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**TEMPORARY  
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Expires October 11, 2012**

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

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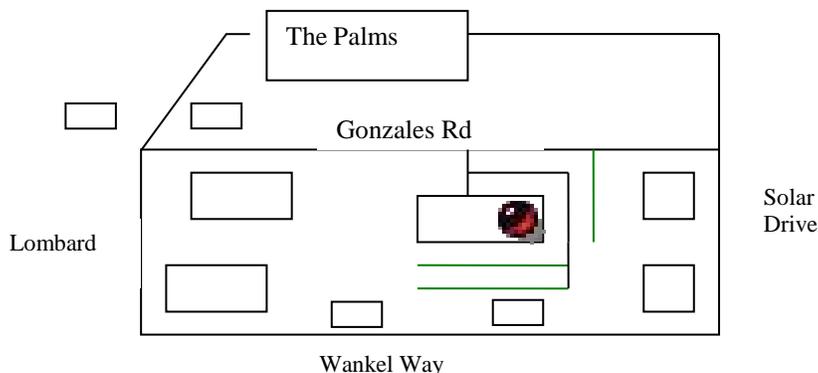
**2100 Solar Drive**

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.**



Prehospital Services Committee 2012

For Attendance, please initial your name for the current month

Agency	LastName	FirstName	1/12/2012	2/9/2012	03/08/12	4/12/2012	5/10/2012	6/14/2012	7/12/2012	8/9/2012	9/13/2012	10/11/2012	11/8/2012	12/13/2012	%
AMR															
AMR	Panke	Chad		CP		CP			CP	CP					
CMH - ER	Canby	Neil		NC					NC						
CMH - ER	Cobb	Cheryl		CC		CC				CC					
FFD	Herrera	Bill		BH											
FFD	Scott	Bob		BS											
GCA	Norton	Tony		TN		TN			TN	TN					
GCA	Stillwagon	Mike		MS		MS			MS						
Lifeline	Kuroda	Brian		BK		BK			BK	BK					
Lifeline	Winter	Jeff		JW		JW			JW	JW					
LRRMC - ER	Beatty	Matt				MB			MB						
LRRMC - ER	Licht	Debbie		DL		DL			DL						
OFD	Carroll	Scott		SC						NOE					
OFD	Huhn	Stephanie		SPH		SPH			RT	SPH					
OVCH	Boynton	Stephanie		SB		SB				SB					
OVCH	Patterson	Betsy		BP		BP				BP					
SJPVH	Hernandez	Sandi		SH		SH			SH	SM					
SJPVH	Davies	Jeff													
SJRCM	McShea	Kathy		KM		KM			KM	KM					
SJRCM - SJPVH	Larsen	Todd		TL		TL			TL	TL					
SPFD	Dowd	Andrew				AD			AD						
SVH - ER	Tilles	Ira		IT		IT			IT	IT					
SVH - ER	Hoffman	Jennie		JH		JH				JH					
V/College	Mundell	Meredith		MM		MM			MM	MM					
VCFD	Merman	Nancy		NM		NM			NM						
VCFD	Tapking	Aaron		AT		AT			AT	AT					
VNC	Plott	Norm		NP		NP			NP	NP					
VNC	Black	Shannon		SB					SB						
VNC	Shedlosky	Robin		RS		RS				RS					
VCMC - ER	Chase	David		DC		DC			DC	DC					
VCMC - ER	Utley	Dede		DU		DU			SS	DU					
VCMC-SPH	Daucett	Michelle				MD			KB						

Agency	LastName	FirstName	1/12/2012	2/9/2012	03/08/12	4/12/2012	5/10/2012	6/14/2012	7/12/2012	8/9/2012	9/13/2012	10/11/2012	11/8/2012	12/13/2012	%
VCMC-SPH	Beatty	Karen		KB		KB			DH	KB					
VCSO SAR	Hadland	Don		DH		DH				DH					
VCSO SAR	White	Don		DW		DW				DW					
VFF	Rhoden	Crystal		CR											
VFF	Jones	Brad													
<b>Eligible to Vote</b>											<b>Date Change/cancelled - not counted against member for attendance</b>				
<b>Non Voting Members</b>															
EMS	Carroll	Steve		SC		SC			SC	SC					
AMR	Drehesen	Charles		CD		CD			CD	CD					
VCMC	Duncan	Thomas		TD					TD						
EMS	Fisher	Barry								BF					
LMT	Frank	Steve		SF		SF				SF					
EMS	Haddock	Katy		KH		KH			KH	KH					
EMS	Haney	Debora				DH				DH					
EMS	Lara-Jenkins	Stephanie		SLJ		SLJ			SLJ	SLJ					
EMS	Rosa	Chris		CR		CR			CR	CR					
EMS	Salvucci	Angelo				AS			AS	AS					
SAR	Askew	Chris													
CSUDA	Parker	Pilar													
OFD	Donabedian	Chris													
VNC	Komins	Mark		MK		MK				ML					
AMR	Glass	Gil		GG											
VNC	Gregson	Erica		EG		KD			EG						
AMR	Taigman	Mike				MT			MT	MT					
VCMC-ED	Scott	Susan							SS						
VCMC	Berardi	Veronica							VB						
EMS	Grimes	Nikki							NG						

Topic	Discussion	Action	Assigned
<b>I. Introductions</b>	Meeting called to order at 935 a.m. by Jeff Winter, Chair. Stephanie Huhn introduced Dick Eubank to the committee. Ira Tilles, SVH introduced Andrew Bourgeois to the committee.		
<b>II. Approve Agenda</b>		It was M/S/C (Mundell/Patterson) to approve the agenda as submitted	
<b>III. Minutes</b>		It was M/S/C (Patterson/Mundell) to approve the minutes as submitted.	
<b>IV. Medical Issues</b>			
A. Other		No items	
<b>V. New Business</b>			
A. Policy 905: Required Frequencies – S. Carroll	<ul style="list-style-type: none"> <li>• Frequencies are being direct through VNC dispatch plan.</li> <li>• Radio programming will be done in the next month or so through VNC</li> <li>• All portable radios should match the configuration; however, providers may adjust the configuration if needed. This statement for the AMR HTs. AMR will check on the need to change the configuration as they may no longer need this option. Can take out if not needed.</li> </ul>	It was M/S/C (Plott/Panke) to approve the policy as submitted.  If AMR no longer needs ability to change the arrangement of the frequencies on their mobile radio's the statement about specific needs will be deleted.	Approved with possible change.
B. Sepsis Alert – C. Panke	<ul style="list-style-type: none"> <li>• AMR is working with SVH to identify septic patients in the field. Have some patients who are septic and would like to have a checklist to identify them early on. Would all hospitals like this notification?</li> <li>• All hospitals would like this notification.</li> <li>• VCMC suggested a couple changes.               <ul style="list-style-type: none"> <li>○ First – change – sepsis suspected with two of the criteria.</li> <li>○ Newly altered mental status</li> </ul> </li> </ul> There was a lengthy discussion which included the following: <ul style="list-style-type: none"> <li>• Dr. Rutherford – VCMC - would be available to give a lecture</li> <li>• Ability to take temperature is not available. Hot to touch would be o.k., if no ability to take a temperature</li> <li>• Suggestion of a 705 suspected sepsis protocol.</li> <li>• Mike Taigman will get the Alameda County protocol.</li> <li>• BLS providers to have the same alert criteria.</li> </ul>	This topic will be discussed at the next PSC.	Issue to Angelo for review and agenda next meeting.

Topic	Discussion	Action	Assigned
	<ul style="list-style-type: none"> <li>○ Concern over the EMT being required to notify hospital. Not in scope of practice. Problem if the EMT does not notify?</li> <li>○ Doing the right thing vs. someone being held liable if an EMT does not notify the hospital.</li> <li>○ Septic patients need fluid, maybe make a possible septic patient an ALS call.</li> <li>○ Mortality rate for septic patient is 50%.</li> <li>● Possible training bulletin</li> <li>● The call in from the field would trigger the expedient treatment of the patient</li> </ul> <p>This item will be placed on next month's agenda.                      Possible solution to the issue is:</p> <ul style="list-style-type: none"> <li>● 705 treatment protocol for possible septic patient</li> <li>● Review Alameda County protocol</li> </ul>		
<p>C. Policy 705.19: Pain control - C. Panke</p>	<p>This item is being brought to the committee to discuss the IM dosage of pain medications to pediatric patients. It is felt by some that the does may be too high.</p> <ul style="list-style-type: none"> <li>● Suggested changing to 0.1 mg.</li> <li>● Communication Failure protocol for long transport, drop second dose to 0.1 mg after first IM dose. The committee does not feel that the first dose is too high.                             <ul style="list-style-type: none"> <li>○ 1 mg is a more common dose across the board.</li> </ul> </li> <li>● IV dose effect is higher and doesn't last as long.</li> <li>● IM dose larger than IV dose.</li> <li>● CF after 20 may increase dose.</li> </ul>	<p>The policy was M/S/C (Larsen/Panke) to approve the policy with change</p> <p>Change                      Changed dose to 0.1 in the case of CF &gt; 20 minutes.</p>	<p>Approved with change</p>
<p>D. Other</p>			
<p><b>VI Old Business</b></p>			
<p>A. Policy 1000: Documentation – C. Rosa</p>	<p>A report looking at posting a report in ePCR for the sickest patients was 7:42 hours.</p> <p>There was a lengthy discussion which included the following:</p> <ul style="list-style-type: none"> <li>● LMT is using station computers so their posting times are not included in the report as they have no mobile posting.</li> <li>● This time is not acceptable. The reason for</li> </ul>	<p>MSC for change to 30 for arrival at the destination. Norton/Larsen</p> <p>Strike page 4 after prior to and servie. Add 30 minutes after arrival at hospital.</p> <p>Report monthly 30 minutes arrival at</p>	<p>September 1 implementation</p>

Topic	Discussion	Action	Assigned
	<p>moving to Imagetrend was to provide better patient care and the ability for the hospital to access the prehospital care while treating the patient.</p> <ul style="list-style-type: none"> <li>• It was suggested to make this a system performance improvement project</li> <li>• Sickest of the patients, the data needs to be posted at transfer of care.</li> <li>• Comparison for all calls should be looked at.                             <ul style="list-style-type: none"> <li>○ This would not apply as when</li> <li>○ 4 hours later the data is still not there</li> </ul> </li> <li>• EKG is not being left with the patient. Need them</li> <li>• The issue is driven by time. Pt in a time of 20-30 minutes. VCMC is psting on Verizon and VCMC is a dead zone.</li> <li>• PCR must be done before leaving hospital in those systems that track the time in Alameda County.</li> <li>• Good habits start with all calls. Can a report be run for all calls time average.</li> <li>• ALOC/unconscious the average call time is 6:12:56</li> <li>• Set the criteria and set expectations to 30 minutes.</li> <li>• 30 minutes for posting the patient care report.</li> <li>• Minimum data set – report tab. Mimimum data set needs to be available tor review.</li> <li>• Types of patients:</li> <li>• aLOC, unconsciousness, STEMI, Trauma, (see policy for criteria). Must be completed in 30 minutes.</li> <li>• Section f looks like loop hole – system overload.</li> </ul>	hospital	
B. Other			
<b>VII. Informational/Discussion Topics</b>			
A. Other			
<b>VIII. Policies for Review</b>			

Topic		Discussion	Action	Assigned
A.	Policy 1204: EMS Aircraft Classification		Approved	
B.	Policy 620: Oral Glucose		Expiration date does not matter. Strike Typo corrected Need to look at policies for all drug administration. EMT-I change to EMT.	Hold for review
C.	Policy 705.00: General Patient Guidelines			<b>Approved with change</b>
D.	Policy 705.02: Allergic/Adverse Reaction and Anaphylaxis			Approved
D.	Policy 705.03: Altered Neurologic Function		Sepsis statement will be added referring to sepsis policy. Tabled for decision on sepsis protocol	Agenda
E.	Policy 705.04: Behavioral Emergencies			Approved
F.	Policy 705.05: Bites and Stings			Approved
G	Policy 705.12: Heat Emergencies		BLS active cooling measures. Add bullet points for process.  Training bulletin will be completed	Approved with change.
H.	Policy 705.13: Hypothermia		Passive rewarming – move bullet points over up to stat transport. Stat to Expedite transport	Approved with change
I.	Policy 705.16: Neonatal Resuscitation			Approved
J.	Policy 705.18: Overdose/Poisoning	RR < 12 and ALOC	Add significant ALOC	Approved with change
L.	Policy 705.20: Seizures			Approved
L.	Policy 705.22: Shortness of Breath - Wheezes/Other			Approved
M.	Other		Face page for the 705 make a statement that FR will follow the BLS portion of the 705	
<b>IX.</b>	<b>Reports</b>			
	TAG Report	6 years since mission statement and goals reviewed and will be changed, STEMI report – continued improvement		

Topic	Discussion	Action	Assigned
	ALS/BLS - OFD will do pilog study for art/bartd Bh – pm skill lab evaluation reviewed. There are 5 areas demonstrated that need additional education for knowledge deficit Trauma – data being received and reported on		
<b>X. Agency Reports</b>			
A. ALS Providers	VNC – OSHA related in injury. 3 fines on a person going through training. Fined for not providing 911 service and fighting. Active cooling, 15,000 ePCRs in system. Working with providers to improve. Imagetrend in Minneapolis in the last month. Willing to work with other agencies as more providers start electronic data SV station will have paramedics and out in the east end, station 43  AMR/GCA Dr. Drehsen is medical control for both DMSU purchased. Not sure when will receive delivers. This is a disaster medical unit. 2 in the county now.		
B. BLS Providers	OFD – order for new AED, Phillips. Planning stages with station 8, South Oxnard Blvd/Rose Ave. Current academy has 5 recruits. November 10-15 additional academy. Doing basic MCI course and is asking if others want to send staff.		
C. Base Hospitals	SVH – construction, ER next project. Ambulance reroute in next couple weeks  VCMC 8 a.m chest trauma, 2 FCA. ATLS coming 9/23 24 Graal resigning Team going live with CERNER.  SJ PM skills lab in Sept at SJ. ER director will be leaving on the 24 <sup>th</sup> and no replacement yet		
D. Receiving Hospitals	CMH Continuing construction. Issues please contact ...PSC rep. Stroke education for physician next week.		
E. ALS Education Programs	Currently 17 enrolled in fall program starting on August 16. 3 work experience students out in the field and thanked for allowing.		
F. EMS Agency	ePCR – advance procedure report – when can stop doing QA/QI report. Report ran from May		

Topic	Discussion	Action	Assigned
	<p>1 to today. 61 advanced procedure during 3 month period. No procedure comment up until 1 month ago. Receiving all fields Report can be automated. No more paper forms required for pediatric and adult IO/chest decompression/airway and pacing. Effective immediately ResQpod forms are still required.</p> <p><b>Sidewalk CPR</b> - There were some spot events throughout the county this month. Need to figure out when to have the coordinated events. Possible weekend and evenings. Active shooter – looking at EMS and fire plan. Need to look at how to coordinate event with law enforcement. Pepperdine drill attended yesterday. In future would like to have some type of drill involving EMS portion.</p> <p>HPP monthly meeting requirement changed and will need a coalition which involves other providers.</p> <p><b>Human Services</b> meeting as mass care committee to address health care concerns for patients. Red Cross cannot deal with patients with medical needs nor able to set up mass shelters throughout the county. Looking at assistance with shelters and medical shelters with MRC and PH nurses. Red Cross leading project.</p> <p><b>Hospital radio</b> – sole source has been approved and state application has been submitted. Once approved will look at purchasing. No need to duplicate the radios for the hospitals that are still using for daily basis. When ambulance get changed ambulance will have narrow band and hospital radio still in service is wide band and will not be able to function when change happens.</p> <p><b>Reddinet satellite</b> – slowly moving along. Working with hospital and provider and in next few months' submission to state. Probably mid-year next year. PSC cancelled for September. Next meeting in October.</p> <p>Congratulation to Jeff Winter for becoming the new chair for this committee.</p> <p>Thanks to Dede Utley for the last 3 years of service as chair to this committee..</p>		
G. Other			
<b>XI. Closing</b>	<b>11:40</b>		

Respectfully submitted,  
 Debora Haney

<b>Hypovolemic Shock</b>	
<b>ADULT</b>	<b>PEDIATRIC</b>
<b>BLS Procedures</b>	
Place patient in supine position Administer oxygen as indicated	Place patient in supine position Administer oxygen as indicated
<b>ALS Prior to Base Hospital Contact</b>	
IV access <b>Normal Saline</b> <ul style="list-style-type: none"> <li>• IV bolus – 1 Liter               <ul style="list-style-type: none"> <li>○ Caution with cardiac and/or renal history</li> <li>○ Evaluate lung sounds. If signs of CHF, decrease IV to TKO</li> <li>○ If vital signs return to within normal limits, decrease IV to TKO</li> </ul> </li> </ul> <u>Traumatic Injury</u> <ul style="list-style-type: none"> <li>• Do not delay transport for first IV attempt</li> <li>• Attempt second IV while enroute to ED</li> </ul>	IV/IO access <b>Normal Saline</b> <ul style="list-style-type: none"> <li>• IV/IO bolus – 20 mL/kg               <ul style="list-style-type: none"> <li>○ Caution with cardiac and/or renal history</li> <li>○ Evaluate lung sounds. If signs of CHF, decrease IV to TKO</li> <li>○ If vital signs return to within normal limits, decrease IV to TKO</li> </ul> </li> </ul> <u>Traumatic Injury</u> <ul style="list-style-type: none"> <li>• Do not delay transport for first IV attempt</li> <li>• Attempt second IV while enroute to ED</li> </ul>
<b>Communication Failure Protocol</b>	
If shock persists: <ul style="list-style-type: none"> <li>• <i>Repeat Normal Saline</i> <ul style="list-style-type: none"> <li>○ IV bolus – 1 Liter</li> </ul> </li> </ul>	If shock persists: <ul style="list-style-type: none"> <li>• <i>Repeat Normal Saline</i> <ul style="list-style-type: none"> <li>○ IV/IO bolus – 20 mL/kg</li> </ul> </li> </ul>
<b>Base Hospital Orders only</b>	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures

Effective Date: June 1, 2012  
Next Review Date: April 30, 2014

Date Revised: April 12, 2012  
Last Reviewed: April 12, 2012



**EMERGENCY MEDICAL SERVICES**

2220 E. Gonzales Rd., Suite 130, Oxnard, CA 93036-0619  
www.vchca.org/ph/ems  
Phone: 805-981-5301  
Fax: 805-981-5300

**STEVEN L. CARROLL, EMT-P**  
EMS Administrator  
**ANGELO SALVUCCI, M.D., F.A.C.E.P**  
Medical Director

Memo

DATE: October 7, 2012

TO: PSC

FROM: Angelo Salvucci, MD 

RE: King Airway – ITD Study

The King Airway - Impedance Threshold Device (ITD) trial study stopped enrolling patients as of August 31. Thank you to everyone who participated. We are completing data entry and beginning the analysis. Findings and conclusions will be presented to the EMS Medical Directors Association of California (EMDAC) and to the State EMS Commission in December.

The medical literature on the effectiveness of the ITD has been inconclusive. In the 2010 American Heart Association CPR Guidelines the ITD has a Category IIb recommendation. Category IIb items are those where “the evidence documented only short-term benefits from the therapy or weakly positive or mixed results” and “usefulness/effectiveness is unknown or unclear or not well established.” The largest trial to date (NEJM 2011;365:798-806 - 8718 patients randomized to ITD or sham ITD groups) concluded that the ITD did not improve survival. There is a subanalysis pending publication that may demonstrate that the ITD improves survival in patients in ventricular fibrillation who have optimal chest compression rates.

The State EMS Authority has recently determined that the ITD is in the EMT basic scope of practice and its use does not require a trial study or other special authorization. At this time I do not have a recommendation on whether or not to continue the use of the ITD. It will remain as an optional item pending the results of this trial study.

Because the State EMSA-approved trial study is complete, starting October 1, 2012 it will be up to each agency to provide or not provide the ITD. It is not required by EMS. The Ventura County Fire and Ventura City Fire Departments will continue to use the ITD as part of an ongoing study. Agencies that elect not to use the ITD but still have stock may continue to use them until that stock is exhausted, or return them to Ventura County Fire EMS Division.

# FDA Drug Safety Communication: New information regarding QT prolongation with ondansetron (Zofran)

This update is in follow-up to the [FDA Drug Safety Communication: Abnormal heart rhythms may be associated with use of Zofran \(ondansetron\)](#) on 9/15/2011.

## Safety Announcement

**[06-29-2012]** The U.S. Food and Drug Administration (FDA) is informing healthcare professionals and the public that preliminary results from a recently completed clinical study suggest that a 32 mg single intravenous dose of ondansetron (Zofran, ondansetron hydrochloride, and generics) may affect the electrical activity of the heart (QT interval prolongation), which could pre-dispose patients to develop an abnormal and potentially fatal heart rhythm known as Torsades de Pointes.

GlaxoSmithKline (GSK) has announced changes to the Zofran drug label to remove the 32 mg single intravenous dose. The updated label will state that ondansetron can continue to be used in adults and children with chemotherapy-induced nausea and vomiting at the lower intravenous dose recommended in the drug label, a dose of 0.15 mg/kg administered every 4 hours for three doses; however, no single intravenous dose should exceed 16 mg. Information from the new clinical study will be included in the updated drug label.

FDA will evaluate the final study results when available, and will work with GSK to explore an alternative single dose regimen that is both safe and effective for the prevention of chemotherapy-induced nausea and vomiting in adults.

The new information on QT prolongation does not change any of the recommended oral dosing regimens for ondansetron. It also does not change the recommended lower dose intravenous dosing of ondansetron to prevent post-operative nausea and vomiting.

As part of the ongoing safety review of ondansetron, FDA continues to assess data about the risk of QT prolongation and will update the public when more information becomes available. FDA previously issued a [DSC about the ongoing safety review of ondansetron](#) in September 2011.

## Additional Information for Patients (updated from 9/15/2011)

- Discuss any questions or concerns about ondansetron with your healthcare professional.
- While taking ondansetron, your healthcare professional may order an electrocardiogram (ECG, EKG) to monitor your heart rate and rhythm.
- Seek immediate care if you experience an irregular heartbeat, shortness of breath, dizziness, or fainting while taking ondansetron.
- Report any side effects you experience to the FDA MedWatch program using the information in the "Contact Us" box at the bottom of the page.

## Additional Information for Healthcare Professionals (updated from 9/15/2011)

- ECG changes including QT interval prolongation have been observed in patients receiving ondansetron. In addition, Torsade de Pointes, an abnormal, potentially fatal, heart rhythm, has been reported in some patients receiving ondansetron.
- The use of a single 32 mg intravenous dose of ondansetron should be avoided. New information indicates that QT prolongation occurs in a dose-dependent manner, and specifically at a single intravenous dose of 32 mg.
- Patients who may be at particular risk for QT prolongation with ondansetron are those with congenital long QT syndrome, congestive heart failure, bradyarrhythmias, or patients taking concomitant medications that prolong the QT interval
- Electrolyte abnormalities (e.g., hypokalemia or hypomagnesemia) should be corrected prior to the infusion of ondansetron.
- The lower dose intravenous regimen of 0.15 mg/kg every 4 hours for three doses may be used in adults with chemotherapy-induced nausea and vomiting. However, no single intravenous dose of ondansetron should exceed 16 mg due to the risk of QT prolongation.
- The new information does not change any of the recommended oral dosing regimens for ondansetron, including the single oral dose of 24 mg for chemotherapy induced nausea and vomiting.
- The new information also does not change the recommended lower dose intravenous dosing to prevent post-operative nausea and vomiting.
- Report adverse events involving ondansetron to the FDA MedWatch program using the information in the "Contact Us" box at the bottom of the page.

## Data Summary

GlaxoSmithKline (GSK), the manufacturer of Zofran, was required by FDA to conduct a thorough QT study to assess the potential for the drug to prolong the QT interval. Preliminary review of the study results shows that QT prolongation occurs in a dose-dependent manner. Specifically, at the highest tested single intravenous dose of 32 mg, the maximum mean difference in QTcF from placebo after baseline-correction was 20 msec. At the lower tested single intravenous dose of 8 mg, the maximum mean difference in QTcF from placebo after baseline-correction was 6 msec.

<u>COUNTY OF VENTURA</u> <u>HEALTH CARE AGENCY</u>	<u>EMERGENCY MEDICAL SERVICES</u> <u>POLICIES AND PROCEDURES</u>
<u>Policy Title:</u> <u>Acute Stroke Center (ASC) Standards</u>	<u>Policy Number</u> <u>450</u>
<u>APPROVED:</u> <u>Administration: Steven L. Carroll, Paramedic</u>	<u>Date:</u>
<u>APPROVED:</u> <u>Medical Director: Angelo Salvucci, M.D.</u>	<u>Date:</u>
<u>Origination Date:</u> <u>Date Revised:</u> <u>Last Review:</u> <u>Review Date:</u>	<u>Effective Date:</u>

I. PURPOSE: To define the criteria for designation as an Acute Stroke Center in Ventura County.

II. AUTHORITY: California Health and Safety Code, Sections 1797.114, 1797.220, 1798, 1798.2, 1798.101, and California Code of Regulations, Title 22, Section 100147 and 100169.

III. POLICY:

A. An Acute Stroke Center (ASC), approved and designated by Ventura County EMS (VC EMS) shall meet the following requirements:

1. All the requirements of a Receiving Hospital in VCEMS Policy 420.
2. Certification as a Primary Stroke Center by either The Joint Commission, Det Norske Veritas, or the Healthcare Facilities Accreditation Program.
3. Participate in the Ventura County Stroke Registry.
4. Actively participate in the Ventura County EMS Stroke Quality Improvement Program.
5. Have policies and procedures that allow the automatic acceptance of any stroke patient from a hospital within Ventura County that is not designated as an ASC, upon notification by the transferring physician.

B. Designation Process:

1. Application:

Eligible hospitals shall submit a written request for ASC designation to VC EMS no later than 45 days prior to the desired date of designation, documenting the compliance of the hospital with Ventura County ASC Standards.

2. Approval:

- a. Upon receiving a written request for ASC designation, VC EMS will arrange an on-site survey of the requesting hospital to assure compliance with stated requirements.
  - b. ASC approval or denial shall be made in writing by VC EMS to the requesting hospital within two weeks after receipt of the request for approval and all required documentation and completion of the VC EMS site survey.
  - c. Certification as a Primary Stroke Center by either The Joint Commission, Det Norske Veritas, or the Healthcare Facilities Accreditation Program, shall occur no later than six months following designation as an ASC by VC EMS.
3. VCEMS may deny, suspend, or revoke the designation of an ASC for failure to comply with any applicable policies, procedures, or regulations. Requests for review or appeal of such decisions shall be brought to the Ventura County Board of Supervisors for appropriate action.
  4. The VC EMS Medical Director may grant an exception to a portion of this policy upon substantiation of need by the ASC that compliance with the regulation would not be in the best interests of the persons served within the affected area.
  5. ASCs shall be reviewed on a biannual basis.
    - a. ASCs shall receive notification of evaluation from the VCEMS.
    - b. ASCs shall respond in writing regarding program compliance.
    - c. On-site ASC visits for evaluative purposes may occur.
    - d. ASCs shall notify VCEMS by telephone, followed by a letter or email within 48 hours, of changes in program compliance or performance.

C. Provisional Designation Process

VC EMS may grant provisional designation as an ASC to a requesting hospital that has satisfied the requirements of an ASC as outlined in section B of this policy, but has yet to receive certification as a PSC by an approving body. Only when the following requirements are satisfied will VC EMS grant a provisional designation:

1. Application:

Eligible hospitals shall submit a written request for provisional ASC designation to VC EMS no later than 45 days prior to the desired date of
-

provisional designation, documenting the compliance of the hospital with Ventura County ASC Standards.

2. Provisional Approval:

- a. Upon receiving a written request for provisional ASC designation, VC EMS will arrange an on-site survey of the requesting hospital to assure compliance with stated requirements.
- b. Provisional ASC approval or denial shall be made in writing by VC EMS to the requesting hospital within two weeks after receipt of the request for approval and all required documentation, as well as completion of the VC EMS site survey.
- c. Certification as a Primary Stroke Center by either The Joint Commission, Det Norske Veritas, or the Healthcare Facilities Accreditation Program, shall occur no later than six months following provisional designation as an ASC by VC EMS.

3. VC EMS may deny, suspend, or revoke the designation of an ASC for failure to comply with any applicable policies, procedures, or regulations. Requests for review or appeal of such decisions shall be brought to the Ventura County Board of Supervisors for appropriate action.
  4. The VC EMS Medical Director may grant an exception to a portion of this policy upon substantiation of need by the provisional ASC that compliance with the regulation would not be in the best interests of the persons served within the affected area.
  5. VC EMS may deny, suspend, or revoke the provisional designation of an ASC for failure to comply with any applicable policies, procedures, or regulations. Requests for review or appeal of such decisions shall be brought to the Ventura County Board of Supervisors for appropriate action.
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<u>COUNTY OF VENTURA</u> <u>HEALTH CARE AGENCY</u>	<u>EMERGENCY MEDICAL SERVICES</u> <u>POLICIES AND PROCEDURES</u>
<u>Policy Title:</u> <u>Stroke System Triage and Destination</u>	<u>Policy Number</u> <u>451</u>
<u>APPROVED:</u> <u>Administration: Steven L. Carroll, EMT-P</u>	<u>Date:</u>
<u>APPROVED:</u> <u>Medical Director: Angelo Salvucci, M.D.</u>	<u>Date:</u>
<u>Origination Date:</u> <u>Date Revised:</u> <u>Date Last Reviewed:</u> <u>Review Date:</u>	<u>Effective Date: DRAFT</u>

- I. PURPOSE: To outline the process of prehospital triage and transport of suspected acute stroke patients to facilities designated as an Acute Stroke Center (ASC).
- II. AUTHORITY: California Health and Safety Code Sections 1797.220 and 1798, California Code of Regulations, Title 22, Division 9, Sections 100147, and 100169
- III. DEFINITIONS:
- Acute Stroke Center (ASC)** – Hospitals that are designated as an Acute Stroke Center, as defined in VCEMS Policy 450
- Stroke Alert** – An early notification by prehospital personnel to the base hospital that a patient is suffering a possible acute stroke.
- IV. POLICY:
- A. Stroke System Triage: A patient meeting the following three criteria shall be triaged into the VC EMS stroke system and transported to the nearest ASC.
1. Failure of any one test of the Cincinnati Stroke Scale (CSS).
    - Facial Droop
      - Normal: Both sides of face move equally
      - Abnormal: One side of face does not move at all
    - Arm Drift
      - Normal: Both arms move equally or not at all
      - Abnormal: One arm does not move, or one arm drifts down compared with the other side
    - Speech
      - Normal: Patient uses correct words with no slurring
      - Abnormal: Slurred or inappropriate words or mute
  2. Patient was last seen exhibiting no new signs or symptoms of stroke within the last three (3) hours.

3. Blood Glucose is within normal limits OR patient continues to exhibit signs and symptoms of an acute stroke after prehospital treatment of abnormal blood glucose levels.
- B. Stroke Alert: Upon identification of a patient meeting stroke system criteria, Base Hospital Contact (BHC) will be established and a Stroke Alert will be activated.
1. The base hospital will determine the closest appropriate ASC based on several factors including patient presentation, hospital availability, and transport time. Upon receipt of the Stroke Alert, the Base Hospital will notify the appropriate ASC, unless the base hospital receiving the Stroke Alert will also be the receiving the patient.
- C. Destination Decision: patients meeting stroke system criteria shall be transported to the nearest ASC, except in the following cases:
1. Stroke patients in cardiac arrest shall be transported to the nearest receiving hospital. Patients who have greater than thirty seconds of return of spontaneous circulation (ROSC) shall be transported to the nearest STEMI Receiving Center (SRC).
  2. The nearest ASC is incapable of accepting a stroke alert patient due to CT or neuro diversion. In the event of CT or neuro diversion, the patient shall be transported to the next closest ASC.
  3. The patient requests transport to an alternate facility, and the condition of the patient as well as the Base Hospital physician or MICN, permits such transport.
    - a. Bypassing the nearest ASC based on patient request should not extend transport time by more than an additional fifteen (15) minutes.
- D. Documentation
1. Care and findings related to an acute stroke patient shall be documented in the Ventura County electronic patient care reporting (VCePCR) system in accordance with VCEMS policy 1000.

<b>Altered Neurologic Function</b>										
<b>ADULT</b>	<b>PEDIATRIC</b>									
<b>BLS Procedures</b>										
If suspected stroke, <a href="#">refer to VC EMS Policy 705.26</a> Administer oxygen as indicated If low blood sugar suspected <ul style="list-style-type: none"> <li>• <b>Oral Glucose</b> <ul style="list-style-type: none"> <li>○ PO – 15 gm</li> </ul> </li> </ul>	If suspected stroke, <del>perform Cincinnati Stroke Scale</del> <a href="#">refer to VC EMS Policy 705.26</a> Administer oxygen as indicated If low blood sugar suspected <ul style="list-style-type: none"> <li>• <b>Oral Glucose</b> <ul style="list-style-type: none"> <li>○ PO – 15 gm</li> </ul> </li> </ul>									
<b>ALS Prior to Base Hospital Contact</b>										
IV/ <u>IO</u> access  Determine Blood Glucose level <u>If &lt; 60</u> <ul style="list-style-type: none"> <li>• <b>D<sub>50</sub></b> <ul style="list-style-type: none"> <li>○ IV – 25 mL</li> </ul> </li> <li>• <b>Glucagon</b> (if no IV access)                             <ul style="list-style-type: none"> <li>○ IM – 1 mg</li> </ul> </li> </ul> Recheck Blood Glucose level 5 min after D <sub>50</sub> or 10 min after Glucagon administration <u>If still &lt; 60</u> <ul style="list-style-type: none"> <li>• <b>D<sub>50</sub></b> <ul style="list-style-type: none"> <li>○ IV – 25 mL</li> </ul> </li> </ul>	Consider IV/ <u>IO</u> access  Determine Blood Glucose level <u>If &lt; 60</u> <ul style="list-style-type: none"> <li>• Less than 2 years old                             <ul style="list-style-type: none"> <li>○ <b>D<sub>25</sub></b> <ul style="list-style-type: none"> <li>• IV – 2 mL/kg</li> </ul> </li> <li>○ <b>Glucagon</b> (if no IV access)                                     <ul style="list-style-type: none"> <li>• IM – 0.1 mg/kg   <ul style="list-style-type: none"> <li>○ Max 1 mg</li> </ul> </li> </ul> </li> </ul> </li> <li>• 2 years old and greater                             <ul style="list-style-type: none"> <li>○ <b>D<sub>50</sub></b> <ul style="list-style-type: none"> <li>• IV – 1 mL/kg</li> </ul> </li> <li>○ <b>Glucagon</b> (if no IV access)                                     <ul style="list-style-type: none"> <li>• IM – 0.1 mg/kg   <ul style="list-style-type: none"> <li>○ Max 1 mg</li> </ul> </li> </ul> </li> </ul> </li> </ul> Recheck Blood Glucose level 5 min after D <sub>50</sub> or 10 min after Glucagon administration <u>If still &lt; 60</u> <ul style="list-style-type: none"> <li>• Less than 2 years old                             <ul style="list-style-type: none"> <li>○ <b>D<sub>25</sub></b> <ul style="list-style-type: none"> <li>• IV – 2 mL/kg</li> </ul> </li> </ul> </li> <li>• 2 years old and greater                             <ul style="list-style-type: none"> <li>○ <b>D<sub>50</sub></b> <ul style="list-style-type: none"> <li>• IV – 1 mL/kg</li> </ul> </li> </ul> </li> </ul>									
<b>Base Hospital Orders only</b>										
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures									
Additional Information: <ul style="list-style-type: none"> <li>• Certain oral hypoglycemic agents (e.g. - sulfonylureas) and long-acting insulin preparations have a long duration of action, sometimes up to 72 hours. Patients on these medications who would like to decline transport <b>MUST</b> be warned about the risk of repeat hypoglycemia for up to 3 days, which can occur during sleep and result in the patient's death. If the patient continues to decline further care, every effort must be made to have the patient speak to the ED Physician prior to leaving the scene.</li> <li>• If patient has an ALOC and Blood Glucose level is &gt;60 mg/DL, consider alternate causes:                             <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;"><b>A - Alcohol</b></td> <td style="width: 33%;"><b>O - Overdose</b></td> <td style="width: 33%;"><b>I - Infection</b></td> </tr> <tr> <td><b>E - Epilepsy</b></td> <td><b>U - Uremia</b></td> <td><b>P - Psychiatric</b></td> </tr> <tr> <td><b>I - Insulin</b></td> <td><b>T - Trauma</b></td> <td><b>S - Stroke</b></td> </tr> </table> </li> </ul>		<b>A - Alcohol</b>	<b>O - Overdose</b>	<b>I - Infection</b>	<b>E - Epilepsy</b>	<b>U - Uremia</b>	<b>P - Psychiatric</b>	<b>I - Insulin</b>	<b>T - Trauma</b>	<b>S - Stroke</b>
<b>A - Alcohol</b>	<b>O - Overdose</b>	<b>I - Infection</b>								
<b>E - Epilepsy</b>	<b>U - Uremia</b>	<b>P - Psychiatric</b>								
<b>I - Insulin</b>	<b>T - Trauma</b>	<b>S - Stroke</b>								

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Fireline Medic		Policy Number 627	
APPROVED: Administration: Steven Carroll, Paramedic		Date: June 1, 2012	
APPROVED: Medical Director Angelo Salvucci, M.D.		Date: June 1, 2012	
Origination Date: October 5, 2011		Effective Date: June 1, 2012	
Date Revised: November 10, 2011			
Date Last Reviewed: November 10, 2011			
Review Date: October 31, 2014			

- I. PURPOSE: To establish procedures for a fireline paramedic (FEMP) response from and to agencies within or outside local EMS agency (LEMSA) jurisdiction when requested through the statewide Fire and Rescue Mutual Aid System, to respond to and provide advanced life support (ALS) care on the fireline at wildland fires.
- II. AUTHORITY: California Health and Safety Code, Division 2.5, Sections 1797.204, 1797.220; California Code of Regulations, Title 22, Division 9, Sections 100165 and 100167
- III. POLICY:
  - A. County accredited paramedics shall carry the ALS/BLS inventory consistent with the FIRESCOPE FEMP position description. Reasonable variations may occur; however, any exceptions shall have prior approval of the VCEMSA. The equipment lists are a scaled down version of standard inventory in order to meet workable/packable weight limitations (45 lbs including wildland safety gear, divided between a two person team).
    1. It will not be possible to maintain standard ALS minimums on the fireline. The attached ALS inventory essentially prioritizes critical and probable fireline needs.
    2. VCEMS accredited paramedics may function within their scope of practice, when serving in an authorized capacity assignment, as an agent of their authorized ALS fire agency.

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IV. PROCEDURE:

- A. Under the authority of State regulations, a paramedic may render ALS care during emergency operations as long as the following conditions are met:
1. The paramedic is currently licensed by the State of California and is accredited by the Ventura County EMS Agency.
  2. The paramedic is currently employed with a Ventura County ALS provider and possesses the requisite wildland fireline skills and equipment.
  3. The paramedic practices within the treatment guidelines set forth in VCEMSA policies and procedures manual. Paramedics operating in the capacity of a fireline paramedic (FEMP) shall follow VCEMSA communication failure protocol.
  4. The FEMP is expected to check in and obtain a briefing from the Logistics Section Chief, or the Medical Unit Leader (MEDL) if established at the Wildfire Incident.
  5. Documentation of patient care will be completed as per VCEMSA policy 1000.
    - a. Documentation of patient care will be submitted to incident host agencies. A VCePCR shall be completed for all ALS patients contacted, and shall be completed by the FEMP upon return to camp, or as soon as practical.
  6. Continuous Quality Improvement activities shall be in accordance with VCEMSA standards.

**APPENDIX A**

**FIRELINE EMERGENCY MEDICAL TECHNICIAN  
BASIC LIFE SUPPORT (BLS) PACK INVENTORY**

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

**APPENDIX B**

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

**ALS AIRWAY EQUIPMENT:**

Endotracheal Intubation Equipment (6.0, 7.5 ET – Mac 4, Miller 4, stylette and handle)	ETT Verification Device
End Tidal CO2 Detector	Needle Thoracostomy Kit (1)
ETT Restraint	Rescue Airway (1)

**IV/MEDICATION ADMIN SUPPLIES:**

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

**MISCELLANEOUS:**

AMA Paper Forms (3)	PCR Paper Forms (6)
FEMP Pack Inventory Sheet (1)	Sharps Container <u>— Small</u> (1)
Narcotic Storage (per agency policy)	

**BIOMEDICAL EQUIPMENT:**

Glucometer (1)	<u>Defibrillator with ECG waveform display (1)</u>
<u>Defibrillator Electrodes (2)</u>	

**MEDICATIONS:**

Albuterol – 90mcg/puff (1 MDI)	Glucagon 1 mg/unit (1)
Aspirin-Chewable (1 Bottle)	Midazolam 20 mg
Dextrose 50% 25 G. Pre-Load (1)	Morphine Sulfate 10 mg/ml (6)
Diphenhydramine 50 mg (4)	Nitroglycerin 1/150 gr (1)
Epinephrine 1 10,000 1mg (2)	Saline 0.9% IV 1,000 ml – Can be configured into two 500 ml or four 250 ml
Epinephrine 1 1,000 1 mg (4)	<u>Amniodarone 50 mg/ml 3 ml (2)</u>

<b>Supraventricular Tachycardia</b>	
<b>ADULT</b>	<b>PEDIATRIC</b>
<b>BLS Procedures</b>	
Administer oxygen as indicated	Administer oxygen as indicated
<b>ALS Prior to Base Hospital Contact</b>	
Valsalva maneuver IV access <u>Stable</u> – Mild to moderate chest pain/SOB <u>Unstable</u> – ALOC, signs of shock or CHF <ul style="list-style-type: none"> <li>Place on backboard and prepare for synchronized cardioversion</li> </ul>	Valsalva maneuver IV access <u>Stable</u> – Mild to moderate chest pain/SOB <u>Unstable</u> – ALOC, signs of shock or CHF <ul style="list-style-type: none"> <li>Place on backboard and prepare for synchronized cardioversion</li> </ul>
<b>Communication Failure Protocol</b>	
<u>Stable</u> <ul style="list-style-type: none"> <li><b>Adenosine</b> <ul style="list-style-type: none"> <li>IV – 6 mg rapid push immediately followed by 10-20 mL NS flush</li> </ul> </li> </ul> No conversion or rate control <ul style="list-style-type: none"> <li><b>Adenosine</b> <ul style="list-style-type: none"> <li>IV – 12 mg rapid push immediately followed by 10-20 mL NS flush</li> </ul> </li> </ul> May repeat x 1 if no conversion or rate control <u>Unstable</u> <ul style="list-style-type: none"> <li><b>Midazolam</b> <ul style="list-style-type: none"> <li>IV – 2 mg               <ul style="list-style-type: none"> <li>Should only be given if it does not result in delay of synchronized cardioversion</li> <li>For IV use – Dilute 5 mg (1 mL) Midazolam with 4 mL NS for a final volume of 5 mL concentration of 1 mg/mL</li> </ul> </li> </ul> </li> <li><b>Synchronized Cardioversion</b> <ul style="list-style-type: none"> <li>Use the biphasic energy settings that have been approved by service provider medical director.</li> </ul> </li> </ul>	<u>Stable</u> <ul style="list-style-type: none"> <li><b>Adenosine</b> <ul style="list-style-type: none"> <li><u>IV – 0.1 mg/kg (max dose 6 mg)</u> rapid push immediately followed by 10-20 mL NS flush</li> </ul> </li> </ul> No conversion or rate control <ul style="list-style-type: none"> <li><b>Adenosine</b> <ul style="list-style-type: none"> <li><u>IV – 0.2 mg/kg (max dose 12 mg)</u> rapid push immediately followed by 10-20 mL NS flush</li> </ul> </li> </ul> May repeat x 1 if no conversion or rate control <u>Unstable</u> <ul style="list-style-type: none"> <li><b>Midazolam</b> <ul style="list-style-type: none"> <li><u>IV – 0.1 mg/kg (max dose 2 mg)</u> <ul style="list-style-type: none"> <li>Should only be given if it does not result in delay of synchronized cardioversion</li> <li>For IV use – Dilute 5 mg (1 mL) Midazolam with 4 mL NS for a final volume of 5 mL concentration of 1 mg/mL</li> </ul> </li> </ul> </li> <li><b>Synchronized Cardioversion</b> <ul style="list-style-type: none"> <li>Use the biphasic energy settings that have been approved by service provider medical director.</li> </ul> </li> </ul>
<b>Base Hospital Orders only</b>	
Consult with ED Physician for further treatment measure	
Additional Information: <ul style="list-style-type: none"> <li>Adenosine is contraindicated in pt with 2° or 3rd° AV Block, Sick Sinus Syndrome (except in pt with functioning pacemaker), or known hypersensitivity to adenosine.</li> <li>Unless the patient is in moderate or severe distress, consider IV access and transport only. Consider withholding adenosine administration if patient is stable until ED Physician evaluation.</li> <li>Document all ECG strips during adenosine administration and/or synchronized cardioversion.</li> </ul>	

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Airway Management		Policy Number 710	
APPROVED: Administration: Steven L. Carroll, EMT-P		Date: December 1, 2010	
APPROVED: Medical Director: Angelo Salvucci, M.D.		Date: December 1, 2010	
Origination Date: June 1986			
Date Revised: October 14, 2010		Effective Date: December 1, 2010	
Date Last Reviewed: October 14, 2010			
Review Date: October 31, 2012			

- I. PURPOSE: To define the indications, procedure and documentation for airway management by prehospital emergency medical personnel within Ventura County
- II. AUTHORITY: Health and Safety Code, §1798 and §1798.2; §1798.160, and §1798.170 and California Code of Regulations, Title 22, §100218 and §100254.
- III. Policy: Airway management shall be performed on all patients that are unable to maintain or protect their own airway. Paramedics may utilize oral endotracheal intubation on patients eight (8) years of age or older, in accordance with Ventura County Policy 705.
- IV. Definitions: Intubation Attempt – an interruption of ventilation, with laryngoscope insertion, for the purpose of endotracheal tube (ETT) placement.
- V. Procedure:
  - A. Bag-Valve-Mask (BVM) ventilations
    1. Indications
      - a. Respiratory arrest or severe respiratory compromise
      - b. Cardiac arrest – according to VCEMS Policy 705
    2. Contraindications
      - a. None
    3. Impedance Threshold Device (ITD, ResQPOD) – CARDIAC ARREST ONLY
      - a. MUST UTILIZE 2-RESCUER VENTILATION TECHNIQUE
      - b. For all rhythms, in patients 18 y/o and above, start continuous compressions at 100/min. Attach ResQPOD to BVM. As soon as BVM/ResQPOD is ready, insert oral airway and perform CPR at

30:2 compression to ventilation ratio, utilizing the BVM/ResQPOD to deliver the 2 breaths.

- c. Maintain a 2-handed face mask seal throughout compressions.
- d. If the patient has return of spontaneous circulation (ROSC), immediately remove ResQPOD.
- e. Continue to assist ventilations at 1 breath every 5-6 seconds.

B. Endotracheal Intubation (ETI)

1. Indications

- a. Cardiac arrest – according to VCEMS Policy 705
- b. Respiratory arrest or severe respiratory compromise **AND** unable to maintain an adequate airway and adequately ventilate with BVM.
- c. After Base Hospital (BH) contact has been made, the BH Physician may order endotracheal intubation in other situations.

2. Contraindications

- a. Traumatic brain injury – unless unable to maintain adequate airway (e.g. – persistent vomiting).
- b. Intact gag reflex.

3. Intubation Attempts

- a. There shall be no more than two (2) attempts to perform ETI, lasting no longer than 40 seconds each, and prior to BH contact. For patients in cardiac arrest, each ETI attempt shall interrupt chest compressions for no longer than 20 seconds.
- b. The patient shall be ventilated with 100% O<sub>2</sub> by BVM for one minute before each attempt.
- c. If ETI cannot be accomplished in 2 attempts, the airway shall be managed by BLS techniques.
- d. If ETI and BLS techniques are unsuccessful, the approved alternate ALS airway device may be inserted.

4. ITD (ResQPOD) – CARDIAC ARREST ONLY

- a. If/when advanced airway is established, transfer the ResQPOD to the advanced airway and start continuous compressions at 100/min with one breath each 6 seconds (timing light) or every 10<sup>th</sup> compression

- b. If patient has ROSC, immediately remove ResQPOD from advanced airway and continue to assist ventilations at 1 breath every 5-6 seconds as needed.
5. Special considerations
- a. Flexible Stylet. A flexible stylet may be used for any ETI attempt that involves an ETT size of at least 6.0 mm.
    - 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) Use stylet to feel for tracheal rings.
      - e) Advance stylet past the black mark. A change in resistance indicates the stylet is at 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 counter-clockwise 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 ETT 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.
- b. Tracheal stoma intubation
- 1) Select the largest endotracheal tube that will fit through the stoma without force (it should not be necessary to use lubricant).
  - 2) Do not use stylet.
  - 3) Pass ETT until the cuff is just past the stoma.
  - 4) Inflate cuff.
  - 5) Attach the CO<sub>2</sub> measurement device to the ETT and confirm placement (as described below).
  - 6) Secure tube.
6. Confirmation of Placement – It is the responsibility of the paramedic who has inserted the ETT to personally confirm (using air aspiration, auscultation, and CO<sub>2</sub> detection/measurement) and document proper placement. Responsibility for the position of the ETT shall remain with the intubating paramedic until a formal transfer of care has been made.
- a. Prior to intubation, prepare both the air aspiration and the CO<sub>2</sub> measurement devices.
  - b. Insert ETT, advance, and hold at the following depth:
    - 1) Less than 5 ft. tall: balloon 2 cm past the vocal cords.
    - 2) 5'-6'6" tall: 22 cm at the teeth.
    - 3) Over 6'6" tall: 24 cm at the teeth or 2 cm past the vocal cords.

- c. After inserting the ETT, in the patient requiring CPR, resume chest compressions while confirming ETT placement.
- d. Before inflating ETT balloon, perform the air aspiration technique.
  - 1) Deflate the bulb, connect to the ETT, and observe for refilling.
  - 2) Refilling of the bulb in less than 5 seconds indicates tube placement in trachea.
  - 3) 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.
- e. Inflate the ETT cuff, attach the CO<sub>2</sub> measurement device, and begin ventilations. During the first 5-6 ventilations, auscultate both lung fields (in the axillae) and the epigastrium.
- f. After 6 ventilations, observe the CO<sub>2</sub> measurement device:
  - 1) If a colorimetric CO<sub>2</sub> detector device is used for initial placement confirmation prior to capnography, 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.
  - 2) When capnography is applied, 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.

- g. Using information from auscultation and CO<sub>2</sub> measurement, determine the ETT position.
  - 1) If breath sounds are equal, there are no sounds at the epigastrium, and the CO<sub>2</sub> measurement device indicates tracheal placement, secure the ETT using an ETT holder.
  - 2) If auscultation or the CO<sub>2</sub> measurement device, indicates that the ETT may be in the esophagus, immediately reevaluate the patient. If you are not CERTAIN that the ETT is in the trachea, the decision to remove the ETT should be based upon the patients overall clinical status (e.g., skin color, respirations, pulse oximetry)
  - 3) If breath sounds are present but unequal, the ETT position may be adjusted as needed.
- h. Once ETT position has been confirmed, reassessment, using CO<sub>2</sub> measurement, pulse oximetry (if able to obtain), and auscultation of breath sounds should be performed each time patient is moved.
- i. Continue to monitor the CO<sub>2</sub> 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.
- j. After confirmation of proper ETT placement and prior to movement, all intubated patients shall have their head and neck maintained in a neutral position with head supports. A cervical collar will only be used if a cervical spine injury is suspected.
  - 1) Reconfirm ETT placement after any manipulation of the head or neck, including positioning of a head support, and after each change in location of the patient.
  - 2) Report to nurse and/or physician that the head support is for the purpose of securing the ETT and not for trauma (unless otherwise suspected).

7. Documentation

- a. All ETI attempts must be documented in the “ALS Airway” section of the ~~approved Ventura County Documentation System~~ [Ventura](#)

County Electronic Patient Care Report (VCePCR) and the Ventura County "Advanced Airway Quality Improvement Data Collection" form.

~~b. Information not obvious from the "ALS Airway" section (e.g., vomitus in airway, suctioning, extubation and reintubation) will be documented in the narrative. All validated fields related to an advanced airway attempt shall be completed on the VCePCR. Anything related to the advanced airway attempt that does not have an applicable corresponding field in VCePCR, but needs to be documented, shall be entered into the report narrative.~~

~~e.b. An "Advanced Airway Quality Improvement Data Collection" 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 if one is on scene., , and delivered to the intubating paramedic's agency representative before the end of the paramedic's shift. If all ETI attempts are unsuccessful, no physician signature is needed. All data related to an advanced airway attempt (successful or not) shall be documented on a VCePCR. In addition, an electronic signature shall be captured on the mobile device used to document the care provided. The treating emergency room physician will sign the 'Advanced Airway Verification' section of the VCePCR, as well as document the supporting information (placement, findings, method, comments, name, and date). In the event the patient was not transported, another on scene paramedic (if available) will sign and complete the verification section.~~

~~e.c. Documentation of the intubation in the approved Ventura County Documentation System must include the following elements. The acronym for the required elements is "SADCASES."~~

- 1) Size of the ETT
- 2) Attempts, number
- 3) Depth of the ETT at the patient's teeth

- 4) Confirmation devices used and results. For capnography, recording of waveform at the following points:
  - a. Initial ETT placement confirmation;
  - b. Movement of patient; and
  - c. Transfer of care.
- 5) Auscultation results
- 6) Secured by what means
- 7) ETCO<sub>2</sub>, initial value
- 8) Support of the head or immobilization of the cervical spine.

e.d. ~~A printed code summary mounted and labeled displaying capnography waveform at the key points noted above. This printed code summary shall be maintained by the provider as part of the patient record. An electronic upload of Cardiac Monitor data, including ETCO<sub>2</sub> waveform “snapshots” the the VCePCR is required. In the event an upload cannot occur, a printed code summary, mounted and labeled, displaying capnography waveform at the key points noted above is required. This printed code summary shall be scanned and attached to the VCePCR.~~

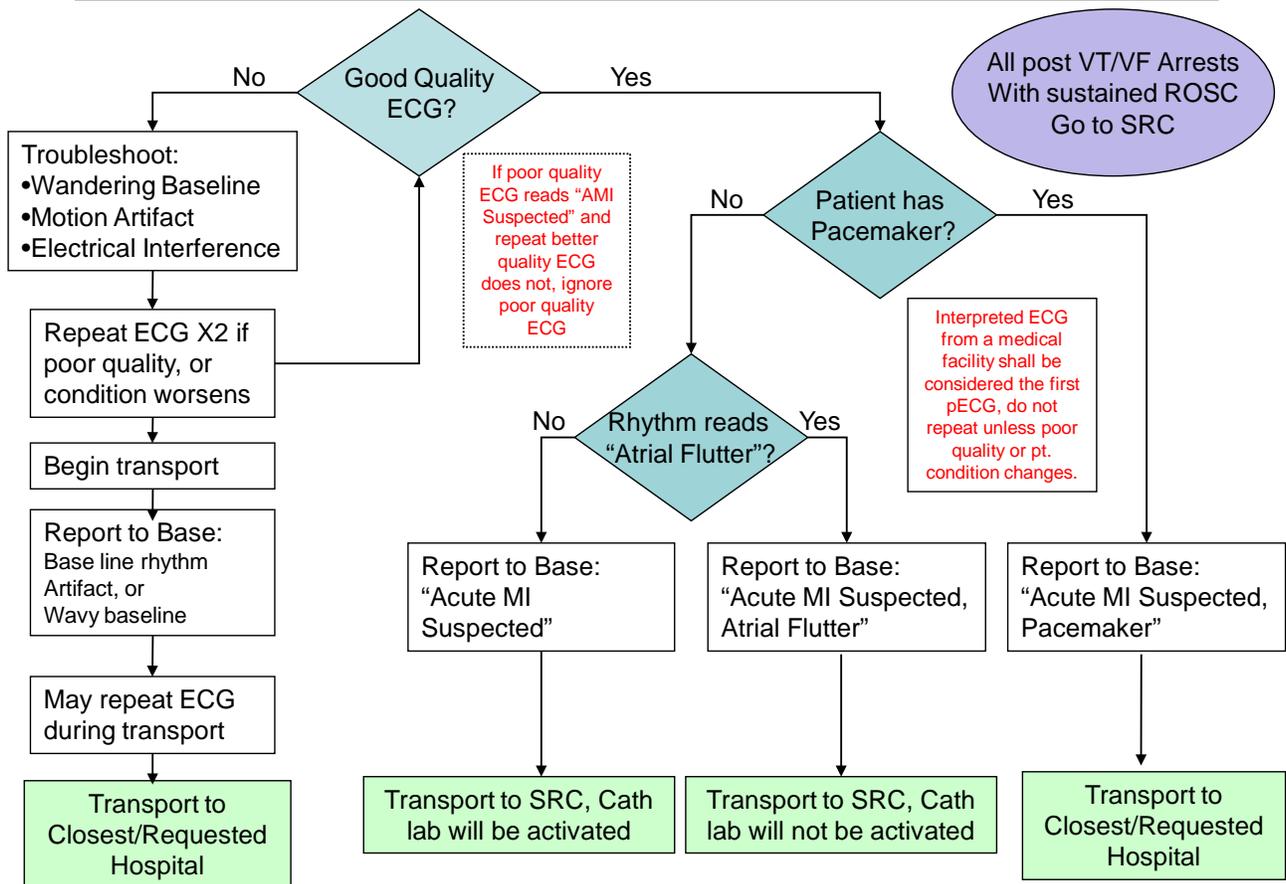
COUNTY OF VENTURA EMERGENCY MEDICAL SERVICES		HEALTH CARE AGENCY POLICIES AND PROCEDURES	
Policy Title 12 Lead ECG		Policy Number: 726	
APPROVED: Administration: Steven L. Carroll, Paramedic		Date: June 1, 2012	
APPROVED: Medical Director: Angelo Salvucci, MD		Date: June 1, 2012	
Origination Date: August 10, 2006			
Date Revised: February 9, 2012		Effective Date: June 1, 2012	
Date Last Reviewed: February 9, 2012			
Review Date: February 28, 2014			

- I. Purpose: To define the indications, procedure and documentation for obtaining 12-lead ECGs.
- II. Authority: California Health and Safety Code, Sections 1797.220 and 1798, California Code of Regulations, Title 22, Section 100175.
- III. Policy: Paramedics will obtain 12-lead ECGs in patients demonstrating symptoms of acute coronary syndrome. Treatment of these patients shall be done in accordance with this policy. Only paramedics who have received training in this policy are authorized to obtain a 12-lead ECG on patients. EMTs who are specially trained may be authorized to set up the 12 lead.
- IV. Procedure:
  - A. Indications for a 12-lead ECG: Medical history and/or presenting complaints consistent with an acute coronary syndrome. Patients will have the acute (within the previous 12 hours) onset of one or more of the following symptoms that have no other identifiable cause:
    1. Chest, upper back or upper abdominal discomfort.
    2. Generalized weakness.
    3. Dyspnea.
  - B. Contraindications: Do NOT perform an ECG on these patients:
    1. Critical Trauma: There must be no delay in transport.
    2. Cardiac Arrest unless return of spontaneous circulation
  - C. ECG Procedure:
    1. Attempt to obtain an ECG during initial patient evaluation. Oxygen should be administered if patient is dyspneic, shows signs of heart failure or shock, or has SAO<sub>2</sub> < 94% If the ECG can be completed without delay (less than 3 minutes after patient contact), and the patient is not in severe distress, perform ECG prior to medication administration.

2. The ECG should be done prior to transport.
  3. If the ECG is of poor quality (artifact or wandering baseline), or the patient's condition worsens, may repeat to a total of 3.
  4. Once an acceptable quality ECG is obtained, switch the monitor to the standard 3-lead function. Repeat the 12-lead ECG only if the original ECG interpretation is NOT \*\*\*ACUTE MI SUSPECTED\*\*\*, and patient's condition worsens.
  5. If interpretation is \*\*\*ACUTE MI SUSPECTED\*\*, note underlying rhythm, and verify by history and physical exam that the patient does not have a pacemaker or ICD.
- D. Base Hospital Communication/Transportation:
1. If the ECG interpretation is ACUTE MI SUSPECTED; report that to MICN at the beginning of the report. If the ECG is of poor quality, or the underlying rhythm is paced, or atrial flutter, include that information in the initial report. All other information, except that listed in items 2, 4, and 5 below, is optional and can be given at the paramedic and MICN's discretion.
  2. Paramedics are to ask the patient if they have a cardiologist and report the information to the base hospital.
  3. If ECG Interpretation is ACUTE MI SUSPECTED, patients should be transported to the closest and most appropriate STEMI Receiving Center (SRC) depending on patient preference and cardiac catheterization lab availability. MICN may direct ambulance to alternative SRC if cardiac catheterization lab not available.
  4. If the ECG interpretation is "\*\*\*\*ACUTE MI SUSPECTED\*\*\*\*", and the underlying rhythm is Atrial Flutter the Base Hospital shall be notified at the beginning of the report. The Cath Lab will not be activated.
  5. If the ECG interpretation is \*\*\*ACUTE MI SUSPECTED\*\*\* and the patient has a pacemaker or the ECG is of poor quality (wandering baseline and/or artifact) report that to the MICN.
  6. If a first responder paramedic obtains an ECG that is **not** \*\*\*ACUTE MI SUSPECTED\*\*\* and the patient is stable, patient care may be turned over to the transporting paramedic. The ECG will be turned over to the transporting paramedic.

7. Positive ECGs will be handed to the receiving medical practitioner. The receiving practitioner will initial, time and date the ECG to indicate they have received and reviewed the ECG.
- E. Patient Treatment:
1. Patient Communication: If the ECG interpretation is \*\*\*ACUTE MI SUSPECTED\*\*\*, the patient should be told that “according to the ECG you may be having a heart attack”. If the ECG interpretation is anything else, the patient should NOT be told the ECG is normal or “you are not having a heart attack”. If the patient asks what the ECG shows, tell him/her that it will be read by the emergency physician.
- F. Other ECGs
1. If an ECG is obtained by a physician and the physician interpretation is Acute MI, the patient will be treated as an \*\*\*ACUTE MI SUSPECTED\*\*\*. Do not perform an additional ECG unless the ECG is of poor quality, or the patient's condition worsens.
  2. If there is no interpretation of another ECG then repeat the ECG.
  3. The original ECG performed by physician shall be obtained and accompany the patient.
- G. Documentation
1. Approved Ventura County Documentation System (AVCDS) documentation will be completed per VCEMS policy. The original ECG will be turned in to the base hospital and ALS Service Provider.
- H. Reporting
1. False Positive ECGs not recognized and called in as such to the Base Hospital, will be reported to VC EMS as an Unusual Occurrence in accordance with VC EMS Policy 150.

# \*\*\* ACUTE MI SUSPECTED \*\*\*



**EMERGENCY MEDICAL SERVICES**

2220 E. Gonzales Rd., Suite 130, Oxnard, CA 93036-0619  
www.vchca.org/ph/ems  
Phone: 805-981-5301  
Fax: 805-981-5300

**STEVEN L. CARROLL, EMT-P**  
EMS Administrator  
**ANGELO SALVUCCI, M.D., F.A.C.E.P**  
Medical Director

**MEMORANDUM**

**Date:** September 25, 2012

**To:** Pre-Hospital Services Committee  
Ventura County Emergency Medical Services Agency

**From:** Diane Starzak, Chair   
EMS Advisory Committee

**Subject:** Shoreline Ambulance Company, LLC.  
Non Emergency Ambulance Application

Committee Members include: Diane Starzak, Joe Milligan, Ray Blackwell and Bob Taylor. Staff representatives: Steve Carroll, Chris Rosa and Debora Haney

Shoreline Ambulance Company, LLC has submitted an "Application for Ambulance Company License" in Ventura County. Using the guidance of the County of Ventura Health Care Agency, Public Health Department, Emergency Medical Services Policy and Procedures number 110 and 111, the EMS Advisory Committee was requested to review their application. The EMS Agency investigated the application and provided information to the EMS Advisory Committee for review. Information in the application packet included, staff investigation documents, neighboring county concerns and correspondence from existing ambulance providers.

Based upon the information reviewed, the EMS Advisory Committee finds significant concern with Shoreline Ambulance Company LLC's financial and business background and questions their ability to provide appropriate ambulance service to Ventura County. Additionally, the Committee finds there is no demonstrated need for additional non emergency ambulance services in Ventura County at this time. Furthermore, VCEMS Policy 111, Section III.A.7 requires a written statement or other evidence of either inadequate response times or inadequate care from existing providers. The Committee finds no evidence to substantiate these issues within our current system. Review of the information provided by the existing providers also leads the Committee to conclude that the authorization of another ambulance service provider in Ventura County would negatively impact the existing providers' ability to provide emergency services to the citizens of Ventura County.

If you need further information, please contact the EMS Agency at 805-981-5301.

Policy Title: Ventura County Emergency Medical Services Provider Agencies		Policy Number 500
APPROVED: Administration:	<a href="#">Barry R. Fisher, MPPA</a> <a href="#">Steven L. Carroll, EMT-P</a>	Date
APPROVED: Medical Director:	Angelo Salvucci, M.D.	Date
Origination Date:	July 1987	
Date Revised:	February 8, 2007	Effective Date: June 1, 2007
<a href="#">Date Last Reviewed:</a>		
Review Date:	February, 2009	

**Air Rescue**

Ventura County Sheriff's Search  
and Rescue  
375 Durley Avenue #A  
Camarillo, CA 93010  
805-388-4212

**First Responder Agencies**

Channel Islands Harbor Patrol  
3900 Pelican Way  
Oxnard, CA 93035  
805-382-3000

Fillmore City Fire Department  
250 Central  
Fillmore, CA 93015  
805-524-1500 X 226

Oxnard City Fire Department  
360 W. Second St.  
Oxnard, CA 93030  
805-385-7722

Ventura County Federal Fire Dept.  
Naval Air Station  
Fire Division, Code 5140  
Point Mugu, CA 93042-5000  
805-989-7034

Santa Paula Fire Department  
214 So. 10<sup>th</sup> Street  
Santa Paula, CA 93060  
805-525-4478

\* Ventura City Fire Department  
1425 Dowell Drive  
Ventura, CA 93003  
805-339-4319

\* Ventura County Fire Protection District  
165 Durley Drive  
Camarillo, CA 93010  
805-389-9702

Ventura Harbor Patrol  
1603 Anchors Way  
Ventura, CA 93003  
805-642-8538

**Transport Agencies**

American Medical Response  
616 Fitch Avenue  
Moorpark, CA 93021  
805-517-2000

Gold Coast Ambulance  
P.O. Box 7065  
200 Bernoulli Circle  
Oxnard, CA 93030  
805-485-1231

Lifeline Medical Transport  
608 E. Thompson Blvd.  
Ventura, CA 93001  
805-653-9111

\* ALS First Responder

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: INTRAOSSEOUS INFUSION		Policy Number: 717	
APPROVED: Administration: Steven L. Carroll, Paramedic		Date: December 1, 2012	
APPROVED: Medical Director: Angelo Salvucci, MD		Date: December 1, 2012	
Origination Date: September 10, 1992		Effective Date: December 1, 2012	
Date Revised: July 12, 2012			
Date Last Reviewed: July 12, 2012			
Review Date: July, 2014			

- I. PURPOSE: To define the indications, procedure, and documentation for intraosseous insertion (IO) and infusion by paramedics.
- II. AUTHORITY: Health and Safety Code, Sections 1797.178, 1797.214, 1797.220, 1798 and California Code of Regulations, Title 22, Sections 100145 and 100169.
- III. POLICY: IO may be performed by paramedics who have successfully completed a training program approved by the EMS Medical Director.
  - A. Training

The EMS service provider will ensure their paramedics successfully complete an approved training program and will notify EMS when that is completed.
  - B. Indications

Patient with an altered level of consciousness (ALOC) or in extremis AND there is an urgent need to administer intravenous fluids or medications AND venous access is not readily available.

    1. Manual IO: For patients less than 8 years of age.
    2. EZ-IO device: For patients of all ages.
  - C. Contraindications
    1. Recent fracture (within 6 weeks) of selected bone.
    2. Congenital deformities of selected bone.
    3. Grossly contaminated skin, skin injury, burn, or infection at the insertion site.
    4. Excessive adipose tissue at the insertion site with the absence of anatomical landmarks.
    5. IO in same bone within previous 48 hours.
- IV. PROCEDURE:
  - A. Manual IO insertion
    1. Assemble the needed equipment

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

- 1) 15 mm needle sets (pink): 3-39 kg
- 2) 25 mm needle sets (blue):  $\geq 40$  kg
- 3) 45 mm needle sets (yellow): For patients with excessive adipose tissue at insertion site
- b. Alcohol wipes
- c. Sterile gauze pads
- d. 10 mL syringe
- e. EZ Connect tubing
- f. IV fluids
  - 1) 3-39 kg: 500 mL NS
  - 2)  $\geq 40$  kg: 1 L NS
- g. Tape or approved manufacturer securing device
2. Prime EZ Connect tubing with 1 mL fluid
  - a. If less than 2 years old, prime with NS
  - b. If  $\geq 2$  years old, and conscious, prime with 2% cardiac lidocaine (20 mg)
3. Locate the appropriate insertion site on the anteromedial flat surface of the proximal tibia.
  - a. Pediatric: 2 cm below the patella, 1 cm medial
  - b. Adult: 2 cm medial to the mid tibial tuberosity
4. Prepare the site utilizing aseptic technique with alcohol wipes.
5. To insert the EZ-IO needle:
  - a. Connect appropriate size needle set to the EZ-IO driver.
  - b. Stabilize the site. .
  - c. Position the EZ-IO needle at  $90^\circ$  to the underlying bone and insert it into the skin. Continue to insert the needle until contacting the bone. Ensure at least one black band is visible above the skin.
  - d. Once contact with the bone is made, activate the driver and advance the needle without pressure until the bone has been penetrated.
  - e. Once properly placed, attach primed EZ Connect tubing and attempt to aspirate bone marrow.
  - f. For responsive patients, slow infusion of 2% cardiac lidocaine over 60 seconds prior to fluid/medication administration for pain management.

- 1) 3-39 kg: 1 mg/kg
  - 2)  $\geq 40$  kg: 40 mg
- g. Flush with 10 mL NS to assess patency. If successful, begin to infuse fluid.
  - h. Splint the IO needle with tape or an approved manufacturer stabilization device.
  - i. Document time of insertion on included purple arm band and place on patient's wrist.
  - j. Document distal pulses and skin color before and after procedure and monitor for complications.
- C. IO Fluid Administration
1. Active pushing of fluids may be more successful than gravity infusion. Use of a pressure to assist with fluid administration is recommended, and usually needed, but not required.
  2. Fluid administration on smaller patients should be given via syringe boluses to control/monitor amount infused. Close observation of the flow rate and total amount of fluid infused is required.
  3. If infiltration occurs or the IO needle is accidentally removed, stop the infusion, leave the connector tubing attached.
- D. Documentation
1. Document any attempt(s) at establishing a peripheral IV prior to attempting/placing an IO infusion ~~in~~ on the approved Ventura County documentation system (AVGDS) and Intraosseous Infusion Data Form (Appendix A)-Ventura County Electronic Patient Care Report (VCePCR) system.
  2. The site(s) and number of attempts, success, complications, and any applicable comments related to attempting to establish an IO infusion shall be documented on the AVGDS/VCePCR. Any, as well as the medications and amount of fluids administered during patient care shall also be documented in the appropriate manner on the VCePCR.
- E. Quality Assurance
- Each use of an IO infusion will be reviewed by ~~the Base Hospital, EMS service provider and EMS.~~ The Intraosseous Infusion Data Form (Appendix A) will be completed for all IO insertion attempt. Data related to IO attempts will be collected and analyzed directly from the VCePCR system.

Appendix A

~~VENTURA COUNTY EMS AGENCY  
INTRAOSSIOUS INFUSION CQI FORM\*~~



DEMOGRAPHICS	
DATE:	INCIDENT NUMBER:
INSERTING PARAMEDIC:	AGENCY:
PATIENT AGE:	PATIENT WEIGHT: <input type="checkbox"/> lbs <input type="checkbox"/> kgs
INDICATIONS: <input type="checkbox"/> Cardiac Arrest <input type="checkbox"/> Shock <input type="checkbox"/> Other:	
Describe conditions:	
ALOC? : <input type="checkbox"/> Yes <input type="checkbox"/> No	IV access unavailable? <input type="checkbox"/> Yes <input type="checkbox"/> No
Extremis? <input type="checkbox"/> Yes <input type="checkbox"/> No	Explain:
IO INFUSION ATTEMPT	
Needle size: <input type="checkbox"/> 15mm <input type="checkbox"/> 25mm <input type="checkbox"/> 45mm	Number of IO attempts:
Insertion site:	Distal Pulses Documented: <input type="checkbox"/> Yes <input type="checkbox"/> No
EZ Connect Primed: <input type="checkbox"/> Lidocaine <input type="checkbox"/> NS	Infiltration: <input type="checkbox"/> Yes <input type="checkbox"/> No
Saline infused <input type="checkbox"/> 500mL <input type="checkbox"/> 1000mL	IO Secured:
Lidocaine 2% <input type="checkbox"/> Yes <input type="checkbox"/> No	Pressure infusion? <input type="checkbox"/> Yes <input type="checkbox"/> No
COMMENTS:	

*\*This form is to be completed on all cases where IO infusion is attempted  
Please submit this form to your agency, the base hospital and to VC-EMSA*



## VENTURA COUNTY EMERGENCY MEDICAL SERVICES AGENCY

### Skills Assessment

Name \_\_\_\_\_ Agency \_\_\_\_\_ Date \_\_\_\_\_

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

Instructor Signature: \_\_\_\_\_ Date \_\_\_\_\_



## VENTURA COUNTY EMERGENCY MEDICAL SERVICES AGENCY

### Skills Assessment

Name \_\_\_\_\_ Agency \_\_\_\_\_ Date \_\_\_\_\_

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

**Instructor Signature:** \_\_\_\_\_ **Date** \_\_\_\_\_

September 26, 2012

Steve Carroll,  
EMS Administrator  
Ventura County EMS Agency  
2220 E. Gonzales Road, #130  
Oxnard, CA 93036

Dear Mr. Carroll,

We would like to inform you that effective 7 p.m. on November 1, 2012 St. John's Pleasant Valley Hospital will no longer provide Obstetric services at this campus. These services will be consolidated at St. John's Regional Medical Center, Oxnard, California. All patients with pregnancy related conditions must be sent to St. John's Regional Medical Center while patients with gynecological complaints can continue to be brought to St. John's Pleasant Valley Hospital.

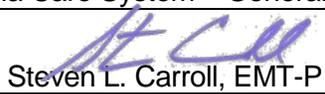
If you have any questions, please contact me at (805) 389-5601.

Thank you.

Sincerely,



Raye Burkhardt, RN MSN  
Vice President/Chief Nursing Officer  
St. John's Pleasant Valley Hospital

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Trauma Care System – General Provisions		Policy Number 1400	
APPROVED: Administration:	 Steven L. Carroll, EMT-P	Date: June 1, 2012	
APPROVED: Medical Director:	 Angelo Salvucci, M.D.	Date: June 1, 2012	
Origination Date:	July 1, 2010	Effective Date:	June 1, 2012
Date Revised:	April, 2012		
Date Last Reviewed:	April, 2012		
Review Date:	April, 2014		

- I. **PURPOSE:** To provide standards and guidelines for the Ventura County Trauma Care System. To provide all injured patients the accessibility to an organized, multi-disciplinary and inclusive system of trauma care. To ensure that all injured patients are taken to the time-closest and most appropriate medical facility.
- II. **AUTHORITY:** Health and Safety Code, §1797.160, §1797.161, and §1798, and California Code of Regulations, Title 22, §100255.
- III. **POLICY:**
  - A. **Multi-disciplinary Nature of Systematized Trauma Care**  
The Ventura County EMS Agency (VCEMS) recognizes the multi-disciplinary nature of a systemized approach to trauma care. VCEMS has adopted policies, guidelines and triage criteria that provide for the coordination of all resources and ensure the accessibility to the time-closest and most appropriate medical facility for all injured patients.
  - B. **Public Information and Education**
    1. VCEMS is committed to the establishment of trauma system support and the promotion of injury prevention and safety education.
    2. VCEMS facilitates speakers to address public groups, and serves as a resource for trauma information/education.
    3. VCEMS assists community and professional groups in the development and dissemination of education to the public on such topics as injury prevention, safety education programs and access to the Trauma Care System.

4. Each designated facility must participate in the development of public awareness and education campaigns for their service area.
- C. Marketing and Advertising
1. In accordance with the Health and Safety Code, Division 2.5, no healthcare provider shall use the term "trauma facility," "trauma hospital," "trauma center," "trauma care provider," "trauma care vehicle," or similar terminology in its signs or advertisements or in printed materials and information it furnishes to the general public unless its use has been authorized by VCEMS.
  2. All marketing and promotional plans, with respect to trauma center designation shall be submitted to VCEMS for review and approval, prior to implementation. Such plans will be reviewed by VCEMS, with approval or denial issued within 10 days, based on the following guidelines:
    - a. Shall provide accurate information
    - b. Shall not include false claims
    - c. Shall not be critical of other providers
    - d. Shall not include financial inducements to any providers or third parties
- D. Service Areas for Hospitals
- Service areas for local trauma hospitals are determined by the VCEMS policy of transporting patients to the time-closest and appropriate facility.
- E. EMS Dispatching
- EMS dispatching for Ventura County is provided for and coordinated through the Ventura County Fire/EMS Communications Center, and, for Oxnard Fire, through the Oxnard PD center. The closest ALS transporting unit to an incident is dispatched, as well as BLS, and in some cases ALS, first responders.
- F. Training of EMS Personnel
1. Designated facilities will provide training to hospital staff on trauma system policies and procedures.
  2. Base Hospitals conduct periodic classes to orient prehospital providers to the local EMS system. Representatives from a designated trauma center may present the orientation to the Ventura County trauma system.
- G. Coordination and Mutual Aid between neighboring jurisdictions

1. VCEMS will establish and maintain reciprocity agreements with neighboring EMS jurisdictions that provide for the coordination of mutual aid within those jurisdictions.
2. VCEMS works cooperatively and executes agreements, as necessary, in order to ensure that patients are transported to the time-closest and appropriate facility.
3. VCEMS maintains contact with neighboring EMS agencies in order to monitor the status of trauma care systems in surrounding jurisdictions.

H. Interfacility Transfers

1. As an inclusive trauma system, all hospitals have a role in providing trauma care to injured patients.
2. Designated trauma centers are required to establish and maintain a transfer agreement with other trauma center(s) of higher designation for the transfer of patients that require a higher level of care.
3. Transferring facilities, in conjunction with the higher-level facility, shall be responsible for obtaining the appropriate level of transportation when transferring trauma patients.

I. Pediatric Trauma Care.

Integration of pediatric hospital (s), when applicable, into the overall trauma care system to ensure that all trauma patients receive appropriate trauma care in the most expeditious manner possible

1. Designated trauma centers are required to maintain a transfer agreement with a pediatric trauma center.
2. As with all specialties, pediatric consultation should be promptly available
3. The transferring facility, in conjunction with the higher-level facility, shall be responsible for obtaining the appropriate level of care during transport.

J. Coordinating and Integration of Trauma Care with Non-Medical Emergency Services

1. VCEMS ensures that all non-medical emergency service providers are apprised of trauma system activities, as it relates to their agency/organization.
2. Non-medical emergency service providers are included in the VCEMS committee memberships, as appropriate.

3. VCEMS disseminates information to non-medical emergency service agencies through written communication, as necessary.
- K. Trauma Center Fees
- VCEMS has developed a fee structure that covers the direct cost of the designation process and to effectively monitor and evaluate the trauma care system. Fees are based on the direct VCEMS cost of administering the trauma care system.
- L. Medical Control and Accountability
1. Each designated trauma center shall:
    - a. Provide base hospital medical control for field prehospital care providers.
    - b. Provide base hospital service in accordance with California Code of Regulations, Title 22, as outlined in the VCEMS Base Hospital Agreements.
    - c. Participate in the VCEMS data collection system as defined by VCEMS, CEMSIS-Trauma and the National Trauma Database.
    - d. Participate in the VCEMS continuous quality improvement program.



# EMERGENT and URGENT Trauma Transfer QI Form

Form: Ventura County EMS Agency Policy 1404

**(ALL FIELDS MUST BE COMPLETED)**

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

**Sending Hospital:**

- SVH     SJPVH     SJRMC     OVCH     CMH     SPH

**Treating Physician:** \_\_\_\_\_

**Patient arrived at sending ED at \_\_\_\_\_ (time of arrival)**

- Brought by EMS: Fire Incident Number \_\_\_\_\_  
 Brought by POV or Walk-In

**Destination Trauma Center:**

- LRHMC  
 VCMC  
 Other: \_\_\_\_\_

**Patient Transfer Process:**

- EMERGENT  
     Ambulance with paramedic ONLY  
     Ambulance with accompanying healthcare personnel  
     Trauma Call Continuation  
 URGENT

**If the transfer was EMERGENT, which of the following Policy 1404 criteria applies?**

- Indications for an immediate neurosurgical procedure  
 Penetrating gunshot wound to head or torso  
 Penetrating wound by any mechanism and presents with or develops shock.  
 Blunt injury and shock  
 Vascular injury that cannot be stabilized and is at risk of hemorrhagic shock or loss of limb acutely (excluding fingers/toes)  
 Pregnancy with indications for immediate Cesarean section

**Comments:**


Within 72 hours of transfer, fax or scan/email to VCEMS: Fax--(805) 981-5300 Email—katy.haddock@ventura.org