Public Health Administration Large Conference Room 2240 E. Gonzales, 2nd Floor Oxnard, CA 93036	Pre-hospital Services Committee Agenda	January 8, 2009 9:30 a.m.

I.	**Approve Agenda**		
II.	**Minutes**		
III.	**Medical Issues**		
	A.	Policy 625:	Physician Orders for Life-Sustaining Treatment (POLST)
	B.	Policy 613:	Do Not Resuscitate
	C.	STEMI Update	
	D.	Impedance Threshold Device Report	
	E.	Other	
IV.	**New Business**		
	A.	PSC Attendance Report	
	B	CPR Competencies Project – A Salvucci	
	C.	Other	
V	**Old Business**		
	A.	CARES Project Update – A. Salvucci	
	B.	ART/BART Report – A. Salvucci	
	C.	Trauma System Update – B. Fisher	
	D.	Pacing Training – Update – A. Salvucci	
	E.	Other	
VI	**TAG Report**		
VII	**Policies for Review**		
	A.	Policy 705:	Anaphylaxis
	B.	Policy 705:	Behavioral Emergencies
	C.	Policy 705:	Burns
	D.	Policy 705:	Cardiac Arrest, Pediatric
	E.	Policy 705	Crush Injury/Syndrome
	F.	Policy 705:	Heat Exhaustion/Heat Stroke
	G.	Policy 705:	Insect and Spider Bites
	H.	Policy 705:	Marine Animals
	I.	Policy 705:	Nerve Agent Poisoning
	J.	Policy 705:	Overdose/Poisoning
	K.	Policy 705	Ventricular Tachycardia, Sustained Not in Arrest
	L.	Other	
VIII.	**Agency Reports**		
	A.	ALS Providers	
	B.	BLS Providers	
	C.	Base Hospitals	
	D.	Receiving Hospitals	
	E.	ALS Education Programs	
	F.	EMS Agency	
	G.	Other	
IX.	**Informational Topics**		
	A.	Policies in which BG was changed to <60	
		1. Policy 705:	Apnea
		2. Policy 705:	Seizures
		3. Policy 705:	Non Traumatic Focal Neuro
		4. Policy 720:	Limited Base Hospital Contact
X.	**Closing**		

Special thanks to Ventura City Fire Department for providing the refreshments

TEMPORARY
PARKING PASS
Expires January 8, 2009

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

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

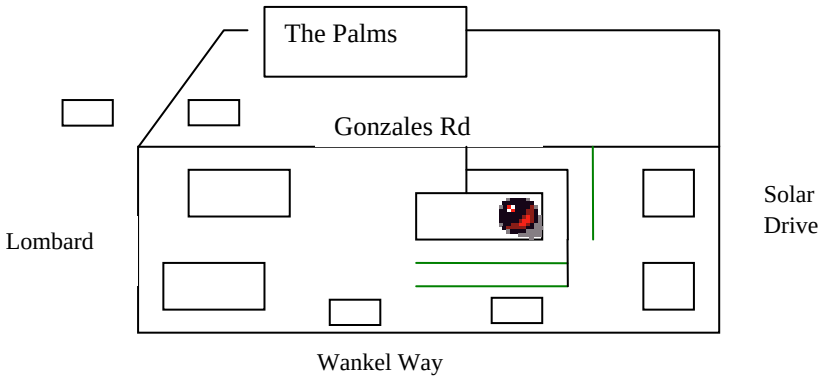
Parking Instructions: Parking at workshop venue is limited. Arrive early to allow for offsite parking if venue parking lot is full.

2240 Gonzales Rd. location
If you park in a designated "green permit parking" slot, fold this flyer in half and place pass face-up on the dash of your car, to avoid receiving a ticket.

2100 Solar Drive
An additional amount of "Green Permit Parking" spaces (only 30) are available in adjacent parking lot, those that back-up against venue parking area, (Enter this parking lot off of Gonzales[3rd driveway] or Solar Drive). **Place this flyer on your dash.** If all of those stalls are occupied, overflow parking is available at The Palms shopping area or side streets.

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

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



Public Health Administration Large Conference Room 2240 E. Gonzales, 2nd Floor Oxnard, CA 93036	Pre-hospital Services Committee Minutes	December 11, 2008 9:30 a.m.

Item	Discussion	Action	Assigned
I. Approve Agenda		The meeting was called to order at 9:30 a.m. It was M/S/C (M. Mundell/L. Tadlock) to approve the agenda as submitted.	
II. Minutes		It was M/S/C (T. Norton/R. Sebree) to approve the minutes as submitted.	
III. Medical Issues		The form is not final as yet. We will work on a policy for next meeting.	
A. POLST	The form is not finalized yet. We will work on the policy for next meeting. The statute is effective the first of the year. It will be approved by the first of the year by EMSA. If personnel are presented with the form, make BH contact. This will not replace the DNR form.		
B. STEMI Update	EMS reviewed each of the SRC policies. Program is doing well and numbers continue to exceed all reports in the literature. We are concentrating on getting early EKGs. Rapid EKGs are continuing to be reviewed. We are receiving requests from other areas on designing program. Ours has become the model.		
C. Impedance Threshold Device Report	Currently looking for funding. Initial start up would be around $60,000. Continuing to review study.		
D. Ezy IO Discussion	EZ IO, we have made it an optional item in Santa Barbara. Santa Barbara has had success with its use. It is a good way to administer resuscitation drugs in IV. It is useful but not sure about making it a required item. This item is useful in adults where the IO is for pediatric use. From a medical perspective, this is a valuable tool. Financially, start up will be expensive. Providers are interested in utilizing; however, funding is the issue. Concern with making it optional, as optional usually becomes mandatory over time.		EMS will set up a meeting with providers to discuss upcoming equipment issues.
E. Policy 727: Transcutaneous Pacing		Changes to policy include: Page 1, III, add after 705, Symptomatic Bradycardia, Adult.	Policy approved with changes. Policy will become effective today.

Item	Discussion	Action	Assigned
		Page 1, C.2, Add BH contact Page 2, D.5, remove "with morphine". Page 2, D.8. Add "are" before needed.	
F. Blood Glucose < 60 Policy 705 Apnea Policy 705: Non Traumatic Focal Neurological Changes Policy 705: Seizures		Changes: **Apnea** – remove draw blood **Non-Traumatic Focal Neurological Changes** Add – Time of symptom onset **Seizure** – Remove #4 in "No known Seizure Disorder	All policies approved. Policies will become effective today.
G. Policy 705: Pediatric Bradycardia			Policy approved as submitted.
H. Other	Gold Coast Ambulance announced that Garrett Fletcher, a long time paramedic for this county died on November 30th. They asked that the committee take a moment of silence in his honor.		
IV. New Business			
A. Policy 334: Pre-Hospital Personnel Mandatory Training Requirements			Policy approved as submitted.
B Policy 500: Ventura County Emergency Medical Services Provider Agencies	There was a lengthy discussion regarding allied agencies. Do the Harbor Patrol Departments need to be included in this listing? They are not a designated 911 response agency. They are an augment to the system. They may be dispatched for the boat, not necessarily as an EMT. Those agencies that we regulate are covered on this list. They are not a 24/7 911 response agency. Concern that if they are dropped off the list it will affect their ability to function. This will not affect their ability to function.	Ventura City Fire Department phone number correction made.	Policy tabled. EMS needs to discuss further.
C. Policy 614: Spinal Immobilization	Significant mechanism of injury was discussed. Patient may not feel the	Change: Page 1, III.A.2. "to the extent…"	Policy approved with a change.

Item	Discussion	Action	Assigned
	pain because of adrenaline.	addition will be added to III.B.5 and III.C below.	
D. Policy 705: Decompression Injuries	There was a lengthy discussion regarding: • Patients are not transferred directly to a chamber nor do we transport to Catalina. SJPVH mainly accepts patients for wound care and they are not available 24/7. • Under base hospital order, it would probably be o.k. to take the patient directly to a chamber. • Majority of chambers in California do not accept patients with decompression injuries. • Direction to BH from EMS regarding appropriate patient destination from the field. Patient should be taken to VC hospital and then hospital will arrange transfer to a chamber.	Diver alert network needs to be added to policy.	Tabled Patient destination will be researched. The policy will be brought back at a later time.
E. Policy 708: Patient Transfer from One Prehospital Team to Another		It was M/S/C to approve the policy as submitted.	Approved
F. Other			
V Old Business			
A. CARES Project Update – A. Salvucci	We are continuing to participate in the program. After the first of the year we will be looking at transitioning the data entry from the PCCs to the field providers. We are still the only agency on the west coast to participate in this program.		
B. ART/BART Report – A. Salvucci	Nothing new. Los Angeles and San Diego are interested in participating.		
C. Trauma System Update – B. Fisher	We have received Board of Supervisor approval. The EMSA has 60 days to review. Then to RFP.		
VI TAG Report		No report	

Item		Discussion	Action	Assigned
VII	**Policies for Review**			
A.	Policy 120: Prehospital Emergency Medical Care Quality Assurance Program		Page 5, EMS Educators – group needs to be amended.	Approved with changes
B.	Policy 330: EMT-I/EMT-P/MICN Decertification and Discipline		Page 2, paramedic (format change)	Approved with change.
C.	Policy 332: EMS Personnel Background Check Requirements		Policy approved as submitted.	Approved
D.	Policy 402: Patient Diversion/Emergency Department Closures	Any patient remaining on a gurney with a paramedic attending them at a hospital is considered an EMTALA violation. Patients should not remain on a gurney in a hospital without hospital staff attending to their needs.	Policy approved as submitted.	Approved
E.	Policy 705: Newborn Resuscitation		Policy approved as submitted.	Approved
F.	Policy 705: Pain Control		Policy approved as submitted.	Approved
VIII.	**Agency Reports**			
A.	ALS Providers			
B.	BLS Providers			
C.	Base Hospitals	SJ – Airway lab on the 29th followed by field care audit. LR – EMS jeopardy hosted by LR/SVH on 12/17/08. SVH – Grosman at SVH 12/12. VCMC – FCA 6:30 tonight.		
D.	Receiving Hospitals	OVCH – Announced that they broke ground for new ER.		
E.	ALS Education Programs	Ventura College Paramedic Studies just completed their reaccreditation process. Meredith thanked those who participated in the site visit. They received an outstanding preliminary recommendation. The group was amazed at the amount of participation that this county offers the program.		

Item	Discussion	Action	Assigned
	The students are just finishing their didactic portion and will be starting their clinical time in January and in March will start in the field.		
F. EMS Agency	• Severe weather warning. Rain and snow to the 1000 ft level. Armories may be opened. • Still moving along with Zoll. Installation of hardware has been completed. Next will be the move of our previous data. Training in January. Still looking at Spring 2009 for a go live date. • MCI is being revamped. Not multi-casualty incident but a multi responder incident. There is an advanced MCI class being held in January. An email was sent out previously with the dates. RSVP should be made through Steve Carroll. There will also be an addition class in July. A list of personnel who will need the training will be sent out. 2008 Homeland Security money was approved to hire a contractor to coordinate a countywide drill in Spring of 2010. • Ambu mannequin to improve chest compression. 80+ personnel tested who were on duty. They were tested and then shown their results and retested. Improvements were seen from 20% initially and then retest, 77% completed it correctly. Will be publishing the results in the March issue of JEMS. Another mannequin will be purchased by EMS. There is room for improvement in skills.		
G. Other			
IX. Informational Topics			
A. Mark I Kits	Mark-I kits. Homeland security monies were previously used to purchase. They have gone away from this type of injector. Monies are no longer available for their purchase. In 2009 we will look at a partial restock. Please rotate stock. New kits are $1300. Please let Steve know how much stock you have that needs to be destroyed.		
X. Closing	**The meeting was adjourned at 11:15 a.m.**		

Respectfully submitted
Debora Haney

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Physician Orders for Life-Sustaining Treatment (POLST)	Policy Number 625
APPROVED: Administration: Barry R. Fisher, MPPA	Date:
APPROVED: Medical Director: Angelo Salvucci, M.D.	Date:
Origination Date: January 5, 2009 Date Revised: Review Date:	Effective Date:

I. PURPOSE: To permit Ventura County Emergency Medical Services personnel to honor valid POLST forms and provide end-of-life care in accordance with a patient's wishes.

II. AUTHORITY: California Health and Safety Code, Sections 1798 and 7186. California Probate Code, Division 4.7 (Health Care Decisions Law).

III. DEFINITIONS:

A. "EMS Personnel": All EMT-1s, EMT-Ps and RNs caring for prehospital or interfacility transfer patients as part of the Ventura County EMS system.

B. Valid Physician Orders for Life-Sustaining Treatment (POLST). A completed and signed physician order form, according to California Probate Code, Division 4.7 and approved by the California Emergency Medical Services Authority.

IV. POLICY:

A. A POLST form must be signed by the patient or surrogate and physician to be valid.

B. Although an original POLST form is preferred, a copy or FAX is valid.

C. When a valid POLST form is presented, EMS personnel will follow the instructions according to the procedures below.

D. The POLST form is intended to supplement, not replace, an existing Advance Health Care Directive. If the POLST form conflicts with the Advance Health Care Directive, the most recent order or instruction of the patient's wishes governs.

V. PROCEDURE:

A. Confirm that:

1. The patient is the person named in the POLST.

2. The POLST form, Section D, is signed by the patient and physician. The form is not valid if not signed by both.

B. POLST form - Section A:

1. If the patient has no pulse and is not breathing AND "Do Not Attempt Resuscitation/DNR is selected, refer to VC EMS Policy 613 – Do Not Resuscitate.
2. If the patient has no pulse and is not breathing AND EITHER "Attempt Resuscitation/CPR" is selected OR neither option is selected then begin resuscitation.

C. POLST Form – Section B: This section applies if the patient has a pulse and/or is breathing.

1. If **"Comfort Measures Only"** is selected, the following treatments may be done as indicated to relieve pain and suffering:
   a. Patient positioning
   b. Oxygen
   c. Airway suctioning
   d. Relief of airway obstruction (including Magill Forceps)
   e. Morphine – IV or IM
2. If **"Limited Additional Interventions"** is selected, in addition to the above "Comfort Measures Only" items, the following treatments may be done may be done as indicated:
   a. IV fluids
   b bag-mask ventilation
   c. PAP
   d. O NOT INTUBATE

   If the "Do Not Transfer to hospital for medical interventions" option is selected, contact the base hospital. Generally the patient will be transported.
3. If "**Full Treatment"** is selected the patient will be treated with all medically indicated medications and/or procedures.

D. If there is any conflict between the written POLST orders and on-scene individuals, contact the base hospital.

E. Take the POLST form with the patient.

VI. DOCUMENTATION:

For all cases in which a patient has been treated according to a POLST form, the following documentation is required:

A. Name of patient's physician signing the form.

B. If the Base Hospital was contacted, the name of the MICN and/or physician.

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Do Not Resuscitate	Policy Number 613
APPROVED: Administration: Barry R. Fisher, MPPA	Date: ~~06/01/2008~~
APPROVED: Medical Director: Angelo Salvucci, M.D.	Date: ~~06/01/2008~~
Origination Date: October 1, 1993 Date Revised: ~~November 8, 2007~~January 5, 2009 Review Date: ~~November, 2009~~	Effective Date: ~~June 1, 2008~~

I. PURPOSE: To establish criteria for a Do Not Resuscitate (DNR) Order, and to permit ~~EMT-1s, EMT-Ds and EMT-Ps~~Emergency Medical Services personnel to withhold resuscitative measures from patients in accordance with their wishes.

II. AUTHORITY: ~~—————~~California Health and Safety Code, Sections 1798 and 7186.
California Probate Code, Division 4.7 (Health Care Decisions Law).
California Code of Regulations, Title 22, Sections 70707(6), and 72527(a)(4).

III. DEFINITIONS:

A. "EMS Personnel~~T~~": All EMT-1s, EMT-Ps and RNs caring for prehospital or interfacility transfer patients as part of the Ventura County EMS system. ~~who are certified, or EMT-Ps who are accredited, to function in Ventura County.~~

B. "Resuscitation": Medical interventions whose purpose is to restore cardiac or respiratory activity, and which are listed below:

1. External cardiac compression (chest compressions).
2. Defibrillation.
3. Tracheal Intubation.
4. Assisted Ventilation.
5. Administration of cardiotonic medications.

C. "DNR Medallion": A permanently imprinted insignia, worn by a patient that has been manufactured and distributed by an organization approved by the California Emergency Medical Services Authority.

D. "DNR Order": An order to withhold resuscitation. A DNR Order shall be considered operative only under the following circumstances:

1. A fully executed original or photocopy of the "Emergency Medical Services Prehospital DNR Form" has been read and reviewed on scene ~~by the EMT~~;
2. The patient is wearing a DNR Medallion;
3. A fully executed California Durable Power of Attorney For Health Care (DPAHC) form is seen ~~by the EMT~~, a health care agent designated therein is present, and that agent requests that resuscitation not be done;
4. A fully executed Natural Death Act Declaration has been read and reviewed on scene ~~by the EMT~~; ~~or~~
5. A fully executed California Advance Health Care Directive (AHCD) has been read and reviewed on scene~~is seen by the EMT~~ and:
   a. a health care agent designated therein is present, and that agent requests that resuscitation not be done, or
   b. there are written instructions in the AHCD stating that the patient does not wish resuscitation to be attempted;~~.~~
6. A completed and signed Physician Orders for Life-Sustaining Treatment (POLST) form has been read and reviewed on scene, and in Section A, "Do Not Attempt Resuscitation/DNR" is selected, or;
~~6~~7. For patients who are in a licensed health care facility, or who are being transferred between licensed health care facilities, a written document in the patient's permanent medical record containing the statement "Do Not Resuscitate", No Code", or No CPR," has been seen ~~by the EMT~~. A witness from the health care facility must verbally document the authenticity of this document.

E. "California Advance Health Care Directive (AHCD)". As defined in California Probate Code, Sections 4600-4805.

F. "California Durable Power of Attorney for Health Care (DPAHC)": As defined in California Civil Code, Sections 2410-2444.

G. "Natural Death Act Declaration": As defined in the Natural Death Act of California, Health and Safety Code, Sections 7185-7195.

H. "Physician Orders for Life-Sustaining Treatment (POLST)". As defined in California Probate Code, Division 4.7 (Health Care Decisions Law).

IV. PROCEDURE:

A. All patients require an immediate medical evaluation.

B. Correct identification of the patient is crucial in this process. If not wearing a DNR Medallion, the patient must be positively identified as the person named in the DNR Order. This will normally require either the presence of a witness or an identification band.

C. When a DNR Order is operative:

1. If the patient has no palpable pulse and is apneic, resuscitation shall be withheld or discontinued.
2. The patient is to receive full treatment other than resuscitation (e.g., for airway obstruction, pain, dyspnea, hemorrhage, etc.).
3. If the patient is taking high doses of opioid medication has decreased respiratory drive, early base hospital contact should be made before administering naloxone. If base hospital contact cannot be made, naloxone should be administered sparingly, in doses no more than 0.1 mg every 2-3 minutes.

D. A DNR Order shall be considered null and void under any of the following circumstances:

1. The patient is conscious and states that he or she wishes resuscitation.
2. In unusual cases where the validity of the request has been questioned (e.g., a family member disputes the DNR, the identity of the patient is in question, etc.), EMS prehospital personnel may temporarily disregard the DNR request and institute resuscitative measures while consulting the BH for assistance. Discussion with the family member, with explanation, reassurance, and emotional support may clarify any questions leading to validity of a DNR form.
   The underlying principle is that the patient's wishes should be respected.
3. There is question as to the validity of the DNR Order.

   Should any of these circumstances occur, appropriate treatment should continue or immediately commence, including resuscitation if necessary. Base Hospital contact should be made when appropriate.

E. Other advanced directives, such as informal “living wills” or written instructions without an agent in the California Durable Power of Attorney for Health Care,

may be encountered. Should any of these occur, appropriate treatment will continue or immediately commence, including resuscitation if necessary. Base Hospital contact will be made as soon as practical.

F In case of cardiac arrest, if a DNR Order is operative, Base Hospital contact is not required and resuscitation should not be done. Immediate base hospital contact is strongly encouraged should there be any questions regarding any aspect of the care of the patient.

G. If a DPAHC or AHCD agent requests that resuscitation not be done, the EMT shall inform the agent of the consequences of the request.

H. DNR in a Public Place

Persons in cardiac arrest with an operative DNR Order should not be transported. The Medical Examiner's office should be notified by law enforcement or EMS personnel. If possible, an EMS representative should remain on scene until a representative from law enforcement or the Medical Examiner's office arrives.

V. DOCUMENTATION:

For all cases in which a patient has been treated under a DNR Order, the following documentation is required in the EMEDS report:

A. Name of patient's physician signing the DNR Order.

B. Type of DNR Order (DNR Medallion, Prehospital DNR Form, written order in a licensed health care facility, DPAHC, Natural Death Act Declaration)/

C. If the decision to withhold or terminate resuscitative measures was made by an EMT-1 or EMT-D, his/her name and certificate number.

D. For all cases which occur within a licensed health care facility, in addition to above, if the DNR Order was established by a written order in the patient's medical record, the name of the physician signing and the witness to that order.

E. If resuscitation is not done because of the request of a healthcare agent designated in a DPACH or AHCD, the agent's name.

Prehospital Services Committee 2008

For Attendance, please initial your name for the current month

Agency	LastName	FirstName	1/10/2008	2/14/2008	3/13/2008	4/10/2008	5/8/2008	6/12/2008	7/10/2008	8/14/2008	9/11/2008	10/9/2008	11/13/2008	12/11/2008	%
AMR	Clay	Nick	JW		JW	JW				JW		NC		NC	83
AMR	Sebree	Robert	RS			RS						RS		SR	75
CMH - ER	Canby	Neil	NC		NC							NC		NC	75
CMH - ER	Howery	Jennifer	JH		JH	JH			JH			JH			83
FFD	Davis	Royce			RD	RD			RD	RD		RD		RD	92
FFD	Hall	Jim			JH	JH			JH					JH	67
GCA	Norton	Tony	TN						TN	TN		TN		TN	83
GCA	Stillwagon	Mike	MS			MS				MS		MS		MS	83
Lifeline	Frank	Steve	SF		SF	SF			SF	SF		SF		SF	100
Lifeline	Winter	Jeff			JW				JW	JW		JW		JW	83
LRRMC - ER	David	Paul	PD		PD	PD			PD	PD		PD		PD	100
LRRMC - ER	Tadlock	Lynn	LT			LT			LT	LT		LT		LT	92
OFD	Carroll	Scott	SC		BW	BW			SC	SMS		SC		SC	100
OFD	Huhn	Stephanie	SPH			SPH			SPH	SPH		SPH		SPH	92
OVCH	Boynton	Stephanie	SB		SB	SB				SB		SB		SB	92
OVCH	Patterson	Betsy			BP	BP			BP	BP		BP		BP	92
SJPVH	Bumblis	Debbie	DSB		DB	DB			DB	DB		DB			92
SJRMC	Gregson	Erica	JO		JO	EG			EG	EG		EG		EG	100
SJRMC - SJPVH	Handin	Richard	RH		RH	RH			RH	RH		RH		RH	100
SPFD	Dowd	Andrew	KF		KF	KF				KF				AD	83
SVH - ER	Yu	Alfred				AY			AY	AY		AY		AY	83
SVH - ER	Hoffman	Jennifer			JH	JH						JH		JH	75
V/College	Mundell	Meredith	MM			MM			MM			MM		MM	83
VCFD	Merman	Nancy	NM		NM	NM			NM	NM		NM		NM	100
VCFD	Hansen	Jack			JH	JH			BD	JH		JH		JH	92
VCFPD	Plott	Norm	BV		BV	BV			KH	KH		KH			92
VCFPD	Pina	Mark				MP			MP	MP		MP		MP	83
VCFPD	Shedlosky	Robin	RS		RS				RS	RS		RS			83
VCMC - ER	Chase	David	DC			DC			SG	DC		DC		DC	92
VCMC - ER	Utley	Dede	KW		KW	KW			KW	KW		DU		DU	100
VCMC-SPH	Daucett	Michelle	MD						MD			MD		MD	75

Agency	LastName	FirstName	1/10/2008	2/14/2008	3/13/2008	4/10/2008	5/8/2008	6/12/2008	7/10/2008	8/14/2008	9/11/2008	10/9/2008	11/13/2008	12/11/2008	%
VCMC-SPH	Pelkola	Marie	MP		MP	MP				MP		MP			83
VCSO SAR	Hadland	Don			LF	LF				DH				DH	75
VCSO SAR	Patterson	Carl	CP		CP	CP			CP	CP		CP		CP	100
VFF	Rhoden	Crystal	CR												50
VFF	Grap	Edward	EG			EG			EG	EG		EG		DG	92
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	
AMR	Drehsen	Charles	CD		CD	CD			CD	CD				CD	
EMS	Fisher	Barry	BF		BF	BF			BF	BF		BF		BF	
VNC	Hadduck	Katy	KH		KH				KH	KH		KH			
EMS	Haney	Debora	DH		DH	DH			DH	DH		DH		DH	
AMR	Kedrowski	Butch	BK		BK	BK			BK	BK					
EMS	Lara-Jenkins	Stephanie	SLJ		SLJ	SLJ			SLJ	SLJ		SLJ		SLJ	
AMR	Norman	Mark			MN	MN									
EMS	Salvucci	Angelo	AS		AS	AS			AS	AS		AS		AS	
VNC	Komins	Mark				MK				MK		MK		MK	

CPR Competencies Project

Below is a list prepared by Chris McNicoll. Based upon his study (included in the October PSC packet - 19% of all compressions were correct in rate, depth, and chest recoil) and a follow-up study (correct compressions improved to 77% with feedback-enhanced training), there is a clear opportunity for improving CPR skills County-wide.

I would like to begin planning how we are going to get all EMS personnel better trained and to demonstrate competency in CPR. Ideally within the next few months we will have all EMTs and paramedics trained and tested – and reassessed on a regular (to be determined) basis.

We will first target EMS personnel and later look at PAD providers and laypersons.

With the CARES database we will be able to see if these efforts increase neurologically intact survival to hospital discharge.

Organizations that employ people with CPR certificates

A. Prehospital EMS
    a. Ambulance companies
        i. American Medical Response (AMR)
        ii. Gold Coast Ambulance
        iii. LifeLine Medical Transport.
    b. Fire Departments
        i. Ventura County F.D.
        ii. Ventura City F.D.
        iii. Fillmore F.D.
        iv. Oxnard F.D.
        v. Santa Paula F.D.
        vi. Ventura County Federal Fire
    c. Law enforcement agencies
        i. Ventura County Sheriff's Office
        ii. Ventura City P.D.
        iii. Oxnard P.D.
        iv. Simi Valley P.D.
        v. California Highway Patrol
        vi. Correctional Health Facility
    d. Other
        i. Events Medical Co
        ii. Ventura County Harbor Patrol
        iii. Ventura County Search and Rescue
        iv. Naval Base-Ventura County

v. United States Coast Guard
vi. Disaster Assistance Recovery Teams (DART)
vii. Community Emergency Response Team (CERT)
viii. City Lifeguards
ix. United States National Parks Service
x. California State Parks
xi. Security companies

B. Hospitals
    a. General acute care hospitals
        i. Ventura County Medical Center
        ii. Los Robles Hospital and Medical Center
        iii. VCMC-Santa Paula Hospital
        iv. Simi Valley Hospital
        v. Saint John's Regional Medical Center
        vi. Community Memorial Hospital
        vii. Ojai Valley Community Hospital
        viii. Saint John's Pleasant Valley Hospital
    b. Special hospitals
        i. Thousand Oaks Surgical Hospital
    c. Acute psychiatric hospitals
        i. Aurora Vista del Mar Hospital

C. Other Health Facilities
    a. Long term care organizations
        i. Skilled nursing facilities (SNF)
        ii. Residential care facilities for the elderly (RCFE)
        iii. Intermediate care facilities (ICF)
        iv. Intermediate care facilities for the developmentally disabled (ICF – Developmentally Disabled)
        v. Congregate living health facilities
    b. Chronic dialysis clinic
    c. Psychology clinic
    d. Rehab clinic
    e. Adult Day Health Centers
    f. Community Clinic
    g. Home Health Agencies
    h. Referral Agencies
    i. Pediatric day health
    j. Respite care
    k. Alternative birthing centers
    l. Hospice
    m. Chemical dependency recovery
    n. Medical offices
    o. Kaiser
    p. Behavioral health clinics
        i. Conejo Valley Clinic
        ii. Oxnard Clinic

iii. Ventura Clinic
iv. Santa Paula Clinic
v. Simi Valley Clinic

D. Schools
    a. EMT schools
    b. Paramedic Schools
        i. Ventura College School of Prehospital and E.M.
    c. Universities and Colleges
        i. Ventura College
        ii. Oxnard College
        iii. Moorpark College
        iv. California University Channel Islands
        v. California Lutheran University
        vi. Thomas Aquinas College
        vii. Saint John's Seminary
    d. 23 School districts
        i. Oak Park Unified School District (K-12)
        ii. Conejo Valley Unified School District
        iii. Ocean View Elementary School District
        iv. Oxnard Union High School District
        v. Simi Valley Unified School District
        vi. Ventura County Office of Education
            1. all the teachers, para-educators need CPR
    e. Private Schools
    f. High Schools
    g. Junior High Schools
    h. Elementary Schools
    i. Pre-primary schools

E. Community organizations
    a. Day care centers
    b. Boys and Girls Club
    c. YMCA
    d. Boy Scouts and Girl Scouts
    e. Recreational facilities
    f. Gyms
    g. Corporate AED programs
    h. Park districts
    i. Golf courses

HISTORY	PHYSICAL
Respiratory Distress? Syncope? Recent Altered Level of Consciousness?	Vital Signs, Skin Vitals, Breath sounds: Wheezes, stridor Hives, rash, swelling of face or tongue, and/or itching

TREATMENT PRIOR TO BASE HOSPITAL CONTACT

ABC's, O2, Monitor, Documentation of Rhythm Strip

POTENTIAL ANAPHYLAXIS	ANAPHYLAXIS WITHOUT SHOCK	ANAPHYLAXIS WITH SHOCK
Consider IV NS TKO ↓ Begin Transport ↓	EPINEPHRINE 1:1,000 IM Peds: 0.01 ml/kg IM (max 0.3 ml) Adult Age: 12 - 40: 0.3 ml Adult Age: >40: Give only if severe respiratory distress is present[2] ↓ IV NS ↓ BENADRYL Adult: 50 mg IV - IM if no IV access Peds: 1mg/kg IV/IM (max 50 mg), may repeat X1 in 10 minutes ↓ Begin Transport ↓	↓ EPINEPHRINE 1:1,000 IM[1] Peds: 0.01 ml/kg (max. 0.3 ml) Adult Age: 12-40: 0.5 ml Adult Age: > 40 0.3 ml[2] IV NS WO x 2 Adults: 1-2 L Peds: 20 ml/kg For Profound Shock[3] EPI 1:10,000 IV* slow infusion 0.1 mg (1 ml) increments to max of 0.3-0.5 mg (3-5 ml) over 1-2 minutes (adult)[2] ↓ BENADRYL Adult: 50 mg IV - IM if no IV access Peds: 1 mg/kg IV/IM (max 50 mg) ↓ Begin Transport (Expedite if not improving) ↓

BASE HOSPITAL CONTACT, continue treatment as ordered
If unable, continue transport, follow COMMUNICATION FAILURE PROTOCOL

COMMUNICATIONS FAILURE PROTOCOL

Consider Benadryl Adult: 50 mg IV - IM if no IV access Peds: 1 mg/kg IV/IM (Max 50 mg)	Consider NEBULIZED BRONCHODILATOR ↓ Repeat EPI to effect up to q 5 min X 2	Consider NEBULIZED BRONCHODILATOR ↓ Re-evaluate. If shock persists and no rales, repeat fluid bolus as above Repeat EPI to effect up to q 5 min X 2

BASE HOSPITAL ORDERS ONLY

Consult with ED MD for further treatment measures

1. May be initiated simultaneously with IV attempt.
2. Use Epi with caution in older patients. If clearly in anaphylaxis, this is the drug of choice, even in older patients. If doubt exists, initiate early BH Contact, prior to drug therapy. Tachycardia is not a contraindication to epinephrine.
3. BP<=80 and/or signs of severe hypo perfusion, pale, cool, diaphoretic, poor capillary return, altered LOC, etc. Again, if doubt exists, initiate early BH Contact prior to drug therapy.

* Pediatric dose IV Epinephrine 0.01 mg/kg (0.1ml/kg) 1: 10,000 slow IVP.
** Pediatric dose IM Epinephrine 0.01 mg/kg (0.01ml/kg) 1:1000

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VC EMS Medical Director

BEHAVIORAL EMERGENCIES

Unruly, irrational behavior may be caused by psychiatric illness, or organic illness (such as hypoglycemia, hypoxia, and hypoperfusion states, withdrawal, or intoxicant states).

HISTORY	PHYSICAL
Previous psych history? Medications Medical history	Vital signs (with O2 Sat if available) Skin vitals Mental status exam Evidence of trauma, overdose, ETOH, hypoglycemia, hypoperfusion, hypoxia? Threat to own life or to the life of others? Able to provide food and shelter for self?

PRIOR TO BASE HOSPITAL CONTACT

ABC's
↓
Consider O_2 therapy as indicated
↓
Consider IV and Monitor
↓
Assess and treat injuries or medical condition which might lead to behavioral emergency according to specific treatment guidelines.
↓
For extreme agitation: Adult: Midazolam 1 mg q 2 min IV, max 0.1mg/kg up max 5 mg.
If no IV, Midazolam 0.1 mg/kg IM, max 5 mg.
Peds: Midazolam 0.1 mg/kg IM, max 5 mg.
↓
BASE HOSPITAL CONTACT, continue treatment as ordered
If unable, initiate transport, follow COMMUNICATION FAILURE PROTOCOL

BASE HOSPITAL ORDERS ONLY

Consult with Base Hospital Physician for further treatment measures

Notes:

1. Protect yourself and others. Never try to subdue a patient forcibly without adequate help from law enforcement, other rescuers, etc.
2. If patient refuses care and transport, and that refusal is because of a “mental disorder”, consider having the patient taken into custody according to Welfare and Institutions Code Section 5150. “Mental disorders” do not generally include alcohol or drug intoxication, brain injury, hypoxemia, hypoglycemia, or similar causes.
3. Welfare and Institutions Code Section 5150:
   A patient may be taken into custody if, as a result of a mental disorder, there is a danger to self or others or is gravely disabled. A California peace officer, a California licensed psychiatrist in an approved facility, Ventura County Health Officer or other County-designated individuals, can take the individual into custody, but it must be enforced by the police in the field.
4. Patients should be medically cleared prior to transporting to a psychiatric facility, unless evaluated by Crisis Team or PAT team in the field, and they request direct transport to a psychiatric facility.
5. Refer to Policy 603 if patient attempts to decline treatment or transportation.

   Ventura County Mental Health Crisis Team: 805 652 6727

HISTORY	PHYSICAL
Inhalation of smoke or steam? Carbon monoxide produced? Associated trauma? See trauma algorithm. Closed or open space? Type of burn (mechanism), i.e., chemical, flash, explosion, flames, electrical, etc. Other medical problems, i.e., diabetes, liver disease, dysrhythmias.	Vital Signs (If hypotensive, see Hypotension algorithm) Skin vitals % of body burned and degree of burns Breath sounds: wheezes, stridor respiratory distress Singed facial or nasal hair Level of consciousness 0_2 Sat

TREATMENT PRIOR TO BASE HOSPITAL CONTACT

ABC's[1]
↓
O_2 therapy as indicated
↓
Monitor, document rhythm strip[3]
↓
Remove rings, prostheses, shoes, constrictive clothing, garments made from synthetic material
↓
If < 10%, total body surface area (TBSA), cool burned area with saline-soaked dressings, elevate burned extremities[2]
↓
Patient Hypotensive/Major burn? (> 10% TBSA)

YES	NO
Adult: IV WO 500 cc IV Bolus Peds: 20 cc/Kg Cover patient to maintain body heat Pain control per policy 705 Pain Control	Consider IV TKO Pain control per policy 705 Pain Control

BASE HOSPITAL CONTACT, continue treatment as ordered
If unable, initiate transport, follow COMMUNICATION FAILURE PROTOCOL

COMMUNICATIONS FAILURE PROTOCOL

Morphine according to 705 Pain Control

BASE HOSPITAL ORDERS ONLY

Consult with ED MD for further treatment orders

1. Assume airway/respiratory involvement in inhaled chemical and closed space thermal burns or any signs of respiratory distress, expedite transport.
2. If burning process has stopped, use clean, dry dressings. Covering prevents air currents from causing pain in partial thickness burns.
   For chemical burns, flush agent from body surface with copious amounts of water. Powdered agents should be brushed from the skin prior to flushing.
3. Electric burns may affect cardiac activity.

CARDIAC ARREST, PEDIATRIC

Patient pulseless and apneic or with agonal respirations

BLS airway management, establish pulselessness, initiate CPR, monitor, document rhythm strip, determine cardiac rhythm

PRIOR TO BASE HOSPITAL CONTACT[3]

VFIB/VTACH[4] (persistent)

WHILE ON SCENE

1. DEFIBRILLATE : 2 J/kg ****
2. CPR for 2 minutes[5].
3. Vascular access (NS IV or IO)[2] during CPR4. Reassess, DEFIBRILLATE: 4 J/kg,& resume CPR.
5. EPINEPHRINE q 3-5 minutes
   IV/IO: 0.01 mg/kg (0.1 ml/kg) 1:10,000
   ET: 0.1 mg/kg (0.1 ml/kg) 1:1,000
6. Reassess cardiac rhythm,
   If VFIB/VTACH[4] remain:

**DEFIBRILLATE - 4 J/kg * & resume CPR

7.***LIDOCAINE
   IV/IO: 1 mg/kg
   ET: 3 mg/kg
8. Reassess and manage airway[1]
   (per Policy 710)
9. DEFIBRILLATE – 4J/kg *

ASYSTOLE

1. Vascular Access, NS IV/IO[2]
2. EPINEPHRINE
   IV/IO: 0.01 mg/kg (0.1 ml/kg) 1:10,000
   ET: 0.1 mg/kg (0.1 ml/kg) 1:1,000
3. Reassess and manage airway[1]
   (per Policy 710)
4. If any question in rhythm, confirm in 2 leads.

PEA

1. Identify/Treat cause of PEA if able
   If cardiac tamponade or hemorrhagic hypovolemia, initiate immediate transport
2. Vascular access NS IV/IO[2]
   Initiate 20 ml/kg infusion unless rales or known CHD & CHF
3. EPINEPHRINE
   IV/IO: 0.01 mg/kg (0.1 ml/kg) 1:10,000
   ET: 0.1 mg/kg (0.1 ml/kg) 1:1,000
4. Reassess and manage airway[1]
   (per Policy 710)

LIKELY CAUSES OF PEDs PEA

Severe hypoxemia
Severe acidosis
Severe hypovolemia
Tension pneumothorax
Cardiac tamponade
Profound hypothermia

** If Fibrillation recurs, defibrillate at last successful joules delivered

*** If defibrillation into narrow complex rhythm > 50, not in 2nd or 3rd degree block, and Lidocaine not already given, give Lidocaine 1.0 mg/kg IVP or ET 3 mg/kg (if no IV).

**** If collapse before dispatch, 2 minutes CPR before defibrillation.

BASE HOSPITAL CONTACT (If unable, initiate transport and follow COMMUNICATION FAILURE PROTOCOLS)

COMMUNICATION FAILURE PROTOCOLS

9. EPINEPHRINE
   IV/IO: 0.01 mg/kg (0.1 ml/kg) 1:10,000
   ET: 0.1 mg/kg (0.1 ml/kg) 1:1000
   q 3-5 minutes
10. DEFIBRILLATE – 4J/kg *
11. LIDOCAINE 1 mg/kg IV/IO
12. DEFIBRILLATE - 4 J/kg *

*Or biphasic waveform defibrillation at energy level approved by service provider medical director.

5. EPINEPHRINE q 3-5 minutes
   IV/IO: 0.01 mg/kg (0.1 ml/kg) 1:10,000
   ET: 0.1 mg/kg (0.1 ml/kg) 1:1,000

5. EPINEPHRINE q 3-5 minutes
   IV/IO: 0.01 mg/kg (0.1 ml/kg) 1:10,000
   ET: 0.1 mg/kg (0.1 ml/kg) 1:1,000
6. If hemorrhagic hypovolemia, initiate 2nd bolus infusion NS at 20 ml/kg

BASE HOSPITAL ORDERS ONLY

13. Consider NA BICARB: 1 mEq/kg IV/IO
14. DEFIBRILLATE - 4 J/kg *
15 Consider LIDOCAINE 1 mg/kg IV/IO
16. DEFIBRILLATE - 4 J/kg *
17. DEFIBRILLATE – 4J/kg *

*Or biphasic waveform defibrillation at energy level approved by service provider medical director.

6. Consider NA BICARB: 1 mEq/kg IV/IO

7. Consider NA BICARB: 1 mEq/kg IV/IO
8. Consider repeat bolus (2nd or 3rd) of NS at 20 ml/kg

1. If unable to adequately ventilate with BLS measures, insert advanced airway earlier. If difficulty with airway management, consider immediate transport.
2. If difficulty with vascular access, consider immediate transport. IO route preferred if age < 2 years and may be used up to age 8, per Policy 717.
3. Early BH contact is recommended in unusual situations, e.g., renal failure, Calcium channel blocker OD, tricyclic OD, Beta blocker OD.
   BH to consider:
   - $CaCl_2$ and Bicarb in renal failure,
   - early Bicarb in Tricyclic OD,
   - early $CaCl_2$ in Ca channel blocker OD
   - Glucagon in beta-blocker OD and calcium channel blocker OD.
- Dosages:
   - Calcium Chloride: 0.2 ml/kg IVP (max 10 ml) of 10% solution, may repeat X1 in 10 minutes
   - Glucagon: 0.1 mg/kg IVP (max 5 mg) as available
   - Sodium Bicarbonate: 1 mEq/kg IV, followed by 0.5 mEq/kg q 10 minutes
4. V-Tach = Ventricular Tachycardia with rate > 150/min.
5. If organized rhythm with pulse after 2 minutes post-shock CPR, IV access, Lidocaine and ALS airway.

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VC EMS Medical Director

HISTORY	PHYSICAL
Large muscle, extremity and/or pelvis crush, >1 hour of entrapment Compromised local circulation from debris or body weight Multi system injuries Inhalation of smoke, dust Immobility	Signs of Shock Distal pulses could be absent or present Dysrhythmias Look for: Hypovolemia Hypotension ALOC O2 Sat Capnography (if available)
TREATMENT PRIOR TO BASE HOSPITAL CONTACT	
ABCs O2 IV access Monitor, document rhythm strips Advance airway, if indicated C-spine precaution (per policy 614) ↓ Determine Potential vs. Actual Crush Syndrome	
Potential ↓ IV 500cc NS bolus Peds 20cc/kg Release compression Cover patient to maintain body heat Monitor urine color and output ↓	Actual ↓ IV 1-2 liters NS bolus, Ped. 30cc/kg[4] Albuterol 5mg with Neb./Mask, repeat x1 (Ped. 2.5mg <4 y.o.), repeat x 1 Sodium Bicarb. 1mEq/kg, add to first liter of NS[2] (Ped. 20ml/kg) Pain control per policy 705 Pain Control Release compression Continuous re-assessment of ECG Monitor urine color and output ↓
BASE HOSPITAL CONTACT. If unable, follow COMMUNICATION FAILURE PROTOCOL	
Albuterol 5mg with Neb./Mask, repeat x 1 (Ped. 2.5mg <4 y.o.), repeat x 1 ↓	Dysrhythmias[3] Calcium Chloride 1gm [2] slow IVP over 60 sec. Ped. 20mg/kg, Max 500mg ↓ If Shock persists, give 1 liter NS bolus x 1 Ped. 30cc/kg
BASE HOSPITAL ORDERS ONLY *Consider only during ongoing extended entrapment*	
If signs of CHF or not responding to fluid challenge, initiate Dopamine 400 mg/250 ml D_5W. Start at 5-10 mcg/kg/min and titrate to effect, max. 20 mcg/kg/min. Lasix 40-80mg IVP	

1. Not recommended in major systems injury.
2. Calcium Chloride and Sodium Bicarb. precipitate when mixed, thoroughly flush the IV line between administration of these drugs.
3. Suspicion of Hyperkalemia- Peaked T wave, absent P waves, widened QRS complexes.
4. If elderly or cardiac consider 250-500cc bolus and reassess for CHF or improvement

HISTORY	PHYSICAL
Consider weather, environment, activity Antipsychotic drugs	O_2 sat HEAT EXHAUSTION Normal Temperature Weakness, syncope, vertigo Cool, damp skin Abdominal cramping, nausea Patient is SWEATING HEAT STROKE Elevated temperature, pulse, BP Altered LOC Hot, dry skin Patient is NOT SWEATING

TREATMENT PRIOR TO BASE HOSPITAL CONTACT

ABCs
Oxygen 4-6 L/min
↓
Monitor, document rhythm strip
Cool the environment and patient
↓
Check Blood Glucose
↓
IV NS Fluid Challenge
Adult: 1000 cc
Peds: 20 cc/Kg
Caution if known cardiac history
↓

BASE HOSPITAL CONTACT, continue treatment as ordered
If unable, initiate transport, follow COMMUNICATION FAILURE PROTOCOL

COMMUNICATIONS FAILURE PROTOCOL

If hypotensive, repeat IV bolus x 1 enroute
If patient begins to seize, go to Seizure protocol

BASE HOSPITAL ORDERS ONLY

Consult BH MD for further instructions

HISTORY	PHYSICAL
Identify Spider Black Widow - shiny black body and red/orange hourglass on ventral side	**Black Widow** Sharp pain Muscle cramps Abdominal pain/rigidity (lower extremity bite) Chest pain (upper extremity bite) Ascending motor paralysis **Bee** Local pain and swelling Stinger with sac often present

PRIOR TO BASE HOSPITAL CONTACT

ABC's[1]
↓
0_2 therapy as indicated
↓
If stinger present, remove[2]
↓
Cold pack if recent bite
↓
If patient is stable and in no significant distress, may be treated as BLS call
↓
Consider Monitor
↓
Consider IV NS
↓
Initiate Transport
↓
Pain control per policy 705 Pain Control

BASE HOSPITAL CONTACT, continue treatment as ordered

1. If signs of anaphylaxis, see Anaphylaxis protocol.
2. For honeybee sting, if less than 5 minutes since sting, remove stinger immediately. It is not necessary to use a sharp object. Pinching with fingernails is adequate.

HISTORY	PHYSICAL
Identify: Type of animal Time and circumstance of sting Location of sting Transport time	**Jelly Fish** Immediate pain Lesions - small, reddened papular eruptions Erythema Swelling Rash Muscle and abdominal pain Weakness Lacrimation Dyspnea, pain on inspiration **Sting Ray** Intense pain, greatest in 90 min. Redness or swelling around site Wound is either a laceration or puncture Wound edges may have a bluish cast

PRIOR TO BASE HOSPITAL CONTACT

ABC's
O_2 therapy as indicated[1]
↓
If patient is stable and in no significant distress, may be treated as a BLS call
↓
Monitor, document rhythm strips
↓
Consider IV NS TKO

Scorpion Fish Lion Fish Stone Fish Sting Ray Sculpin Immerse in hot water if available[2]	Jelly Fish Wash with salt water, saline DO NOT Wash with fresh water Rub with wet sand Apply heat

Pain control per policy 705 Pain Control

BASE HOSPITAL CONTACT, continue treatment as ordered
If unable, initiate transport

BASE HOSPITAL ORDERS ONLY

Consult with BH MD for further treatment measures

1. If signs of anaphylaxis, follow Anaphylaxis protocol.
2. Do not delay treatment while locating hot water. Check temperature to avoid scalding patient.

HISTORY	PHYSICAL
Known nerve agent release Known chemical release with suspicion of nerve agent **Symptoms:** • Blurred or dim vision • Nausea, abdominal cramps, diarrhea • Flushing • Headache • Anxiety • Vertigo • Weakness • Nausea • Tremors	Vital signs Skin vitals LOC 0_2 Saturation **Signs:** • Mild: o SLUDGE (Salivation, Lacrimation, Urination, Gastrointestinal Elimination (vomiting and diarrhea) • Severe: o Decreased LOC o Fasciculations and muscle weakness o Seizures o Apnea from muscle paralysis

PRIOR TO BASE HOSPITAL CONTACT

ABC's
↓

EXCLUSION ZONE (HOT ZONE)[1]	CONTAMINATION REDUCTION ZONE (WARM ZONE)[2]
For Severe Exposures Only: ↓ Atropine[3,4] Adult: 2 mg IM ↓ Repeat as needed ↓ Pralidoxime (2-PAM): 600 mg IM[3] (Adult only)	**Mild, Moderate, or Severe Exposure:** ↓ IV access ↓ Atropine[3,4]: Adult 2 mg IV or IM Peds: 0.02 mg/kg (min dose 0.1 mg) IV or IM Repeat as needed ↓ Pralidoxime (2-PAM): 600 mg IM[3] (Adult only) ↓ For seizures[5]: Midazolam Adult: 5mg IM Peds: 0.1 mg/kg IM (Max 5 mg)

BASE HOSPITAL CONTACT, continue treatment as ordered
If unable, initiate transport, follow COMMUNICATION FAILURE PROTOCOL

BASE HOSPITAL ORDERS ONLY

Consult with Base Hospital Physician for further treatment measures

Notes:
1. "Exclusion Zone" or "Hot Zone": The innermost of three circles around a hazardous materials site. Special protection is required for all personnel within.
2. "Contamination Reduction Zone (CRZ)" or "Warm Zone": Site of decontamination and between Exclusion (Hot) and Support (Cold) Zones. Requires a lesser degree of protection equipment.
3. Mark 1 Kits contain two auto-injectors, one containing 2 mg atropine and one containing 600 mg pralidoxime (2PAM).
4. Nerve agent poisoning can be very toxic. Large amounts of atropine may need to be utilized (in the 100's of mg's). If the patient is initially symptomatic and no response is seen to the initial doses of medication, continue giving until a response is achieved.
5. Diazepam is available in the CHEMPACK pharmaceutical stockpile and may be deployed In the event of a nerve agent exposure. Paramedics may administer Diazepam using the following dosages for the treatment of seizures associated with suspected nerve agent toxicity.
   Adult - 5-10 mg IV q 10-20 min, titrated to effect; not to exceed 30 mg
   Pediatric – 0.05-0.3 mg IV over 2-3 min q 15-30 min, titrated to effect; not to exceed 10 mg

HISTORY	PHYSICAL
Known suicide attempts Depression Psychiatric problems Meds: Phenothiazines Thorazine, Stelazine Compazine, Phenergan, etc Tricyclics Tofranil, Elavil, Triavil, Sinequan, etc Occupational Exposure Hydrocarbons Corrosives or Caustics Recent GI Surgery	Protected Airway Vital signs Skin vitals LOC Environmental clues O_2 sat Cardiac rhythm Pupils Signs of Trauma Anatomically intact GI tract SLUDGE **S**alivation **L**acrimation **U**rination **D**iaphoresis **G**astrointestinal **E**limination (vomiting & diarrhea)

PRIOR TO BASE HOSPITAL CONTACT

ABC's, Decontaminate as needed
For dysrhythmias/hypotension, see appropriate protocol
BRING ALL CONTAINERS TO THE EMERGENCY DEPARTMENT (if practical and safe)
↓
O_2 therapy as indicated
↓
Monitor, document rhythm strip
↓
Consider IV NS TKO
↓
Alert with gag reflex?
↓

YES	NO
Activated Charcoal (If oral OD within 1 hour) Adults/Peds: 1 Gm/kg PO, max 50 Gm ↓ Transport	See Altered Level of Consciousness Protocol

BASE HOSPITAL CONTACT, continue treatment as ordered
If unable, initiate transport, follow COMMUNICATION FAILURE PROTOCOL

BASE HOSPITAL ORDERS ONLY

Consult with Base Hospital Physician for further treatment measures

NOTES:

1. For caustics/petroleum distillates, DO NOT INDUCE VOMITING, DO NOT GIVE CHARCOAL.
2. For Phenothiazines, give Benadryl, 50 mg IV (Peds: 1 mg/kg IV) for extra-pyramidal reaction.
3. For Tricyclics, monitor for dysrhythmias, consider bicarbonate, DO NOT GIVE CHARCOAL.
4. For symptomatic organophosphate exposure (SLUDGE) give Atropine 2 mg IVP q 5 min. until symptom subsides. (Besides "SLUDGE" Bradycardia, miosis, fasciculation, muscle weakness, and ALOC are relatively common in organophosphate poisoning.)
5. For Beta blocker overdoses, consider Glucagon. (Initial dose: Adult 2 mg, IVP may give up to 10 mg as available, Peds. 0.05-0.15 mg/kg IVP up to 2 mg - may give up to 4 mg IVP as available.)
6. For calcium channel blocker overdose, consider IV $CaCl_2$ (initial dose: Adult 5-10-ml, peds. 10-30 mg/kg IVP). If no response, Glucagon (Initial dose: Adult 2 mg, IVP may give up to 10 mg as available, Peds. 0.05-0.15 mg/kg up to 2 mg - may give up to 4 mg as available.)
7. For sympathomimetic excess (e.g., tachycardia, hypertension, excessive motor activity, agitation, and chest pain) consider midazolam 1 mg IV q 2minutes max: 0.1mg/kg up to 5 mg, or, if no IV, 0.1mg.kg IM, max 5 mg.
8. For chest pain, see Chest Pain protocol, but do NOT give aspirin.

VENTRICULAR TACHYCARDIA, SUSTAINED, NOT IN ARREST

HISTORY	PHYSICAL
Medications	Vital Signs O2 Saturation Breath Sounds Level of Consciousness Pulses

TREATMENT PRIOR TO BASE HOSPITAL CONTACT

ABC'S
↓
O_2
↓
IV access [1]
↓
Monitor, document rhythm strips

Rate > 150/min., Stable	Rate > 150/min., Unstable
↓ Lidocaine [2] 1.5 mg/kg IV	↓ Place on Backboard ↓ Prepare for Cardioversion[3] ↓ Consider sedation with Midazolam 2mg IV[4]: if patient needs sedation and delay in obtaining sedation medication, give Lidocaine 1.5mg/kg IV5. Proceed to Cardioversion as soon as possible unless patient converts. ↓ Synch Cardioversion #1 - 100 J[7] #2 - 200 J[7] #3 - 300 J[7] #4 - 360 J[7] Lidocaine [1,6]

BASE HOSPITAL CONTACT, continue treatment as ordered
If unable, follow COMMUNICATION FAILURE PROTOCOL

COMMUNICATIONS FAILURE PROTOCOL

TRANSPORT	TRANSPORT
↓ Repeat Lidocaine [2] 0.5 mg/kg q 5-10 minutes (up to a total of 3 mg/kg) [Hold if decreased cardiac output, significant liver dysfunction, or in-patient > 70 years of age]	↓ Repeat Lidocaine [2] 0.5 mg/kg q 5-10 minutes (up to a total of 3 mg/kg) ↓ If recurrent, cardiovert again at last successful J

1. Early BH contact is recommended in unusual circumstances, e.g., torsade de pointes, tricyclic OD and renal failure. BH to consider $MgSO_4$ 1 GM in 50 cc D_5W IV over 2-4 minutes for torsade (may repeat X 1 if torsade continues or recurs), Bicarb for tricyclic OD and Ca plus Bicarb for renal failure.
2. Lidocaine administered at no greater than 50mg/min IV.
3. For unstable polymorphic (irregular) VT, immediate unsynchronized countershock (defibrillation) at 360 J, or biphasic energy level approved by service provider medical director.
4. For IV use, dilute Midazolam 5mg (1ml) with 4ml NS for a final volume of 5ml and concentration of 1mg/ml.
5. May be given in conjunction with sequential cardioversion attempts.
6. If cardioversion/defibrillation→ narrow complex rhythm > 50, not in 2nd or 3rd degree block, and Lidocaine not already given, give Lidocaine 1.5 mg/kg IVP or ET 3 mg/kg (if no IV).
7. Or biphasic energy level approved by service provider medical director.

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VC EMS Medical Director

APNEA OR AGONAL RESPIRATION

HISTORY	PHYSICAL
IV drug abuse Diabetes Trauma Medications	Apnea or clearly inadequate ventilatory effort O_2 Sat

TREATMENT PRIOR TO BASE HOSPITAL CONTACT

BLS ventilation techniques
↓
monitor, documentation of rhythm strip

SUSPECTED OPIOID OD	SUSPECTED HYPOGLYCEMIA OR OTHER MEDICAL CONDITION
IV access ↓ Narcan IVP, ET, IM, IO ↓ Determine Blood Glucose Level ↓ If BG <60 Give 50% Dextrose 50 cc IVP If no IV access, give Glucagon 1 mg IM If patient is awake with intact gag reflex, give Oral Glucose 15 g ↓ Airway Management	IV access ↓ Determine Blood Glucose Level ↓ If BG <60 Give 50% Dextrose 50 cc IVP If no IV access, give Glucagon 1 mg IM If pt is awake with intact gag reflex, give Oral Glucose 15 g ↓ If no response to D50, give Narcan* IVP, ET, IM, IO ↓ Airway Management

BASE HOSPITAL CONTACT, continue treatment as ordered.
If unable, initiate transport and follow COMMUNICATION FAILURE PROTOCOLS (Altered Level of Consciousness)

COMMUNICATION FAILURE PROTOCOLS

If LOC is still altered after 5 minutes and original BG <60, repeat BG determination
↓
If BG <60, repeat D50, 50 cc IVP (adult)

BASE HOSPITAL ORDERS ONLY

Consult with ED MD for further treatment measures

PEDIATRIC DOSES, DEXTROSE

D50, 1 ml/kg for > 2 years of age
D25, 2 ml/kg for age < 2 years of age

If the patient is a known alcoholic and D50 has been given, consider use of Thiamine in the ED.

*Administer Narcan 0.4 mg IV q1 minute to maximum of 2 mg, or until respiratory rate > 12. It is not necessary that patient be awake and alert. Pediatric dose 0.1 mg/kg IV/IM (maximum 2 mg).

Effective Date: December 11, 2008
Review Date: December, 2010

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VC EMS Medical Director

HISTORY	PHYSICAL
Description? Duration? Repetition? Trauma? Diabetes? Drugs? Known seizure disorder	Vital signs Loss of consciousness Skin signs Signs of trauma 02 Sat

TREATMENT PRIOR TO BASE HOSPITAL CONTACT

ABC'S
↓
0_2 therapy as indicated
↓
Monitor, document rhythm strips
↓
Seizures stopped?

YES			NO		
Known Seizure Disorder[4]	No Known Seizure Disorder	No Known Seizure Disorder 3rd Trim Pregnancy	Known Seizure Disorder	No Known Seizure Disorder	No Known Seizure Disorder 3rd Trim Preg
Left Lateral Position ↓ If Altered LOC persists, determine blood glucose level by finger stick ↓ IV NS TKO only if atypical presentation or BG < 60 ↓ If BG < 60 50 ml Dextrose 50% ↓	Left Lateral Position ↓ IV NS TKO ↓ If Altered LOC persists, determine blood glucose level ↓ Dextrose 50% 50 ml IV if BG < 60 ↓ If no response to D50 or BG >60 ↓ Repeat BG determination if neuro symptoms persist ↓ D50 if BG < 60 ↓	Left Lateral Position ↓ IV NS TKO ↓ Determine blood glucose level ↓ Dextrose 50% 50 ml if BG < 60 May proceed while Chemstrip developing ↓ MgSO4 2 GM in 50 ml D5W over 5 minutes[1] ↓ Repeat x 1 ↓ STAT transport during infusion ↓	IV NS TKO ↓ Determine blood glucose level ↓ Dextrose 50% 50 ml IV if BG < 60 ↓	IV NS TKO ↓ Determine blood glucose level ↓ Dextrose 50% 50 ml if BG < 60 May proceed while Chemstrip developing ↓	Left Lateral Position ↓ IV NS TKO ↓ Determine blood glucose level ↓ Dextrose 50% 50 ml if BG < 60 May proceed while Chemstrip developing ↓ MgSO4 2 GM in 50 ml D5W over 5 minutes[1] ↓ Repeat x 1 ↓ STAT transport during infusion ↓
			SEIZURE PERSISTS[2] Adult: Midazolam 1 mg q 2 min IV, max 0.1 mg/kg up to 5 mg.[3] If no IV, Midazolam 0.1 mg/kg IM, max 5 mg. Peds: Midazolam 0.1 mg/kg IM, max 5 mg.		

TRANSPORT

BASE HOSPITAL ORDERS
Consult with ED MD for further treatment

For extreme agitation: Adult: Midazolam 1 mg q 2 min IV, max 0.1mg/kg to max 5 mg if needed for safety of patient or EMS personnel. If no IV, Midazolam 0.1 mg/kg IM, max 5 mg.

1. Slow or stop infusion rate if bradycardia, heart block, decreased respiratory effort. Slow infusion if seizure stops.
2. Treatment with Midazolam as indicated in the following:
   a. Continuous seizure > 5 minutes (or > 2 minutes in pregnancy).
   b. Repetitive seizures without regaining consciousness.
3. For IV use, dilute Midazolam 5mg (1ml) with 4ml NS for a final volume of 5ml and concentration of 1mg/ml.
4. Patients with known seizure disorder or uncomplicated apparent pediatric febrile seizures, no longer seizing and with a normal postictal state, may be treated as a BLS call.

Effective Date: December 11, 2008
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VC EMS Medical Director

HISTORY	PHYSICAL
History of Previous CVA Diabetes Hypertension Trauma Time of symptom onset (last time patient appeared to be normal) Medications	Vital Signs Skin Vitals O_2 sat Symmetry vs. asymmetry of face, movement, etc. Level of Consciousness Depth of Coma Eyes (Pupils) Respirations Movement
TREATMENT PRIOR TO BASE HOSPITAL CONTACT	
ABC's ↓ O_2 4-6L/min ↓ Monitor, document rhythm strip ↓ IV NS TKO ↓ If hypertensive, elevate head of bed ↓ Determine Blood Glucose Level ↓	
BLOOD GLUCOSE < 60	BLOOD GLUCOSE > 60
50% Dextrose 50 cc IVP (Give Glucagon, 1 mg IM if no IV access)	
BASE HOSPITAL CONTACT, continue treatment as ordered If unable, initiate transport, follow COMMUNICATION FAILURE PROTOCOL	
COMMUNICATIONS FAILURE PROTOCOL	
Repeat Blood Glucose determination if neuro symptoms persist ↓ Repeat D50 if BG < 60	

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Guidelines For Limited Base Hospital Contact	Policy Number 720
APPROVED: Administration: Barry R. Fisher, MPPA	Date: December 11, 2008
APPROVED: Medical Director Angelo Salvucci, M.D.	Date: December 11, 2008
Origination Date: June 15, 1998 Date Revised: December 11, 2008 Review Date: December, 2010	Effective Date: December 11, 2008

I. PURPOSE: To define patient conditions for which EMT-P's shall establish LIMITED BH contact.

II. AUTHORITY: Health and Safety Code 1797.220.

III. POLICY: EMT-P's shall make Limited BH contact for simple, uncomplicated non-traumatic cases, which respond positively to initial treatment and require no further intervention.

A. Patient criteria:

1. Hypoglycemia
2. Narcotic Overdose.
3. Chest pain - no arrhythmia, hypertension or associated shortness of breath.
4. COPD/Asthma
5. Focal Neuro Changes suspected TIA or CVA, Chemstick > 60 (no need for Narcan)
6. Seizure: No drug ingestion, no dysrhythmias, Chemstick > 60 (new onset, no longer seizing, not status epilepticus, not pregnant).
7. Syncope or near-syncope (stable vs. no dysrhythmia, Chemstick > 60.
8. Patients with severe pain who meet requirements of Policy 705 Pain Control

B. Treatment to include:

1. Hypoglycemia: Prior to Contact procedure up to Dextrose
2. Narcotic Overdose: Prior to Contact procedure up to Narcan
3. Chest pain: Prior to Contact procedure up to three sublingual nitroglycerin or nitroglycerin spray (administered by paramedic) and Aspirin 324 mg po.
4. COPD/Asthma: Prior to Contact procedure up to one nebulized breathing treatment only (administered by paramedic).
5. Focal Neuro Changes: Prior to Contact procedure up to administration of Dextrose.
6. Seizure: Prior to contact procedure up to administration of Dextrose and/or Versed.
7. Syncope or near-syncope: Prior to Contact procedure up to IV Chemstick check.
8. Pain: Prior to Contact procedure, including administration of morphine.

C. Communication

1. The limited BH contact call-in shall include the following information:
   a. ALS unit number

b. "We have a completed Limited Base Contact (LBC) call"

c. Age/Sex

d. Brief nature of call

e. Patient Care Record

f. ETA and destination

D. Documentation

1. ALS Unit

a. Complete the PCR with "LBC" noted in the "Base Hospital Contact" box.

b. PCR delivered to base station within the required time frame.

2. MICN

a. Complete log entry with "LBC" noted in the treatment section.

b. EMT-P/BH Communication form is NOT required.

c. Call will be documented on tape.