when applicable~~
    - ~~i) Dispatch recordings if applicable~~
    - ~~j) MICN recordings if applicable~~
    - ~~k) Diversion status documents (Reddinet)~~

### ~~2. Reporting~~

~~The discovering party or agency will communicate reportable events to VC EMS within **24 hours**. A complete investigatory report will be submitted to VC EMS by the investigating entity within **10 working days** of the occurrence. The report may be~~

~~faxed, mailed, or e-mailed. If fax or e-mail is used, place  
"CONFIDENTIAL" in subject section.~~

~~3. Follow Up~~

~~a. Provider Agency~~

~~The provider(s) identified in the Unusual Occurrence will track their involvement in the incident for the purpose of identifying trends and quality improvement will track all reportable events for the purpose of quality improvement.~~

~~b. VC EMS:~~

- ~~1) The Quality Improvement Coordinator will be responsible for receiving reportable event investigations and assuring they are complete~~
- ~~2) VC EMS will track all reportable events for the purpose of quality improvement.~~
- ~~3) Once the event is reviewed by VC EMS, a letter of acknowledgement, conclusion and/or recommendation will be sent to all involved agencies and the case will be considered closed.~~
- ~~4) VC EMS will categorize all reportable events as described in this policy in section V.5.a-c).~~

~~f.4. Education~~

All prospective investigating personnel from provider agencies and base hospitals will attend and complete a mandatory education seminar provided by VC EMS on Unusual Occurrence Investigation and Reporting.



**VENTURA COUNTY EMS AGENCY**  
**UNUSUAL OCCURRENCE**  
**Reporting Form**

<u>Person Reporting</u>	<u>Agency</u>	<u>Date of Report</u>	<u>Date to EMS</u>

<u>Date of Event:</u>	<u>Fire Incident #:</u>	<u>PCR:</u>
<u>Time of Event:</u>	<u>Dispatch #:</u>	<u>Person Reported To:</u>

<u>Personnel Involved</u>	<u>Agency</u>

<u>Description of Unusual Occurrence</u>

<u>Identified Issues</u>

Please send to VC EMS CQI Coordinator  
 Or Fax to VC EMS Agency (805)981-5300 Attn: CQI Coordinator

~~Ventura County Emergency Medical  
Services~~

**UNUSUAL OCCURRENCE  
Reporting Form**

Reporting Person phone	Reporting Agency Phone	Date of Report	Date to EMS

**Type of Event**

Reportable Event

Sentinel Event

Date of event:	Dispatch #	PFR/PCR
Time of event:	Fire Incident #	Reported to:

Personnel Involved	Agency

**Description of Unusual Occurrence**


**Identified Issues**

1.	
2.	
3.	

# UNUSUAL OCCURRENCE



Unexpected occurrence involving death or serious physical or psychological injury, or the risk thereof ~~where there is EMS involvement.~~

Unexpected occurrence or practice outside the "normal" flow of operations surrounding dispatch, response, rescue and disposition, ~~of ALS, and BLS calls where there is no serious adverse patient outcome.~~

- To be reported to VC EMS immediately, by discovering party ~~on discovery~~
- Investigation assigned by VC EMS Agency
- Complete report submitted to EMS in 5 working days

- To be reported to VC EMS within 24 hours by investigating ~~discovering~~ party, -agency
- Investigation assigned by VC EMS Agency
- Complete report within 10 working days

Event tracked by investigating provider agency or base hospital

- Review, Tracked by VC EMS
- EMS to issue findings and or recommendations

~~Event~~ tracked by investigating provider agency or base hospital and VC EMS

- VC EMS to review and track
- VC EMS to issue findings and or recommendations



COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Documentation of Prehospital Care		Policy Number 1000	
APPROVED: Administration: <del>Barry R. Fisher, EMT-P</del> <u>Steven L. Carroll, EMT-P</u>		Date	
APPROVED: Medical Director Angelo Salvucci, M.D.		Date	
Origination Date: June 15, 1998		Effective Date: <del>December 1, 2004</del>	
Date Revised: <del>October 14, 2004</del>			
Review Date: <del>October, 2006</del>			

- I. PURPOSE: To define the use of standardized records to be used by Ventura County Emergency Medical Service (VC EMS) providers for documentation of pre-hospital care.
- II. AUTHORITY: Title 22 Section 100147.
- III. POLICY: Patient care provided by first responders and ambulance personnel will be documented using the appropriate method.
- IV. PROCEDURE:
  - A. Provision of Forms  
VC EMS will provide a supply of First Responder Patient Care Records (FR PCR) to EMS system participants that are not currently on the approved Ventura County documentation system (AVCDS).
  - B. Documentation
    1. The VCEMS FR PCR and AVCDS report will be used to document the care provided by first responders and ambulance personnel for every patient contact. A patient contact will be defined as any encounter involving Ventura County pre-hospital personnel with any person consenting, either implied or informed, to assessment and/or treatment. Documentation shall be completed on any person with obvious injury or significant mechanism regardless of consent. Documentation of care given by first responders will not interfere with transport agency assessment or patient care procedures. The following are exceptions:
      - a. If a First Responder Advanced Life Support (FR ALS) Paramedic initiates care of the patient, the FR ALS Paramedic will document all care provided to the patient on AVCDS.
      - b. If care is turned over to another ALS agency, an AVCDS report will be completed by all pre-hospital provider agencies who delivered patient care and/or transport.
      - c. In the event of multiple patients, documentation will be as follows:

- 1) Level 1 MCI: The care of each patient shall be documented using an AVCDS report.
- 2) Level 2 and 3 MCI: Each patient transported to a hospital shall have their care documented on a Ventura County Multi-Casualty Patient Record.
  - a) The transporting agency is responsible for completion of the multi-casualty patient record. The record is designed to be completed by the transporting crew enroute to the receiving hospital.
  - b) The transporting agency retains the original of the multi-casualty patient record. A copy shall be left with the patient at the receiving hospital. The triage tag shall be attached to this copy and is included as official documentation in the patient's medical record.
  - c) The transporting agency shall distribute copies of the multi-casualty patient record to the base hospital and EMS Agency within twenty-four hours of demobilization of the incident.

2. AVCDS and FR PCR's shall be completed according to instructions distributed by VC EMS.

A. First Responder Patient Care Record

- 1) Original shall be retained by the provider agency. A copy shall be submitted to the VC EMS Agency.

~~a. First Responder Patient Care Record~~

- ~~1) Original (White) retained by agency, copied or submitted to VC EMS for data processing.~~
- ~~2) Patient (Yellow) given to the transport agency at scene to become part of patient chart. This copy may be incomplete at the time that it is handed to the transport crew. If the FR PCR does not accompany the patient, it will be delivered to the RH within 12 hours. If the report is~~

~~submitted through AVCDS, it should be sent as soon as possible or prior to the end of their 24 hour shift.~~

~~3) Base Hospital (Pink) to be completed and delivered to the BH by the FR agency at least weekly.~~

- C. In the event the cardiac monitor is attached as required by any of the VC EMS 705 policies, a rhythm strip shall be recorded and mounted on an ECG form. Additionally, anytime there are changes in the patient's ECG rhythm, defibrillation occurs, ALS procedures are performed, or after ALS medications are administered, a trace recording of the ECG is required. Distribution of these trace recordings are as follows:
1. The original copy shall be placed in the patient's chart.
  2. Two additional copies of that strip shall be made. The first submitted to the receiving or base hospital (depending on where the patient is transported), and the second to the provider.
- D. Submission to VC EMS  
The Emergency Medical Services Agency copy of the FR PCR shall be submitted to the Emergency Medical Services Agency by Provider Agency at least monthly.
- E. Dry Run/Against Medical Advice  
Every patient contact resulting in refusal of medical attention/transport must be documented with the following information, the reason dispatched and/or chief complaint, assessment and vital signs, base hospital contact (when appropriate), patient advised to seek medical attention and completion of AMA.
- F. ALS Interfacility Transfers (Acute Care Facility to Acute Care Facility)  
Documentation shall be completed on all ALS Interfacility transfers only. Documentation will include, but not be limited to, baseline assessment, medications administered, reason for transfer, procedures done to the patient, vital signs and any changes from baseline assessment.  
If the transferring facility sends staff to accompany the patient, the staff member(s) name(s) shall be documented on the AVCDS.
- G. Patient Medical Record  
The hospital copy of the FR PCR, AVCDS and Ventura County Multi-Casualty Patient Record shall be considered a legal document and part of the patient's

medical record. The first responder agency, transport agency, and hospital are custodians of record.

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## Attachment A

These abbreviations have been accumulated from the California approved EMT-1 Curriculum and various other resource material. The abbreviations were collected by the Ventura County ALS CQI Team to assist EMS field, hospital and dispatch personnel in providing consistent medical documentation.

Term	Abbreviation
5% Dextrose in Water	D5W
Abdomen	Abd
Above knee amputation	AKA
Acquired Immunodeficiency Syndrome	AIDS
Ad Libitum (as desired)	Ad lib
Advanced Life Support	ALS
After	p
Against medical advise	AMA
Alcohol	ETOH
Alert and oriented	A & O
Also known as	AKA
<del>Altered level of consciousness</del>	<del>ALOG</del>
Altered Level Of Consciousness	ALOC
Amount	Amt
Ampere	Amp
Ampule	Amp
Antecubital	ACe
Anterior	Ant.
Anterior/Posterior	AP
Appointment	Appt.
Arterial Blood Gas	ABG
Arteriosclerotic Heart Disease	ASHD
As necessary	pPrn
As soon as possible	ASAP
Aspirin	ASA
At	@
Atrial Fibrillation	A fib., AF
Attention Deficit Hyperactivity Disorder	ADHD
Automated external Defibrillator	AED
Automatic Implantable Cardiac Defibrillator	AICD
Bag Valve Mask	BVM
Basic Life Support	BLS
Before	a
Birth Control Pill	bcp
Bowel Movement	BM
Bundle Branch Block	BBB
By Mouth	p.o.
By Order Of	pPer
Cancer	CA
Carbon Dioxide	CO <sub>2</sub>

Term	Abbreviation
Carbon Monoxide	CO
Cardio Pulmonary Resuscitation	CPR
Central Nervous System	CNS
Cerebrospinal Fluid	CSF
Cerebrovascular Accident	CVA
Cervical Spine	C-Spine
Change	Δ
Chief Complaint	CC
Chronic Obstructive Pulmonary Disease	COPD
Circulation, Sensation, Motor	CSM
Clear	Cl
Continuous Positive Airway Pressure	CPAP
Coronary Artery Bypass Graft	CABG
Coronary Artery Disease	CAD
Date of Birth	DOB
Dead on Arrival	DOA
Decreased	↓
Defibrillated	Defib
Degrees, Hour	°
Delirium Tremens	DTs
Diabetes Mellitus	DM
Dilation and curettage	D & C
Discontinue*	D/C*
<del>Distention-Deformity</del> <del>Contusion-Abrasion</del> <del>Penetration-Paradoxical</del> <del>Respiration-Burn-Laceration</del> <del>Swelling-Tenderness</del> <del>Instability-Crepitus</del> <del>Deformity,</del> <u>Contusion, Abrasion,</u> <u>Penetration, Burn,</u> <u>Tenderness, Laceration,</u> <u>Swelling</u>	<del>ADCAPpBLSTIGD</del> <u>CAPBTLS</u>
Do Not Resuscitate	DNR
Drops	gtts
Dyspnea On Exertion	DOE
Electrocardiogram	ECG
Electroencephalogram	EEG
Emergency Department	ED
Emergency Medical Services	EMS

Term	Abbreviation
Emergency Medical Technician	EMT
Endotracheal	ET
Equal	=
Estimated	Est
Estimated Time of Arrival	ETA
Etiology	Etiol.
Every	q
Every day*	qd*
Evening	pm
Extended Care Facility	ECF
Eye, ear, nose, throat	EENT
Fahrenheit	F
Female	Fe.
Fetal Heart Rate	FHR
Fluid	Fl
Foot	Ft
Foreign body	FB
Four times a day	QID
Fracture	Fx
Gallbladder	GB
Gastrointestinal	GI
Genitourinary	GU
Glasgow Coma Score	GCS
Grain	Gr
Gram	gm
Gravida 1,2,3, etc	G-1, G2, G3
Greater Than	>
Gun Shot Wound	GSW
Gynecological	Gyn
Heart Rate	HR
Hematocrit	Hct
Hemoglobin	Hgb
Hepatitis A Virus	HAV
Hepatitis B Virus	HBV
Hepatitis C Virus	HCV
History	Hx
History and Physical	H & P
Hour of Sleep (bedtime)*	hs*
Human Immunodeficiency Virus	HIV
Hydrochlorothiazide	HCTZ
Hypertension	HTN
Immediately	STAT
Increase	↑
Insulin Dependent Diabetes Mellitus	IDDM
Intake and Output	I & O
Intensive Care Unit	ICU
Intercostal Space	ICS
Intracranial Pressure	ICP
Intralingual	IL
Intramuscular	IM
Intraosseous	IO
Intrauterine Device	IUD
Intravenous	IV
Intravenous Push	IVP

Term	Abbreviation
Irregular	Irreg
Jugular venous distention	JVD
Kilogram	kg
Kilometer	Km
Labor and Delivery	L & D
Laceration	Lac
Last Menstrual Period	LMP
Lateral	Lat
Left	L
Left Ear*	AS*
Left Eye*	OD*
Left Lower Extremity	LLE
Left Lower Lobe	LLL
Left Lower Quadrant	LLQ
Left Upper Extremity	LUE
Left Upper Lobe	LUL
Left Upper Quadrant	LUQ
Less Than	<
Lower Extremity	LE
Lumbar Puncture	LP
Male	♂
Medical Doctor	MD
Meter	M
Metered Dose Inhaler	MDI
Microgram	mcg
Milliequivalent	mEq
Milligram	mg
Milliliter	ml
Millimeter	mm
Minute	Min
Morning	am
Morphine Sulphate*	MS*
Motor Vehicle Collision	MVC
Moving all Extremities	MAE
Multiple Casualty Incident	MCI
Multiple sclerosis	MS
Myocardial Infarction	MI
Nasal cannula	NC
Nausea/Vomiting	NV
Negative	neg
Night	Noc
Nitroglycerine	NTG
No Acute Distress	NAD
No Known Allergies	NKA
No Known Drug Allergies	NKDA
Non Insulin Dependent Diabetes Mellitus	NIDDM
Non Rebreather Mask	NRBM
Non Steroidal Anti-inflammatory Drugs	NSAID
None/No	∅
Normal Saline	NS
Normal Sinus Rhythm	NSR
Not applicable	NA
Nothing by Mouth	NPO
Obstetrics	OB
Occupational Therapy	OT

Term	Abbreviation
Operating Room	OR
Organic Brain Syndrome	OBS
Ounce	oz
Over the Counter	OTC
Overdose	OD
Oxygen	O <sub>2</sub>
Palpable	Palp
Para, number of pregnancies	Para 1,2,3, etc
Paramedic	PM
Paroxysmal Supraventricular Tachycardia	PSVT
Paroxysmal Nocturnal Dyspnea	PND
Past Medical History	PMH
Pediatric Advanced Life Support	PALS
Pelvic Inflammatory Disease	PID
Per Rectum	pr
Percutaneously Inserted Central Catheter	PICC
Phencyclidine	PCP
Physical Exam	PE
Positive	+
Pound	lb
Pregnant	Preg
Premature Ventricular Contraction	PVC
Primary Care Physician	PCP
Private/Primary Medical Doctor	PMD
Privately Owned Vehicle	POV
Pro Re Nata – As Needed	PRN
Pulmonary Embolism	PE
Pulse, Motor, Sensation	PMS
Pulseless Electrical Activity	PEA
Pupils Equal and Reactive to Light	PEARL
Range of Motion	ROM
Registered Nurse	RN
Respiration	R
Respiratory Rate	RR
Respiratory Therapist	RT
Right	Rt
Right Ear*	AD*
Right Eye*	OD*
Right Lower Extremity	RLE
Right Lower Lobe	RLL
Right Lower Quadrant	RLQ

Term	Abbreviation
Right Middle Lobe	RML
Ringer's Lactate	RL
Rule Out	R/O
Sexually Transmitted Disease	STD
Shortness of Breath	SOB
Sinus Bradycardia	SB
Sinus Tachycardia	ST
Sodium Bicarbonate	NaHCO <sub>3</sub>
Sodium Chloride	NaCl
Streptococcus	Strep
Subcutaneous*	SQ*
Sublingual	SL
Sudden Acute Respiratory Syndrome	SARS
Sudden Infant Death Syndrome	SIDS
Supraventricular Tachycardia	SVT
Temperature	T
Temperature, Pulse, Respiration	TPR
Three Times a Day	TID
Times	X
To Keep Open	TKO
Tracheostomy	Trach
Traffic Accident	TA
Transient Ischemic Attack	TIA
<a href="#">Transcutaneous Pacing</a>	<a href="#">TCP</a>
Treatment	Tx
Tuberculosis	TB
Twice a day	BID
Upper Respiratory Infection	URI
Urinary Tract Infection	UTI
Ventricular Fibrillation	VF
Ventricular Tachycardia	VT
Vital Signs	VS
Volume	Vol
Water	H <sub>2</sub> O
Weight	Wt
With	c
Within Normal Limits	WNL
Without	s
Wolf-Parkinson-White	WPW
Year	Yr
Years Old	y/o

\*JCAHO and ISMP have indicated these abbreviations have a high likelihood of misinterpretation; thereby leading to medical errors, therefore, they are **not** to be used in **handwritten** documentation.