Public Health Administration Large Conference Room 2240 E. Gonzales, 2nd Floor Oxnard, CA 93036	Pre-hospital Services Committee Agenda	February 11, 2010 9:30 a.m.

I.	**Introductions**
II.	**Approve Agenda**
III.	**Minutes**
	A. November 2009
	B. December 2009
IV.	**Medical Issues**
	A. STEMI Update
	1. Scan/Email of ECGs memo
	B. Cardiac Arrest Improvement 2009
	1. CPR Competency Testing – A. Salvucci
	C. Policy 710: Endotracheal Intubation – A. Salvucci
V.	**New Business**
	A. PSC Attendance Report – D. Haney
	B. Policy 626: Chempack Deployment – S. Carroll
	C. EMT 2010 Overview – M. Komins / D. Haney
	D. Other
VI	**Old Business**
	A. CARES Update – A. Salvucci
	B. Trauma System Update – S. Carroll
	C. Impedance Threshold Device/King Airway Study – D. Chase
	D. Policy 150: Unusual Occurrence – S. Lara-Jenkins
	E. Policy 920: Reddinet Policy – S. Carroll
	F. Policy 1000: Documentation of Pre-Hospital Care – S. Lara-Jenkins
	G. E-PCR – D. Haney
	H. Other
VII.	**Informational Topics**
	A. Other
VIII.	**Policies for Review**
	A. Policy 604: Transport and Destination Guidelines
	B. Policy 607: Hazardous Material Exposure: Prehospital Protocol
	C. Policy 704: Guidelines For Base Hospital Contact
	D. Policy 717: Pediatric Intraosseous Infusion
	E. Policy 722: Interfacility Transport of Patients with IV Heparin & Ntg
	F. Other
IX.	**Reports**
	TAG Report
	A. Policy 705 Revisions
X.	**Agency Reports**
	A. ALS Providers
	B. BLS Providers
	C. Base Hospitals
	D. Receiving Hospitals
	E. ALS Education Programs
	F. EMS Agency
	G. Other
XI.	**Closing**

Prehospital Services Committee 2009

For Attendance, please initial your name for the current month

Agency	LastName	FirstName	1/8/2009	2/12/2009	3/12/2009	4/9/2009	5/14/2009	6/11/2009	7/9/2009	8/13/2009	9/10/2009	10/8/2009	11/12/2009	12/10/2009	%
AMR	Clay	Nick	NC	NC	NC	NC		NC		NC	NC		NC	NC	100
AMR	Stevens	Ambrose	RS	AS	AS	AS		AS			AS		AS	AS	92
CMH - ER	Canby	Neil		NC	NC	NC		NC			NC			NC	75
CMH - ER	Cobb	Cheryl				MO		MO		Stuart	MO		CC	CC	75
FFD	Davis	Royce			RD	BH		BH		RD			RD	RD	75
FFD	Hall	Jim		JH	JH			JH		CP				JH	67
GCA	Norton	Tony	TN	TN	TN	TN		YN		TN	TN			TN	92
GCA	Stillwagon	Mike	MS	MS	MS	MS							MS	MS	75
Lifeline	Frank	Steve	SF	SF	SF			SF		SF	SF		SF	SF	92
Lifeline	Winter	Jeff	JW	JW		JW		JW		JW	JW		JW	JW	92
LRRMC - ER	David	Paul	PD	PD	PD	PD		PD			PD		PD		83
LRRMC - ER	Tadlock	Lynn	LT	LT		LT		LT		OB	OB/LT		PB		83
OFD	Carroll	Scott	SC	SC	SC	SC		SC		GS	SC		SC	SC	100
OFD	Huhn	Stephanie	SH	SH	SPH	SPH		SPH		SPH	SPH		SPH	SPH	100
OVCH	Boynton	Stephanie	SB	SB	SB	SB				SB	SB		SB	SB	92
OVCH	Patterson	Betsy	BP	BP		BP		BP		BP	BP		BP		83
SJPVH	Juan	Naomi	DB	DB		NJ		NJ			JNJ			NJ	75
SJRMC	Gregson	Erica			EG	EG		EG			EG		EG	EG	75
SJRMC - SJPVH	Handin	Richard	RH	RH	RH	RH		RH		RH				RH	83
SPFD	Dowd	Andrew	AD	AD	AD			AD		AD	AD			AD	83
SVH - ER	Yu	Alfred		AY	AY	AY		AY			AY		AY		75
SVH - ER	Hoffman	Jennifer	JH	JH		JH		JH			JH		JH	JH	83
V/College	Mundell	Meredith	MM	MM	MM	MM		MM		MM	MM		MM	MM	100
VCFD	Merman	Nancy	NM	NM	NM	NM		NM		NM	NM		NM	NM	100
VCFD	Hansen	Jack	JH	JH	JH	JH		JH		JH	JH		JH	JH	100
VNC	Hadduck	Katy	KH	KH	KH	KH		KH		KH	KH		KH	KH	100
VNC	Pina	Mark		MP	MP	MP				MP			MP	MP	75
VNC	Shedlosky	Robin	RS	RS	RS	RS		RS		RS	RS		RS	RS	100
VCMC - ER	Chase	David	DC	DC	DC	DC		DC		DC	DC		DC	DC	100
VCMC - ER	Utley	Dede	DU	DU	DU	DU		DU		DU	DU		DU	DU	100
VCMC-SPH	Daucett	Michelle	MD	MD						MD	MD		MD	MD	75

Prehospital Services Committee 2009

For Attendance, please initial your name for the current month

Agency	LastName	FirstName	1/8/2009	2/12/2009	3/12/2009	4/9/2009	5/14/2009	6/11/2009	7/9/2009	8/13/2009	9/10/2009	10/8/2009	11/12/2009	12/10/2009	%
VCMC-SPH	Pelkola	Marie	MP	MP	MP	MP		MP		MP	MP		MP	MP	100
VCSO SAR	Fuggles	Lisa	DH		DH	LF		LF			LF		LF		75
VCSO SAR	Patterson	Carl		CP	CP	CP		CP		CP			CP		75
VFF	Rhoden	Crystal											CR		8
VFF	Dison	Derrick	EG	EG	EG	EG		EG							75
Eligible to Vote	**Date Change/cancelled - not counted against member for attendance**														
Non Voting Members															
EMS	Carroll	Steve	SC	SC	SC	SC		SC		SC	SC		SC		
AMR	Drehsen	Charles	CD	CD		CD		CD			CD		CD		
VCMC	Duncan	Thomas						TD		TD	TD				
EMS	Fisher	Barry		BF											
EMS	Haney	Debora	DH	DH		DH		DH		DH	DH		DH		
AMR	Kedrowski	Butch	BK	BK		BK		BK		BK	BF		BF		
VNC	Komins	Mark	MK	MK		MK		MK					SL		
EMS	Lara-Jenkins	Stephanie	SL	SL	SL	SL				SL	SL		AS		
EMS	Salvucci	Angelo	AS	AS		AS		AS		AS	AS		AS		
EMS	Snyder	Robert									RS		RS		
LMT	Tibbs	Phillip	PT	PT											
VNC	Plott	Norm	NP	NP	NP					NP	NP				
SAR	Askew	Chris				CA									

Public Health Administration Large Conference Room 2240 E. Gonzales, 2nd Floor Oxnard, CA 93036	Pre-hospital Services Committee Minutes	November 12, 2009 9:30 a.m.

Item		Discussion	Action	Assigned
I.	**Introductions**	**No introductions**		
II.	**Approve Agenda**		It was M/S/C (M. Mundell/N. Merman) to approve the agenda as submitted.	
III.	**Minutes**		It was M/S/C (M. Mundell/S. Boynton) to approve the minutes as submitted.	
IV.	**Medical Issues**			
	A. STEMI Update	Dr. Salvucci gave a presentation regarding STEMI data for the last two years. We have improved from very long times to very short times. AHA will be including our data in their next article and Dr. Salvucci may possibly have it published in a medical journal.		
	B. Cardiac Arrest Improvement 2009	Started program around first of the year. CARES data started last year. First 6 months survival rate of 10.6 and overall national average is 8.8. The second 6 month we improved to 16.5 and national average remained at 8.8. Some of the changes we made were dispatcher and CPR training. Witness shockable rhythm increased from 32 to 52 and national average has remained the same. This will be published in EMS Magazine in the next couple weeks. Utstein survival has also increased. We need improvement in bystander CPR. Our data is not as good as other sites. Questions: How do we know we have all the data? AS stated that the PCCs are diligent in going through the reports. We are also going to review PCR data.		
V.	**New Business**			
	A. Ambulance License Application – S. Carroll	EMS has received an application for a non emergency ambulance company. This is a notification only for PSC at this time. Policy 111 was included as we need to follow the process outlined in the policy. The company is planning on licensing 2 ambulances in Ventura County. We are putting together a meeting with the EMS advisory committee. Possibly the 9th of December. That report from the EMS Advisory Committee will get forwarded to PSC and PSC will then put together a report. The report will then be sent to the Board of Supervisors for the final review and decision. We need to have this completed in 60 days.		
	B. E-PCR – R.	We are going through the architecture to try and put together a program that will be		

Item	Discussion	Action	Assigned
Snyder	compatible for all providers. We are also looking at one form on a patient, not a document from each agency. EMS has started and is almost done with moving the EMEDS data to a virtual server and upgrading to new equipment. This will increase speed. The data on the current server is secure; the move will provide the ability to upgrade the software. We want to make it faster and less cumbersome to get into. Once that is done we will connect the EMEDS data to First Watch.		
C. Other			
VI Old Business			
A. CPR Competency Testing – A. Salvucci	No report at this point. We have not identified a person at this point to do the spot checks.		
B. CARES Project Update – A. Salvucci			
C. ART/BART Report – A. Salvucci	ART project was presented as an in-hospital program last week and won the abstract of the year award. We are still looking at going forward with this program instead of ACLS. We had a conversation with AHA and they are interested in piloting this project.		
D. Trauma System Update – S. Carroll	Three hospitals are diligently working on their proposals. Next meeting is Tuesday to review the checklist that ACS will use. Proposals are due to Chicago, ACS and ACS is looking at site visits the first week of January. Still shooting for June 1 Go Live date.		
E. Impedance Threshold Device/King Airway Study – D. Chase	We currently have 2 months of data. We need larger numbers. Powerpoint presentation distributed to members who wanted them. This device is promising in the hospital setting however; it may not be good for the field. We do not have enough data in to make a final determination. We are finding out that vomiting may be a complication There seems to be a fair amount of confusion on the process and we have put together a review PowerPoint presentation to allow personnel to review. If we do not document a problem on the form we do not know about them. If too many problems and no trend for improvement. There seems to be confusion on the forms. When BLS put in a tube there needs to be an ALS form for confirmation. If you are an agency who had both BLS and ALS one form is o.k. If 2 different providers, need two forms. Problem with EMEDS and wrong numbers. People still think BVM before ResQpod. No mask unless a failure. Confusion in prior to dispatch CA. Use ResQpod for the first 2 minutes before advanced		

Item	Discussion	Action	Assigned
	airway.		
F. H1N1 Report – S. Carroll	Clarification, • Dr. Levin is responsible for distribution of the H1N1 vaccine in Ventura County. We have received 30,000 doses. We need to prioritize to high risk group. He has decided • We are giving to providers with employees who meet the criteria. • 4 agencies that will be receiving doses. Only give to those who meet the criteria. • If other agencies have employees to meet the criteria please see Steve. We may be at the peak now so there may be no additional supplies. We need to ensure that the vaccine is available for those who are at more risk. Recommendation flu mist vs. injectable for those who have pregnant wives. If healthy but have a contact criteria 2-49 eligible for mist. Only cause for not giving flu mist is a person who works in an organ donor ward. Consent form was sent out a couple days ago. RN can give with doctor approval. We have trainers for the flu mist. Hospital should be getting through independent sources. We do not know when we will receive additional doses.		
G. Other			
VII. Informational Topics			
A. Policy 705: Cardiac Arrest – A. Salvucci	Number 7 footnote was added previously and is now reflected. In order to get approval we said we were changing our policy and review the change. The other way was a waiver of informed consent. We are looking prospectively to look at the change in policy.		
VIII. Policies for Review			
A. Policy 100: EMS, Local Agency (9/13/84)		Approved	Approved
B. Policy 124: Hospital Emergency Services Reduction Impact Assessment		Page 4 of 4 hospital services. Psych spelled wrong.	Approved with change
C. Policy 501: Advanced Life Support Service Provider Criteria		Approved	Approved
D. Policy 502: Advanced Life		Approved	Approved

Item	Discussion	Action	Assigned
Support Service Provider Approval Process			
E. Policy 508: First Responder Advanced Life Support Units		Approved	Approved
F. Policy 615: Organ Donor Information Search		Approved	Approved
G. Policy 701: Medical Control: Base Hospital Medical Director		Change EMT-P to paramedic	Approved
H. Policy 703: Medical Control At Scene, Private Physician		Page 2 o3 3 c4d, PCR in the field. This refers to a paper one. No form for physician to sign. D will be deleted.	Approved with change
I. Policy 724: Apparent Life Threatening Event (ALTE)		Approved	Approved
J. Policy 920: ReddiNet Policy		G, we do not do the once a day assessment poll, only as needed. This needs to be reworded.	Agenda
K. Policy 1100: EMT-I Program Approval		Approved. EMS will check state regulations. This may not take place until new regulation, EMT-I or EMT-B Checklist has EMT-B. Change letterhead to new.	Approved
L. Other			
IX. Reports			
TAG Report	No report		
A. ALS Providers	VEN has personnel changes. In the month of December the following personnel will be		

Item	Discussion	Action	Assigned
	retiring: Mike Lavery, Dave Frost and Vern Alstot. Jack Hansen may be our first paramedic to become a BC.		
B. BLS Providers	No report		
C. Base Hospitals	Lynn Tadlock has become the new Director of the ER. They are looking for a new PCC VCMC is conducting a disaster drill tomorrow morning. Their drill will simulate a hospital evacuation. All providers and EMS will be involved.		
D. Receiving Hospitals	No report		
E. ALS Education Programs	Everything is status quo		
F. EMS Agency	• Reach Air – Offering 7 CEU on Dec 4. Will have a list of topics and will be posted to EMS website. Will be held at Oxnard College. We will also have one in the summer. Sign up on Reach Air website. • VCMC drill for hospitals, need to make sure they know Reddinet is part of it. We will call if you don't respond. • We received approval to purchase Duodot as a replacement from Mark I kits we will purchase and distribute to first responders. When replacing can we do a disposal as before. If you have expired 2009 stock, please forward to Steve. Current stock expires in 2011, and new stuff will probably have 2015 expiration. • First Watch –This is a surveillance system that monitors what we program into it. Currently the program is only connected to VNC dispatch. We will connect to EMEDS soon, then whatever EPCR program we chose and also Oxnard's new cad when the purchase. EMS will also be using it for ambulance compliance. o If providers would like to have it programmed for specific project, you would be able to purchase the triggers through EMS. • We will be hiring a TNC with hopefully a start date in April. We will probably post the position in the next couple months. • EMEDS is still having a few issues. Hopefully when the data is moved to the virtual server it may fix some of the problems. • HavBed Poling – Every Tuesday the hospitals are required to supply data per State and Federal requirements. We are one of the few counties at 100% compliance for the first 3 weeks. • Still working out an ILI pole. PH is being requested to do that. • ILI poling contacts need to be forwarded to Debbie ASAP. If we do not receive the information it will go through Reddinet. You can have more that one representative. • EMS Provider – EMT level. Background checks are coming. If you employ personnel		

Item	Discussion	Action	Assigned
	who EMS does not require Live Scans they will be required by the State. If you decide to do before implementation it will cost you less. • EMS has moved some offices around. We will be integrating Dawn into more of the EMS side. Phone coverage will primarily done by Dawn as a learning process, so please be nice to her. • EMS Conference – we need to get a feel on whether we can continue with this. We cannot continue to offer this because of staff and financial issues. If you want this to continue we need a commitment from providers to provide staff and financial support. At this point only Reach is interested in continuing. Conference will not be continued at this point. • Base and RH physicians will meet with EMS on Dec 3 regarding EPCR. This is an opportunity for the physicians to voice their concerns regarding PCRs when the patient is at hospital. This is an opportunity for hospital medical directors to state what they want to see on a report.		
G. Other	No report		
X. Closing	**Meeting adjourned at 10:55.**		

Respectfully submitted
Debbie

Public Health Administration Large Conference Room 2240 E. Gonzales, 2nd Floor Oxnard, CA 93036	Pre-hospital Services Committee **Special Meeting** Minutes	December 10, 2009 9:30 a.m.

TOPIC	DISCUSSION	ACTION	ASSIGNED
I. Introductions		**Meeting called to order at 9:35 a.m.**	
II. Approve Agenda		**NM/RS**	
III. New Business			
A. Policy 111 Review	As notified last month, EMS has received an application for non emergency transport license. VCEMS Policy 111 was reviewed by committee for the requirements of the policy in reference to the application process. This committee will need to make a recommendation on the application, approval/denial. PSC will need to make a recommendation to EMS on whether to accept/deny the application based on "needs and necessity" for licensing the company.		
B. Ambulance License Application – S. Carroll	The application was reviewed by the committee. • Application deficiencies were noted. • Needs and Necessity portion of application was explained. • ProCare's application states there are 3 ambulances in Ventura County. ○ Clarified that we have 3 ambulance providers, and up to 40 available resources most times. • Financial statements have been forwarded to the VC Auditor/Controller • Insurance has been forwarded to VC Risk Management Department. • ProCare conducted a survey in Ventura County and has submitted only one survey that marginally requested additional service. EMS has made numerous attempts to contact Simi Dialysis both by phone and on-site visit and have not been able to verify the recommendation. • EMS contacted LA City and LA County to verify their status in that county and city. In November 2008 they submitted an application to LACO for licensing. The application was deficient and the requested additional documentation was never received. The application was denied. • LA City stated that ProCare is a provider in their city. They have		

TOPIC	DISCUSSION	ACTION	ASSIGNED
	had some violations but are in good standing at this time. • VC Ambulance providers were contacted and they have significant concerns. The new provider would not be held to the ALS provider standards. The non emergency application allows them to cherry pick the paying patients. In Ventura County the non emergency business augments the ALS system. • Current provider letters reviewed. • EMS duties and timeframes for processing application were discussed.		
IV. EMS Advisory Committee Report	It was M/S/C (D. Chase/K. Hadduck) that the application for non emergency licensure is denied for lack of a need and necessity. The approval of a non emergency ambulance provider in Ventura County would adversely affect the level of services of the EMS System as a whole. The following are the findings of PSC: 1. No demonstrated need and necessary exists at this time. 2. The addition of a Non-Emergency ambulance provider would negatively impact the level of service in the EMS System. Recommendation is to deny the application. Our providers provide non emergency calls to augment the emergency calls. There was a role call for votes. The vote was unanimous to approve the recommendation.		
V. Discussion	None		
VI. Development of PSC Report	PSC Developed the recommendation and it was received by EMS.		
VII. Round Table			
VIII. Closing	**Meeting adjourned at 10:30**		

Respectfully submitted,

Debora Haney

VCPH Ventura County Public Health

A Division of the Ventura County Health Care Agency

BARRY R. FISHER, MPPA
Director

EMERGENCY MEDICAL SERVICES

STEVEN L. CARROLL, EMT-P
EMS Administrator

ANGELO SALVUCCI, M.D., F.A.C.E.P
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MEMORANDUM

To: All EMS Providers, Receiving and Base Hospitals

From: Angelo Salvucci, MD

Date: February 5, 2010

RE: Distribution of EGCs

As you know, the Ventura County STEMI program has taken off and has proven itself as one of the premier STEMI programs in the country. Our times-to-treatment are at least as good as, and mostly better than, any published studies. We have you to thank for that!

In an effort to continue monitoring and improving this program, it is important to be able to catalogue and review the prehospital ECGs.

As you know, copies, and copies of copies are difficult to read. Please **color scan** and email to STEMIDATA@ventura.org these **original** ECGs:

1. All with ***ACUTE MI SUSPECTED***
2. False Negatives (machine interpretation negative but EDMD interprets the prehospital ECG as a STEMI)
3. True negative prehospital ECGs followed by STEMI on ED ECG.

This will not apply to a large number of ECGs. Historically it has been about 3% of all ECGs, or about 20 a month countywide.

ALS providers will leave an original ECG at the receiving hospital, and hospital staff will scan and email them to STEMIDATA. If the ALS provider would like to have an original for internal use, please print two copies so that one can be left at the receiving hospital.

Thank you.

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

I. Purpose: To define the indications, procedure and documentation for oral endotracheal tube (ETT) insertion by paramedics.

II. Authority: Health and Safety Code, Sections 1797.220 and 1798.

III. Policy: Paramedics may utilize oral endotracheal intubation on patients eight (8) years of age or older, in accordance with Ventura County Policy 705.

IV. Definition: Intubation Attempt: an interruption of ventilation, with laryngoscope insertion, for the purpose of ETT placement.

V. Procedure:

A. Indications

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

B. Contraindications

1. Traumatic brain injury – unless unable to maintain adequate airway (e.g., persistent vomiting).
2. Gag reflex.

C. Intubation Attempts

1. There shall be no more than two (2) attempts to intubate, lasting no longer than 20 second each, prior to BH contact. The patient shall be ventilated with 100% O2 by BVM for one minute before each attempt.
2. If endotracheal intubation cannot be accomplished in 2 attempts, the approved Alternate ALS airway device may be inserted.
3. If ALS airway techniques are unsuccessful or contraindicated, the airway shall be managed by BLS techniques. If an approved Alternate ALS airway device has been inserted and placement of an endotracheal tube is ordered, the

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

D. Flexible Stylet. A flexible stylet may be used for any ETI attempt.

1. Two Person Technique (recommended when visualization is less than ideal):
   a. Visualize as well as possible.
   b. Place stylet just behind the epiglottis with the bent tip anterior and midline.
   c. Gently advance the tip through the cords maintaining anterior contact.
   d. Use stylet to feel for tracheal rings.
   e. Advance stylet past the black mark and feel for the carina.
   f. Withdraw the stylet to align the black mark with the teeth.
   g. Have your assistant load and advance the ETT tip to the black mark.
   h. Have your assistant grasp and hold steady the straight end of the stylet.
   i. While maintaining laryngoscope blade position, advance the ETT.
   j. At the glottic opening turn the ETT 90 degrees counterclockwise to assist passage over the arytenoids.
   k. Advance the ETT to 22 cm at the teeth.
   l. While maintaining ETT position, withdraw the stylet.
2. One Person Technique (recommended when visualization is good but cords are too anterior to pass ET tube).
   a. Load the stylet into the ETT with the bent end approximately 4 inches (10 cm) past the distal end of the ETT.
   b. Pinch the ETT against the stylet.
   c. With the bent tip anterior, while visualizing the cords advance the stylet through the cords.
   d. Maintain laryngoscope blade position.
   e. When the black mark is at the teeth ease your grip to allow the tube to slide over the stylet. If available have an assistant stabilize the stylet.
   f. At the glottic opening turn the ET tube 90 degrees counter clockwise to assist passage over the arytenoids.
   g. Advance the ETT to 22 cm at the teeth.
   h. While maintaining ETT position, withdraw the stylet.

E. Confirmation of Placement. It is the responsibility of the paramedic who has inserted the endotracheal tube to confirm (using air aspiration, auscultation, and CO2 detection/measurement) and document its placement. Responsibility for the position of

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

1. Prior to intubation, prepare both the air aspiration and the CO2 measurement devices.
2. Insert ETT, advance, and hold at 22 cm at the teeth for a patient >= 5 ft. tall. For patients less than 5 ft. tall, insert the ETT so that the balloon is 2 cm past the vocal cords.
3. After inserting the ETT, in the patient requiring CPR, resume chest compressions while confirming ETT placement.
4. Before inflating ETT balloon, perform the air aspiration technique.
    a. Deflate the bulb, connect to the ETT, and observe for refilling.
    b. Refilling of the bulb in less than 5 seconds indicates tube placement in trachea.
    c. If the bulb does not completely refill within 5 seconds, unless able to definitively confirm placement on repeat direct laryngoscopy, remove the ETT. Suspect delayed filling with the ETT in the trachea if the patient is morbidly obese, has fluid in the airway (pulmonary edema, aspiration, pneumonia, drowning), or the ETT is against the carina.
5. Inflate the ETT cuff, attach the CO2 measurement device, and begin ventilations.
    a. During the first 5-6 ventilations, auscultate both lung fields (in the axillae) and the epigastrium.
6. After 6 ventilations, observe the CO2 measuring device:
    a. If a CO2 detector device is used, 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.
    b. If capnography is used, a regular waveform with each ventilation should be seen with tracheal placement. If the patient has been in cardiac arrest for a prolonged time (more than 5-10 minutes) the waveform may be diminished or, rarely, absent. In the patient with spontaneous circulation, if a regular waveform with a CO2 of 25 or higher is not seen, that is a strong indicator of esophageal intubation.
7. Using information from auscultation and CO2 measurement, determine the ETT position.

a. If breath sounds are equal, there are no sounds at the epigastrium, and the CO2 measuring device indicates tracheal placement, secure the ETT using an ETT holder.

b If auscultation or the CO2 measuring device indicate that the ETT may be in the esophagus, immediately reevaluate the patient. If you are not CERTAIN that the ETT is in the trachea, remove the ETT.

c. When in doubt about the position of the ETT, the decision should be based upon the patients overall clinical status (e.g., skin color, respirations, pulse oximetry).

d. If breath sounds are present but unequal, the ETT position may be adjusted as needed.

8. Once ETT position has been confirmed, reassessment, using CO2 measurement, pulse oximetry (if available), and auscultation of breath sounds should be performed each time patient is moved.

9. Continue to monitor the CO2 measurement device during treatment and transportation. If a change occurs from positive (yellow/tan) to negative (purple), or the waveform diminishes or disappears, reassess the patient for possible accidental extubation.

10. After confirmation of proper ET tube placement and prior to movement, all intubated patients shall have their head and neck immobilized in a neutral position in a manner similar to immobilization of suspected cervical spine injuries.

a. Reconfirm ET tube placement after head/neck immobilization, and at intervals consistent with length of treatment.

b. Report to nurse and/or physician that the spinal immobilization is for the purpose of securing the ETT and not for trauma.

F. Stomal Intubation

a. Select the largest endotracheal tube that will fit through the stoma without force (it should not be necessary to use lubricant).

b. Do not use stylet.

c. Pass endotracheal tube until the cuff is just past the stoma.

d. Inflate cuff.

e. Attach end-tidal CO2 detection device to the ET tube. Assess ETT placement using tools described in this policy.

f. Secure tube.

F. Documentation

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

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: CHEMPACK Deployment	Policy Number 626
APPROVED: Administration: Steven L. Carroll, EMT-P	Date:
APPROVED: Medical Director: Angelo Salvucci, M.D.	Date:
Origination Date: February 2, 2010 Date Revised: Review Date:	Effective Date: DRAFT

I. PURPOSE: This policy establishes guidelines for the deployment and use of the CHEMPACK by pre-hospital care providers in response to incidents involving suspected nerve agent exposure.

II. AUTHORITY: Health and Safety Code, Division 2.5, Sections 1797.220 & 1798.

III. DEFINITION: The Centers for Disease Control and Prevention (CDC) has established the "CHEMPACK" project for the forward placement of sustainable repositories of nerve agent antidotes in numerous locations throughout the United States, so that they can be immediately accessible for the treatment of exposed and affected persons.

There are two types of CHEMPACKs available. The "Hospital CHEMPACK" is designed for hospital and healthcare provider use, consisting mostly of single dose vials and a small quantity of auto-injectors. The "EMS CHEMPACK" is designed for field use and contains mostly auto-injectors. Ventura County has elected to only host EMS CHEMPACKs.

Content of CHEMPACKs

Unit Pack	**Units**	**Cases**	**Quantity**
Mark 1 auto-injector	240	5	1200
Atropine Sulfate 0.4 mg/ml 20 ml	100	1	100
Pralidoxime 1 Gm inj. 20 ml	276	1	276
Atropen 0.5 mg	144	1	144
Atropen 1.0 mg	144	1	144
Diazepam 5 mg/ml auto-injector	150	2	300
Diazepam 5 mg/ml vial, 10 ml	25	2	50
Sterile water for inj (SWFI) 20cc vials	100	2	200
Sensaphone® 2050	1	1	1
Satco B DEA Container	1	1	1

IV. POLICY: Actual location of the CHEMPACK will be maintained as confidential. This policy outlines the responsibilities and the operational requirements to pre-position or utilize a cache within the Ventura County Operational Area.

In the case of an accidental or deliberate release of a nerve agent or potent organophosphate compound, time will be of the essence to minimize morbidity and mortality. This is a key consideration in cache placement, notification, transportation and administration.

V. PROCEDURE: CHEMPACK Deployment and Movement

A. Authorization to Open or Forward Deploy a CHEMPACK Container – Emergency Incident Based:

1. The Ventura County EMS Agency shall be contacted for authorization to open or forward deploy any CHEMPACK within the Ventura County Operational Area. The EMS Agency Duty Officer can be accessed on a 24-hour basis by calling the Ventura County Fire Department Fire Communications Center at 805-388-4279.
2. In the event that return contact by the EMS Agency Duty Officer is delayed and the situation clearly warrants immediate action, the CHEMPACK provider may elect to open or forward deploy the CHEMPACK for an emergency incident. Attempts to contact the EMS Agency Duty Officer shall be made in all cases through the Fire Communications Center.
3. The EMS Agency may request deployment of a CHEMPACK to a location within the Ventura County Operational Area or outside the operational area under a medical-health mutual aid request. The CHEMPACK provider shall make CHEMPACK resources immediately available upon request by the EMS Agency.
4. The EMS Agency shall immediately notify the Region 1 Regional Disaster Medical Health Specialist (RDMHS) of any CHEMPACK movement from fixed locations or opening of a CHEMPACK container. The RDMHS will ensure that California Department of Health Services / Emergency Preparedness Office (DHS/EPO) is notified promptly of any movement or deployment of CHEMPACK material. DHS/EPO will in turn notify CDC.
5. Qualifying Events – Emergency Deployment: CHEMPACK material may be accessed, deployed or used only when it is determined that an

accidental or intentional nerve agent or other organophosphate release has threatened the public health security of a community. A seal will be broken and material used only when it is determined that other means to save human life will not be sufficient. Authorization to deploy, break the seal on, or move a CHEMPACK container from its specified location will be limited to any of the following events:

a. Release of a nerve agent or potent organophosphate with human effects or immediate threats too great to adequately manage with other pharmaceutical supplies available.

b. Large or unusual occurrence of patients presenting with signs and/or symptoms consistent with nerve agent or organophosphate exposure or intoxication.

c. A credible threat of an imminent event of a magnitude likely to require the assets of the CHEMPACK.

d. An event with potential to create a nerve agent or organophosphate release with human exposure (e.g. a transportation accident with fire or loss of container integrity).

e. Any mutual aid request from another region or neighboring state in which CHEMPACK assets are being deployed or staged.

f. Any event which, in the judgment of the County Health Officer, EMS Agency Medical Director, or Medical & Health Operational Area Coordinator (MHOAC), justifies the deployment of CHEMPACK supplies.

g. A physical threat to the CHEMPACK at the fixed location (i.e. fire, theft, flood).

B. Authorization to Forward Deploy a CHEMPACK Container – Event or Threat Planning:

1. The EMS Agency may authorize movement of a CHEMPACK container and contents to any location within the Ventura County Operational Area, or outside the area under a medical-health mutual aid request. The EMS Agency will notify the Region 1 RDMHS in advance of any pre-planned CHEMPACK container movement for a particular event or threat.

2. Qualifying Events – Pre-Emptive Deployment: Pre-emptive movement is the relocation of a sealed CHEMPACK container and its contents to a site providing for levels of environmental and security controls generally identical to those required for its regular placement site. Breaking the seal, removing any contents, or moving the cache to a location without those controls constitutes deployment, not pre-emptive movement, and must meet deployment conditions.
   a. Pre-emptive movements may be requested to the EMS Agency by any emergency medical, public health, emergency management, hazardous materials or other related agency in preparation for, or response to, a planned or occurring event deemed appropriate for forward CHEMPACK placement.
   b. Any such request must be made to the RDMHS for approval. Unless an imminent or ongoing emergency, each request must be made at least 48 hours before the movement. The RDMHS will refer any request to the RDMHC and to DHS/EPO for consideration. If an RDMHS is unavailable to take timely action on a movement request, that request may be made to DHS/EPO via the State Warning Center.

C. Post Event Actions:
   1. Incident documentation should begin as soon as possible following any emergency operation involving CHEMPACK assets by the EMS Agency. The documentation must include the following:
      a. A thorough description of the incident or event involving CHEMPACK resources.
      b. A list of the approving officials.
      c. An inventory of used and unused CHEMPACK contents.
      d. An after-action critique of CHEMPACK deployment effectiveness.
   2. The CHEMPACK container and any unused contents will be returned to the CHEMPACK Provider and will be resealed. The EMS Agency will coordinate resupply with the Region 1 RDMHS, DHS/EPO and the CDC as appropriate. Currently the CHEMPACK Project is not funded to replace CHEMPACK supplies used for an emergency event. However, requests for replenishment of CHEMPACK supplies should be made to the SNS

Program as soon as possible after their use. The SNS Program will attempt to secure federal funding to replace and restock supplies used in response to an emergency event

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: UNUSUAL OCCURRENCE REPORTABLE EVENTS/SENTINEL EVENT	Policy Number 150
APPROVED: Administration: ~~Barry R. Fisher, EMT-P~~Steven L. Carroll, EMT-P	Date
APPROVED: Medical Director: Angelo Salvucci, M.D.	Date
Origination Date: June, 1990 Date Revised: ~~March 11, 2004~~ Effective Date: ~~June 1, 2004~~ Review Date: ~~June, 2006~~	

I. PURPOSE: To define Unusual Occurrences and differentiate ~~reportable~~ Reportable ~~events~~ Events ~~vs.~~from ~~sentinel~~ Sentinel ~~events~~Events. To give direction for investigating and reporting unusual occurrences. To define the role of VC EMS in relation to these events.

II. AUTHORITY: Health and Safety Code, ~~Division 2.5,~~ Section 1797.204 and 1798. ~~and~~ California Code of Regulations, Title 22, ~~Division 9,~~ Section ~~100172~~100167, 100168, 100169, 100402, 100403, 100404.

III. DEFINITIONS:

A. Unusual Occurrence: Any event or occurrence deemed to have impact or potential impact on patient care, and/or any practices felt to be outside the norm of acceptable patient care, as defined by the Ventura County EMS (VC EMS) Policies & Procedures manual. Unusual occurrences also cover events outside the "normal" flow of operations surrounding dispatch, response, rescue and disposition of all ALS and BLS calls. Unusual occurrences may or may not have life threatening impacts.

1. Sentinel Event: The Joint Commission ~~on Accreditation of Healthcare Organizations (JCAHO)~~ defines sentinel events as "…an unexpected occurrence involving death or serious physical or psychological injury, or the risk thereof.~~"~~ The phrase "or the risk thereof" includes any process variation for which a recurrence would carry a significant chance of a serious adverse outcome." An unusual occurrence is considered a sentinel event if it could reasonably be considered to be the direct cause of a death or serious injury. Sentinel events warrant immediate investigation, and reporting to VC EMS.

2. Reportable Event: A reportable event is an unexpected occurrence during the dispatch, rescue, care and transportation of

a victim requiring emergency medical care that ~~*does not* involve~~*is not the direct cause of* serious physical or~~,~~ psychological injury, or the risk thereof, but does require investigation for the purposes of quality improvement.

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

V. PROCEDURE:

A. SENTINEL EVENTS

1. Reporting

The discovering party will immediately report the event upon discovery to VC EMS by fax, phone or e-mail. If the event occurs after business hours, or on the weekends, reporting will be to VC EMS Duty Officer through Ventura County Fire Communications Center, (805 388-4279) If fax or email is used, and protected health information is being transmitted, place "CONFIDENTIAL" in the subject section.

~~1~~2. Investigation:

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

b. ~~The investigating entity will notify all parties directly involved in the incident by phone, fax or email.~~ When documents containing protected health information are being transmitted by written or electronic mail, they must be marked "CONFIDENTIAL".

c. VC EMS retains the authority to become the primary i~~I~~nvestigator of any Sentinel or Reportable Event.

d. The investigating party will be responsible for completing the process by collecting all required elements described in this policy. No portion of the completed investigation will be made available to parties other than VC EMS.

e. The following are ***required elements*** in investigating sentinel events and must be submitted to VC EMS

1) Policies
2) Interview with providers
3) Documentation of occurrence by providers
4) Action Plan
5) CAD sheets if applicable
6) VC EMS Unusual Occurrence Form
7) Patient Care Records (EMEDS and ED) if applicable
8) Rhythm strips if~~when~~ applicable
9) Dispatch recordings if applicable
10) MICN taped runs if applicable
12) Diversion status print out (Reddinet) if applicable

f. Complete report of the investigation will be submitted to VC EMS within **5 working days.** If the investigating party is unable to comply with the five day requirement, EMS will be notified and every reasonable attempt will be made to adjust this requirement according to EMS, hospital and provider needs.

~~g. Root Cause Analysis will be conducted in a reasonable amount of time following submission of investigation to the EMS Agency. The investigating party will organize the~~

~~event and it will be held at a neutral location with an agent of the EMS office acting as facilitator to the meeting.~~

~~g~~h. Upon completion, the report will be submitted to VC EMS, where a final conclusion and or recommendation will be made on the case.

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

~~2. Reporting~~

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

3. Follow Up

a. PROVIDER AGENCY: Agencies will track all Sentinel events they have investigated for the purpose of quality assurance. If there has been no reoccurrence, tracking may end after a two year period. When follow up reevaluation is part of the plan of action, an update report will be forwarded to VC EMS.

b. VC EMS

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

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

3) Sentinel Events will be tracked and analyzed for quality improvement purposes.

4) The EMS Medical Director will issue a recommendation including, but not limited to, disciplinary action when indicated.

~~5) VC EMS will categorize all sentinel events according to the following criteria:~~

~~a) **Trend:** Any event determined to be an isolated occurrence, with no indication of system-wide implications. These will be monitored for two years. Events with no similar occurrence will be removed from tracking, with no further investigation. Reoccurring events will be evaluated by VC EMS Medical Director, VC EMS Administrator, and VC EMS CQI Coordinator to determine if a continuing trend exists and recommend further action as appropriate. These occurrences will be in the category of reportable events only.~~

~~b) **Investigate**: An event that appears to be part of a larger trend. Events categorized as Investigate are referred to the CQI Coordinator who will assure a complete investigation is conducted, and who will track an event as a possible indicator in a CQI study. Both reportable and sentinel events may fall into this category.~~

~~c) Disciplinary Event: Any event that requires the need for disciplinary intervention, by VC EMS, or the State EMS Authority. Incidents involving individual disciplinary action, or change in accreditation status will by handled per VC EMS policy. These occurrences will be in the category of sentinel event.~~

5~~6~~) Once the event is reviewed by VC EMS, a letter of acknowledgement, conclusion, and/or recommendation will be sent to all involved

agencies and the case will be tracked for a period of two years. If no further incidence, the case will be considered closed.

B. REPORTABLE EVENTS

1. Reporting

If the event is deemed "reportable", the report shall be made within 24 hours. The discovering party will report the event to VC EMS by fax, phone or e-mail. If fax or email is used, and protected health information is being transmitted, place "CONFIDENTIAL" in the subject section.

2~~1.~~ Investigation

a. Following notification of a reportable event, VC EMS will assign the case to an appropriate entity for investigation. VC EMS will notifiy all involved parties when and to whom the case has been assigned.

~~b. The investigating entity will notify all parties having direct involvement in the incident by phone, fax or email. When documents containing protected health information are being transmitted by written or electronic mail, they must be marked "CONFIDENTIAL".~~

c. No portion of the completed investigation will be made available to parties other than VC EMS.

d. ~~-~~Once the investigation is complete, all required documentation ~~as~~ described in this policy will be submitted to VC EMS where a conclusion and/~~-~~or recommendation will be made. ~~No portion of the completed investigation will be made available to parties other than VC EMS.~~

1) The following are required elements in investigating reportable events.

a) Policies

b) Interview with providers

c) Documentation of occurrence by providers

d) Action plan ~~if warranted~~

e) CAD sheets if applicable

f) VC EMS Unusual Occurrence Form

g) Patient Care Record (EMEDS and ED) if applicable

h) Rhythm Strips ~~when~~ if applicable

i) Dispatch recordings if applicable

j) MICN recordings if applicable

k) ~~-~~Diversion status documents (Reddinet) if applicable

~~2. Reporting~~

~~The discovering party or agency will communicate reportable events to VCEMS within **24 hours**. A complete investigatory report will be submitted to VCEMS by the investigating entity within **10 working days** of the occurrence. The report may be faxed, mailed, or e-mailed. If fax or e-mail is used, place "CONFIDENTIAL" in subject section.~~

3. Follow Up

a. Provider Agency

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

b. VC EMS:

1) The Quality Improvement Coordinator will be responsible for receiving reportable event investigations and assuring they are complete

2) VC EMS will track all reportable events for the purpose of quality improvement.

3) Once the event is reviewed by VC EMS, a letter of acknowledgement, conclusion and/or recommendation will be sent to all involved ~~agencies~~service providers. ~~and the case will be considered closed.~~

~~4) VC EMS will categorize all reportable events as described in this policy in section V.5.a-c).~~

4. Education

Prior to being assigned primary investigator responsibilities, ~~All prospective investigating~~ personnel from provider agencies and base hospitals will attend and complete a mandatory education seminar provided by VC EMS on Unusual Occurrence Investigation and ~~Reporting~~ Reporting.~~.~~

VENTURA COUNTY EMS AGENCY
UNUSUAL OCCURRENCE
Reporting Form

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

Type of Event	
☐ Reportable Event	☐ Sentinel Event

Date of Event:	Fire Incident #:	PCR:
Time of Event:	Dispatch #:	Person Reported To:

Personnel Involved	Agency

Description of Unusual Occurrence

Identified Issues

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

Ventura County Emergency Medical Services

UNUSUAL OCCURRENCE
Reporting Form

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

Type of Event	
☐ Reportable Event	☐ Sentinel Event

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

Personnel Involved	Agency

Description of Unusual Occurrence

Identified Issues
1.
2.
3.

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: ReddiNet Communications Policy	Policy Number 920
APPROVED: Administration: Steven L. Carroll, EMT-P	Date:
APPROVED: Medical Director: Angelo Salvucci, M.D.	Date:
Origination Date: April 26, 2007 Date Revised: Review Date: March, 2010	Effective Date:

I. PURPOSE: The Rapid Emergency Digital Data Network (~~REDDINET~~ReddiNet) is the computerized system that links hospitals, the EMS Agency, and Public Health for a variety of purposes; including but not limited ~~to **daily** (Q24 hr) reports of~~ diversion status, multiple casualty incidents (MCI), assessment communication, disease surveillance, and bed capacity. This policy defines the expectation for the use and maintenance of ReddiNet by all facilities.

II. AUTHORITY: Health and Safety Code, Division 2.5, Chapter 1, Section 1797.204 and Chapter 6, Section 1798.100.

III. POLICY:

A. The ReddiNet System is to be maintained by each individual facility. This includes, but is not limited to, maintenance and upgrade of all associated hardware, software, and licensing.

B. It is the responsibility of each facility to ensure that any staff expected to use the ReddiNet System be properly trained and refreshed on a routine basis (at least twice per year). At least one staff member who is knowledgeable on the use of the ReddiNet System is to be on duty at all times.

C. The ReddiNet System is to remain online at all times unless there is a hardware or software problem that disables the system, in which case every effort shall be made to correct the problem as quickly as possible.

D. The sound volume on the ReddiNet System is to be maintained at an adequate level to alert staff within a facility at all times, and is never to be placed on mute.

E. The ReddiNet System shall be placed in an easily accessible location within each facility.

F. If a facility is using a ReddiNet supplied computer, ~~The~~ use ~~of the ReddiNet computer~~ is limited to operation of the ReddiNet System and access to EMS educational materials only. Accessing the Internet or other applications on the system is prohibited.

~~G~~. ~~The ReddiNet System sends a shift check-in Assessment Poll at least once a day. Each facility is to acknowledge this check-in poll as directed by the system.~~

~~H~~G. The ReddiNet System is not to be used to disseminate non-system information such as conference flyers, educational opportunities, and other like materials.

IV. PROCEDURE:

A. Emergency Department and other appropriate hospital staff will use ReddiNet for the following information:

1. Status – Hospitals will utilize the Reddinet System to update all diversion status pursuant to VCEMS Policy 402. Hospitals should note that the ReddiNet System also displays diversion status for other facilities within the region.
2. Multi Casualty Incidents (MCI) – During an MCI, the designated Base Hospital will coordinate response activities with other hospitals using ReddiNet unless relieved by EMS Agency personnel. The Base Hospitals will initiate an MCI using the ReddiNet MCI function. All patients received by hospitals during an MCI are to be recorded in ReddiNet, within the MCI function. The System will send an alert tone when a facility is being included in an MCI response.
3. Assessment – This function within the ReddiNet System allows a facility or the EMS Agency to assess the status of other facilities and other resources (such as staffing, equipment, etc). Assessments are polls that ask specific questions and require a response. All facilities are to respond as quickly as possible to active polls or within specified timeframes. Assessments contain one or more questions whose answers are formatted (I.e., Yes/No, numeric, multiple choice, text, etc) The System will send an alert tone when Assessments are received.
4. Public Health Surveillance – The Public Health Department may initiate disease surveillance programs utilizing Reddi-Net. These will be in the form of assessment polls that ask for specific information on a routine basis. Each facility is to ensure that these assessments are answered in a timely manner. This will likely require involvement of Infectious/Communicable Disease staff at each facility. This does not replace the obligation of health care providers to report certain diseases on a Confidential Morbidity Report (CMR) pursuant to Title 17, California Code of Regulations, §2500 (rev. 1996)
5. Messages – All facilities are expected to utilize the Reddi-Net messaging function to communicate appropriate information within their facility, with other hospitals, the EMS Agency and the Public Health Department. The system is similar to email. All messages that are appropriate for dissemination to other staff are to be printed or otherwise shared with affected staff. The System will send an alert tone when messages are received.
6. Bed Capacity – Hospitals are expected to update their bed availability by 9:00 AM on a daily basis. Updates ideally should be done twice per day, morning and evening shift.

Hospitals should update their bed availability after their normally scheduled daily discharge time.

B. ReddiNet System Failure or Disruption –

1. If the ReddiNet System is not functioning due to an internal hospital issue (ie: computer or internet failure), facilities are to utilize the following procedure:
    a. Attempt to the resolve the problem at the computer. Check for correct power and internet connections as well as correct log-in and password.
    b Notify the facility ReddiNet coordinator or IT department according to facility policy.
    c Notify the EMS Agency of the status of the ReddiNet System and the anticipated return to service.
    d. Fax Appendix A to the EMS Agency and all facilities in your hospital grouping to notify of your current diversion status. Updates should be provided every 8 hours until the system is functional. If available, the EMS Agency will update facility status on the Reddinet System. For Internal Disaster category only, fax should also be sent to Fire Communications Center (FCC).
    e Notify other hospitals, EMS Agency and FCC via ReddiNet when connection is restored.
2. If the ReddiNet System is not functioning due to a systemwide issue, (ie: ReddiNet server or internet service provider failure), facilities are to utilize the following procedure:
    a. Notify the EMS Agency of the ReddiNet System failure.
    b. FAX Appendix A to the EMS Agency and all facilities in your hospital grouping to notify of your current diversion status. Updates should be provided every 8 hours until the system is functional. For Internal Disaster category only, fax should also be sent to Fire Communications Center (FCC).
    c. ReddiNet and/or the EMS Agency will notify all facilities and FCC when service is restored.

C. Hospital Groupings: The following hospital groupings are to be used for faxed diversion status notifications during a ReddiNet failure. The hospital with a diversion status change will send a fax to the EMS Agency and to each of the hospitals in their group.

Hospital	Hospital Grouping
Community Memorial Hospital	(OVCH, SJRMC, SPH, VCMC)
Los Robles Hospital and Medical Center	(SVH, SJRMC, SJPVH)
Ojai Valley Community Hospital	(CMH, SPH, VCMC)
Santa Paula Hospital	(CMH, OVCH, SJRMC, VCMC)
Simi Valley Hospital	(LRHMC, SJPVH, SJRMC, VCMC)
St. Johns Regional Medical Center	(CMH, SJPVH, VCMC)
St. Johns Pleasant Valley Hospital	(SJRMC, LRHMC, SVH, VCMC)
Ventura County Medical Center	(CMH, SPH, OVCH, SJRMC)

County of Ventura
Emergency Medical Services Agency

Diversion Notification

(For use during ReddiNet failure only)

Date: _____

Time: _____

Name: _____

ReddiNet Failure Reason: _____

_____

_____

Hospital:

- ☐ **CMH**
- ☐ **LRRMC**
- ☐ **OVCH**
- ☐ **SPH**
- ☐ **SJPVH**
- ☐ **SJRMC**
- ☐ **SVH**
- ☐ **VCMC**

Diversion Category:

- ☐ **ICU / CCU Saturation**
- ☐ **ED Saturation**
- ☐ **Neuro / CT Scanner**
- ☐ **Internal Disaster**

All Diversion Categories, send FAX to VCEMS at (805) 981-5300 and to each location in your hospital grouping:

Hospital	*Fax Number*	*Hospital Grouping*
Community Memorial Hospital	**(805) 648-6170**	(OVCH, SJRMC, SPH, VCMC)
Los Robles Hospital and Medical Center	**(805) 370-4579**	(SVH, SJRMC, SJPVH)
Ojai Valley Community Hospital	**(805) 640-2360**	(CMH, SPH, VCMC)
Santa Paula Hospital	**(805) 525-6778**	(CMH, OVCH, SJRMC, VCMC)
Simi Valley Hospital	**(805) 527-9374**	(LRHMC, SJPVH, SJRMC, VCMC)
St. Johns Regional Medical Center	**(805) 981-4436**	(CMH, SJPVH, VCMC)
St. Johns Pleasant Valley Hospital	**(805) 383-7465**	(SJRMC, LRHMC, SVH, VCMC)
Ventura County Medical Center	**(805) 652-3299**	(CMH, SPH, OVCH, SJRMC)

For diversion due to Internal Disaster, also send FAX to:

Ventura County Fire Communications Center (805) 383-7631

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

I. PURPOSE: To define the use of standardized records to be used by Ventura County Emergency Medical Service (VC EMS) providers for documentation of pre-hospital care.

II. AUTHORITY: Title 22 Section 100147.

III. POLICY: Patient care provided by first responders and ambulance personnel will be documented using the appropriate method.

IV. PROCEDURE:

A. Provision of Forms

VC EMS will provide a supply of First Responder Patient Care Records (FR PCR) to EMS system participants that are not currently on the approved Ventura County documentation system (AVCDS).

B. Documentation

1. The VCEMS FR PCR and AVCDS report will be used to document the care provided by first responders and ambulance personnel for every patient contact. A patient contact will be defined as any encounter involving Ventura County pre-hospital personnel with any person consenting, either implied or informed, to assessment and/or treatment. Documentation shall be completed on any person with obvious injury or significant mechanism regardless of consent. Documentation of care given by first responders will not interfere with transport agency assessment or patient care procedures. The following are exceptions:

   a. If a First Responder Advanced Life Support (FR ALS) Paramedic initiates care of the patient, the FR ALS Paramedic will document all care provided to the patient on AVCDS.

   b. If care is turned over to another ALS agency, an AVCDS report will be completed by all pre-hospital provider agencies who delivered patient care and/or transport.

   c. In the event of multiple patients, documentation will be as follows:

1) Level 1 MCI: The care of each patient shall be documented using an AVCDS report.

2) Level 2 and 3 MCI: Each patient transported to a hospital shall have their care documented on a Ventura County Multi-Casualty Patient Record.

a) The transporting agency is responsible for completion of the multi-casualty patient record. The record is designed to be completed by the transporting crew enroute to the receiving hospital.

b) The transporting agency retains the original of the multi-casualty patient record. A copy shall be left with the patient at the receiving hospital. The triage tag shall be attached to this copy and is included as official documentation in the patient's medical record.

c) The transporting agency shall distribute copies of the multi-casualty patient record to the base hospital and EMS Agency within twenty-four hours of demobilization of the incident.

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

a. First Responder Patient Care Record

1) Original (White) retained by agency, copied or submitted to VC EMS for data processing.

2) Patient (Yellow) given to the transport agency at scene to become part of patient chart. This copy may be incomplete at the time that it is handed to the transport crew. If the FR PCR does not accompany the patient, it will be delivered to the RH within 12 hours. If the report is submitted through AVCDS, it should be sent as soon as possible or prior to the end of their 24 hour shift.

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

C. In the event the cardiac monitor is attached as required by any of the VC EMS 705 policies, a rhythm strip shall be recorded and mounted on an ECG form. Additionally, anytime there are changes in the patient's ECG rhythm, defibrillation occurs, ALS procedures are performed, or after ALS medications are administered, a trace recording of the ECG is required. Distribution of these trace recordings are as follows:

1. The original copy shall be placed in the patient's chart.
2. Two additional copies of that strip shall be made. The first submitted to the receiving or base hospital (depending or where the patient is transported), and the second to the provider.

D. Submission to VC EMS

The Emergency Medical Services Agency copy of the FR PCR shall be submitted to the Emergency Medical Services Agency by Provider Agency at least monthly.

E. Dry Run/Against Medical Advice

Every patient contact resulting in refusal of medical attention/transport must be documented with the following information, the reason dispatched and/or chief complaint, assessment and vital signs, base hospital contact (when appropriate), patient advised to seek medical attention and completion of AMA.

F. ALS Interfacility Transfers (Acute Care Facility to Acute Care Facility)

Documentation shall be completed on all ALS Interfacility transfers only. Documentation will include, but not be limited to, baseline assessment, medications administered, reason for transfer, procedures done to the patient, vital signs and any changes from baseline assessment.

If the transferring facility sends staff to accompany the patient, the staff member(s) name(s) shall be documented on the AVCDS.

G. Patient Medical Record

The hospital copy of the FR PCR, AVCDS and Ventura County Multi-Casualty Patient Record shall be considered a legal document and part of the patient's medical record. The first responder agency, transport agency, and hospital are custodians of record.

Attachment A

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

Term	Abbreviation
5% Dextrose in Water	D5W
Abdomen	Abd
Above knee amputation	AKA
Acquired Immunodeficiency Syndrome	AIDS
Ad Libitum (as desired)	Ad lib
Advanced Life Support	ALS
After	p
Against medical advise	AMA
Alcohol	ETOH
Alert and oriented	A & O
Also known as	AKA
Altered level of consciousness	ALOC
Altered Level Of Consciousness	ALOC
Amount	Amt
~~Ampere~~	~~Amp~~
Ampule	Amp
Antecubital	Ac
Anterior	Ant.
Anterior/Posterior	~~AP~~A/P
Appointment	Appt.
Arterial Blood Gas	ABG
Arteriosclerotic Heart Disease	ASHD
As necessary	Prn
As soon as possible	ASAP
Aspirin	ASA
At	@
Atrial Fibrillation	A fib
Attention Deficit Hyperactivity Disorder	ADHD
Automated external Defibrillator	AED
Automatic Implantable Cardiac Defibrillator	AICD
Bag Valve Mask	BVM
Basic Life Support	BLS
Before	a
Birth Control Pill	bcp
Bowel Movement	BM
Bundle Branch Block	BBB
By Mouth	p.o.
By Order Of	Per
Cancer	CA
Carbon Dioxide	CO2
Carbon Monoxide	CO

Term	Abbreviation
Cardio Pulmonary Resuscitation	CPR
Central Nervous System	CNS
Cerebrospinal Fluid	CSF
Cerebrovascular Accident	CVA
Cervical Spine	C-Spine
Change	Δ
Chief Complaint	CC
Chronic Obstructive Pulmonary Disease	COPD
Circulation, Sensation, Motor	CSM
Clear	Cl
Continuous Positive Airway Pressure	CPAP
Coronary Artery Bypass Graft	CABG
Coronary Artery Disease	CAD
Date of Birth	DOB
Dead on Arrival	DOA
Decreased	↓
Defibrillated	Defib
Degrees~~, Hour~~	°
Delirium Tremens	DTs
Diabetes Mellitus	DM
Dilation and curettage	D & C
Discontinue*	D/C*
Distention Deformity Contusion Abrasion Penetration Paradoxical Respiration Burn Laceration Swelling Tenderness Instability Crepitus	dDCAPpBLSTIC
Do Not Resuscitate	DNR
Drops	gtts
Dyspnea On Exertion	DOE
Electrocardiogram	ECG
Electroencephalogram	EEG
Emergency Department	ED
Emergency Medical Services	EMS
Endotracheal	ET
Equal	=
Estimated	Est
Estimated Time of Arrival	ETA
Etiology	Etiol.
Every	q
Every day*	qd*
Evening	p~~P~~m*

Term	Abbreviation
Extended Care Facility	ECF
Eye, ear, nose, throat	EENT
Fahrenheit	F
Female	♀ ~~Fe~~
Fetal Heart Rate	FHR
Fluid	Fl
Foot	Ft
Foreign body	FB
Four times a day	QID
Fracture	Fx
Gallbladder	GB
Gastrointestinal	GI
Genitourinary	GU
Glasgow Coma Score	GCS
Grain	Gr
Gram	gm
Gravida 1,2,3, etc	G-1, G2, G3
Greater Than	>
Gun Shot Wound	GSW
Gynecological	Gyn
Heart Rate	HR
Hematocrit	Hct
Hemoglobin	Hgb
Hepatitis A Virus	HAV
Hepatitis B Virus	HBV
Hepatitis C Virus	HCV
History	Hx
History and Physical	H & P
Hour of Sleep (bedtime)*	hs*
Human Immunodeficiency Virus	HIV
Hydrochlorothiazide	HCTZ
Hypertension	HTN
Immediately	STAT
Increase	↑
Insulin Dependent Diabetes Mellitus	IDDM
Intake and Output	I & O
Intensive Care Unit	ICU
Intercostal Space	ICS
Intracranial Pressure	ICP
Intralingual	IL
Intramuscular	IM
Intraosseous	IO
Intrauterine Device	IUD
Intravenous	IV
Intravenous Push	IVP
Irregular	Irreg
Jugular venous distention	JVD
Kilogram	kg
Kilometer	Km
King Airway	
Labor and Delivery	L & D
Laceration	Lac
Last Menstrual Period	LMP
Lateral	Lat
Left	L

Term	Abbreviation
Left Ear*	AS*
Left Eye*	OS~~OD~~*
Left Lower Extremity	LLE
Left Lower Lobe	LLL
Left Lower Quadrant	LLQ
Left Upper Extremity	LUE
Left Upper Lobe	LUL
Left Upper Quadrant	LUQ
Less Than	<
Lower Extremity	LE
Lumbar Puncture	LP
Male	♂
Medical Doctor	MD
Meter	M
Metered Dose Inhaler	MDI
Microgram	mcg
Milliequivalent	mEq
Milligram	mg
Milliliter	ml
Millimeter	mm
Minute	Min
Morning	am
Morphine Sulphate*	MS*
Motor Cycle Accident	MCA
Motor Vehicle ~~Collision~~Accident	MVA~~C~~
Moving all Extremities	MAE
Multiple Casualty Incident	MCI
Multiple sclerosis	MS
Myocardial Infarction	MI
Nasal cannula	NC
Nausea/Vomiting	NV
Negative	neg
Night	Noc
Nitroglycerine	NTG
No Acute Distress	NAD
No Known Allergies	NKA
No Known Drug Allergies	NKDA
Non Insulin Dependent Diabetes Mellitus	NIDDM
Non Rebreather Mask	NRBM
Non Steroidal Anti-inflammatory Drugs	NSAID
None/No	ø
Normal Saline	NS
Normal Sinus Rhythm	NSR
Not applicable	NA
Nothing by Mouth	NPO
Obstetrics	OB
Occupational Therapy	OT
Operating Room	OR
Organic Brain Syndrome	OBS
Ounce	oz
Over the Counter	OTC
Overdose	OD
Oxygen	O2
Palpable	Palp

Term	Abbreviation
Para, number of pregnancies	Para 1,2,3, etc
Paramedic	PM
Paroxysmal Supraventricular Tachycardia	PSVT
Paroxysmal Nocturnal Dyspnea	PND
Past Medical History	PMH
Pediatric Advanced Life Support	PALS
Pelvic Inflammatory Disease	PID
Per Rectum	pr
Percutaneously Inserted Central Catheter	PICC
Phencyclidine	PCP
~~Physical Exam~~	~~PE~~
Positive	+
Pound	Lb
Pregnant	Preg
Premature Ventricular Contraction	PVC
Primary Care Physician	PCP
Private/Primary Medical Doctor	PMD
Privately Owned Vehicle	POV
Pro Re Nata – As Needed	PRN
Pulmonary Embolism	PE
Pulse, Motor, Sensation	PMS
Pulseless Electrical Activity	PEA
Pupils Equal and Reactive to Light	PEARL
Range of Motion	ROM
Registered Nurse	RN
Respiration	R
Respiratory Rate	RR
Respiratory Therapist	RT
Right	Rt
Right Ear*	AD*
Right Eye*	OD*
Right Lower Extremity	RLE
Right Lower Lobe	RLL
Right Lower Quadrant	RLQ
Right Middle Lobe	RML
Ringer's Lactate	RL
Rule Out	R/O

Term	Abbreviation
Sexually Transmitted Disease	STD
Shortness of Breath	SOB
Sinus Bradycardia	SB
Sinus Tachycardia	ST
Sodium Bicarbonate	NaHCO3
Sodium Chloride	NaCl
Streptococcus	Strep
Subcutaneous*	SQ*
Sublingual	SL
Sudden Acute Respiratory Syndrome	SARS
Sudden Infant Death Syndrome	SIDS
Supraventricular Tachycardia	SVT
Temperature	T
Temperature, Pulse, Respiration	TPR
Three Times a Day	TID
Times	X
To Keep Open	TKO
Tracheostomy	Trach
Traffic Accident	TA
Transcutaneous Pacing	TCP
Transient Ischemic Attack	TIA
Treatment	Tx
Tuberculosis	TB
Twice a day	BID
Upper Respiratory Infection	URI
Urinary Tract Infection	UTI
Ventricular Fibrillation	VF
Ventricular Tachycardia	VT
Vital Signs	VS
Volume	Vol
Water	H20
Weight	Wt
With	c
Within Normal Limits	WNL
Without	s
Wolf-Parkinson-White	WPW
Year	Yr
Years Old	y/o

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

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Transport and Destination Guidelines	Policy Number 604
APPROVED: Administration: Barry R. Fisher, MPPA	Date: 06/01/2008
APPROVED: Medical Director: Angelo Salvucci, M.D.	Date: 06/01/2008
Origination Date: June 3, 1986 Date Revised: January 9, 2008 Review Date: January, 2010	Effective Date: June 1, 2008

I. PURPOSE: To establish guidelines for determining appropriate patient destination, so that to the fullest extent possible, individual patients receive appropriate medical care while protecting the interests of the community at large by optimizing use and availability of emergency medical care resources.

II. AUTHORITY: Health and Safety Code, Section 1317, 1797.106(b), 1797.220, and 1798 California Code of Regulations, Title 13, Section 1105(c) and Title 22, Section 100147.

III. POLICY: In the absence of decisive factors to the contrary, patients shall be transported to the most accessible medical facility equipped, staffed, and prepared to receive emergency cases and administer emergency medical care appropriate to the needs of the patients.

IV. PROCEDURE:

A. Hospitals unable to accept patients due to an internal disaster shall be considered NOT "prepared to receive emergency cases".

B. In determining the most accessible facility, transport personnel shall take into consideration traffic obstruction, weather conditions or other factors which might affect transport time.

C. Most Accessible Facility

The most accessible facility shall ordinarily be the nearest hospital emergency department, except for:

1. Base Hospital Direction for ALS patients

a. Upon establishment of voice communication, the Base Hospital is responsible for patient management until the patient reaches a hospital and medical care is assumed by the receiving hospital.

b. The Base Hospital may direct that the patient be transported to a more distant hospital which in the judgment of the BH physician or MICN is more appropriate to the medical needs of the patient.

c. Patients may be diverted in accordance with Policy 402.

2. Patients transported in BLS ambulances demonstrating conditions requiring urgent ALS care (e.g., unstable vital signs, chest pain, shortness of breath, airway obstruction, acute unconsciousness, OB patient with contractions), shall be transported to the nearest hospital emergency department prepared to receive emergency cases.

D. "Decisive Factors to the Contrary"

Decisive factors to the contrary include, but are not limited to, the following:

1. Prepaid Health Plans

a. EMS personnel shall not request information on insurance or delay transport or treatment while determining insurance status.

b. A member of a group practice prepayment health care service who volunteers such information and requests a specific facility may be transported according to that plan when the BLS ambulance personnel or the ALS Base Hospital determines that the condition of the member permits such transport.

c. However, when it is determined that such transport would unreasonably remove the ambulance unit from the service area, the member may be transported to the nearest hospital capable of treating the member.

2. Patient Requests

a. When a person or his/her legally authorized representative requests emergency transportation to a hospital other than the most accessible emergency department, the request should be honored when ambulance personnel, BH MD or MICN determines that the condition of the patient permits such transport.

b. When it is determined that such transport would unreasonably remove the ambulance unit from the service area, the patient may be transported to the nearest hospital capable of treating him/her.

3. Private Physician's Requests

When a treating physician requests emergency transportation to a hospital other than the most accessible acute care hospital, the request should be honored unless it is determined that such transport would unreasonably remove the ambulance from the service area. In such cases:

a. If the treating physician is immediately available, ambulance personnel shall confer with the physician regarding a mutually agreed upon destination.

b. If the treating physician is not immediately available, the patient should be transported to the nearest hospital capable of treating him/her.

c. If Base Hospital contact has been made due to the condition of the patient and the immediate unavailability of the treating physician, and the BH MD or MICN determines that the condition of the patient does not permit such transport, BH directions shall be followed. If communication with the treating physician is possible, the BH should consult with the physician.

4. Physician on Scene per VC EMS Policy 702

5. Direct Admits

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

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

I. PURPOSE: This policy establishes guidelines for the response of pre-hospital care providers to incidents involving hazardous materials.

II. AUTHORITY: Health and Safety Code, Division 2.5, Sections 1797.220 & 1798. California Code of Regulations, Title 22, Division 9, Section 100175.

III. POLICY: The Ventura County Regional Response Team (VCRRT), under direction of the Incident Commander, assumes responsibility for control of the hazardous materials incident.

The responding Emergency Medical Services personnel assume responsibility for patient care and transportation after release and/or decontamination by VCRRT. The EMS personnel and/or treatment team shall coordinate treatment/transport efforts with VCRRT so as not to jeopardize scene integrity, causing unnecessary spread of contamination to ambulance, equipment, EMS personnel and hospital personnel or citizens.

IV. PROCEDURE:

A. INITIAL NOTIFICATION

1. The responding EMS unit shall be notified by the Fire Department as soon as possible on all hazardous material incidents in order to facilitate their entry into the scene. Necessary information should include:

   a. Radio channel/frequency for the incident
   b. Estimated number of victims or potential victims
   c. Urgency of the incident
   d. Approach to the incident
   e. Location of the staging area
   f. Identification (radio designation) of the Incident Commander

g. Hazardous substance involved

h. Request for specialized equipment needed

2. While enroute, the EMS unit shall make radio contact with the Incident Commander or FCC and verify location, approach and staging information prior to their arrival on-scene.

3. Upon arrival at the scene, the ambulance unit shall notify the base hospital or receiving hospital affected as to the number of patients, description of hazard, and any other pertinent information relative to hospital needs. (Note: the IC or VCRRT should provide this information upon request).

B. ARRIVAL ON-SCENE

1. If the scene has not been secured and a staging area has not been established, the ambulance unit should make radio contact with the Incident Commander or FCC for staging instructions.

2. In the absence of an Incident Commander and/or a staging area, EMS personnel should stay upwind and avoid entering the contaminated area.

3. If the scene has been secured, the first-in ambulance unit should enter the staging area and report to the Incident Commander for direction.

C. VICTIM DECONTAMINATION

1. Victims contaminated by a hazardous substance or radiation shall be appropriately decontaminated by VCRRT prior to being moved to the triage area for transportation.

2. Decontamination may include removal of clothing and personal articles, washing the patient (as needed), and wrapping the patient in a protective covering.

3. The transfer of the victim from the contaminated zone to the safe zone must be accomplished by trained personnel in an appropriate level of protective clothing and carefully coordinated so as not to permit the spread of contamination.

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

5. Contaminated clothing and personal articles shall be properly prepared for disposal by the VCRRT.
6. Every effort shall be made to preserve, protect and return personal articles.

D. TRANSPORTATION

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

E. ARRIVAL AT EMERGENCY ROOM

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

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

F. EMERGENCY PERSONNEL DECONTAMINATION

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

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Guidelines For Base Hospital Contact		Policy Number: 704
APPROVED: Administration:	Barry R. Fisher Barry R. Fisher, MPPA	Date: 06/01/2008
APPROVED: Medical Director:	Angelo Salvucci, MD	Date: 06/01/2008
Origination Date: Date Revised: Review Date:	October 1984 March 13, 2008 March, 2010	Effective Date: June 1, 2008

I. PURPOSE: To define patient conditions for which EMT-Ps shall establish BH contact.

II. AUTHORITY: Health and Safety Code Sections 1798, 1798.102 and 1798.2

III. POLICY: A paramedic shall contact a Base Hospital in the following circumstances:

A. Any patient to which ALS care is rendered under VCEMS Policy 705: County Wide Protocols.

B. Any mechanism of injury where paramedics suspect or patient exhibits significant signs of injury.

1. Vehicle accident
2. Suspect or complicated fractures
3. Injuries, which exhibit neurological or vascular compromise
4. Significant penetrating head, neck, chest, abdomen or thigh
5. Any abdominal pain secondary to blunt trauma

C. General Cases

1. Significant vaginal bleeding (OB or non-OB related).
2. Pregnant female in significant distress (e.g., symptoms of placenta previa, placenta abruptio, toxemia, retained placenta, etc.).
3. Syncope / Near Syncope
4. AMA involving any of the above conditions
5. AMA including suspected altered level of consciousness
6. Any patient who, in paramedic's opinion, would benefit from base hospital consultation.

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: PEDIATRIC INTRAOSSEOUS INFUSION	Policy Number: 717
APPROVED: Administration: Barry R. Fisher, MPPA	Date: 06/01/2008
APPROVED: Medical Director: Angelo Salvucci, MD	Date: 06/01/2008
Origination Date: September 10, 1992 Date Revised: April 10, 2009 Review Date: March, 2010	Effective Date: June 1, 2008

I. PURPOSE: To define parameters of use of Intraosseous Infusion (IO).

II. AUTHORITY: Health and Safety Code 1797.178, 1797.214, 1797.220, 1798 and California Code of Regulations, Title 22, Division 9, Section 100145, 100166 and 100175.

III. POLICY: IO infusion may be performed by paramedics who have successfully completed a competency review, in its use, have been authorized by the Ventura County EMS Medical Director, and when conditions listed under indications are met. Only two (2) attempts at establishing an IO infusion shall be done.

IV. Procedure:

A. Indications

1. Child < 8 years of age with altered level of consciousness (ALOC), and urgent need to administer fluids and/or medications which can only be given by the IV route and a peripheral IV site is not readily/immediately available.

B. Contraindications

1. Recent fracture of involved bone
2. Infected burn or cellulitis overlying the site
3. Congenital deformities of bone
4. Grossly contaminated skin overlying site
5. Skin injury

C. Potential Complications

1. Prolongation of transport time
2. Local infiltration of fluid/medication or local bleeding
3. Osteomyelitis or sepsis (rare)
4. Localized periosteal or bone marrow inflammation

5. Incorrect placement of the needle leading to bone growth plate damage or knee joint injury
6. Fat embolism
7. Vascular or nerve damage from large volume extravasation
8. Fluid overload

D. Training

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

E. Documentation

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

F. Quality Assurance

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

G. Procedure

1. IO infusion shall not unnecessarily prolong on scene time or transport time. There shall be no more than two attempts unless ordered by BH MD.
2. Assemble the needed equipment
   a. Sterile gloves
   b. 16-18 gauge IO needle - 1 1/2 inches long

c. Betadine swabs or solution on gauze
d. Sterile gauze pads
e. Two (2) 5 cc syringes or primed IV line with or without stopcock
f. IV fluids - maximum 250 cc bags
g. Tape
h. Splinting device

3. Locate the appropriate insertion site, a non-traumatized proximal tibia. Locate the landmarks 2-3 cm below the tibial tuberosity on the anteromedial flat bony surface of the proximal tibia.
4. Prepare the site. Position the child so that the site is accessible. Prepare the site using betadine. Start in the center of the site and paint on betadine from the center of the site to the outer edge of the site (clean to dirty). Repeat this procedure 3 times using a new sterile swab or pad each time. Drying the site is not necessary.
5. Fill one syringe with IV solution, keeping the needle tip sterile.
6. Maintain sterile procedure at all times.
7. Insert the IO needle.
   a. Hold the child's leg steady
   b. Grasp the needle with the obturator still in place and insert it through the skin at the selected site at a 90-degree angle to the skin surface
   c. Once the periosteum of the bone has been reached, direct the needle 10-15 degrees away from the knee, rotating and gently pushing the needle forward
   d. When the needle is felt to 'pop' into the bone marrow space: Remove the obturator, attach a dry 5 cc syringe, and attempt to aspirate bone marrow. Attach the 5 cc syringe containing the IV solution, to flush the IO needle. Connect the IV tubing and secure the needle by taping

   OR

   Remove the obturator, attach a primed IV solution set with or without a stop cock. Pinch or close to the IV solution and attempt to aspirate bone marrow. Pinch or close to the patient and draw 5 cc of fluid from the IV bag. Pinch or close to IV bag and flush IO

needle. Secure the needle by taping (if unable to flush continue procedure and watch carefully for extravasation and swelling).

e. Once satisfactory flushing is achieved - begin to infuse fluids and/or medications.

f. Splint the child's leg - to prevent accidental dislodging of the needle.

g. Document pedal pulses and skin color bilaterally before and after procedure.

8. Active pushing of fluids may be more successful than gravity infusion. Use the same size syringe for fluid bolus's. Close observation of the flow rate and amount is required.

9. If infiltration occurs, stop the infusion, remove the needle, and apply a pressure bandage to the IO site.

10. If the needle is accidentally removed, stop the infusion, and apply a pressure bandage to the IO site.

Appendix A

Quality Improvement:

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

INTRAOSSEOUS INFUSION DATA FORM

Date: _____ Incident Number: _____

Nature of Case:

__ Cardiopulmonary Arrest __ Shock, Non-traumatic

__ Shock, Traumatic __ Other, describe

Age: _____ Sex: Male: _____ Female: _____ Weight _____

Use appropriate per EMS Policies/Procedures: Yes: _____ No: _____

Number of Attempts/Successes:

Total _____ Attempts _____ Successes _____

PARAMEDIC #1 – License No. _____ Attempts _____ Successes: _____

PARAMEDIC #2 - License No. _____ Attempts _____ Successes _____

If line(s) started for volume resuscitation, volume infused in field: _____ c.c.

If line started for drug therapy, drugs given via intraosseous route in field: _____

Elapsed on Scene Time: _____ min. Base Hospital: _____

Appendix B

Intraosseous Infusion Competency Review

Name: _____ Date: _____

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

Reviewer's Signature: _____

Reviewer's Printed Name: _____

License/Certificate Level: _____

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Interfacility Transport Of Patients With IV Heparin & Nitroglycerin		Policy Number 722
APPROVED: Administration	Barry R. Fisher Barry Fisher, MPPA	Date: 01-10-08
APPROVED: Medical Director	Angelo Salvucci, M.D.	Date: 01-10-08
Origination Date: Date Revised: Review Date:	June 15, 1998 January 10, 2008 January, 2010	Effective Date :January 10, 2008

I. PURPOSE:

To provide a mechanism for paramedics to be permitted to monitor infusions of nitroglycerin and heparin during interfacility transfers.

II. POLICY:

A. Paramedics: Only those Paramedics who have successfully completed a training program approved by the Ventura County EMS Medical Director on nitroglycerin and heparin infusions will be permitted to monitor them during interfacility transports.

B. ALS Ambulance Providers: Only those ALS Ambulance providers approved by the Ventura County EMS Medical Director will be permitted to provide the service of monitoring nitroglycerin and/or heparin infusions during interfacility transports

C. Patients: Patients that are candidates for paramedic transport will have pre-existing intravenous heparin and/or nitroglycerin drips. Pre-hospital personnel will not initiate heparin and nitroglycerin drips.

III. PROCEDURE:

A. Medication Administration

1. The paramedic shall receive a report from the nurse caring for the patient and continue the existing medication drip rate
2. If medication administration is interrupted by infiltration or disconnection, the paramedic may restart or reconnect the IV line.
3. All medication drips will be in the form of an IV piggyback monitored by a mechanical pump familiar to the Paramedic who has received training and is familiar with its use.
4. In cases of pump malfunction that cannot be corrected, the medication drip will be discontinued and the receiving hospital notified.

B. Nitroglycerin Drips: Paramedics are allowed to transport patients on nitroglycerin drips within the following parameters:

1. Infusion fluid will be D5W. Medication concentration will be either 25 mg/250ml or 50 mg/250ml.
2. Drip rates will remain constant during transport. No regulation of the rate will be performed except to turn off the infusion completely.
3. In cases of severe hypotension, the medication drip will be discontinued and the receiving hospital notified.
4. Drip rates will not exceed 50 mcg/minute.
5. Vital signs will be monitored and documented every 5 minutes.

C. Heparin Drips: Paramedics are allowed to transport patients on heparin drips within the following parameters:

1. Infusion fluid will be D5W or NS. Medication concentration will be 100 units/ml of IV fluid (25,000 units/250ml or 50,000 units/500 ml).
2. Drip rates will remain constant during transport. No regulation of the rate will be performed except to turn off the infusion completely.
3. In cases of severe uncontrolled bleeding, the medication drip will be discontinued and the base hospital notified.
4. Drip rates will not exceed 1600 units/hour.
5. Vital signs will be monitored and documented every 10 minutes.

D. QI: All calls will be audited by the service provider and by the transferring and receiving hospitals. Audits will assess compliance with VCEMS Policy, including base hospital contact in emergency situations. Reports will be sent to the EMS agency as requested.