Public Health Administration Large Conference Room 2240 E. Gonzales, 2nd Floor Oxnard, CA 93036	Pre-hospital Services Committee Agenda	April 9, 2009 9:30 a.m.

I.	**Approve Agenda**	
II.	**Minutes**	
III.	**Medical Issues**	
	A.	STEMI Update Policy 705: Cardiac Arrest - Adult
	B.	Cardiac Arrest Improvement 2009 Report
	C.	Other
IV.	**New Business**	
	A.	Policy 105: Prehospital Services Committee Guidelines
	B.	Other
V	**Old Business**	
	A.	Policy 310: Paramedic Scope of Practice – S. Carroll
	B.	Policy 705: Crush Injury
	B.	CARES Project Update – A. Salvucci
	C.	ART/BART Report – A. Salvucci
	D.	Trauma System Update
	E.	Impedance Threshold Device/King Airway Study – D. Chase
	F.	Other
VI	**TAG Report**	
VII	**Policies for Review**	
	A.	Other
VIII.	**Agency Reports**	
	A.	ALS Providers
	B.	BLS Providers
	C.	Base Hospitals
	D.	Receiving Hospitals
	E.	ALS Education Programs
	F.	EMS Agency
	G.	Other
IX.	**Informational Topics**	
	A.	Other
X.	**Closing**	

Special thanks to Community Memorial Hospital for providing refreshments

TEMPORARY
PARKING PASS
Expires April 9, 2009

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

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

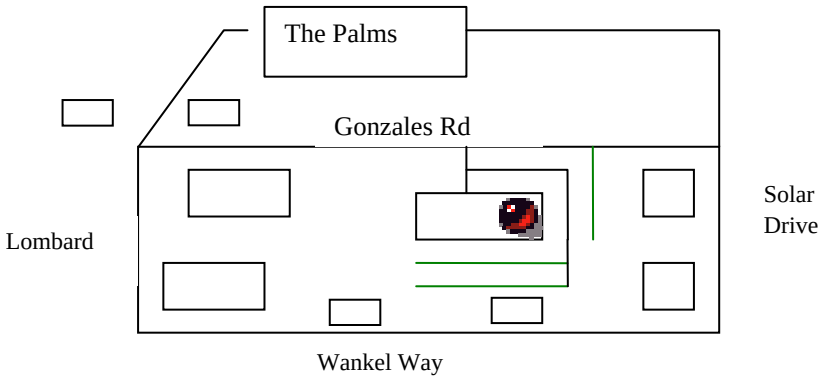
Parking Instructions: Parking at workshop venue is limited. Arrive early to allow for offsite parking if venue parking lot is full.

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, 2nd Floor Oxnard, CA 93036	Pre-hospital Services Committee Minutes	March 12, 2009 9:30 a.m.

Topic	Discussion	Action	Assigned
I. Approve Agenda		It was M/S/C (M. Mundell/E. Grap) to approve the agenda as submitted.	
II. Minutes		It was M/S/C (T. Norton/S. Huhn) to approve the minutes as submitted.	
III. Medical Issues			
A. STEMI Update Policy 726: 12-LEAD ECGs Policy 705:Cardiac Arrest - Adult	There was a patient transported with pacer to STEMI Center. The paramedic did not realize that patients with a pacer were treated differently than those without pacers. Patients with pacers will give a false positive. Dr. Salvucci stated that he has added the key training portion into the policy.	**Policy 726** IV. D. BH Communication: Change requested. After MICN discretion…add except for 2, 4 and 5. IV.D.7 – change not approved. The receiving practitioner shall sentence – concern raised if the physician does not initial…Dr. Salvucci will look at rewriting sentence. **Policy 705** #6 changed to read: If sustained ROSC perform 12 lead ECG. If ROSC after VF transport to SRC. Column 1, #5, ** suggested removal. 2 minutes CPR needs to be consistent.	Policy 726 approved with changes. Policy 705 will be placed on agenda.
B. Cardiac Arrest Improvement 2009		We are still moving forward on CPR improvement project. It was decided that all EMTs and Paramedics would be tested by August 1 and then reassessed. In September or October we will be sending someone out to test personnel on CPR compliance.	
C. Other		Memo regarding priority dispatch e-	

		mail. This is for information only. Memo distributed.	
IV. New Business			
A. Policy 705: Crush Injury/Syndrome – S. Lara-Jenkins		Hypovolemia deleted under physical. Under actual, remove footnote 4 notations for ped. bolus. Add Bradycardia into footnote 3.	Policy approved with changes.
B. Policy 310: Paramedic Scope of Practice – S. Lara-Jenkins		B.6.u. Typo in inter-facility. B.18 removed.	Policy approved with changes.
C. Other	PSC Chair: Nominating committee will consist of Stephanie Huhn, Jim Hall and Erica Gregson. Election will be held in May and will start in July. Those interested please let one of the member know.		
V Old Business			
A. Policy 1000: Documentation Policy – Abbreviations only – S. Lara-Jenkins		Suggested changes, please forward to Stephanie Lara-Jenkins.	Tabled
B. CARES Project Update – A. Salvucci	No report		
C. ART/BART Report – A. Salvucci	Meeting on March 30th at UCLA to see about moving forward.		
D. Trauma System Update	Trauma plan has not been approved by state. Still working with contractor that is putting the RFP together. Still working on draft policies.		
E. Impedance Threshold Device/King Airway Study – D. Chase		Couple feelers out in order to secure funding. We are running short of time to make decision regarding study.	
F. Other			
VI TAG Report	**ALS** – Looked at 3 years of unusual occurrences and why they were unusual occurrence. Most were medication errors. **BLS** - reviewed training. They are looking at retesting on knowledge base. **EMD** - they are reviewing time from call pick up to first tone to appropriate responder. **Education** – no report.		
VII Policies for Review			
A. Other	None		
VIII. Agency Reports			

A. ALS Providers	**VEN** - LP 12s have been placed in the field with no problems. **VNC** – Dispatch – Dispatchers currently direct callers to administer aspirin in specific cases. On March 25th they will stop making this recommendation. **VNC- Worksheet** – County Fire met with County Counsel regarding the request to add patient identifiers onto the worksheet that County Fire is using as a pre-requisite to an electronic system. County Counsel has approved the addition of patient identifiers and they will be added with the next printing.		
B. BLS Providers	No report		
C. Base Hospitals	SJRMC - MICN Course is almost done. They will sit for the County test later in the month. VCMC - Thanked Erica for hosting the MICN course. MICN candidates will be starting their 10 proctored runs.		
D. Receiving Hospitals	No report.		
E. ALS Education Programs	Interns are currently completing their field internship.		
F. EMS Agency	**Recruitment** is open for the EMS Specialist position on the county website. **Zoll** – Moving right along. Still some who have not submitted password. We ran into a few more issues with the Tablet and the encryption. Shooting for next week to start training. **Appointments** are required for certification and accreditation. We may have to enforce no walk-ins. We try to be accommodating but that may not continue. **Equipment committee**: the concept of this is to be fiscally responsible. We need to make sure we are making reasonable requests. We are coming up with short medium and long term goals. **EMEDS**: We do not know when the system fails. When you see that you are not getting faxes, please contact EMS. **LVAS** – They are discharging these patients home. UCLA is sending patients home with this device. UCLA expects us to train our staff. We have decided not to train for something that you would rarely come in contact with.. If you have a patient, please contact your base hospital for direction.		
G. Other	None		
IX. Informational Topics			
A. Other			
X. Closing	**The meeting was adjourned at 10:50 a.m.**		

Respectfully submitted,
Debora Haney

Prehospital Services Committee 2009

For Attendance, please initial your name for the current month

Agency	LastName	FirstName	1/8/2009	2/12/2009	3/12/2009	4/9/2009	5/14/2009	6/11/2009	7/9/2009	8/13/2009	9/10/2009	10/8/2009	11/12/2009	12/10/2009	%
AMR	Clay	Nick	NC	NC	NC										
AMR	Stevens	Ambrose	RS	AS	AS										
CMH - ER	Canby	Neil		NC	NC										
CMH - ER	Howery	Jennifer													
FFD	Davis	Royce			RD										
FFD	Hall	Jim		JH	JH										
GCA	Norton	Tony	TN	TN	TN										
GCA	Stillwagon	Mike	MS	MS	MS										
Lifeline	Frank	Steve	SF	SF	SF										
Lifeline	Winter	Jeff	JW	JW											
LRRMC - ER	David	Paul	PD	PD	PD										
LRRMC - ER	Tadlock	Lynn	LT	LT											
OFD	Carroll	Scott	SC	SC	SC										
OFD	Huhn	Stephanie	SH	SH	SPH										
OVCH	Boynton	Stephanie	SB	SB	SB										
OVCH	Patterson	Betsy	PBP	BP											
SJPVH	Bumblis	Debbie	DB	DB											
SJRMC	Gregson	Erica			EG										
SJRMC - SJPVH	Handin	Richard	RH	RH	RH										
SPFD	Dowd	Andrew	AD	AD	AD										
SVH - ER	Yu	Alfred		AY	AY										
SVH - ER	Hoffman	Jennifer	JH												
V/College	Mundell	Meredith	MM	MM	MM										
VCFD	Merman	Nancy	NM	NM	NM										
VCFD	Hansen	Jack	JH	JH	JH										
VNC	Hadduck	Katy	KH	KH	KH										
VNC	Pina	Mark		MP	MP										
VNC	Shedlosky	Robin	RS	RS	RS										
VCMC - ER	Chase	David	DC	DC	DC										
VCMC - ER	Utley	Dede	DU	DU	DU										
VCMC-SPH	Daucett	Michelle	MD	MD											

Prehospital Services Committee 2009

For Attendance, please initial your name for the current month

Agency	LastName	FirstName	1/8/2009	2/12/2009	3/12/2009	4/9/2009	5/14/2009	6/11/2009	7/9/2009	8/13/2009	9/10/2009	10/8/2009	11/12/2009	12/10/2009	%
VCMC-SPH	Pelkola	Marie	MP	MP	MP										
VCSO SAR	Hadland	Don	DH		DH										
VCSO SAR	Patterson	Carl		CP	CP										
VFF	Rhoden	Crystal													
VFF	Grap	Edward	EG	EG	EG										
Eligible to Vote	**Date Change/cancelled - not counted against member for attendance**														
Non Voting Members															
EMS	Carroll	Steve	SC	SC	SC										
AMR	Drehsen	Charles	CD	CD											
EMS	Fisher	Barry		BF											
EMS	Haney	Debora	DH	DH											
AMR	Kedrowski	Butch	BK	BK											
VNC	Komins	Mark	MK	MK											
EMS	Lara-Jenkins	Stephanie	SL	SL	SL										
AMR	Norman	Mark	MN	MN											
EMS	Salvucci	Angelo	AS	AS											
LMT	Tibbs	Phillip	PT	PT											
VNC	Plott	Norm	NP	NP	NP										

COUNTY WIDE PROTOCOLS: POLICY NO: 705

CARDIAC ARREST, ADULT

Patient pulseless and apneic or with agonal respirations,
CPR, BLS airway management, Monitor, document rhythm strip, Determine Cardiac Rhythm [1, 2]

PRIOR TO BASE HOSPITAL CONTACT

VFIB/V-TACH[3] (Persistent) WHILE ON SCENE

1. DEFIBRILLATE* ~~- 360 J*~~
2. 5 cycles (2 minutes) CPR[5]
3. IV access during CPR
4. Reassess cardiac rhythm. If VFib/Vtach[3] remain: DEFIBRILLATE - 360 J * & resume CPR.
5. EPINEPHRINE: May repeat q 3-5 min IVP: 1:10,000 1.0 mg If NO IV, give ET: 1:10,000 2.0 mg** IL: 1:1,000 1.0 mg
6. Reassess cardiac rhythm. If VFib/Vtach[3] remain: DEFIBRILLATE ~~- 360 J~~ * & resume CPR.
7. ***Lidocaine IVP: 1.5 mg/kg or ET: 3 mg/kg**
8. Defibrillate ~~- 360 J~~ *
9. ALS airway management.[4]
10. Repeat Epi q 3-5 minutes
11. Defibrillate - 360 J*
12. Repeat Lidocaine 1.5 mg/kg in 3-5 minutes (to total dose of 3 mg/kg)
13. Defibrillate ~~- 360 J~~ *

ASYSTOLE

1. 5 cycles (2 minutes) CPR[5]
2. IV access
~~2~~3. EPINEPHRINE May repeat q 3-5 min IVP: 1:10,000 1.0 mg If NO IV, give ET: 1:10,000 2.0 mg** IL: 1:1,000 1.0 mg
~~3~~4. Reassess Cardiac Rhythm. If any question in rhythm, confirm in 2 leads.
4. If still ASYSTOLE, give ATROPINE: IVP: 1.0 mg IVP ET: 2.0 mg** IL: 1.0 mg (1 mg/ml)
5. 5 cycles (2 minutes) CPR[5]
~~5~~6. ALS Airway management.[4]
~~6~~7. Repeat Epi q 3-5 minutes
~~7~~8. Repeat Atropine q 3-5 minutes to a total dose of 0.04 mg/kg (3 mg in a 75 kg patient)

BRADYCARDIC PEA***

1. 5 cycles (2 minutes) CPR[5]
2. ASSESS/TREAT CAUSE
2. IV access
3. EPINEPHRINE May repeat q 3-5 min IVP: 1:10,000 1.0 mg If no IV, give ET: 1:10,000 2.0 mg** IL: 1:1,000 1.0 mg
4. Reassess cardiac rhythm. If still BRADYCARDIC PEA, give ATROPINE: IVP: 1.0 mg ET: 2.0 mg** IL: 1.0 mg (1 mg/ml)
5. 5 cycles (2 minutes) CPR[5]
~~5~~6. ALS airway management.[4]
~~6~~7. Repeat Epi q 3-5 minutes
~~7~~8. Repeat Atropine q 3-5 minutes to a total dose of 0.04 mg/kg (3 mg in a 75 kg patient)

NON BRADYCARDIC PEA***

1. 5 cycles (2 minutes) CPR[5]
2. ASSESS/TREAT CAUSE: Medical vs. Trauma. Treat Hypovolemia if present
~~2~~3. IF TRAUMA OR HYPOVOLEMIA, STAT TRANSPORT AS SOON AS AIRWAY IS SECURED
~~3~~4. IV access (Wide Open if hypovolemic)
~~4~~5. EPINEPHRINE May repeat q 3-5 min IVP: 1:10,000 1.0 mg If No IV, ET: 1:10,000 2.0 mg** IL: 1:1000 1.0 mg
6. 5 cycles (2 minutes) CPR[5]
~~5~~7. ALS Airway Management.[4]
~~6~~8. Reassess Cardiac Rhythm. If Non-Bradycardic PEA remains, continue treatment of likely cause.

~~7~~9. Repeat Epi q 3-5 minutes

* ~~Or b~~Biphasic waveform defibrillation at energy level approved by service provider medical director, or monophasic waveform at 360J.
** For ET administration, dilute in 5-10 ml NS.
*** If defibrillation → narrow complex rhythm > 50, not in 2nd or 3rd degree block, and Lidocaine not already given, give Lidocaine 1.5 mg/kg IVP or ET 3 mg/kg (if no IV).
****** If collapse before dispatch, 5 cycles CPR before defibrillation.**

LIKELY CAUSES OF PEA

Acidosis	Pulm Embolism	Drug OD
Hyperkalemia	Massive MI	Tricyclics
Tamponade	Digitalis	Beta Blockers
Hypovolemia	Tension Pneumo	Profound Hypothermia
Hypoxemia		Ca Channel Blockers

Base Hospital Contact (if unable, initiate transport and continue efforts to contact)

BASE HOSPITAL ORDERS ONLY

12. Consider Na Bicarb 1 mEq/kg IVP
13. Defibrillate* ~~- 360 J~~
14. Consider $MgSO_4$ 1-2 GM IVP
15. Defibrillate* ~~- 360 J or biphasic waveform defibrillation at energy level approved by service provider medical director.~~

8. Consider Na Bicarb 1 mEq/kg IVP

8. Consider Na Bicarb 1 mEq/kg IVP
~~***PEA: Pulseless Electrical Activity~~

8. Consider Na Bicarb 1 mEq/kg IVP

NOTES:

1. Early BH contact is recommended in unusual situations, e.g., renal failure, Calcium channel blocker OD, tricyclic OD, Beta blocker OD and Torsade. BH to consider:
   - $CaCl_2$ and Bicarb in renal failure,
   - early Bicarb in Tricyclic OD,
   - early $CaCl_2$ in Ca channel blocker OD,
   - Glucagon in beta blocker OD and calcium channel blocker OD, and
   - $MgSO_4$ in Torsade.
   - Dosages
     - Calcium Chloride: 10 ml of 10% solution, may repeat X1 in 10 minutes
     - Glucagon: 1-5 mg IVP as available
     - Magnesium: 2 g slow IVP over 2 minutes
     - Sodium Bicarbonate: 1 mEq/kg followed by 0.5 mEq/kg q 10 minutes
2. In cases of normothermic adult patients with unmonitored cardiac arrest with adequate ventilation, vascular access, and persistent asystole or PEA despite 20 minutes of standard advanced cardiac life support; the base hospital should consider termination of resuscitation in the field. If transported, the patient may be transported Code II. If unable to contact base hospital, resuscitative efforts may be discontinued and patient determined to be dead.
3. V-Tach = Ventricular Tachycardia with rate > 150/min.
4. If unable to adequately ventilate with BLS measures, insert advanced airway earlier.
5. If organized narrow complex rhythm > 50, not in 2nd or 3rd degree block after 2 minutes post-shock CPR, IV access, lidocaine 1.5 mg/kg IVP.
6. If sustained ROSC ~~after VF~~, perform 12-Lead ECG. ~~If STEMI, t~~If ROSC after VF/VT, transport to SRC.

Effective Date: December 1, 2008 Date Revised: October 9, 2008
Next Review Date: December, 2010 Last Reviewed: October 9, 2008

VCEMS Medical Director

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Cardiopulmonary Resuscitation (CPR) by EMS Personnel: Measuring Performance, Reducing Errors and Improving Patient Safety

Angelo A. Salvucci, MD, Christopher F. McNicoll, MA, MPH, Amy H. Kaji, MD, PhD, Marianne Gausche-Hill, MD, James T. Niemann, MD, William J. Koenig, MD, David G. Chase, MD

Ventura County Emergency Medical Services

BACKGROUND

- The likelihood of surviving a sudden cardiac arrest is increased if the victim receives properly performed CPR.
- Historically, however, CPR skills acquisition and retention has not been adequate, resulting in performance errors and patient safety concerns.
- The 2005 American Heart Association (AHA) Guidelines for CPR attempted to address these deficiencies by emphasizing the importance of uninterrupted high quality chest compressions.
- How well EMS personnel meet the 2005 AHA CPR Guidelines is unknown.

OBJECTIVE

- To measure adequacy of chest compression depth (1.5-2 inches), rate (100/min), and recoil (full).
- To evaluate the performance improvement impact of debriefing and real-time visual feedback training in EMS personnel.

VENTURA COUNTY EMS

Population	**813,000**
Cardiac Arrests (Annual)	**930**
EMS Personnel	**975**
EMT-B	**730**
Paramedic	**245**
Fire Departments	**6**
Ambulance Companies	**3**
Hospitals	**8**

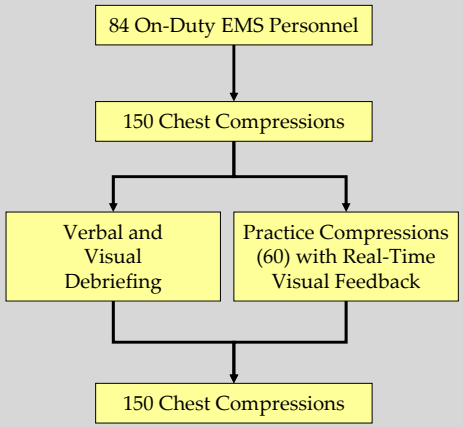
METHODS

Subjects: Eighty-four on-duty EMTs and paramedics performed chest compressions on a SmartMan© adult CPR manikin system from Ambu, Inc.

- Subjects were divided into two groups:
  - 69 subjects viewed their performance on the manikin systems' on-screen display and received guidance for improvement.
  - 15 subjects practiced 60 compressions (2 sets of 30) using the SmartMan© real-time on-screen feedback for each compression.
- A second assessment was done for both groups after the specified intervention.

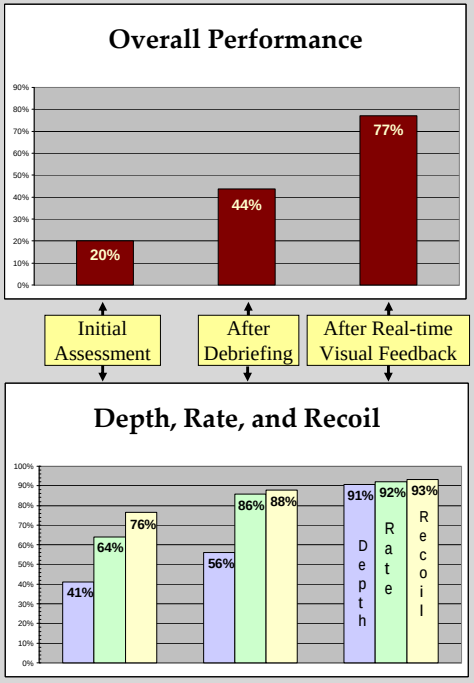
Outcome measures:

- Adequacy of depth, rate, and recoil of chest compressions.
- Performance differences before and after training intervention.
- Comparison of debriefing to real-time visual feedback training.

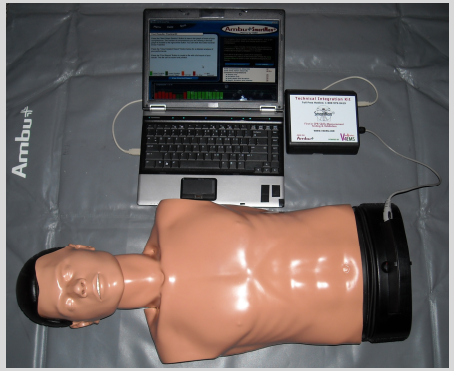


RESULTS

- Each assessment spanned five cycles of 30 chest compressions for a total of 150.
- At baseline, 20.2% (95% CI 14.1-26.3%) of the compressions met the 2005 AHA Guidelines for all three components: depth, rate, and recoil.
- This improved to 43.7% (95% CI 34.8-52.7%, $p < 0.0001$) after post-assessment debriefing.
- There was a greater improvement - to 77.1% (95% CI 68.7-85.4%, $p < 0.0001$) - after real-time visual feedback training.



AMBU SMARTMAN©



CONCLUSIONS

- Despite the 2005 AHA Guidelines emphasizing chest compressions, only a small minority of chest compressions done by this cohort of EMS personnel achieved the correct depth, rate, and release during an initial assessment.
- There is accumulating evidence that deficiencies in CPR skills worsen patient outcomes and negatively impact patient safety.
- Given the importance of correct chest compressions, there should be greater emphasis on improving and maintaining competency.
- A debriefing session significantly improved subsequent performance.
- Real-time visual feedback practice was superior to debriefing in improving performance.

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Prehospital Services Committee Operating Guidelines		Policy Number 105
APPROVED: Administration:	~~Barry R. Fisher, MPPA~~Steve Carroll, Paramedic	Date: ~~12/01/07~~
APPROVED: Medical Director:	Angelo Salvucci, M.D.	Date: ~~12/01/07~~
Origination Date: Date Revised: Review Date:	March, 1999 ~~June 12, 2007~~ June 2009	Effective Date: ~~December 1, 2007~~

I. Committee Name

The name of this committee shall be the Ventura County (VC) Prehospital Services Committee (PSC).

II. Committee Purpose

The purpose of this committee shall be to provide input to the VC Emergency Medical Services (EMS) Medical Director and VC EMS administration on matters pertaining to emergency medical services, including, but not limited to, dispatch, first responders, ambulance services, communications, medical equipment, training, personnel, facilities, and disaster medical response.

III. Membership

A. Voting Membership

Voting membership in the committee shall be composed of 2 representatives, as appointed by the organization administrator, from each of the following organizations:

Type of Organization	Member	Member
Base Hospitals	PCC	PLP
Receiving Hospitals	ED Manager	ED Physician
First Responders	Administrative	Field (provider of "hands-on" care)
Ambulance Companies	Administrative	Field (provider of "hands-on" care)
Emergency Medical Dispatch Agency	Emergency Medical Dispatch Coordinator (1 representative selected by EMD Agency coordinators)	
Air Units	Administrative	Field (provider of "hands-on" care)
Paramedic Training Programs	Director (1 representative from each program.)	

B. Membership Responsibilities

B. Non-voting Membership

Non-voting members of the committee shall be composed of the following

1. VC EMS Medical Director
2. VC EMS Administrator
3. VC EMS ~~Management Assistant~~Administrative Support
4. VC County Counsel, as appropriate
5. ~~Ventura College EMT-P Program Director~~
6. VC EMS CQI Coordinator
7. VC EMS Emergency Medical Services Specialist

C. Membership Responsibilities

Representatives to PSC represent the views of their agency. Representative should ensure that documentation has been discussed/reviewed by their agency prior to the meeting.

~~C~~D. Voting Rights

Designated voting members shall have equal voting rights.

E~~D~~. Attendance

1. Members shall remain as active voting members by attending 75% of the meetings in a (calendar) year. If attendance falls below 75%, the organization administrator will be notified and the member will lose the right to vote.
   (a) Physician members may have a single designated alternate attend in their place, no more than two times per calendar year.
   (b) Agencies may designate one representative to be able to vote for both representatives, no more than two times per calendar year.
2. The member whose attendance falls below 75% may regain voting status by attending two consecutive meetings.
3. If meeting dates are changed or cancelled, members will not be penalized for not attending.

IV. Officers

A. The chairperson of PSC is the only elected member. The chairperson shall perform the duties prescribed by these guidelines and by the parliamentary authority adopted by the PSC.

B. A nominating committee, composed of 3 members, will be appointed at the regularly scheduled March meeting to nominate candidates for PSC Chair. The election will take place in May, with duties to begin at the July meeting.

C. The term of office is one (1) year. A member may serve as Chair for up to three (3) consecutive terms.

V. Meetings

A. Regular Meetings

The PSC will meet on the second Thursday of each month, unless otherwise determined by the PSC membership. VCEMS will prepare and distribute electronic PSC Packet no later that one week prior to a scheduled meeting.

B. Special Meetings

Special meetings may be called by the chairman, VC EMS Medical Director, VC EMS Administrator or Public Health Director. Except in cases of emergency, seven (7) days notice shall be given.

C. Quorum

The presence a simple majority (1/2 of committee membership plus 1) of voting members shall constitute a quorum. The presence of a quorum at the beginning of the meeting shall allow the committee to continue to do business until adjournment, regardless of the number of members who leave during the meeting.

VI. Task Forces and Ad-hoc Committees

The PSC Chair, VC EMS Administrator, VC EMS Medical Director or Public Health Director may appoint task forces or ad-hoc committees to make recommendations to the PSC on particular issues. The person appointing the task force or ad-hoc committee will name the chair. A task force or ad-hoc committee shall be composed of at least three (3) members and no more than seven (7) individuals. Persons other than voting members may be appointed to task forces or ad-hoc committees.

VII. Calendar Year

The Prehospital Services Committee will operate on a calendar year

VIII. Parliamentary Authority

The rules contained in the current edition of Robert's Rules of Order, newly revised, shall govern the organization in all cases to which they are applicable and in which they are not inconsistent with these guidelines, and any special rules of order the PSC may adopt.

IX. Submission of Agenda Items

Agenda items shall be received by the Ventura County EMS Office 14 days before the meeting it is to be presented. Items may be submitted by US mail, fax or e-mail and must include the following information:

A. Subject

B. Reason for request

C. Description/Justification

D. Supporting medical information/other research as applicable

E. List of affected VC EMS policies, if a requested policy change

F. Agenda Category:

1. Operational
2. Medical

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Paramedic Scope Of Practice	Policy Number: 310
APPROVED: Administration: ~~Barry Fisher, EMT-P~~Steven Carroll, Paramedic	Date: ~~06/01/2008~~
APPROVED: Medical Director Angelo Salvucci, MD	Date: ~~06/01/2008~~
Origination Date: May, 1984 Date Revised: ~~January 10, 2008~~ Review Date: January, 2010	Effective Date: ~~June 1, 2008~~

I. PURPOSE: To define the scope of practice of a Paramedic accredited and practicing in Ventura County.

II. AUTHORITY: Health and Safety Code Section 1797.172 and 1797.185. California Code of Regulations, Division 9, Chapter 4, Section 100145.

III. POLICY:

A. A paramedic may perform any activity identified in the Scope of Practice of an EMT-I or EMT-II as defined in regulations governing those certification levels.

B. A paramedic trainee or paramedic accredited in Ventura County, while caring for patients in a hospital as part of their training or continuing education, under the direct supervision of a physician, registered nurse, or physician assistant, or while at the scene of a medical emergency, during transport, or during inter-facility transfer when medical direction is maintained by a physician or an MICN according to the policies and procedures approved by the Ventura County Emergency Medical Services Medical Director, may:

1. Perform pulmonary ventilation by use of oral endotracheal intubation or a Ventura County EMS approved alternative ALS airway management device.
2. Institute intravenous (IV) catheters, saline locks, needles or other cannulae (IV) lines, in peripheral veins.
3. Monitor and access pre-existing peripheral and central vascular access lines.
4. Administer intravenous D_5W and Normal Saline solutions.
5. Obtain venous blood samples.
6. Administer the following drugs:
   a. Activated charcoal
   b. Adenosine
   c. Aspirin
   d. Atropine sulfate

e. Bronchodilators, Nebulized beta-2 specific
f. Calcium chloride
g. Dextrose, 50% and 25%
h. Diazepam
i. Diphenhydramine hydrochloride
j. Dopamine hydrochloride
k. Epinephrine
l. Furosemide
m. Heparin (Interfacility transfers)
n. Glucagon hydrochloride
o. Lidocaine hydrochloride
p. Magnesium sulfate
q. Midazolam
r. Morphine sulfate
s. Naloxone hydrochloride
t. Nitroglycerine preparations, (oral only)
u. Nitroglycerine preparations, IV (Interfacility transfers)
v. Pralidoxime
w. ~~v.~~ Sodium bicarbonate

7. Perform defibrillation.
8. Perform synchronized cardioversion.
9. Perform transcutaneous pacing
10. Perform suction through an approved airway device.
11. Visualize the airway by use of the laryngoscope and remove foreign body(ies) with forceps.
12. Perform valsalva maneuver.
13. Monitor thoracostomy tubes.
14. Monitor and adjust IV solutions containing potassium <= 20 mEq/L.
15. Perform needle thoracostomy.
16. Perform blood glucose level determination.
17. Insertion of intraosseous needle and intraosseous infusion.
18. ~~Perform continuous positive airway pressure ventilation~~

COUNTY WIDE PROTOCOL

POLICY NO: 705
CRUSH INJURY/SYNDROME

HISTORY	PHYSICAL
Large muscle, extremity and/or pelvis crush, >1 hour of entrapment Compromised local circulation from debris or body weight Multi system injuries Inhalation of smoke, dust Immobility	Signs of Shock: ~~Hypovolemia~~ Decreased Capillary Refill Hypotension Cool skin ALOC Diaphoretic Distal pulses could be absent or present Dysrhythmias O2 Sat Capnography (if available)

TREATMENT PRIOR TO BASE HOSPITAL CONTACT

ABCs
O2
IV access
Monitor, document rhythm strips
Advance airway, if indicated
C-spine precaution (per policy 614)
↓
Determine Potential vs. Actual Crush Syndrome

Potential	Actual
↓ IV 500cc NS bolus[4], Peds 20 mL/kg ↓ Release compression Cover patient to maintain body heat Continuous re-assessment ECG Monitor urine color and output ↓	↓ IV 1-2 liters NS bolus[4], Ped. 20 mL/kg[4] Sodium Bicarb. 1mEq/kg, add to first liter of NS[2] ↓ Albuterol 5mg with Neb./Mask, repeat x1 (Ped. 2.5mg <4 y.o.), repeat x 1 ↓ Pain control per policy 705 Pain Control[1] Release compression Continuous re-assessment of ECG Monitor urine color and output ↓

BASE HOSPITAL CONTACT.
If unable, follow COMMUNICATION FAILURE PROTOCOL

Albuterol 5mg with Neb./Mask, repeat x 1 (Ped. 2.5mg <4 y.o.), repeat x 1 ↓	Dysrhythmias[3] Calcium Chloride 1gm [2], slow IVP over 60 sec. Ped. 20mg/kg, Max 500mg ↓ If Shock persists, give 1 liter NS bolus x 1[4] Ped. 2~~3~~0 mL~~cc~~/kg

BASE HOSPITAL ORDERS ONLY
Consider only during ongoing extended entrapment

If signs of CHF or not responding to fluid challenge, initiate Dopamine 400 mg/250 ml D_5W.
Start at 5-10 mcg/kg/min and titrate to effect, max. 20 mcg/kg/min.
Lasix 40-80mg IVP

1. Not recommended in major systems injury.
2. Calcium Chloride and Sodium Bicarb. precipitate when ~~mixed,~~ mixed, stop IV infusion, flush line with NS, administer CaCl, then thoroughly flush the IV line with NS. ~~between administration of these drugs.~~ A second IV line may be started for the purpose of drug administration if feasible.
3. Suspicion of Hyperkalemia- ~~Sx: (~~Peaked T wave, absent P waves, widened QRS complexes, bradycardia)~~.~~
4. If elderly or cardiac consider 250-500cc bolus and reassess for CHF or improvement

Effective Date: ~~June 1, 2008~~
Review Date: ~~June, 2009~~
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VC EMS Medical Director