Public Health Administration
Large Conference Room
2240 E. Gonzales, 2 nd Floor
Ovnard CA 93036

Pre-hospital Services Committee Agenda

December 13, 2012 9:30 a.m.

I.	Intro	ductions	
II.		ove Agenda	
III.	Minu		
IV.		cal Issues	
	Α.	Stroke System	Lindata
	B.	CAM Update	Opuale
	C.	ITD Study	
	D.	Policy 728:	King Airway
	<u>Б.</u>	Other	King Airway
٧.		Business	
٧.	A.	Policy 310:	Paramedic Scope of Practice
	B.	Policy 614:	Spinal Immobilization – for discussion
	<u>С.</u>	Policy 614.	Oral Glucose – Propose deletion
	C.	Other	Oral Glucose – Propose deletion
VI		usiness	
'		Policy 710:	Airway Management
	A. B.		odate – Report from hospitals
	<u>Б.</u>	Other	odate – Report Ironi nospitais
VII.		mational/Discuss	ion Tonics
VII.	A.	Policy 451:	Stroke System Triage
	<u>А.</u> В.		Report to Informational/Discussion Topics
	<u>Б.</u>	Other	report to informational/discussion Topics
VIII.		ies for Review	
VIII.	A.	Policy 100:	Emergency Medical Service, Local Agency (9/13/84)
	B.	Policy 323:	Mobile Intensive Care Nurse: Authorization Challenge
	C.	Policy 351:	EMS Update Procedure
	D.	Policy 402:	Diversion
	<u>Б.</u> Е.	Policy 430:	STEMI Center Receiving Standards
	F.	Policy 502:	Organ Donor Information Search
	G.	Policy 506:	ASV
	<u> </u>	Policy 615:	Organ Donor Information Search
	l.	Policy 619:	Safely Surrendered Babies
	J.	Policy 701:	Medical Control: Base Hospital Medical Director
	K.	Policy 705.16:	Neonatal Resuscitation
		Policy 703.16.	Airway Management
	<u>.</u> М.	Policy 715:	Needle Thoracostomy
ΧI		Report	Troodio Thoracostority
X.		cy Reports	
<u> </u>	A.	ALS Providers	
	B.	BLS Providers	
	C.	Base Hospitals	
	D.	Receiving Hospitals	
	E.	ALS Education	
	F.	EMS Agency	i iogianis
	G.	Other	
XI.	Closi		
ΛI.	CIUSI	ug	



Expires December 13, 2012

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

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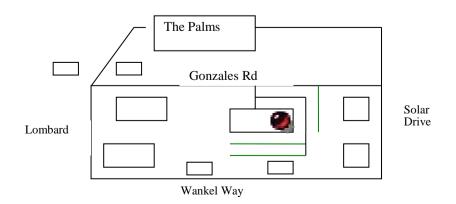
2100 Solar Drive

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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

For Attendan	ce, picase ii	ilitiai youi	manne i	or the	Currer	it illoli	uii								
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	Stefansen	Adriane				,			·			AS			
AMR	Panke	Chad		СР		СР			СР	СР		СР			
CMH - ER	Canby	Neil		NC					NC						
CMH - ER	Cobb	Cheryl		СС		CC				CC		CC			
FFD	Herrera	Bill		ВН								ВН			
FFD	Scott	Bob		BS											
GCA	Norton	Tony		TN		TN			TN	TN		TN			
GCA	Stillwagon	Mike		MS		MS			MS						
Lifeline	Kuroda	Brian		BK		BK			BK	BK		BK			
Lifeline	Winter	Jeff		JW		JW			JW	JW		JW			
LRRMC - ER	Beatty	Matt				MB			MB			PD			
LRRMC - ER	Licht	Debbie		DL		DL			DL			DL			
OFD	Carroll	Scott		SC						NOE		SC			
OFD	Huhn	Stephanie		SPH		SPH			RT	SPH		SPH			
OVCH	Boynton	Stephanie		SB		SB				SB					
OVCH	Patterson	Betsy		BP		BP				BP					
SJPVH	Hernandez	Sandi		SH		SH			SH	SH		SH			
SJPVH	Davies	Jeff													
SJRMC	McShea	Kathy		KM		KM			KM	KM		KM			
SJRMC - SJPVH	Larsen	Todd		TL		TL			TL	TL		TL			
SPFD	Dowd	Andrew				AD			AD			AD			
SVH - ER	Tilles	Ira		IT		IT			IT	IT		ΙΤ			
SVH - ER	Hoffman	Jennie		JH		JH				JH		JH			
V/College	Mundell	Meredith		MM		MM			MM	MM		MM			
VCFD	Merman	Nancy		NM		NM			NM			NM			
VCFD	Tapking	Aaron		AT		AT			AT	AT		AT			
VNC	Plott	Norm		NP		NP			NP	NP		NP			
VNC	Black	Shannon		SB					SB			SB			
VNC	Shedlosky	Robin		RS		RS				RS		RS			
VCMC - ER	Chase	David		DC		DC			DC	DC		DC			
VCMC - ER	Utley	Dede		DU		DU			SS	DU		DU			
VCMC-SPH	Daucett	Michelle				MD			KB			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								CR			
VFF	Jones	Brad													
Eligible to Vot	te Date Chang	e/cancelled	l - not d	counted	again	st mem	ber for	attend	ance						
Non Voting Mem															
EMS	Carroll	Steve		SC		SC			SC	SC		SC			
AMR	Drehsen	Charles		CD		CD			CD	CD		CD			
VCMC	Duncan	Thomas		TD					TD			TD			
EMS	Fisher	Barry								BF					
LMT	Frank	Steve		SF		SF				SF		SF			
EMS	Hadduck	Katy		KH		KH			KH	KH		KH			
EMS	Haney	Debora				DH				DH		DH			
EMS	Lara-Jenkins	Stephanie		SLJ		SLJ			SLJ	SLJ					
EMS	Rosa	Chris		CR		CR			CR	CR		CR			
EMS	Salvucci	Angelo				AS			AS	AS		AS			
SAR	Askew	Chris													
CSUDA	Parker	Pilar													
OFD	Donabedian	Chris													
VNC	Komins	Mark		MK		MK				ML		MK			
AMR	Glass	Gil		GG											
VNC	Gregson	Erica		EG		KD			EG			EG			
AMR	Taigman	Mike				MT			MT	MT					
VCMC-ED	Scott	Susan							SS						
VCMC	Berardi	Veronica							VB						
EMS	Grimes	Nikki							NG						

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Pre-hospital Services Committee Agenda

October 11, 2012 9:30 a.m.

	Topic	Discussion	Action	Assigned
I.	Introductions	AMR – the new representative from the fie		
		LR – Dr. David is representing LRHMC at		
II.	Approve Agenda	Presentation of plaque to Dede Utley		It was M/S/C (N. Merman/M.
		added by EMS		Mundell) to approve the change.
III.	Minutes		Changes to the minutes included:	It was M/S/C (T. Larsen/K.
				McShea) to approve the minutes
			 Page 3 of 6: 	with corrections.
			5 th bullet point. One agency is using	
			Verizon and VCMC has areas that	
			are dead zones for Verizon. This	
			may cause an issue with the 30	
			minute posting requirement.	
			 OSHA fined VNC for a heat 	
			related injury	
			 Station 43 and 47 will have 	
			paramedics.	
Other		Presentation by EMS thanking Dede Utley	for her service as PSC Chair.	
IV.	Medical Issues			
	A. Policy 705.14:	Discussion regarding:	Add as a bullet point: Maintain	Policy approved with changes.
	Hypovolemic		resuscitation SBP of > 80 mmHg. If	
	Shock	 Patient position, Trendelenberg, 	SBP > 80 mmHg, then maintain IV	
		supine vs. shock	at TKO rate	
		 Maintain patient body temperature 	 Add as a reminder: Maintain patient 	
		 Trauma treatment guidelines – 	body temperature	
		abdominal pelvic trauma systolic BP	 Hypovolemic/septic shock – clarify 	
		TKO of 80 reduce to TKO. Add into	that criteria is same in both	
		this policy	instances. Add septic shock.	
	B. ITD	The State approved trial for ITD is	Final results of the study will be	Study completed.
		completed.	reported to the State by December.	

Topic	Discussion	Action	Assigned
	 Don't know what the conclusion is. State EMSA determined that this is part of the EMT basic scope of practice No need for permission to continue for use Has not been proven definitive that it improves outcomes EMS has no recommendation on whether it is used. This is an optional equipment item. Use during CAM study there was discussion on whether this can be used during trial. 	 Documents regarding the study will be forwarded to the committee for review. Will not be used during the CAM study. If still using in April/May would like to look at end tidal co2 and outcome data to see if we are improving the trends during the CA case. Purchasing information can be received from Norm Plott. 	
C. Ondansetron	 Potential dangers were discussed for prolonged use and Torsade. The problem is with IV dose. The report was reviewed. The problem does not apply to the dose we are using it for. FDA approval is only for chemo therapy and after surgery use. Problem is with the use of 32 mg single dose. 	This does not apply to the format that is being utilized by the field providers. Will continue with use.	Item complete, no changes required.
D. Other	 705 Cardiac Arrest protocol - CA VTach was discussed in relation to: Defibrillation and medication. Dr. Chase will forward requested language change to Dr. Salvucci CAM pilot criteria. Who is going to compile the data. 	If after 2nd shock VF/VT persists administer Amiodarone.	Policy will be changed for update. Will be e-mailed to the group for final approval
V. New Business	,		
A. Policy 450: Acute Stroke Center Standards	Hospital Administrators except for one are all on board with December 1 go live. OVCH may not be	We will continue to work with hospitals that have applied. Not sure it is reasonable to change the	Approved with changes

Topic	Discussion	Action	Assigned
	participating. EMS will meet later this week to discuss. • A request was made to change tge provisional approval time from three months to 6 months. This will allow time for the approving bodies to complete the evaluations and issue approval. Joint commission is the sticking point. Tentative visit is January or February for several hospitals.	 policy at this point. Need a formal request from the facilities. We have e-mails but need official notification from administration. Change 45 to a 30 day written request, need ASAP. Approved with change to 3a2 3a2 and 3c1- first time primary stroke center PSC. Clarify PSC and ASC in policy 	
B. Policy 451: Stroke System Triage	 Page 3/2 within normal limits, do we need to define this term. Change to 60 or greater. Discussion regarding changing the EMD time from 3 hours. There will be no change. EMD should match whatever we decide on for the policy/protocol match treatment policy. 4.5 will allow transfer to a stroke center. Some protocol code 2 and then the responders are told to hurry. Code to call and then transfer to a stroke center. Concern is with administration of TPA. 4a1 normal vs abnormal. Identification of one CSS change to abnormal finding. Speech – mute or expressive aphasia. 	It was M/S/C (R. Shedlosky/D. Licht) to approve the policy with changes Change WNL for TKO to > than 60. Amend time on 2 to 4.5 hours. Onset of new symptoms. Last seen normal will be added 4.5 hours ago. Speech section change. BG > 60 EMD discussion will be completed off line. Patient request to alternate facility may be granted with base station approval. Combine time frame into the sentence. Change 15 minutes to 20 minutes.	Approved with changes

Topic	Discussion	Action	Assigned
C. Policy 705.26: Suspected Stroke		 Duplicate changes from above stroke policy. Delete the pediatric section. Cincinnati stroke scale is additional information. Place bar above. Ensure that all 705 policy reference to 705.03. 3 hours to 4.5 changed It was M/S/C (S. Black/T. Larsen) to approve the policy with changes. 	Approved with changes
D. Policy 705.03 Altered Neurologic Function		Add title of referral policy in BLS section 705,26. BH contact for pediatric patient. Move IO to BH order It was M/S/C (T. Larson/K.McShea) to approve the policy with changes.	Approved with changes
E. Policy 627: Fireline Medic – C. Rosa	Defibrillation with waveform is now a requirement and needs to be added. Now a 2 person team	 Changes to policy include: Amiodarone typo (ck spelling). D5W bag add Dextrose preload typo Add: to EPI Digital Thermometer is required - add Atropine 1 mg x 2 units— add into policy It was M/S/C (N. Plott/C. Panke) to approve the policy with changes. 	Approved with changes
E. Policy 705.23: Supraventricular Tachycardia	Pediatric information added into the policy.	Midazolam removed for pediatric patients. IO for unstable adult only	Approved

Topic	Discussion	Action	Assigned
	Pediatric IM for Midazolam. Current policy only IM for pediatric. This policy uses IV. No IV Midazolam under age 12.		
F. Policy 710: Airway Management – C. Rosa	QA/QI forms deleted. During CPR de-emphasize listening for breath sounds with an intubated patient.	 Page 4b2: ResQPod made as optional equipment,. Word change regarding breath sounds will be submitted by DC to AS. Page 7 or 8 strike after ePCR in first paragraph. Only intubate patient if BLS airway cannot be maintained. This will be a teaching point for Update. Level II exam needs to have this as part of the test. Last page, scanning could be an issue at a station. 	Tabled for documentation. This will be addressed with the formation of a subcommittee to discuss the numerous changes/concerns noted. ePCR changes are already being completed.
G. Policy 726: 12- Lead ECG – C. Rosa		Patients with pace makers with symptoms should be brought to SRC. This will be discussed at the next STEMI meeting. It was M/S/C (T. Larson/K. McShea) to approve the policy as submitted	Approved as submitted.
H. Shoreline Ambulance Provider Application	Concern expressed over the monopoly for ambualcne providers in our county. Our ordinance allows for a transport out of county can be any provider. This only protects intra county transports. Can use any provider.	Ambulance providers excused from the meeting. Dede Utley is sitting in on this item as committee as Chair. Documents distributed to committee members.	

		Topic	Discussion	Action	Assigned
			EMS can look into this issue. Please forward information to EMS.	Process for a non emergency license application explained by SC.	
				EMS Advisory Committee met and denied their application.	
				Motion by SH/second by EMS recommendation for denial and the EMA motion that PSC recommends denial fo application. No documentation evident of a need for and add AS would jeopardize the viability of our current providers. Norm Plott. Seconded.	
				Approve motion 21 Opposed 0	
	1	Other		Оррозси о	
VI	Old Bu				
•••	A.	Sepsis Alert	This will be utilized to alert the hospitals that they will have a patient	 Policy 705 sepsis alert policy. Goal is to recognize a septic patient and give fluids. If BLS ambulance, crew can alert hospital of possible septic patient. No upgrade required. Employer will complete training. It was M/S/C (C. Panke/M. Mundell) to approve the policy as submitted. 	Approved as submitted.
	B.	Policy 500: VCEMS Provider Agencies – C. Rosa		 LMT address update SPFD address updated FFD moved to ALS section Cal State CI will be formalized into the system shortly and will become 	Approved with changes

	Topic	Discussion	Action	Assigned
			a formal member of PSC.	
D.	Policy 717: Intraosseous Infusion – C. Rosa	Changed to delete QA/QI forms.	 pink removed, leve armband last pate of policy medication administered should be documented in the appropriate manner 	
			It was M/S/C (S. Black/M. Mundell) to approve the policy as submitted.	
E.	Other			
VII. Infor Topics	mational/Discussion			
A.	SJPVH Women's Unit Closure – S. Hernandez	St. John's Hospital is consolidating their on longer be performing elective deliveries. Questioned whether this was a requirement and if required will need to look at it on whether the state of the s	s. ent of a receiving hospital. EMS review	
B.	Policy 1400: Trauma Care System - General Provisions –K. Hadduck	. This policy was approved by TORC and is informational item.	·	Approved
C.	Policy 1401: Trauma Center Designation – Deleted - K. Hadduck	As this is an administrative policy it cannot been changed to 3 years.	t be deleted. The policy review date has	Policy is not being deleted.
D.	Policy 1404: Guidelines for IFT of Patient to Trauma Center – K. Hadduck	QI form change for tracking length of stay Policy was approved by the trauma comm as an informational item.	Approved	
E.	Spinal Immobilization	one had a cord injury. Data was reviewed at TORC and it was d the policy. Study is completed at this time.	ed. There were 3 that fell out and of the 3 ecided that there was no need to change	
F.	ePCR Upload Report to	At the August PSC meeting data was pres	sented regarding the time fram for upload	Add to EMS Update with

Topic	Discussion	Action	Assigned
Informational/Discussion Topics	from devices for critical patients. It was d improved. In August the time frame for up hours. Sept 1 through the 30th dropped to 4 hou continue Discussion included:	ecided that time frames needed to be load from the device to servicer was 6+	expectations.
	 Transfer up and download is difficult t Focus on the upload time to the serve The data is for all critical calls. Policy requires upload in 30 minutes to average. Average upload is 2-3 ho 	er. for critical patients Need to look at mean	
	 Still having hardware and software iss Deliver patient to hospital, complete r Need to look at reason for delay. Issues identified 	sues.	
	 System overload Device/software issues Pm have tendency to sit on a call Physicians have stopped going into the record is not entered. 		
	patients.	gularly logging into the system and eed to upload the record from previous Verizon network. Verizon is planning on	
	 an upgrade in the next year. System failure, make sure they transf completed. ER report that comes into the hospital 	er immediately to get documentation I dashboard is not connected to the other	
	 agency reports. In order for a call to be seen on hospi Every time the call is posted, it update 		

	Topic	Discussion	Action	Assigned
	-	EMS is looking at first post and screen		
		 EMS will run a report for arrived destire 	nation as the start point.	
		 Physicians are most interested in the 	transport call unless fire rides in and	
		retains care.		
		 Vitals and treatment automatically por 	•	
		 Minimum data for a critical patient is the 		
		 If training on subset, get mixed bag. I repetition. 	It is the whole report or nothing. Need	
		Upload call whether it is complete or r	not.	
		It was decided that we will look at:		
		 Look at calls for night vs. day to see if 	f difference in the upload times.	
		 Continue to monitor with clearly define 		
		Fire requested that whatever time we	decide on, let them know for training.	
		 Will split the reports between fire and 	ambulance reports.	
	F. Other			
	Policies for Review			
	A. Other			
	Reports			
	TAG Report	There was no meeting this morning. Katy Representative for TAG. There will be a r		
X.	Agency Reports	·		
	A. ALS Providers	GCA –		
		Dispatch center is being merged with		
		current dispatchers. Phone numbers		
		 Received delivery of new ambulances 		
		days.		
		 New hires by both GCA and AMR. 		
		 CAM training went great. Thanks to Clast week. Providers are checking earnements of the emphasized in training to go back to provide the companion of the companion		
		VEN –		
		 For the month of October staff are we 	aring pink shirts for BCA	
			dring print drinte for Dort.	
		 Don McPherson is new fire chief. 		

Topic	Discussion	Action	Assigned
	Academy completing in November		
	VCFD		
	Oct 28 - 32 nd there will be changes to		
	Some changing to BLS and other cha		
	Thanked everyone for ResQPod study	y participants.	
	LMT also sporting pink shirts for BC aware	eness month	
B. BLS Providers	SPA – saver grant approved. 5 full time F		
D. BEST TOTAGES	OFD		
	• 5 new FF graduates on October 26.		
	Nov 26 - 15 new FF trainees starting in the starting in t	n an academy. These positions are	
	covered by Saver grant. Staffing up for		
		. Kept on track for compressions. Small	
	metronome is not loud enough.	·	
	OFD selling shirts for BCA.		
C. Base Hospitals	SVH – LR/SVH is offering 4 hours of FCA		
	Thousand Oaks.		
	LR –		
	UCLA pediatric residents in ER this m	onth.	
	Continuing to do sidewalk CPR.		
	VCMC – Dede Utley announced that she	has been named to the Trauma	
	Coordinator position recently vacated by (
	for PCC position to be posted.	Stadi Bavio. Troop by boat on the Webbito	
	Total Co position to go position.		
	Sarah Melgoza has been promoted to ER	Director/ICU at SJPVH. Sandi	
	Hernandez is new replacement.		
D. Receiving Hospitals	PV – no report		
·	CMH – construction continuing. If access		
E. ALS Education	Half way through class. New this year, Po		
Programs	class to existing PM and nurses and it has	s been fun and positive.	
	Meredith announced that she will be retiring	ng in December. Job not posted yet.	

Topic	Discussion	Assigned	
	Anyone interested keep eye out.		
F. EMS Agency	Hosp – radios – There is more functionalit packet will be completed and distributed. and EMS. DTMF keypads from ambulance hospital contact from rigs will be via phone		
	ReddiNet satellite project has been appro- installation is ongoing.		
	500,000 grant received by County which very type of event. Next week meeting for the		
	Julie Frey will be starting with EMS shortly project for homeland security multi discipli modify plans as well as exercises.		
G. Other	Journal of Trauma article written by Dr. W		
	ACS journal – Holmes – fast enough articl article has won 3 rd place. Unusual for a F		
XI. Closing	Adjourned at 1:00 pm		

Respectfully submitted

Debora Haney

COUNTY OF VENTU	RA	EMERGENC	Y ME	DICAL SERVICES
HEALTH CARE AGE	NCY	POLICIE	ES AN	D PROCEDURES
	Policy Title: King Airway		P	olicy Number: 728
APPROVED: Administration:	Barry Fisher, MPPASteven L. C	arroll, EMT-P	Date:	August 14, 2008
APPROVED: Medical Director:	Angelo Salvucci, M.D.		Date:	August 14, 2008
Origination Date: Date Revised: Date Last Reviewed: Next Review Date:	April 10, 2008 August 14, 2008 August, 2010	Effective Date	:	August 14, 2008

- I. Purpose: To define the indications and use of the King Airway in the pre-hospital setting by paramedic personnel.
- II. Authority: Health and Safety Code 1797.220 and 1798; California Code of Regulations, Title 22, Division 9, Section 100175.
- III. Policy: Paramedic personnel may use the King Airway in accordance with Policy705 as an option for ALS Airway Management.

IV. Procedure:

- A. Indications: Patients who require assisted ventilation, and meet criteria for an advanced airway as listed in VC EMS Policy 710, and an ETI cannot be inserted. May be used as a primary airway or after one or more unsuccessful ETI attempts.
- B. The following contraindications shall be observed:
 - 1. Its use will be restricted only to unconscious patients without a gag reflex.
 - 2. It is not to be used on patients under four (4) feet tall.
 - It is not to be used on suspected cases of esophageal diseases or of ingestion of caustic substances.

C. Placement

- 1, Select appropriately sized King Airway:
 - a. Size 3 Patient between 4 and 5 feet tall (55 ml air)
 - b. Size 4 Patient between 5 and 6 feet tall (70 ml air)
 - Size 5 Patient over 6 feet tall (80 ml air)
- 2. Check King Airway cuffs to ensure patency. Deflate tube cuffs. Leave syringe attached. Lubricate the tip of the tube.
- 3. Oxygenate with 100% oxygen.
- 4. Position the head. The ideal position is the "sniffing position". A neutral position can also be used if trauma is suspected.

Policy 728: King Airway Page 2 of 4

- 5. Without exerting excessive force, advance tube until base of connector is aligned with teeth or gums.
- 6. Inflate cuffs with the minimum volume necessary to seal the airway at the peak ventilatory pressure employed. based on size according to Section 1 above. Typical inflation volumes are as follows: Size #3: 45-60 ml, Size #4: 60-80 ml, Size #5: 70-90 ml
- 6.7. Attach bag-valve to King Airway. While gently bagging the patient to assess ventilation, withdraw the airway until ventilation is easy and free flowing.
- 8. Attach bag valve device and verify placement by **ALL** of the following:
 - a. Rise and fall of the chest
 - b. Bilateral breath sounds
 - c. Absent epigastric sounds
 - d. CO2 measurement (colorimetric capnography)
- If there is any question about the proper placement of the King Airway, deflate the cuffs and remove device, ventilate the patient with BVM for 30 seconds and repeat.
- 10. Secure the tube with tape or commercial tube holder. Note depth marking on tube.
- 11. Continue to monitor the patient for proper tube placement throughout prehospital treatment and transport.

D. Troubleshooting:

- If placement is unsuccessful, remove tube, ventilate via BVM and repeat sequence of steps.
- If unsuccessful on second attempt, BLS airway management should be resumed.
- Most unsuccessful placements relate to failure to keep tube in midline during placement.

E. Additional Information:

- Cuffs can be lacerated by broken teeth or dentures. Remove dentures before placing tube.
- Do not force tube, as airway trauma may occur.

F. Documentation:

Policy 728: King Airway Page 3 of 4

 Document time of placement and results of tube placement checks performed throughout the resuscitation and transport.

Policy 728: King Airway Page 4 of 4

Ventura County Emergency Medical Services



King Airway Documentation Form

Pt Age: Gender: Height:	Date:	Paramed	ic:				Agency
Type: Medical Arrest Traumatic Arrest Submersion Arrest (Circle One) Respiratory Arrest Other:	FI #		Pt Age	:		Gender	: Height:
Criteria 1. # of ETI attempts? (Circle One) 0 1 2 2. # of King Airway attempts? (Circle One) 1 2 3. King Airway Successful? 4. Physical Exam Confirms Successful Placement? 4a. Chest Rise? 4b. Lung Sounds Present? 4c. Abdominal Sounds Absent? 4d. Colorimetric CO2 Detector Used? 4d. Colorimetric CO2 Detector Used? 4e. Capnography Used? 5. Complications? (i.e. Unable to Ventilate, Inadequate Seal, Failed Placement, Ruptured Balloon, Etc.) Cother Yes No Other O	King Airway Size:	(Circle One)		3	4	5	
Criteria 1. # of ETI attempts? (Circle One) 0 1 2 2. # of King Airway attempts? (Circle One) 1 2 3. King Airway Successful? 4. Physical Exam Confirms Successful Placement? 4a. Chest Rise? 4b. Lung Sounds Present? 4c. Abdominal Sounds Absent? 4d. Colorimetric CO2 Detector Used? 4e. Capnography Used? 5. Complications? (i.e. Unable to Ventilate, Inadequate Seal, Failed Placement, Ruptured Balloon, Etc.)	Туре:	Medical Arr	est	Tra	umatic A	rrest	Submersion Arrest
1. # of ETI attempts? (Circle One) 0 1 2 2. # of King Airway attempts? (Circle One) 1 2 3. King Airway Successful? 4. Physical Exam Confirms Successful Placement? 4a. Chest Rise? 4b. Lung Sounds Present? 4c. Abdominal Sounds Absent? 4d. Colorimetric CO2 Detector Used? 4d. Colorimetric CO2 Detector Used? 4e. Capnography Used? 5. Complications? (i.e. Unable to Ventilate, Inadequate Seal, Failed Placement, Ruptured Balloon, Etc.) Describe Complications:	(Circle One)	Respiratory	Arrest	Oth	er:		
1. # of ETI attempts? (Circle One) 0 1 2 2. # of King Airway attempts? (Circle One) 1 2 3. King Airway Successful? 4. Physical Exam Confirms Successful Placement? 4a. Chest Rise? 4b. Lung Sounds Present? 4c. Abdominal Sounds Absent? 4d. Colorimetric CO2 Detector Used? 4d. Colorimetric CO2 Detector Used? 4e. Capnography Used? 5. Complications? (i.e. Unable to Ventilate, Inadequate Seal, Failed Placement, Ruptured Balloon, Etc.) Describe Complications:		Criteria			Yes	No	Other
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4. Physical Exam Confirms Successful Placement? 4a. Chest Rise? 4b. Lung Sounds Present? 4c. Abdominal Sounds Absent? 4d. Colorimetric CO2 Detector Used? 4e. Capnography Used? 5. Complications? (i.e. Unable to Ventilate, Inadequate Seal, Failed Placement, Ruptured Balloon, Etc.) Circle One) Purple Gray Tan Yellow Reading Describe Complications:	2. # of King Airway att	tempts? (Circle (One) 1	2			
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4c. Abdominal Sounds Absent? 4d. Colorimetric CO2 Detector Used? 4e. Capnography Used? 5. Complications? (i.e. Unable to Ventilate, Inadequate Seal, Failed Placement, Ruptured Balloon, Etc.) (Circle One) Purple Gray Tan Yellow Reading Describe Complications:	4a. Chest Rise?						
4d. Colorimetric CO2 Detector Used? 4e. Capnography Used? 5. Complications? (i.e. Unable to Ventilate, Inadequate Seal, Failed Placement, Ruptured Balloon, Etc.) (Circle One) Purple Gray Tan Yellow Reading Describe Complications:	4b. Lung Sounds	Present?					
4d. Colorimetric CO2 Detector Used? 4e. Capnography Used? 5. Complications? (i.e. Unable to Ventilate, Inadequate Seal, Failed Placement, Ruptured Balloon, Etc.) Purple Gray Tan Yellow Reading Describe Complications:	4c. Abdominal Sc	ounds Absent?					
5. Complications? (i.e. Unable to Ventilate, Inadequate Seal, Failed Placement, Ruptured Balloon, Etc.) Describe Complications:	4d. Colorimetric CO2 Detector Used?						
(i.e. Unable to Ventilate, Inadequate Seal, Failed Placement, Ruptured Balloon, Etc.)	4e. Capnography Used?						Reading
6. Patient Transported? Hospital	(i.e. Unable to Ventilate, Inadequate Seal, Failed Placement, Ruptured					Describe Complications:	
	6. Patient Transported	d?					Hospital
7. Patient Outcome? ☐ Resuscitated ☐ Expired ☐ Unknown	7. Patient Outcome?						
For VC EMS use only:	For VC EMS use only	:					

COUNTY OF VENTU HEALTH CARE AGE				EDICAL SERVICES ND PROCEDURES
	Policy Title:		Р	olicy Number:
	Paramedic Scope of Practice			310
APPROVED:			Date:	December 1, 2010
Administration:	Steven L. Carroll, EMT-P		Date.	2000m201 1, 2010
APPROVED:			Date:	December 1, 2010
Medical Director:	Angelo Salvucci, M.D.		Date.	2000111001 1, 2010
Origination Date:	May, 1984			
Date Revised:	October 14, 2010	Effecti	ve Date:	December 1,
Date Last Reviewed:	October 14, 2010			2010 Draft
Review Date:	October 31, 2013			

- 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 or EMT Advanced 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:
 - 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 D₅W and Normal Saline solutions.
 - 5. Obtain venous blood samples.
 - 6. Administer the following drugs:
 - a. Activated charcoal
 - b. Adenosine
 - c. Amiodarone
 - ed. Aspirin

- de. Atropine sulfate
- ef. Bronchodilators, Nebulized beta-2 specific
- fg. Calcium chloride
- gh. Dextrose, 50% and 25%
- <u>hi</u>. Diazepam
- ij. Diphenhydramine hydrochloride
- ik. Dopamine hydrochloride
- kl. Epinephrine
- lm. Furosemide
- mn. Heparin (Interfacility transfers)
- no. Glucagon hydrochloride
- ep. Lidocaine hydrochloride
- pg. Magnesium sulfate
- gr. Midazolam
- **FS**. Morphine sulfate
- st. Naloxone hydrochloride
- <u>tu</u>. Nitroglycerine preparations, (oral only)
- <u>⊌v</u>. Nitroglycerine preparations, IV (Interfacility transfers)
- ₩. Ondansetron
- wx. Pralidoxime
- xy. Sodium bicarbonate
- 7. Perform defibrillation.
- 8. Perform synchronized cardioversion.
- 9. Perform transcutaneous pacing
- 10. Visualize the airway by use of the laryngoscope and remove foreign body(ies) with forceps.
- 11. Perform Valsalva maneuver.
- 12. Monitor thoracostomy tubes.
- 13. Monitor and adjust IV solutions containing potassium <= 20 mEg/L.
- 14. Perform needle thoracostomy.
- 15. Perform blood glucose level determination.
- 16. Insertion of intraosseous needle and intraosseous infusion.

COUNTY OF VENTU	RA	EMERG	ENCY I	MEDICAL SERVICES
HEALTH CARE AGE	NCY	PO	LICIES	AND PROCEDURES
	Policy Title			Policy Number
	Spinal Immobilization			614
APPROVED:			Doto	Docombor 11, 2009
Administrator:	Steven L. Carroll, EMT-P		Date:	December 11, 2008
APPROVED:			5 ,	D 1 11 0000
Medical Director:	Angelo Salvucci, M.D.		Date:	December 11, 2008
Origination Date:	October 1992			
Date Revised:	December 11, 2008	Effective Date		Docombor 11 2009
Date Last Reviewed:	,	Effective Date	 .	December 11, 2008
Review Date:	December 31, 2011			

- I. PURPOSE: To define the use of spinal immobilization by field personnel in Ventura County.
- II. AUTHORITY: Health and Safety Code, Sections 1797.214, 1797.220, 1798, and 1798.200, CCR
 Division 9, Chapter 4, Sections 100175, 100179
- II. POLICY: Field personnel in Ventura County may apply spinal immobilization devices under the following circumstances.
- III. PROCEDURE: Patients who meet any of the criteria listed in Section A will be carefully evaluated according to criteria in Section B. Spinal immobilization will only be done on patients who meet the criteria of *both* Section A *and* Section B.
- A. Patients who meet at least one of the following criteria will require further evaluation as listed in Section B to determine whether spinal immobilization is required. Patients who do *not* meet any of these criteria do *not* require spinal immobilization:
 - Any patient with head or neck trauma who complains of neck or back pain, or weakness, numbness or radiating pain in a trauma setting.
 - Any patient with altered level of consciousness, neurological deficit, or alcohol
 or drug intoxication to the extent that appreciation of pain is altered, or
 suffering from severe distracting painful injuries for whom the mechanism of
 injury is unknown or suspicious for spinal injury.
 - B. Spinal immobilization will be done on patients who meet criteria listed in Section A above if they have at least one of the following:
 - 1. Neck or spinal pain,
 - Spinal tenderness,
 - 3. A painful distracting injury (e.g., long bone fracture),
 - 4. Neurological deficit, OR
 - Inability to communicate effectively.

The awake, alert patient, not under the influence of alcohol or drugs to the extent that appreciation of pain is altered, with whom you can communicate effectively, who

denies spine pain or tenderness, is neurologically intact, does not have a distracting injury, does NOT require spinal immobilization.

- C. Cervical immobilization is not necessary in the awake, alert patient, not under the influence of alcohol or drugs to the extent that appreciation of pain is altered, with whom you can communicate effectively who complains of isolated lumbar pain or tenderness but denies cervical pain or tenderness and does not have weakness or numbness in a trauma setting. Long board immobilization without cervical immobilization is adequate for this type of patient.
- D. In patients with penetrating torso or neck injury and unstable vital signs, transportation must be expedited. For potential spinal injury, the patient should be placed on a backboard. The head should be taped if a cervical spine injury is suspected.
- VI. Special Procedure for Care of Potentially Spine-Injured Football Athlete
 - A. The facemask should always be removed prior to transportation, regardless of current respiratory status.
 - Tools for facemask removal include screwdriver, FM Extractor, Anvil Pruners, or ratcheting PVC pipe cutter should be readily accessible.
 - 2. All loop straps of the facemask should be cut and the facemask removed from the helmet, rather than being retracted.
 - B. The helmet should not be removed during the prehospital care of the football athlete with a potential spinal injury, unless:
 - 1. After a reasonable period of time, the face mask cannot be removed to gain access to the airway,
 - 2. The design of the helmet and chin strap is such that even after removal of the face mask, the airway cannot be controlled or ventilation provided,
 - 3. The helmet and chin straps do not hold the head securely such that immobilization of the helmet does not also immobilize the head, or
 - 4. The helmet prevents immobilization for transport in an appropriate position.
 - C. If the helmet must be removed, spinal immobilization must be maintained while removing.
 - In most circumstances, it may be helpful to remove cheek padding and/or deflate the air padding prior to helmet removal.
 - 2. If the helmet is removed, the shoulder pads must be removed at the same time.
 - D. If needed, the front of the shoulder pads can be opened to allow access for CPR and defibrillation. They should only be removed if the helmet is removed at the same time.

COUNTY OF VENTU	RA	EMERG	ENCY MEDICAL SERVICES		
HEALTH CARE AGE	NCY	PO	LICIES AND PROCEDURES		
	Policy Title:		Policy Number		
EMT	Administration of Oral Glucose		620		
APPROVED:			Data: December 1 2009		
Administration:	Barry R. Fisher, MPPA		Date: December 1, 2008		
APPROVED:			Date: December 1, 2008		
Medical Director:	Angelo Salvucci, M.D.		Date: December 1, 2008		
Origination Date:	November 18, 1982				
Date Revised:	March 9, 2006	Effoc	tive Date: December 1, 2008		
Date Last Reviewed:	October 9, 2008	Ellec	Ective Date. December 1, 2000		
Next Review Date:	October, 2011				

- I. PURPOSE: To define the indications and use of oral glucose by EMTs.
- II. AUTHORITY: Health and Safety Code 1798, 1797.220. California Code of Regulations, Title 22, Section 100063.

III. POLICY:

- A. Oral glucose is to be used <u>only</u> if the patient meets the following criteria:
 - 1. The patient has a history of diabetes controlled by medication
 - 2. Shows signs or symptoms of altered mental status.
 - 3. The patient is conscious, able to swallow and protect their airway (intact gag reflex).

IV. PROCEDURE:

- A. The following instructions should be followed:
 - 1. Check the expiration date of the oral glucose
 - 2. Monitor patient's airway closely during administration
 - 3. Administer the entire tube in small increments
 - Squeeze small portions of the oral glucose into the mouth between the cheek and gum or
 - Place small portions f the oral glucose on a tongue depressor and deposit the medication between the cheek and gum
 - Lightly massage the cheek to increase absorption; the medication should not be swallowed.
 - 5. If the patient loses consciousness or seizes, stop administration, consider suctioning.

- 6. Reassess the patient for improvement in mental status
- 7. Document the patient's assessment, the time and amount of medication administered and patient's reassessment.

COUNTY OF VENTU	RA	EMERG	ENCY M	MEDICAL SERVICES
HEALTH CARE AGE	HEALTH CARE AGENCY			AND PROCEDURES
	Policy Title:			Policy Number
	Airway Management			710
APPROVED:			Doto	December 1, 2012
Administration:	Steven L. Carroll, EMT-P		Date:	December 1, 2012
APPROVED:			Doto	Doomhor 1 2012
Medical Director:	Angelo Salvucci, M.D.		Date:	December 1, 2012
Origination Date:	June 1986			
Date Revised:	October 11, 2012	Effoo	tivo Dot	e: December 1, 2012
Date Last Reviewed:	October 11, 2012	Ellec	live Dat	e. December 1, 2012
Review Date:	October 31, 2014			

- 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
 - Impedance Threshold Device (ITD, ResQPOD) CARDIAC ARREST ONLY
 - a. MUST UTILIZE 2-RESCUER VENTILATION TECHNIQUE
 - 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.
- 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

- Cardiac arrest according to VCEMS Policy 705 ONLY if unable to adequately ventilate with BVM.
- Respiratory arrest or severe respiratory compromise AND unable to maintain an adequate airway and adequately ventilate with BVM.
- 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% O₂ 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. [OPTIONAL] 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 10th compression
- 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.
 - 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.
 - I) 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
 - 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 CO₂ 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 CO₂ 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 CO₂ 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.
 - 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 CO₂ 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 CO₂ measurement device:
 - 1) If a colorimetric CO₂ 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 CO₂ and tan 2-5% CO₂. Yellow or tan indicates tube placement in the trachea. Purple indicates less than 2% CO₂ and in the patient with spontaneous circulation is a strong indicator of esophageal intubation.
 - 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 CO₂ of 25 or higher is not seen, that is a strong indicator of esophageal intubation.
- g. Using information from auscultation and CO₂ measurement, determine the ETT position.
 - If breath sounds are equal, there are no sounds at the epigastrium, and the CO₂ measurement device indicates tracheal placement, secure the ETT using an ETT holder.
 - 2) If auscultation or the CO₂ 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)
 - If breath sounds are present but unequal, the ETT position may be adjusted as needed.
- h. Once ETT position has been confirmed, reassessment, using CO₂ measurement, pulse oximetry (if able to obtain), and auscultation of breath sounds should be performed each time patient is moved.
- Continue to monitor the CO₂ measurement device during treatment and transportation. If a change occurs from positive (yellow/tan) to negative (purple), or the waveform diminishes or disappears, reassess the patient for possible accidental extubation or change in circulation status.
- 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.
 - 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 thepurpose 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 Ventura County Electronic Patient Care Report (VCePCR).
- b. 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. 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.
- 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) ETCO2, initial value
 - 8) Support of the head or immobilization of the cervical spine.
- d. An electronic upload of Cardiac Monitor data, including ETCO2 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 VENTU	IRA	EMERGE	NCY MEDICAL SERVICES
HEALTH CARE AGE	NCY	POLI	CIES AND PROCEDURES
	Policy Title:		Policy Number
Stro	ke System Triage and Destination		451
APPROVED:			Data: Dagambar 1 2012
Administration:	Steven L. Carroll, EMT-P		Date: December 1, 2012
APPROVED:			Data: Dacambar 1, 2012
Medical Director:	Angelo Salvucci, M.D.		Date: December 1, 2012
Origination Date:	October 11, 2012		
Date Revised:		Effective	e Date: December 1, 2012
Date Last Reviewed:			
Review Date:	October 31, 2013		

- 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. Identification of any abnormal finding of the Cincinnati Stroke Scale (CSS).

Facial Droop

Normal: Both sides of face move equally

Abnormal: One side of face does not move normally

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 normal within the last 4.5 hours.

- 3. Blood Glucose is greater than sixty (60) 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:
 - 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).
 - The nearest ASC is incapable of accepting a stroke alert patient due to CT diversion. In the event of CT diversion, the patient shall be transported to the next closest ASC.
 - 3. The patient requests transport to an alternate facility, not extending transport by more than twenty (20) minutes, and approved by the Base Hospital.

D. Documentation

 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.

COUNTY OF VENTU	JRA	EMERGENO	CY MEDICAL SERVICES
HEALTH CARE AGE	NCY	POLICI	ES AND PROCEDURES
	Policy Title:		Policy Number
Loca	I Emergency Medical Services Agency		100
APPROVED:			Doto: June 1 2010
Administration:	Steven L. Carroll, EMT-P		Date: June 1, 2010
APPROVED:			Doto: June 1 2010
Medical Director:	Angelo Salvucci, M.D.		Date: June 1, 2010
Origination Date:	July 1, 1980		
Date Revised:	October, 2003	Effortivo [Date: December 1, 2003
Last Reviewed:	November 12, 2009	Ellective r	Date. December 1, 2003
Review Date:	January, 2013		

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

COUNTY OF VENTU	JRA	EMERGENO	CY MEDICAL SERVICES
HEALTH CARE AGE	NCY	POLICI	ES AND PROCEDURES
	Policy Title:		Policy Number
Mobile Inte	ensive Care Nurse Authorization Challeng	ge	323
APPROVED:			Date: 06/01/2008
Administration:	Steven L. Carroll, EMT-P		24.0. 00/01/2000
APPROVED:			Date: 06/01/2008
Medical Director:	Angelo Salvucci, M.D.		2010. 00/01/2000
Origination Date:	April 1983		
Date Revised:	November 8, 2007	Fffe	ective Date: June 1, 2008
Last Reviewed: Review Date:	June 11, 2009 November 30, 2012	2.110	carre Date: carre 1, 2000

- I. PURPOSE: To define the procedure by which a Registered Nurse who is currently authorized as a Mobile Intensive Care Nurse (MICN) in another California County or state may challenge for Ventura County authorization.
- II AUTHORITY: Health and Safety Code 1797.56, 1797.213 and 1798.
- III. POLICY: Authorization as an MICN requires professional experience and appropriate training so that appropriate medical direction can be given to Emergency Medical Technician Paramedic's (EMT-P) at the scene of an emergency.
- IV. PROCEDURE:
 - A. VC EMS shall be notified by the Base Hospital of an MICN wishing to challenge Ventura County MICN Authorization procedures. The employer shall submit the following to Ventura County EMS prior to starting challenge procedure:
 - 1. Evidence of the candidate's current out-of-county authorization as an MICN
 - 2. Application (Appendix B)
 - 3. Record of Continuing Education from the previous authorizing agency, and
 - 4. BH recommendation (Appendix A)
 - B. A currently certified MICN in another California county shall meet the following requirements for Ventura County authorization:
 - 1. Professional experience

The candidate shall hold a valid California Registered Nurse license and shall have a minimum of 1040 hours (equivalent to six months' full-time employment) critical care experience as a Registered Nurse. Critical care areas include, but are not limited to, Intensive Care Unit, Coronary Care Unit, and the Emergency Department.

2. Prehospital care exposure

The candidate shall be employed in a Ventura County Base Hospital Emergency Department for a minimum of 520 hours (equivalent to three (3) months full time employment) within the previous six calendar months, and have one or more of the following assignments:

- a. Be assigned to clinical duties in an Emergency Department responsible for directing prehospital care. (It is strongly recommended that this requirement be in addition to and not con current with the candidate's six- (6) months' critical care experience. Base Hospital may recommend an MICN candidate whose critical care and/or Emergency Department experience are concurrent based on policies and procedures developed by the Base Hospital), or
- b. Have responsibility for management, coordination, or training for prehospital care personnel, or
- c. Be employed as a staff member of Ventura County Emergency Medical Services.
- d. The internship requirement shall be completed within six (6) months of the initiation of the challenge process.

3. Field observation

Candidates shall ride with an approved Ventura County EMT-P unit for a minimum of eight (8) hours. A completed Field Observation Form shall be submitted to the VC EMS as verification of completion of the field observation requirement (See Appendix C).

4. Internship

The candidate shall satisfactorily direct ten (I0) base hospital runs under the supervision of a Mobile Intensive Care Nurse, the Paramedic Care Coordinator, and/or an Emergency Department physician.

- a. The Radio Communication Performance Evaluation Form shall be completed for each response handled by the candidate during the internship phase. (Appendix D.)
- Upon successful completion of at least ten (I0) responses, the responses shall be evaluated by the Emergency Department Director or Paramedic Liaison Physician, the Emergency Department Nursing Supervisor, and the Paramedic Care Coordinator. All Radio

Communication Performance Evaluation Forms (Appendix D) and Verification of Internship Completion Form (Appendix E) shall be submitted to Ventura County EMS.

- 5. Employer recommendation
 - a. Mobile Intensive Care Nurse candidates shall have the recommendation of the Emergency Department Medical Director or Paramedic Liaison Physician, Paramedic Care Coordinator and Emergency Department Nurse Supervisor.
 - b. Candidates employed by Ventura County Emergency Medical
 Services shall be recommended by the Emergency Medical Services
 Medical Director.
- 6. All recommendations shall be submitted in writing to Ventura County Emergency Medical Services
- 7. Examination Process
 - Written Procedure: Candidates shall successfully complete a comprehensive written examination approved by VCEMS.
 - a. The examination's overall minimum passing score shall be 80%.
 - Employers shall be notified within two (2) weeks of the examination if their candidates passed or failed the examination.
 - c. Candidate will have only one opportunity to pass the examination
- C. After receipt and review of all challenge documents for satisfactory compliance with Ventura County requirements, authorization shall be granted.
- D. The expiration date of the authorization card shall be the same date of the out-of-county authorization card.

Policy 323 Appendix A

LETTER OF RECOMMENDATION AUTHORIZATION CHALLENGE

is recommended for Mobile	Intensive Care Nurse
Authorization in Ventura County.	
We have reviewed the attached Mobile Intensive Care Nurse Application and	verify that the applicant:
Holds a valid California Registered Nurse License. Is currently authorized as an MICN in another California County or States.	State in the United
Has at least 1040 hours of critical care experience.	
Has completed the Field Observation Requirement.	
Has been employed by in the Emerger least 520 hours gaining prehospital care exposure.	ncy Department for at
Emergency Department Med Paramedic Liaison Physician	
Emergency Department Nurs	sing Supervisor
Prehospital Care Coordinato	<u> </u>
Date:	

Policy 323 Appendix B

AUTHORIZATION APPLICATION, OUT OF COUNTY CHALLENGE

Attacl			

- 1. Facsimile of California RN License
- 2. Facsimile of ACLS Certification
- 3. Field Observation Verification
- 4. Letter of Recommendation
- 5. Facsimile of out of county MICN Authorization
- 6. Documentation of completion of Internship
- 7. Record of Continuing Education during current authorization period from currently authorizing county.

	MICN Candidate Signature	
	Prehospital Care Coordinator	
Date:	_	

POLICY 323 APPENDIX C

FIELD OBSERVATION REPORT

MICN NAME:			AL	JTH. NO.:		
EMPLOYER:			RIDE-ALONG	DATE: _		
TIME IN:	TIME OUT:		_ TOTAL HOUR	RS:		
BASE CONTACT M	MADE WITH ALS PROCED	URES PERFO	DRMED:YES:	#	NO	
SUMMARY OF FIEL	D OBSERVATION		ALS I	PROVIDE	R:	
EMT-P Signature	_	EMT-F	^o Signature			
MICN Signature		PCC S	Signature			
(Use other side for a	dditional comments)					

POLICY 323 APPENDIX D

RADIO COMMUNICATION PERFORMANCE EVALUATION FORM

Candidate's	Name:		MICN Exam Date:	Bas	se Hospital:	
MICN Evaluator: Please evaluate this MICN candidate for the following, to include but not be limited to: Proper operation of radio equipment; recommended radio protocols used; correct priorities set; additional info requested as needed; appropriate, complete, specific orders given; able to explain rationale for orders, notification of other agencies involved; and ability to perform alone or with assistance.						
Date	Incident # (and Pt # of Total as	Chief Complaint	Treatment	Evaluator's Comm	nents Evaluator's Signature	PCC's Comments

Date	Incident # (and Pt # of Total as needed)	Chief Complaint	Treatment	Evaluator's Comments	Evaluator's Signature	PCC's Comments
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

Policy 323 Appendix E

VERIFICATION OF INTERNSHIP COMPLETION

		, employed at, is/is
not recommended for Authorization as a Mob	ile Intensive (Care Nurse. S/He has achieved the following
rating in the following categories:		, and the second
Category	Rating	Comments
Understands and operates equipment		
properly		
Sets correct priorities		
Requests additional information as needed		
Orders are specific, complete and		
appropriate		
Understands treatment rationale		
NOTE: In order to qualify for recommendation, a can	didate must r	eceive at least a rating of 3 in each category.
Ratings are as follows: 1. Poor	4. Good	
2. Fair	5. Excelle	ant
3. Average	J. LACCIN	THE STATE OF THE S
o. Average		
ATTACH RADIO COMMUNICATION PERFO	DRMANCE EV	ALUATION FORM
Signatures:		Director/Paramedic Liaison Physician
	Prenospital (Care Coordinator

COUNTY OF VENT	URA	EMERGENCY MED	ICAL SERVICES
HEALTH CARE AGE	ENCY	POLICIES AND	PROCEDURES
	Policy Title:	Po	olicy Number
	EMS Update Procedure		351
APPROVED:		Date:	12/01/09
Administration:	Steven L. Carroll, EMT-P	Date.	12/01/09
APPROVED:		Date:	12/01/09
Medical Director:	Angelo Salvucci, M.D.	Date.	12/01/09
Origination Date:	February 9, 2005		
Date Revised:	September 10, 2009	Effective Date: D	December 1, 2009
Last Reviewed:	September 10, 2009	Effective Date. L	December 1, 2009
Review Date:	September 30, 2012		

- I PURPOSE: To establish a standard for the method, design, approval, and delivery of information to EMS personnel on new and amended policies as well as general EMS information.
- II AUTHORITY: Ventura County Emergency Medical Services Agency (VC EMS Agency).
- III POLICY: VC EMS Agency will develop a method by which all EMS providers will be notified of changes or amendments in County EMS policies as well as general EMS information.

V PROCEDURE:

- A. EMS Update will be presented in May and November of each year.
 - Dates, times and locations for EMS Update will be determined by the base hospital PCCs and submitted to VC EMS Agency and providers no later than 30 days prior to the presentation of the first EMS Update.
 - 2. Each base station shall offer a minimum of three EMS Updates in May and in November.
- B. EMS Update will consist of the following:
 - All new and revised policies approved by the Prehospital Services
 Committee since the last EMS Update.
 - 2. Pertinent "information" items discussed at PSC not included in policy updates.
 - 3. Information submitted to the PCCs by the VC EMS Agency
- C. EMS Update training materials will be designed by the EMS Update Design Team.

- Dates and times of the EMS Update design meetings will be determined on an "as needed" basis by the EMS Update Design Team.
- Membership of the EMS Design Team will include all PCC's, a representative from the EMS Agency, and a BLS and ALS representative.
- 3. The training package will include the following materials:
 - a. Power Point Presentation
 - b. Instructional objectives
 - c. Course outline
 - d. Lesson plan
 - e. Method of evaluation (written and/or skills competency based valuation tool).
 - f. Make up exam.
- 4. The review, editing, and final approval of the EMS Update will be done by the VC EMS Staff.
- D. Copies of the final EMS Update will be delivered via email by the VC EMS Agency to the EMS Update training providers prior to the first presentation.
- E. BLS provider Agencies will receive a copy by e-mail to adapt materials for EMT-1 providers.
- F. Changes to EMS Update following approval of final draft.
 - Errors or omissions discovered following release of the final draft by VC EMS will be reported to VC EMS Agency CQI Coordinator who will be responsible for notifying all EMS training providers of the corrected information.
- G. EMS Update Make-Up Session will be held two weeks after the last Update presentation. The Make-Up Session will be held on a date, time and location established by VC EMS Agency.
 - 1. The Power Point training package will used by VC EMS Agency
 - 2. A written post-test, developed by the EMS Update Design Team, will be administered by the VC EMS Agency.
 - 3. A minimum passing score of 85% must be achieved for successful course completion.
 - 4. VC EMS Agency staff will present the Make-Up Session.
- H. Course completion records will include the following:
 - 1. Student course evaluation to be retained by training organization.

- A copy of the continuing education roster shall be submitted to the VC
 EMS Agency immediately after the completion of each course offered.
- 3. Documentation of successful course completion for participants.

COUNTY OF VENTURA EM			MERGENCY MEDICAL SERVICES		
HEALTH CARE AG	ENCY	POLIC	IES AND PROCEDURES		
	Policy Title		Policy Number:		
Patient Dive	rsion/Emergency Depart	ment Closures	402		
APPROVED:			Date: October 1, 2003		
Administration:	Steven L. Carroll, EMT-P		Date: October 1, 2000		
APPROVED:			Date: October 1, 2003		
Medical Director:	Angelo Salvucci, M.D.		Date: October 1, 2000		
Origination Date:	January 1990				
Revised Date:	March 2003	Effective Date	e: November 1, 2003		
Date Last Reviewed:	December 11, 2008	Encouve But	5. 146 VOITIBET 1, 2000		
Review Date:	November 30, 2012				

- I. PURPOSE: To define the procedures by which Emergency Medical Services (EMS) providers and/or Base Hospitals (BH) may:
 - A. Transport emergency patients to the most accessible medical facility that is staffed, equipped, and prepared to administer emergency care appropriate to the needs of the patient.
 - B. Provide a mechanism for a hospital in the Ventura County (VC) EMS system to have patients diverted away from its emergency department when it has been determined that the hospital is not staffed, equipped, and/or prepared to care for additional or specific types of patients.
 - C. Assure that Advanced Life Support (ALS) units are not unreasonably removed from their area of primary response when transporting patients to a medical facility.
- II. AUTHORITY: California Administrative Code, Title 13, Section 1105(c): "In the absence of decisive factors to the contrary, ambulance drivers shall transport emergency patients to the most accessible medical facility equipped, staffed, and prepared to receive emergency cases and administer emergency care appropriate to the needs of the patient".
- III. POLICY: Hospitals may divert patients according to the conditions described below. This policy shall not negate prearranged interhospital triage and transport agreements approved by VC EMS Basic Life Support (BLS) patients will be transported to the nearest unless it is closed by internal disaster.

IV. DEFINITIONS:

- A. ALS Patient: A patient who meets the criteria for base hospital contact.
- B. BLS Patient: A patient whose illness or injury requires BLS care or a patient in a BLS unit, irrespective of the level of care required for the patient's illness or injury.

V. PROCEDURE

A. DIVERSION REQUEST CATEGORIES

A hospital may request that ambulances be diverted for the following reasons using the following terminology:

1. Internal Disaster

Hospital's emergency department cannot receive any patients because of a physical plant breakdown (e.g. fire, bomb threat, power outage, safety issues in the ED, etc.).

NOTE: Activation of a hospital's internal plan to handle diversions (see Section IV.D) does NOT constitute an internal disaster.

2. Emergency Department Saturation

The hospital's emergency department resources are fully committed to critically and/or seriously ill patients and are not available for additional ALS patients.

3. Lack of Neurosurgical coverage

Hospital is unable to provide appropriate care due to unavailability of a neurosurgeon, and is therefore not an ideal destination for patients likely to require these services.

4. Intensive Care Unit (ICU) / Critical Care Unit (CCU) Saturation Hospital's ICUs do not have any available licensed beds to care for additional patients, and is therefore not an ideal destination for patients likely to require these services.

5. CT Scanner Inoperative

Hospital's CT scanner is not functioning and therefore not the ideal destination for patients with blunt or penetrating head or truncal trauma.

B. PATIENT DESTINATION

- 1. Internal Disaster
 - a. A hospital on diversion due to internal disaster shall not receive patients.
 - Base hospitals shall not direct ALS units to transport patients to any medical facility that has requested diversion of ALS patients due to an internal disaster.
- 2. Diversion requests will be honored provided that:
 - a. The involved ALS unit estimates that it can reach an "open" facility without compromising the patient's condition by extending the Code 3 en route time from the incident location for hospitals on diversion due to:
 - 1) ICU/CCU saturation,
 - 2) Emergency Department saturation, or

- 3) Neuro/CT scanner limitations for appropriately selected patients.
- b. The patient does not exhibit an uncontrollable problem in the field. An "Uncontrollable Problem" is defined as:
 - 1) Unstable vital signs
 - 2) Cardiac Arrest
 - 3) Severe Respiratory Distress
 - 4) Unstable Airway
 - 5) Profound Shock
 - 6) Status Epilepticus
 - 7) OB patient with imminent delivery
 - 8) Life threatening arrythmia
 - Any Patient that the paramedic on scene or the BH MD feels would likely deteriorate due to diversion.
- 3. Destination while adjacent hospitals are on diversion
 - If adjacent hospitals within an area grouping are on diversion for the same diversion category, patients cannot be diverted for that reason, and the patient will be transported to the closest medical facility.
 - Guidelines for potential diversion destination when a hospital is on diversion based on patient location and estimated transport times are as follows:

Hospital Groupings/Areas

- Area 1 (Ojai): Ojai Valley Community Hospital, Community
 Memorial Hospital, Ventura County Medical Center, Santa Paula
 Memorial Hospital
- Area 2 (Santa Paula/Fillmore): Santa Paula Memorial Hospital,
 Ventura County Medical Center, Community Memorial Hospital,
 Ojai Valley Community Hospital
- Area 3 (Simi Valley): Simi Valley Hospital, Los Robles Regional Medical Center, St. Johns Pleasant Valley Hospital
- Area 4 (Thousand Oaks): Los Robles Regional Medical Center,
 Simi Valley Hospital, St. Johns Pleasant Valley Hospital
- Area 5 (Camarillo): St. Johns Pleasant Valley Hospital, St. Johns Regional Medical Center, Los Robles Regional Medical Center,

- Simi Valley Hospital, Ventura County Medical Center, Community Memorial Hospital
- Area 6 (Oxnard): St. Johns Regional Medical Center, Ventura
 County Medical Center, Community Memorial Hospital, St. Johns
 Pleasant Valley Hospital
- Area 7 (Ventura): Ventura County Medical Center, Community Memorial Hospital, St. Johns Regional Medical Center, Ojai Valley Community Hospital, Santa Paula Memorial Hospital.

As needed, an MICN may divert a patient to a hospital outside of Ventura County.

BLS ambulances shall notify receiving hospitals of their impending arrival.

4. Notwithstanding any other provisions of this policy, and in accordance with VCEMS Policy 604, Patient Transport and Destination, final authority for patient destination rests with the Base Hospital.

C. PROCEDURE FOR REQUESTING DIVERSION OF ALS PATIENTS

- The hospital administrator or his/her designee must authorize the need for diversion.
- 2. To initiate, update or cancel a diversion, the Administrator or his/her designee shall make the status change via the ReddiNet system.
 - Hospitals on diversion status shall immediately update their status via the ReddiNet system.
 - Problems with policy and procedure related to diversion notification will be directed to VC EMS during normal business hours or the on-call VC EMS administrator after normal business hours
 - c. Problems arising during a diversion, requiring immediate action should be directed to VC EMS during normal business hours or the on-call VC EMS administrator after normal business hours.
- 3. VC EMS staff will perform unannounced site visits to hospitals on diversion status to ensure compliance with these guidelines.
- D. Hospitals shall develop internal policies and procedures for authorizing diversion of patients in accordance with this policy. These policies shall include internal activation of

backup procedures. These policies and procedures shall be approved according to the hospital policy approval procedure and shall be available to the EMS staff for review.

COUNTY OF VENT	URA	EMERGENC'	Y MEDICAL SERVICES
HEALTH CARE AG	ENCY	POLICIE	S AND PROCEDURES
	Policy Title:		Policy Number
STE	MI Receiving Center (SRC) St	tandards	430
APPROVED:			Date: 12/01/07
Administration:	Steven L. Carroll, EMT-P		Date. 12/01/07
APPROVED:			Date: 12/0107
Medical Director:	Angelo Salvucci, M.D.		Date. 12/0107
Origination Date:	July 28, 2006		
Date Revised:	June 14, 2007	Effective Date:	Docombor 1, 2007
Last Review:	June 11, 2009	Ellective Date.	December 1, 2007
Review Date:	June, 2011		

- I. PURPOSE: To define the criteria for designation as a STEMI Receiving Center in Ventura County.
- II. AUTHORITY: Health and Safety Code, Division 2.5, Sections 1798, 1798.101, 1798.105, 1798.2 and California Code of Regulations, Title 22, Section 100175.

III. POLICY:

- A. A STEMI Receiving Center (SRC), approved and designated by Ventura County EMS shall meet the following requirements:
 - 1. All the requirements of a Receiving Hospital in VCEMS Policy 420.
 - Designate a SRC Coordinator who will have the responsibility for communication with VC EMS.
 - Operate a cardiac catheterization lab licensed by the Department of Health Services and approved for emergency percutaneous coronary interventions.
 - 4. Maintain a daily roster of on-call cardiologists with privileges in percutaneous coronary interventions.
 - 5. Have criteria for patients to receive emergent angiography or emergent fibrinolysis, based on physician decisions for individual patients.
 - 6. Collect and submit data
 - b. as identified by the STEMI QI Committee
 - 8. Maintain a hospital Quality Improvement Program.
 - Actively participate in the Ventura County EMS STEMI Quality
 Improvement Program.
 - 10. Will accept all ambulance-transported patients with ***ACUTE MI SUSPECTED*** except on internal disaster or no cardiac catheterization lab is available, regardless of ICU/CCU or ED saturation status.

11. Have policies and procedures that allow the automatic acceptance of any STEMI patient from a Ventura County Hospital upon notification by the transferring physician

B. Designation

1. Application:

Eligible hospitals shall submit a written request for SRC approval to the VC EMS, documenting the compliance of the hospital with Ventura County SRC Standards.

2. Approval:

SRC approval or denial shall be made in writing by VCEMS to the requesting Hospital within two weeks after receipt of the request for approval and all required documentation.

- VC EMS may deny, suspend, or revoke the approval of a SRC 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 VCEMS Medical Director may grant an exception to a portion of this policy upon substantiation of need by the PSC that compliance with the regulation would not be in the best interests of the persons served within the affected area.
- 5. SRCs shall be reviewed on an annual basis.
 - SRCs shall receive notification of evaluation from the VCEMS.
 - b. SRCs shall respond in writing regarding program compliance.
 - On-site SRC visits for evaluative purposes may occur.
 - d. SRCs shall notify VCEMS by telephone, followed by a letter or email within 48 hours, of changes in program compliance or performance.

COUNTY OF VENTURA EMERGENCY MEDICAL SERVICES

STEMI RECEIVING CENTER CRITERIA COMPLIANCE CHECKLIST

SRC	Date:
-----	-------

		YES	NO
An S	RC, approved and designated by the Ventura County, shall:		
1.	Operate a cardiac catheterization lab licensed by the Department of Health Services and approved for emergency percutaneous coronary interventions.		
2.	Maintain a daily roster of on-call cardiologists with privileges in percutaneous coronary interventions.		
3.	Have criteria for patients to receive emergent angiography or emergent fibrinolysis, based on physician decisions for individual patients.		
4.	Collect and submit data as required by VC EMS.		
5.	Maintain a quality improvement program		
6.	Designate a SRC Coordinator		
7.	Actively participate in the Ventura County EMS STEMI Quality Improvement Program.		
8.	Have policies and procedures that allow the automatic acceptance of all STEMI patients transferred from Ventura County hospitals.		

			ICY MEDICAL SERVICES		
HEALTH CARE AGENCY POI			LICIES AND PROCEDURES		
Policy Title: Advanced Life Support Service Provider Approval Process			Policy Number 502		
APPROVED: Administration:	Steven L. Carroll, EMT-P	Da	ate: 06/01/2008		
APPROVED: Medical Director:	Angelo Salvucci, M.D.	Da	ate: 06/01/2008		
Origination Date: Date Revised: Date Last Reviewed: Review Date:	May 1984 January 10, 2008 November 12, 2009 January, 2013	Effective I	Date: June 1, 2008		

- I. PURPOSE: To define criteria by which an agency may be designated as an Advanced Life Support (ALS) Service Provider (SP) in Ventura County.
- II. POLICY: An agency wishing to become an ALS SP in Ventura County must meet Ventura County ALS SP Criteria and agree to comply with Ventura County regulations. An initial six-month review of all ALS activity will take place and subsequent program review will occur per Ventura County Emergency Medical Services (VC EMS) policies and procedures.

III. PROCEDURE:

A. Request for ALS SP Program Approval

The agency shall submit a written request for ALS SP approval to Ventura County Emergency Medical Services (VC EMS), documenting the compliance of the company/agency with the Ventura County EMS Policy 501 or 508.

B. Program Approval or Disapproval:

Program approval or disapproval shall be made in writing by VC EMS to the agency requesting ALS SP designation within a reasonable period of time after receipt of the request for approval and all required documentation. This time period shall not exceed three (3) months.

VC EMS shall establish the effective date of program approval upon the satisfactory documentation of compliance with all the program requirements. All contracts or memorandum of understanding must be approved by the County Board of Supervisors prior to implementation.

C. Initial Program Evaluation

Review of all ALS activity for the initial 6 months of operation as an Advanced Life Support Ambulance Provider shall be done in accordance with VC EMS policies and procedures.

- D. Program Review
 - Program review will take place at least every two years according to policies and procedures established by VC EMS.
- E. ALS SP Program Changes
 An approved ALS Service Provider shall notify VC EMS by telephone, followed by letter within 48 hours, of program or performance level changes.
- F. Withdrawal, Suspension or Revocation of Program Approval

 Non-compliance with any criterion associated with program approval, use of nonlicensed or accredited personnel, or non-compliance with any other Ventura

 County regulation or policy applicable to an ALS SP may result in withdrawal,
 suspension or revocation of program approval by VC EMS.
- G. Appeal of Withdrawal, Suspension or Revocation of Program Approval
 An ALS SP whose program approval has been withdrawn, suspended, or
 revoked may appeal that decision in accordance with the process outlined in the
 Ventura County Ordinance Code,

ADVANCED LIFE SUPPORT SERVICE PROVIDER APPROVAL PROCESS CRITERIA COMPLIANCE STATEMENT

APPLICANT:		DA	IE:		
The above named agency agrees to observe the following criteria as a condition of approval as an Advanced Life Support Provider in the Ventura County EMS system.					
	YE	S NO			
1. Provide ALS service on a continuous 24-hour per day basis.					
2. Provide appropriate transportation for ALS patients.					
3. Provide for electronic communication between the EMT-Ps at	nd				
the BH, complying with VC Communications Department					
requirements.	10				
4. Provide and maintain ALS drugs, solutions and supplies per \	/C				
EMS policies and procedures.5. Assure that all personnel meet certification/accreditation and	lor				
training standards in VCEMS policies.	1 01				
6. Cooperate with data collection, QA and CQI programs.					
7. Provide BLS service when ALS in not indicated.					
8. Charge for ALS services only when rendered.					
9. Submit patient care and other documentation per VC EMS					
policies and procedures.					
10. Comply with all VC EMS policies and procedures.					
If any statements are checked as "NO", supply information stating the rationale for each "NO" answer. The information will be considered, but submission does not assure approval of the program.					
Signature:					
Title:					
Date:					

COUNTY OF VENTU	JRA	EMERGENO	CY MED	ICAL SERVICES
HEALTH CARE AGE	NCY	POLICIES AND PROCEDURES		
	Policy Title:		Po	olicy Number
Advanc	ed Life Support (ALS) Support Vehicles			506
APPROVED:			Date:	06/01/2008
Administration:	Steven L. Carroll, EMT-P		Date.	00/01/2008
APPROVED:			Date:	06/01/2008
Medical Director:	Angelo Salvucci, M.D.		Date.	00/01/2008
Origination Date:	October 1995			
Revised Date:	November 8, 2007	Γ#-	-4i: D-:	to. l 1 0000
Last Reviewed:	August 13, 2009	Епе	ctive Da	te: June 1, 2008
Review Date:	November 30, 2012			

- I. PURPOSE: To provide an additional ALS option to a County approved service provider by allowing a single paramedic to provide ALS services without a second paramedic or an EMT-ALS Assist in attendance.
- II. POLICY: At those times when an ALS Support Vehicle (ASV) is either the closest ALS unit to an emergency, for a multi-patient incident, or when a BLS ambulance is being dispatched to a potential ALS call, the paramedic who is operating an ALS Support Vehicle may respond and begin ALS care, and may continue to function as a paramedic during patient transport.

III. PROCEDURE:

- A. Dispatch of an ALS Support Vehicle is recommended in the following circumstances:
 - 1. The ASV is the closest unit to a call.
 - 2. A BLS ambulance is responding to a call that may require ALS services, and the ASV can make a response which will not delay in trauma, and will not delay inappropriately in other patient conditions, patient transportation to the nearest appropriate medical facility. All delays in transport shall be documented and reviewed by the BH MD or PCC.
 - 3. During a multi patient incidents
- B. Personnel Requirements

An ASV will be staffed by a paramedic who has been designated as a Level II paramedic in Ventura County.

- C. Equipment Requirements
 - An ASV will carry supplies and equipment according to Policy 504.
- D. Documentation
 - ASV care shall be documented per Policy 1000.

COUNTY OF VENTU	RA	EMERGENO	EMERGENCY MEDICAL SERVICES		
HEALTH CARE AGE	NCY	POLICI	POLICIES AND PROCEDURES		
	Policy Title:		Policy Number		
(Organ Donor Information Search		615		
APPROVED:			Doto: 06/04/2009		
Administration:	Steven L. Carroll, EMT-P		Date: 06/01/2008		
APPROVED:			Doto: 06/04/2009		
Medical Director:	Angelo Salvucci, M.D.		Date: 06/01/2008		
Origination Date:	October 1, 1993				
Date Revised:	March 11, 2004	Effec	ctive Date: June 1, 2004		
Date Last Reviewed:	November 12, 2009				
Review Date:	January, 2013				

- I. PURPOSE: To establish guidelines for Emergency Medical Services (EMS) field personnel to meet requirements that they search for organ donor information on adult patients for whom death appears to be imminent.
- II. AUTHORITY: Health and Safety Code Section 7152.5(b)
- III. POLICY: EMS field personnel shall make a brief reasonable search to determine the presence or absence of an organ donor card on adult patients for whom death appears to be imminent. This brief search shall not interfere with patient care, and must be done in the presence of a witness, preferably a public safety officer, unless extenuating circumstances make having a witness clearly infeasible.

IV. DEFINITIONS:

- A. "Reasonable Search": A brief attempt by EMS field personnel to locate documentation that may identify a patient as a potential organ donor, or one who has refused to make an anatomical gift. This search shall be limited to a wallet, purse or other personal belongings on or near the individual likely to contain a driver's license or other identification card with this information. A REASONABLE SEARCH SHALL NOT TAKE PRECEDENCE OVER PATIENT CARE/TREATMENT.
- B. "Imminent Death": A condition wherein illness or injuries are of such severity that in the opinion of EMS field personnel, death is likely to occur before the patient arrives at a hospital. For purposes of this policy, this definition does not include any conscious patient regardless of the severity of illness or injury.
- C. "Receiving Hospital": The hospital to which the patient is being transported.

IV. PROCEDURE:

- A. When EMS field personnel encounter an unconscious adult patient for whom it appears that death is imminent (that is, death prior to arrival at a hospital), they shall attempt a "reasonable search" as defined in Section III. A. This search must be done in the presence of a witness, preferably a public safety officer, unless extenuating circumstances make having a witness clearly infeasible. If a family member or patient representative is the only witness available, EMS field personnel should clearly and carefully explain the intent of the brief search. The identity of the witness to the brief search will be documented on the approved Ventura County Documentation System.
- B. Treatment and transport of the patient remains the highest priority for EMS field personnel. This search shall not interfere with patient care or transport.
- C. EMS field personnel shall notify the receiving hospital if organ donor information is discovered. Advanced Life Support (ALS) units shall notify the base hospital in addition to the receiving hospital.
- D. Any organ donor document that is discovered should be transported to the receiving hospital with the patient unless it is requested by the investigating law enforcement officer. If the investigating law enforcement officer retains the organ donor card, the presence of the card will be documented on the approved Ventura County documentation system. In the event that the patient is not transported, any document will remain with the patient.
- E. Field personnel should briefly note the results of the search, notification of hospital, and witness name(s) on the approved Ventura County Documentation System.
- F. No search is to be made by EMS field personnel after patient death occurs.
- G. If a member of the patient's immediate family or other patient representative objects to the search for an organ donor document at the scene, no search shall be made, and their response to a question about the patient's organ donor wishes may be considered to satisfy the requirement of this policy. This information shall be documented on the approved Ventura County Documentation System.

COUNTY OF VEN		EMERGENCY	EMERGENCY MEDICAL SERVICES		
HEALTH CARE AC	GENCY	POLICIES AND PROCEDURES			
	Policy Title:		Policy Number:		
Safely Surrendered Babies			619		
APPROVED:			Date: 06/01/2008		
Administration:	Steven L. Carroll, EMT-P		Date. 00/01/2000		
APPROVED:			Date: 06/01/2008		
Medical Director:	Angelo Salvucci, MD		Date. 00/01/2000		
Origination Date:	February 2003				
Revised Date:	November 8, 2007	Effocti	ve Date: June 1, 2008		
Last Reviewed:	August 13, 2009	LIIGUI	ive Date. Julie 1, 2000		
Review Date:	November 30, 2012				

- I. PURPOSE: This policy outlines the procedures whereby prehospital care providers accept a newborn under the California Safe Haven Law. This law as amended allows a person to surrender a minor child, less than 72 hours old to a person at any *designated* fire station, or emergency room without fear of arrest or prosecution, provided that the infant has not been abused or neglected. According to the law, "no person or entity that accepts a surrendered child shall be subject to civil, criminal, or administrative liability for accepting the child and caring for the child in the good faith belief that action is required or authorized by the bill, including but not limited to instances where the child is older than 72 hours or the person surrendering the child did not have lawful physical custody of the child".
- II. AUTHORITY: 1797.220, 1798 Health & Safety Code; CCR Division 9 Chapter 4, 100175; Senate Bill 1368, Chapter 824, and Statutes of 2000; and Ventura County Board of Supervisor Resolution dated May 6, 2003.
- III. POLICY: Emergency Medical Services (EMS) personnel shall follow the procedures outlined in this document to ensure the surrendered infant is protected and medically cared for until delivered to the closest hospital emergency department.

IV. PROCEDURE:

- A. When an infant is surrendered to a fire station, the personnel shall notify their dispatch center of the situation.
- B. The dispatch center will dispatch the closest paramedic transport unit.
- C. Fire station personnel will assess the newborn and treat as needed.
- D. Initiate first responder form.
- E. Open the Newborn Safe Surrender Kit, (available at the fire station).
- F. Place a confidential coded bracelet on the infant's ankle and wrist. (Record this number on the first responder form)

- G. Provide the surrendering party the inner business reply mail envelope. This contains the Safe Haven medical questionnaire (English and Spanish version), an information sheet and a matching coded, confidential bracelet. Advise the surrendering party that provided that there has been no abuse or neglect, the parent may reclaim the infant within **14 days**, by taking the bracelet back to the hospital. Hospital personnel will provide information about the baby.
- H. Upon arrival of the transport paramedic unit, the fire station personnel will provide a copy of the written report and a verbal report of the infants' care and status.
- I. If the infant appears to be greater than 72 hours old, abused or neglected, accept the infant and provide medical treatment as necessary.
- J. The paramedic transport unit will initiate base station contact and begin transport to the closest appropriate hospital emergency department.
- K. The paramedic transport unit will initiate care and treat the infant as needed.
- L. The paramedic transport unit will complete a PCR via approved Ventura County Documentation System and will record the confidential coded ankle bracelet number.
- M. Upon arrival at the receiving emergency department, the transporting paramedic will provide a verbal and written report.
- N. Receiving hospital personnel will make verbal and written notification to the Ventura County HSA Department of Children and Family Services (DCFS).

COUNTY OF VENTU	EMERGENCY MEDICAL SERVICES			
HEALTH CARE AGE	NCY	POLICIES AND PROCEDURES		
	Policy Title:		Polic	cy Number
Medical			701	
APPROVED:			Doto: 0	06/04/2009
Administration:	Steven L. Carroll, EMT-P		Date: 0	06/01/2008
APPROVED:			Data: 00/04/0000	
Medical Director:	Angelo Salvucci, M.D.		Date: 0	6/01/2008
Origination Date:	August 1, 1988			
Date Revised:	January 10, 2008	Effec	ctive Date:	June 1, 2008
Date Last Reviewed:	November 12, 2009			
Review Date:	January 31, 2013			

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

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

Neonatal Resuscitation

BLS Procedures

Newly Born Infant

Provide warmth, dry briskly and discard wet linen

• Suction ONLY if secretions, including meconium, cause airway obstruction

Assess while drying infant

- 1. Full term?
- 2. Crying or breathing?
- 3. Good muscle tone?

If "YES" to all three

- Place skin-to-skin with mother
- Cover both with dry linen
- Observe breathing, activity, color

If "NO" to any of three

- Stimulate briefly (<15 seconds)
 - Flick soles of infant's feet
 - Briskly rub infant's back
- Provide warm/dry covering
- Continue to assess

Infant up to 48 hours old

Provide warmth

- Suction ONLY if secretions cause airway obstruction
- Stimulate briefly (<15 seconds)
 - Flick soles of infant's feet
 - Rub infant's back with towel

Provide warm/dry covering Continue to assess

Assess Breathing

- If crying or breathing, assess circulation
- If apneic or gasping
 - Positive pressure ventilations (PPV) with BVM and ROOM AIR at 40-60 breaths per minute for 30 seconds
 - Continue PPV, reassessing every 30 seconds, until infant is breathing adequately
 - Reassess breathing, assess circulation

Assess Circulation

- If HR between 60 and 100 bpm
 - PPV with BVM and ROOM AIR at 40-60 breaths per minute for 30 seconds
 - Continue PPV, reassessing every 30 seconds, until infant maintains HR >100 bpm
- If HR < 60 bpm
 - CPR at 3:1 ratio for 30 seconds
 - 90/min compressions
 - 30/min ventilations
 - Continue CPR, reassessing every 30 seconds, until HR > 60 bpm
 - If no improvement after 90 seconds of ROOM AIR CPR, add supplemental O₂ until HR > 100

ALS Prior to Base Hospital Contact

Establish IO line only in presence of CPR

Asystole OR Persistent Bradycardia < 60 bpm

- Epinephrine 1:10,000
 - o IO 0.01mg/kg (0.1mL/kg) q 3-5 min

PEA

- Epinephrine 1:10,000
 - o IO 0.01mg/kg (0.1mL/kg) q 3-5 min
- Normal Saline
 - IO bolus 10mL/kg

Base Hospital Orders only

Consult with ED Physician for further treatment measures

Additional Information:

Resuscitation efforts may be withheld for extremely preterm infants (< 21 weeks or < 9 inches long). Sensitivity
to the desires of the parent(s) may be considered. If uncertain as to gestational age, begin resuscitation.

Effective Date: June 1, 2011 Date Revised: April 14, 2011
Next Review Date: June 1, 2012 Last Reviewed: April 14, 2011

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VCEMS Medical Director

Effective Date: June 1, 2011 Next Review Date: June 1, 2012 Date Revised: April 14, 2011 Last Reviewed: April 14, 2011

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COUNTY OF VENTURA			EMERGENCY MEDICAL SERVICES		
HEALTH CARE AGENCY			POLICIES AND PROCEDURES		
	Policy Title:		Policy Number		
Airway Management				710	
APPROVED:			Doto	December 1, 2012	
Administration:	Steven L. Carroll, EMT-P		Date:	December 1, 2012	
APPROVED:			Data: Dacambar 1 201		
Medical Director:	Angelo Salvucci, M.D.		Date:	December 1, 2012	
Origination Date:	June 1986				
Date Revised:	October 11, 2012	Effoo	tive Date: December 1, 2012		
Date Last Reviewed:	October 11, 2012	Ellec			
Review Date:	October 31, 2014				

- 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
 - Impedance Threshold Device (ITD, ResQPOD) CARDIAC ARREST ONLY
 - a. MUST UTILIZE 2-RESCUER VENTILATION TECHNIQUE
 - 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

- Cardiac arrest according to VCEMS Policy 705 ONLY if unable to adequately ventilate with BVM.
- Respiratory arrest or severe respiratory compromise AND unable to maintain an adequate airway and adequately ventilate with BVM.
- 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% O₂ 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. [OPTIONAL] 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 10th compression
- 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.
 - 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.
 - I) 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
 - 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 CO₂ 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 CO₂ 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 CO₂ 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.
 - 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 CO₂ 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 CO₂ measurement device:
 - 1) If a colorimetric CO₂ 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 CO₂ and tan 2-5% CO₂. Yellow or tan indicates tube placement in the trachea. Purple indicates less than 2% CO₂ and in the patient with spontaneous circulation is a strong indicator of esophageal intubation.
 - 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 CO₂ of 25 or higher is not seen, that is a strong indicator of esophageal intubation.
- g. Using information from auscultation and CO₂ measurement, determine the ETT position.
 - If breath sounds are equal, there are no sounds at the epigastrium, and the CO₂ measurement device indicates tracheal placement, secure the ETT using an ETT holder.
 - 2) If auscultation or the CO₂ 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)
 - If breath sounds are present but unequal, the ETT position may be adjusted as needed.
- h. Once ETT position has been confirmed, reassessment, using CO₂ measurement, pulse oximetry (if able to obtain), and auscultation of breath sounds should be performed each time patient is moved.
- Continue to monitor the CO₂ measurement device during treatment and transportation. If a change occurs from positive (yellow/tan) to negative (purple), or the waveform diminishes or disappears, reassess the patient for possible accidental extubation or change in circulation status.
- 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.
 - 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 thepurpose 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 Ventura County Electronic Patient Care Report (VCePCR).
- b. 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. 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.
- 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) ETCO2, initial value
 - 8) Support of the head or immobilization of the cervical spine.
- d. An electronic upload of Cardiac Monitor data, including ETCO2 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.