

To: ALL VENTURA COUNTY EMS POLICY MANUAL HOLDERS

DATE: June 1, 2018

Policy Status	Policy #	Title/New Title	Notes
Replace	430	STEMI Receiving Standards	
Replace	452	TCASC Standards	
Replace	500	VCEMS Provider Agencies	
Replace	501	ALS Provider Criteria	
Replace	504	ALS and BLS Equipment	
Replace	506	Paramedic Support Vehicles	
Replace	508	First Responder ALS Units	
Replace	603	Refusal of EMS Services	
Replace	704	Guidelines for Base Hospital Contact	
Replace	705 Cover	Treatment Protocols Cover	
Replace	705.02	Allergic Reaction / Anaphylaxis	
Replace	705.03	Altered Neurologic Function	
Replace	705.04	Behavioral Emergencies	
Replace	705.07	Cardiac Arrest Asystole and PEA	
Replace	705.08	Cardiac Arrest VF/VT	
Replace	705.09	Chest Pain	
Replace	705.17	Nerve Agent / Organophosphate Poisoning	
Replace	705.18	Overdose	
Replace	705.19	Pain Control	
Replace	705.20	Seizures	
Replace	705.21	SOB Pulmonary Edema	
Replace	705.22	SOB Wheezes	
Replace	705.24	Symptomatic Bradycardia	
Replace	705.25	V-Tach Sustained – Not in Arrest	
Replace	705.26	Suspected Stroke	
Replace	705.27	Sepsis Alert	
Add	705.28	Smoke Inhalation	
Replace	720	Guidelines for Limited Base Contact	

Continued on Next Page

Replace	722	Interfacility IV Heparin and Nitroglycerin	
Replace	723	CPAP	
Replace	724	Brief Resolved Unexplained Event	
Replace	726	12 Lead ECG	
Delete	802	EMT AED Service Provider Medical Director	
Replace	803	EMT AED Service Provider Program Standards	
Delete	805	EMT Medical Cardiac Arrest	
Delete	808	EMT Integration with Public AED Operators	
Add	1133	CE for EMS Personnel	
Replace	1405	Trauma Triage and Destination Criteria	
Replace	1601	PSFA and TCC Training Program Approval	



Ventura County EMS Agency

Policy and Protocol Application!



VCEMS has contracted with an app developer to provide field personnel within Ventura County the first ever VCEMS approved mobile app for policies, treatment protocols and additional resources.

Download Instructions

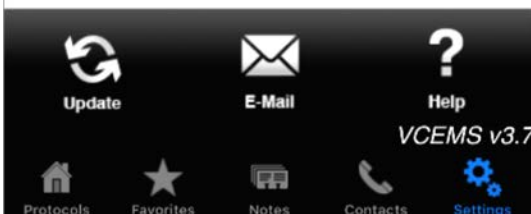
iOS: <https://www.acidremap.com/customAppDownload.php?bundleID=PPPVCESMMobile&platform=iOS>

Android: <https://www.acidremap.com/customAppDownload.php?bundleID=PPPVCESMMobile&platform=android>

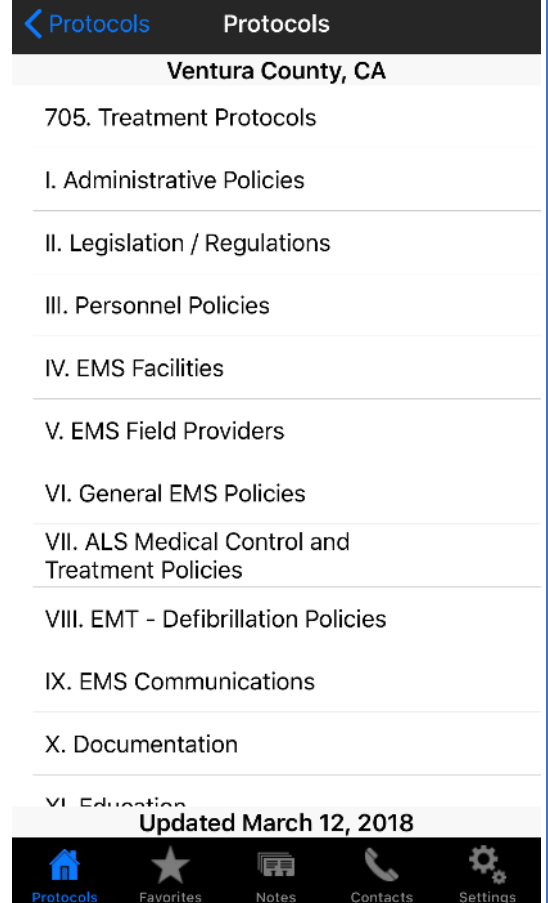
Note: It is recommended that iOS users follow the link directly from their iOS device. If they prefer to get a code for redemption, then they can do that by clicking on Ventura county on <https://www.acidremap.com>. Following the above link directly from a desktop will launch iTunes which no longer has the App Store integrated and will probably not work.

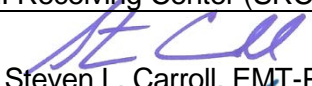

Please note that this is a work in progress. There are limited capabilities with the app, but we are working with the developer on new ideas to improve the product. Please forward your constructive comments and ideas to emsagency@ventura.org and we will review them with the developer.

AT&T LTE 11:33 AM 63%



AT&T LTE 11:34 AM 63%



COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: STEMI Receiving Center (SRC) Standards		Policy Number 430	
APPROVED: Administration:	 Steven L. Carroll, EMT-P	Date: June 1, 2018	
APPROVED: Medical Director:	 Daniel Shepherd, M.D.	Date: June 1, 2018	
Origination Date: July 28, 2006			
Date Revised: March 8, 2018		Effective Date: June 1, 2018	
Last Review: March 8, 2018			
Review Date: March 31, 2021			

- I. PURPOSE: To define the criteria for designation as a STEMI Receiving Center in Ventura County.
- II. AUTHORITY: Health and Safety Code, Division 2.5, Sections 1798, 1798.101, 1798.105, 1798.2 and California Code of Regulations, Title 22, Section 100175.
- III. POLICY:
 - A. A STEMI Receiving Center (SRC), approved and designated by Ventura County EMS shall meet the following requirements:
 1. All the requirements of a Receiving Hospital in VCEMS Policy 420.
 2. All the requirements of a SRC in VCEMS Policy 440.
 3. Designate a SRC Coordinator who will have the responsibility for communication with VC EMS.
 4. Operate a cardiac catheterization lab licensed by the Department of Health Services and approved for emergency percutaneous coronary interventions.
 5. Licensed Cardiovascular Surgery.
 6. Maintain a daily roster of on-call cardiologists with privileges in percutaneous coronary interventions.
 7. Have policies for patients to receive emergent angiography or emergent fibrinolysis, based on physician decisions for individual patients.
 8. Maintain a hospital STEMI Quality Improvement Program.
 9. Actively participate in the Ventura County EMS STEMI Quality Improvement Program and comply with data submission and case review standards as established by VCEMS.
 10. Will accept all ambulance-transported patients if the interpretation on the monitor meets the manufacturer guidelines for a POS STEMI ECG,

except when on internal disaster or no cardiac catheterization lab is available, regardless of ICU/CCU or ED saturation status.

11. Have policies and procedures that allow the automatic acceptance of any STEMI patient from a Ventura County Hospital upon notification by the transferring physician.
12. Have available continuous Intra-aortic balloon pump and Impella device capability with staffing.
13. Have policies in place for the transfer of STEMI patients.

B. Designation

1. Application:
Eligible hospitals shall submit a written request for SRC approval to the VC EMS, documenting the compliance of the hospital with Ventura County SRC Standards.
 2. Approval:
SRC approval or denial shall be made in writing by VCEMS to the requesting Hospital within two weeks after receipt of the request for approval and all required documentation.
 3. VC EMS may deny, suspend, or revoke the approval of a SRC for failure to comply with any applicable policies, procedures, or regulations. Requests for review or appeal of such decisions shall be brought to the Ventura County Board of Supervisors for appropriate action.
 4. The VCEMS Medical Director may grant an exception to a portion of this policy upon substantiation of need by the PSC that compliance with the regulation would not be in the best interests of the persons served within the affected area.
 5. SRCs shall be reviewed on an annual basis.
 - a. SRCs shall receive notification of evaluation from the VCEMS.
 - b. SRCs shall respond in writing regarding program compliance.
 - c. On-site SRC visits for evaluative purposes may occur.
 - d. SRCs shall notify VCEMS by telephone, followed by a letter or email within 48 hours, of changes in program compliance or performance.
-

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Thrombectomy Capable Acute Stroke Center (TCASC) Standards		Policy Number 452	
APPROVED: Administration: Steven L. Carroll, Paramedic		Date: June 1, 2018	
APPROVED: Medical Director: Daniel Shepherd, MD		Date: June 1, 2018	
Origination Date: July 26, 2017		Effective Date: June 1, 2018	
Date Revised: January 11, 2018			
Last Review: January 11, 2018			
Review Date: January 31, 2021			

- I. PURPOSE: To define the criteria for designation as a Thrombectomy Capable Acute Stroke Center (TCASC) in Ventura County.
- II. AUTHORITY: California Health and Safety Code, Sections 1797.114, 1797.220, 1798, 1798.2, 1798.101, and California Code of Regulations, Title 22, Section 100147 and 100169.
- III. DEFINITIONS:
 - Acute Stroke Center (ASC):** Hospital designated as an Acute Stroke Center, as defined in VCEMS Policy 450.
 - ELVO Alert:** A pre-arrival notification by pre-hospital personnel to the base hospital that a patient is suffering a possible Emergent Large Vessel Occlusion (ELVO) ischemic stroke.
 - Thrombectomy Capable Acute Stroke Center: (TCASC)** Acute Stroke Center (ASC) that has the capability to perform neuroendovascular procedures for acute stroke including thrombectomy and intra-arterial thrombolysis.
- IV. POLICY:
 - A. A Thrombectomy Capable Acute Stroke Center (TCASC), approved and designated by Ventura County EMS (VC EMS), shall meet the following requirements:
 1. All the requirements of an Acute Stroke Center (ASC) as defined in Policy 450.
 2. Certified as a Primary Stroke Center or a Comprehensive Stroke Center by either The Joint Commission, Det Norske Veritas, or the Healthcare Facilities Accreditation Program.

3. Neurointerventionist on call 24/7 and available on-site at TCASC within 45 minutes of notification of an ELVO alert.
 4. Neurosurgeon on call 24/7 and available to provide care as indicated.
 5. Neurologist, with hospital privileges to provide ICU level of care for acute stroke patients, on call 24/7 and available to provide care as indicated.
 6. An individual Neurointerventionist or Neurosurgeon may not be simultaneously on call for a separate hospital.
 7. Appropriate endovascular catheterization laboratory personnel available on-site within 45 minutes of notification of an ELVO alert
 8. Will create policies and procedures detailing how the TCASC will notify the appropriate personnel of an ELVO alert.
 9. Will accept all ELVO alert patients, regardless of ICU or ED saturation status, except in the event of internal disaster or no catheterization laboratory availability.
 10. Will create policies and procedures detailing how the TCASC will manage the presentation of concurrent ELVO alerts.
 11. Will create policies and procedures that allow the automatic acceptance of any ELVO patient from a Ventura County Hospital upon notification by the transferring physician.
 12. Ability to perform endovascular procedures as indicated for emergent large vessel occlusions.
 13. Have CT or MRI perfusion capabilities.
 14. Maintain appropriate staff and facility availability to address complications of emergent endovascular procedures.
 15. Will complete VCEMS ELVO Data spreadsheet on a monthly basis. Data for the preceding month will be due on the 15th of the following month.
- B. Designation Process:
1. Application:
 - a. When all requirements are met, submit a written request for a **Preliminary** TCASC designation to VC EMS no later than 30 days prior to the desired date of designation, documenting the compliance of the hospital with Ventura County TCASC Standards.
-

2. Approval:
 - a. Upon receiving a written request for **Preliminary** TCASC designation, VC EMS will arrange an on-site survey of the requesting hospital to assure compliance with stated requirements. A Comprehensive Stroke Center (CSC) or Thrombectomy-Capable Stroke Center (TSC) certified by either The Joint Commission, Det Norske Veritas, or the Healthcare Facilities Accreditation Program will not require an on-site visit if the EMS agency was present at the initial survey.
 - b. TCASC approval or denial shall be made in writing by VC EMS to the requesting hospital within two weeks after receipt of the request for approval and all required documentation and completion of the VC EMS site survey.
 3. VCEMS may deny, suspend, or revoke the designation of a TCASC for failure to comply with any applicable policies, procedures, or regulations. Requests for review or appeal of such decisions shall be brought to the Ventura County Board of Supervisors for appropriate action.
 4. The VC EMS Medical Director may grant an exception to a portion of this policy upon substantiation of need by the TCASC that compliance with the regulation would not be in the best interests of the persons served within the affected area.
 5. A **Formal** TCASC Designation will be granted after demonstration of competency through data submission and review.
 6. TCASCs shall be reviewed on a biannual basis in conjunction with the ASC review process.
 - a. TCASCs shall receive notification of evaluation from the VCEMS.
 - b. TCASCs shall respond in writing regarding program compliance.
 - c. On-site TCASC visits for evaluative purposes may occur.
 - d. TCASCs shall notify VCEMS by telephone, followed by a letter or email within 48 hours, of changes in program compliance or performance.
-

COUNTY OF VENTURA
HEALTH CARE AGENCY

EMERGENCY MEDICAL SERVICES
POLICIES AND PROCEDURES

Policy Title: Ventura County Emergency Medical Services Provider Agencies	Policy Number 500
APPROVED: Administration: Steven L. Carroll, Paramedic	Date: June 1, 2018
APPROVED: Medical Director: Daniel Shepherd, M.D.	Date: June 1, 2018
Origination Date: July 1987	Effective Date: June 1, 2018
Date Revised: January 11, 2018	
Date Last Reviewed: January 11, 2018	
Review Date: January 31, 2021	

Air Rescue

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

Law Enforcement

Cal State Channel Islands
University Police Department
1 University Drive - Placer Hall
Camarillo, CA 93012
805-347-8444

First Responder Agencies

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

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

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

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

City of Santa Paula Fire Department
970 East Ventura Street
Santa Paula, CA 93060
805-933-4218

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

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

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

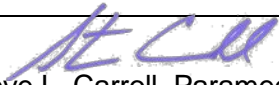

Transport Agencies

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

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

LifeLine Medical Transport
P.O. Box 1089
632 E. Thompson Blvd
Ventura, CA 93001
805-653-9111

* ALS First Responder

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Advanced Life Support Transport Provider Criteria		Policy Number 501	
APPROVED	 Administration: Steve L. Carroll, Paramedic	Date: June 1, 2018	
APPROVED	 Medical Director: Daniel Shepherd, M.D.	Date: June 1, 2018	
Origination Date:	April 1984	Effective Date: June 1, 2018	
Date Revised:	January 11, 2018		
Last Reviewed:	January 11, 2018		
Review Date:	January 31, 2021		

- I. PURPOSE: To define the criteria for ALS transport providers.
- II. POLICY: A Ventura County ALS Transport Provider shall meet the following criteria.
- III. AUTHORITY:

Health and Safety Code, Section 1797.218. California Code of Regulations, Section 100168.
- IV. PROCEDURE:
 - A. ALS Transport Provider Requirements

An Advanced Life Support Transport Provider, approved by Ventura County Emergency Medical Services (VC EMS), shall:

 1. ALS Unit Response Capability

Provide medical services response on a continuous twenty-four (24) hours per day, basis 7 days a week. Any change in response capability of the ALS transport provider must be reported to VC EMS immediately or during the first day of office hours after the change in response capability. All requests for pre-hospital emergency care shall be met by ALS capable staff and vehicles.

Interfacility transfers are not considered emergency medical service unless the transfer is for an urgent life or limb threatening condition that cannot be medically cared for at the transferring facility. (Refer to Policy 605: Interfacility Transfers)
 2. ALS Unit Coverage and Staffing

All requests for pre-hospital emergency medical care shall be responded to with the following:

 - a. An ambulance that meets the requirements of Policy 504 and
 - b. 2 paramedics or 1 paramedic and 1 EMT ALS Assist per VC EMS Policies 318 and 306. At least one paramedic must be employed by the contracted ambulance transport agency.
 3. ALS Patient Transport

Provide transportation for ALS patients in an ALS unit.
 4. ALS Communications

Provide two-way communication capability between the paramedics and the Base Hospital. All radio equipment shall comply with VC EMS Policy 905.

5. Satellite Phone

Each ALS Transport Provider shall have a minimum of one fully equipped and operational satellite phone. The device must be active with a satellite service provider and shall be readily deployable 24 hours a day for disaster communication purposes. The ALS Transport Provider will participate in occasional VC EMS sponsored satellite phone exercises. VC EMS will supply all providers with a current list of satellite phone contact numbers. Any changes to the satellite phone contact information shall immediately be forwarded to VC EMS.

6. ALS Drugs, Equipment and Supplies

Provide and maintain ALS drugs, solutions, medical equipment and supplies as specified by VC EMS Policy 504.

a. Ensure that security mechanisms and procedures are established for controlled substances and that mechanisms for investigation and mitigation of suspected tampering or diversion are established, in accordance with section 100168 of the California Code of Regulations

7. Contract with VC EMS

Have a contract with VC EMS to participate in the ALS program and to comply with all applicable State legislation and regulations, and local ordinances and policies and procedures.

8. Medical Direction

Assure that paramedics perform medical procedures only under specific orders of a physician or Ventura County authorized MICN except when operating under Prior to Base Hospital Contact and Communications Failure Policies.

9. Personnel Records

Keep a personnel file for each paramedic and EMT, which includes but not limited to licensure/certification, accreditation, employment status, and performance.

10. Certifications

Assure that each paramedic maintains current ACLS and either PALS, PEPP, or ENPC certification.


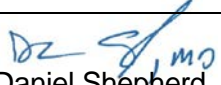
11. Quality Assurance

Assist the VC EMS, Pre-hospital Services Committee, and EMS Medical Director in data collection and evaluation of the VC EMS system.

12. Basic Life Support

Provide Basic Life Support services if ALS services are not indicated.

13. ALS Rates
Charge ALS rates, as approved by the Board of Supervisors.
 14. Documentation
Submit documentation according to VC EMS Policy 1000.
- B. Advertising
1. ALS Transport Provider
No paramedic transport provider shall advertise itself as providing ALS services unless it does, in fact, routinely provide ALS services on a continuous twenty-four (24) hours per day and complies with the regulations of Ventura County Emergency Medical Services Agency.
 2. ALS Responding Unit
No responding unit shall advertise itself as providing ALS services unless it does, in fact, provide ALS services twenty-four (24) hours per day and meets the requirements of VC EMS.
- C. ALS Policy Development
Medical policies and procedures for the VC EMS system shall be developed by the Pre-hospital Services Committee for recommendation to and approval by the EMS Medical Director.
- D. Contract Review
VC EMS shall review its contract with each ALS transport provider on an annual basis.
- E. Denial, Suspension, or Revocation of Transport Provider Approval
VC EMS may deny, suspend, or revoke the approval of an ALS transport provider for failure to comply with applicable policies, procedures, and regulation. Requests for review or appeal of such decisions shall be brought to the Pre-hospital Services Committee and the Board of Supervisors for appropriate action.
- F. ALS Transport Provider Review Process, New Designation
Newly designated ALS providers shall undergo review for six (6) months according to VC EMS policies and procedures.

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: BLS And ALS Unit Equipment And Supplies		Policy Number: 504	
APPROVED: Administration:	 Steven L. Carroll, Paramedic	Date: June 1, 2018	
APPROVED: Medical Director	 Daniel Shepherd, MD	Date: June 1, 2018	
Origination Date:	May 24, 1987	Effective Date: June 1, 2018	
Date Revised:	April 12, 2018		
Last Reviewed:	April 12, 2018		
Review Date:	April 30, 2021		

- I. PURPOSE: To provide a standardized list of equipment and supplies for response and/or transport units in Ventura County.
- II. POLICY: Each response and/or transport unit in Ventura County shall be equipped and supplied according to the requirements of this policy.
- III. AUTHORITY: California Health and Safety Code Section 1797.178, 1797.204, 1797.218, 1797.221 and California Code of Regulations Sections 100148, 100306, 100404
- IV. PROCEDURE:
The following equipment and supplies shall be maintained on each response and/or transport unit in Ventura County.



Deviation from the standards outlined in this policy shall only be authorized with written approval from the VCEMS Medical Director.

	ALS / BLS Unit Minimum Amount	PSV/CCT Minimum Amount	FR/ALS Minimum Amount	Search and Rescue Minimum Amounts
A. ALL BLS AND ALS RESPONSE AND/OR TRANSPORT UNITS				
Clear masks in the following sizes: Adult Child Infant Neonate	1 each	1 each	1 each	1 adult 1 infant
Bag valve units Adult Child	1 each	1 each	1 each	1 adult
Nasal cannula Adult	3	3	3	3
Nasopharyngeal airway (adult and child or equivalent)	1 each	1 each	1 each	1 each
Continuous positive airway pressure (CPAP) device	1 per size	1 per size	1 per size	1 per size
Nerve Agent Antidote Kit	9	9	9	0
Blood glucose determination devices <i>(optional for non-911 BLS units)</i>	2	1	1	1
Oral glucose 15gm unit dose	1	1	1	1
Oropharyngeal Airways Adult Child Infant Newborn	1 each size	1 each size	1 each size	1 each size
Oxygen with appropriate adjuncts (portability required)	10 L/min for 20 minutes	10 L/min for 20 mins.	10 L/min for 20 mins.	10 L/min for 20 mins.
Portable suction equipment	1	1	1	1
Transparent oxygen_masks Adult nonrebreather Child Infant	3 3 2	2 2 2	2 2 2	2 2 2
Bandage scissors	1	1	1	1
Bandages <ul style="list-style-type: none"> • 4"x4" sterile compresses or equivalent • 2",3",4" or 6" roller bandages • 10"x 30" or larger dressing 	12 6	12 2 0	12 6 2	5 4 2
Blood pressure cuffs Thigh Adult Child Infant	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1
Emesis basin/bag	1	1	1	1
Flashlight	1	1	1	1
Traction splint or equivalent device	1	1	1	1
Pneumatic or rigid splints (capable of splinting all extremities)	4	4	4	4
Potable water or saline solution	4 liters	4 liters	4 liters	4 liters
Cervical spine immobilization device	2	2	2	2
Spinal immobilization devices KED or equivalent	1	1	1	1


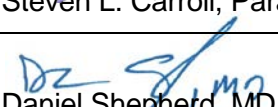
	ALS / BLS Unit Minimum Amount	PSV/CCT Minimum Amount	FR/ALS Minimum Amount	Search and Rescue Minimum Amounts
60" minimum with at least 3 sets of straps	1	0	1	
Sterile obstetrical kit	1	1	1	1
Tongue depressor	4	4	4	4
Cold packs	4	4	4	4
Tourniquet	1	1	1	1
1 mL/3 mL syringes with IM needles	4	4	4	4
OPTIONAL EQUIPMENT				
Occlusive dressing or chest seal				
Hemostatic gauze per EMSA guidelines				
B. TRANSPORT UNIT REQUIREMENTS				
Ambulance cot and collapsible stretcher; or two stretchers, one of which is collapsible.	1	0	0	1
Automated External Defibrillator (if not equipped with ALS monitor/defibrillator)	1	1	1	1
Straps to secure the patient to the stretcher or ambulance cot, and means of securing the stretcher or ambulance cot in the vehicle.	1 Set	0	0	1 Set
Soft Ankle and wrist restraints.	1	0	0	0
Sheets, pillow cases, blankets and towels for each stretcher or ambulance cot, and two pillows for each ambulance	1	0	0	0
Bedpan	1	0	0	0
Urinal	1	0	0	0
Personal Protective Equipment per State Guideline #216				
Rescue helmet	2	1	0	0
EMS jacket	2	1	0	0
Work goggles	2	1	0	0
Tyvek suit	2 L / 2 XXL	1 L / 1 XXL	0	0
Tychem hooded suit	2 L / 2 XXL	1 L / 1 XXL	0	0
Nitrile gloves	1 Med / 1 XL	1 Med / 1 XL	0	0
Disposable footwear covers	1 Box	1 Box	0	0
Leather work gloves	3 L Sets	1 L Set	0	0
Field operations guide	1	1	0	0

	ALS / BLS Unit Minimum Amount	PSV/CCT Minimum Amount	FR/ALS Minimum Amount	Search and Rescue Minimum Amounts
C. ALS TRANSPORT UNIT REQUIREMENTS				
Cellular telephone	1	1	1	1
Alternate ALS airway device	2	1	1	1
Arm Boards 9" 18"	3 3	0 0	1 1	0 0
Cardiac monitoring equipment	1	1	1	1
CO ₂ monitor	1	1	1	1
Colorimetric CO2 Detector Device	1	1	1	1
Defibrillator pads or gel	3	3	3	1 adult – No Peds.
Defibrillator w/adult and pediatric paddles/pads	1	1	1	1
EKG Electrodes	10 sets	3 sets	3 sets	6 sets
Endotracheal intubation tubes, sizes 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5 with stylets	1 of each size	1 of each size	1 of each size	4, 5, 6, 6.5, 7, 7.5, 8
EZ-IO intraosseous infusion system	1 Each Size	1 Each Size	1 Each Size	1 Each Size
Intravenous Fluids (in flexible containers) • Normal saline solution, 500 ml • Normal saline solution, 1000 ml	2 6	1 2	1 4	1 3
IV admin set - microdrip	4	1	2	2
IV admin set - macrodrip	4	1	4	3
IV catheter, Sizes I4, I6, I8, 20, 22, 24	6 each 14, 16, 18, 20 3 each 22 3 each 24	2 each	2 each	2 each
Laryngoscope, replacement bulbs and batteries	1 set	1 set	1 set	1 set
Curved blade #2, 3, 4 Straight blade #1, 2, 3	1 each 1 each	1 each 1 each	1 each 1 each	1 each 1 each
Magill forceps Adult Pediatric	1 1	1 1	1 1	1 1
Nebulizer	2	2	2	2
Nebulizer with in-line adapter	1	1	1	1
Needle Thoracostomy kit	2	2	2	2
Pediatric length and weight tape	1	1	1	1
SpO ₂ Monitor (If not attached to cardiac monitor)	1	1	1	1
OPTIONAL ALS EQUIPMENT (No minimums apply)				
Flexible intubation stylet				
Cyanide Antidote Kit				

	BLS Unit Minimum Amount	ALS Unit Minimum Amount	PSV/CCT Minimum Amount	FR/ALS Minimum Amount	Search and Rescue Minimum Amounts
D. MEDICATION, MINIMUM AMOUNT					
Adenosine, 6 mg		3	3	3	3
Albuterol 2.5mg/3ml		6	2	3	1
Aspirin, 81mg		4 ea 81 mg	4 ea 81 mg	4 ea 81 mg	4 ea 81 mg
Amiodarone, 50mg/ml 3ml		6	3	6	3
Atropine sulfate, 1 mg/10 ml		2	2	2	2
Diphenhydramine (Benadryl), 50 mg/ml		2	1	1	2
Calcium chloride, 1000 mg/10 ml		2	1	1	1
Dextrose 5% 50ml		2	1	2	1
Dextrose 10% 250 ml		2	1	2	1
Dextrose 25% 2.5 GM 10ml		1	1	1	1
Dextrose 50%, 25 GM/50		5	2	2	2
Epinephrine					
• Epinephrine , 1mg/ml	2	4	2	2	2
• 1 mL ampule / vial, OR	2	4	2	2	2
• Adult auto-injector (0.3 mg), AND	2	4	2	2	2
• Peds auto-injector (0.15 mg)					
• Epinephrine 0.1mg/ml (1 mg/10ml preparation)		6	3	6	4
• Epinephrine 1mg/ml, 30 ml multi-dose vial		1	1	1	1
Glucagon, 1 mg/ml		2	1	2	1
Lidocaine, 100 mg/5ml		2	2	2	2
Magnesium sulfate, 1 gm per 2 ml		4	1	2	2
Morphine sulfate, 10 mg/ml		2	2	2	2
Naloxone Hydrochloride (Narcan)					
• IN concentration - 4 mg in 0.1 mL (optional for ALS and non-911 BLS units), OR	2	5	5	5	5
• IM / IV concentration – 2 mg in 2 mL preload (optional for non-911 BLS units)	4	5	5	5	5
Nitroglycerine preparations, 0.4 mg		1 bottle	1 bottle	1 bottle	1 bottle
Normal saline, 10 ml		2	2	2	2
Sodium bicarbonate, 50 mEq/ml		2	1	1	1
Ondansetron 4 mg IV single use vial		4	4	4	4
Ondansetron 4 mg oral		4	4	4	4
Midazolam Hydrochloride (Versed)		5 mg/ml 2 vials	5 mg/ml 2 vials	5 mg/ml 2 vials	5 mg/ml 2 vials

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Paramedic Support Vehicles		Policy Number 506	
APPROVED: Administration:	 Steven L. Carroll, Paramedic	Date: June 1, 2018	
APPROVED: Medical Director:	 Daniel Shepherd, M.D.	Date: June 1, 2018	
Origination Date:	October 1995	Effective Date: June 1, 2018	
Revised Date:	April 5, 2013		
Last Reviewed:	January 11, 2018		
Review Date:	January 31, 2021		

- I. PURPOSE: To provide an additional Advanced Life Support (ALS) option to a County approved service provider by allowing a single paramedic to provide ALS services without a second paramedic or an EMT-ALS Assist in attendance.
- II. POLICY: At those times when a Paramedic Support Vehicle (PSV) is either the closest ALS unit to an emergency, for a multi-patient incident, or when a BLS ambulance is being dispatched to a potential ALS call, the paramedic who is operating a PSV may respond and begin ALS care, and may continue to function as a paramedic during patient transport.
- III. PROCEDURE:
 - A. Dispatch of a PSV is recommended in the following circumstances:
 1. The PSV is the closest unit to a call.
 2. A BLS ambulance is responding to a call that may require ALS services, and the PSV can make a response which will not delay in trauma, and will not delay inappropriately in other patient conditions, patient transportation to the nearest appropriate medical facility. All delays in transport shall be documented and reviewed by the PLP or PCC.
 3. During Mass Casualty Incidents
 - B. Personnel Requirements
A PSV will be staffed by a paramedic who has been designated as a Level II paramedic in Ventura County.
 - C. Equipment Requirements
A PSV will carry supplies and equipment according to Policy 504.
 - D. Documentation
PSV care shall be documented per Policy 1000.

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: First Responder Advanced Life Support Providers		Policy Number: 508	
APPROVED: Administration:	 Steven L. Carroll, Paramedic	Date: June 1, 2018	
APPROVED: Medical Director	 Daniel Shepherd, MD	Date: June 1, 2018	
Origination Date:	June 1, 1997	Effective Date: June 1, 2018	
Date Revised:	January 11, 2018		
Date Last Reviewed:	January 11, 2018		
Review Date:	January 31, 2021		

- I. Purpose: To define the criteria for First Responder Advanced Life Support (FRALS) providers.
- II. Authority: Health and Safety Code, Sections 1797.206, 1797.220, and 1798. California Code of Regulations, Section 100168
- III. Definition: First Responder Advanced Life Support (FRALS) means a non-transport ALS resource that is dispatched as part of the routine EMS response to a medical emergency.
- IV. Policy:
 - A. FRALS Provider Requirements:

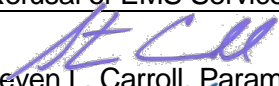
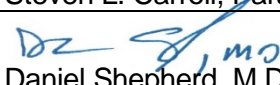
A FRALS provider approved by Ventura County EMS (VC EMS) shall:

 1. Provide medical services response on a continuous twenty-four (24) hours per day basis 7 days a week. Any change in response capability of the provider must be reported to VC EMS immediately.
 2. ALS Unit Coverage and Staffing:
 - a. FRALS units shall meet the requirements of Policy 504 and
 1. Shall be staffed at a minimum with two (2) personnel, of which one shall be a paramedic who meets the applicable requirements of VC EMS Policy 318.
 2. Other personnel may be a paramedic who meets the requirements of VC EMS Policy 318 or an EMT-ALS Assist who meets the requirements of VC EMS Policy 306.
 3. ALS Communications

Provide two-way communication capability between the paramedics and the Base Hospital. All radio equipment shall comply with VC EMS Policy 905.

4. **Satellite Phone**
Each FRALS provider shall have access to a satellite phone. The device must be active with a satellite service provider and shall be readily deployable 24 hours a day for disaster communication purposes. The FRALS provider will participate in occasional VC EMS sponsored satellite phone exercises. VC EMS will supply all providers with a current list of satellite phone contact numbers. Any changes to the satellite phone contact information shall immediately be forwarded to VC EMS.
5. **Written Agreement with VC EMS**
Have a written agreement with VC EMS to participate in the ALS program and to comply with all applicable State legislation and regulations, and local ordinances and policies and procedures.
6. **Medical Direction**
Assure that paramedics perform medical procedures only under specific orders of a physician or Ventura County authorized MICN except when operating under "Prior to Base Hospital Contact and per VCEMS Policy 705".
7. **Personnel records**
Keep a personnel file for each paramedic and EMT, which includes but not limited to licensure/certification, accreditation, employment status and performance.
8. **Certifications**
ACLS and either PALS, PEPP or ENPC Certification.
Assure that each paramedic maintains current ACLS and PALS/PEPP course.
9. **Quality Assurance**
Assist the VC EMS, Pre-hospital Services Committee, and EMS Medical Director in data collection and evaluation of the VC EMS system.
10. **Equipment:**
FRALS shall carry the following equipment:
 - a. **ALS Drugs, Equipment and Supplies**
Provide and maintain ALS drugs, solutions, medical equipment and supplies as specified by VC EMS Policy 504: BLS and ALS Unit Supplies and Equipment, FR/ALS column.
 - b. **BLS Equipment as described in VC EMS Policy 504: BLS and ALS Unit Supplies and Equipment, FR/ALS column.**

- c. Manual or automatic defibrillator per VC EMS Policy 306.
 - 11. Ensure that security mechanisms and procedures are established for controlled substances and that mechanisms for investigation and mitigation of suspected tampering or diversion are established, in accordance with section 100168 of the California Code of Regulations
 - 12. Documentation
 - Submit documentation according to VC EMS Policy 1000.
- B. ALS Policy Development
 - Medical policies and procedures for the VC EMS system shall be developed by the Prehospital Services Committee for recommendation to and approval by the EMS Medical Director.
- C. Agreement Review
 - VC EMS shall review its agreement with each FRALS provider on an annual basis.
- D. Denial, suspension, or Revocation of FRALS Provider Approval
 - VC EMS may deny, suspend, or revoke the approval of an FRALS provider for failure to comply with applicable policies, procedures, and regulation. Requests for review or appeal of such decisions shall be brought to the Pre-hospital Services Committee and the Board of Supervisors for appropriate action.
- E. FRALS Provider Review Process, New Designation
 - Newly designated FRALS providers shall undergo review for six (6) months according to VC EMS policies and procedures.

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Refusal of EMS Services		Policy: 603	
APPROVED: Administration:	 Steven L. Carroll, Paramedic	Date: June 1, 2018	
APPROVED: Medical Director:	 Daniel Shepherd, M.D.	Date: June 1, 2018	
Origination Date: October 31, 1995			
Date Revised: April 12, 2018		Effective Date: June 1, 2018	
Last Review: April 12, 2018			
Review Date: April 30, 2021			

- I. **PURPOSE:** To define the policy and operating procedures for the approach to patients, or potential patients, at the scene of an EMS response who decline services

- II. **AUTHORITY:** California Health and Safety Code, Division 2.5, sections 1797.204, 1797.206, 1798, and 1798.2, California Code of Regulations Title 22, Division 9, sections 100170(5) and 100128(4), California Welfare and Institution Code, sections 305,625, 5150 and 5170

- III. **DEFINITIONS:**
 - Adult** – person 18 years of age or older

 - ALS** – advanced level EMS services as defined in the policies and procedures of the Ventura County Emergency Medical Services Agency (VCEMS) and the California Health and Safety Code, section 1797.52

 - AMA** – when a patient with evidence of an emergency or acute medical condition, or who has required an ALS intervention, refuses transport or other indicated interventions. Patient must be an adult or emancipated minor, and have capacity as defined below, to decline service against medical advice.

 - BLS** – basic level EMS services as defined in the policies and procedures of VCEMS and the California Health and Safety Code, section 1797.60

 - Capacity** – a person’s ability to make an informed decision after consideration of the risks and benefits of such a decision. Capacity differs from competence, which is a legal definition that extends beyond the act of making specific medical decisions.

 - Declination of EMS Service** – a contact at the scene of an EMS response who does not demonstrate any evidence of an injury or acute medical condition and is declining any and all EMS services. Example: ambulatory individuals at a minor traffic accident, bystanders at a structure fire.

Declination of transport and/or assessment – when a patient requests BLS level services but declines transport and/or assessment. These patients meet defined criteria for declining such services and lack any complaints or exam findings indicative of an emergent medical condition.

Dedicated decision maker – an individual who has been selected by or legally appointed to make medical decisions on behalf of the patient, including individuals with a power of attorney.

Emancipated minor – a person under 18 years of age who has been legally separated from their parents and lives independently, minors on military duty, married minors, minors who are pregnant and minors who parents.

Emergency Medical Condition – a medical condition that is acute or subacute in nature and requires immediate assessment. Emergency medical conditions typically carry the risk of sudden deterioration and possibly death. These conditions may be readily apparent or suspected based on the reported signs and symptoms, mechanism of injury, or medical history.

Incident: Any response involving any Ventura County pre-hospital personnel to any event in which there is an actual victim, or the potential for a victim

Minor – person under 18 years of age.

Patient Contact: Any encounter involving Ventura County pre-hospital personnel with any person consenting, either implied or informed, to assessment and/or treatment.

Power of attorney – the authority to act for another person in specified legal, medical or financial matters.

IV. POLICY:

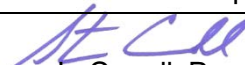

- A. Adults and emancipated minors with decision-making capacity have the right to dictate the scope of their medical care. EMS has an obligation to offer service.
 - B. For unaccompanied minors, refer to VCEMS Policy 618.
 - C. All potential patients at the scene of an EMS response shall be offered evaluation and treatment. Transportation is an essential component of EMS care and should be encouraged.
 - D. Providing care establishes a therapeutic relationship and the expectations therein.
 - E. Not all EMS patients require ALS care and/or transport.
 - F. Patients declining care and/or transport should be counseled thoroughly about the pertinent risks of declining such interventions and all discussions should be documented thoroughly.
 - G. If there is any concern, the BLS providers shall request an ALS provider.
 - H. BLS providers with concern for an emergency medical condition shall request an ALS provider for an ALS level assessment.
 - I. Only adults and emancipated minors may decline services if they meet the criteria for refusal. Persons who refuse care must demonstrate capacity and be free of
-

- impairment due to drugs and/or alcohol. Parents of minors and the dedicated decision makers for adults who lack capacity can decline services for others if they themselves meet the criteria for refusal.
- J. Criteria for refusal:
1. Alert, oriented (x4) person, place, time, and purpose/situation.
 2. Able to demonstrate capacity by participating in a discussion of the risks of refusal. Must adequately acknowledge risks of declining the relevant services.
 3. Free of impairment due to drugs or alcohol.
 4. No evidence of suicidality, homicidally, grave disability, or other acute psychiatric condition that may require a 5150.
- K. Provider agencies may require additional documentation over and above the minimum requirements outlined in this policy.
- V. PROCEDURE:
- A. Cancellation
1. No ePCR is required if:
 - a. Cancelled enroute prior to arrival
 - b. Cancelled by another agency upon arrival at the scene of the incident
 - c. Cancelled after arrival and no patient contact as defined in Section III
- B. Declination of EMS Services
1. Those individuals contacted at an EMS response who have no medical complaints or evidence of an emergency medical condition may decline service. Services will still be offered, and encouraged. An ePCR with a no treatment disposition shall be completed.
- C. Declination of Transport and/or Assessment
1. Patients with minor injuries or illness, or those in need of strictly BLS interventions, shall be evaluated and treated per protocol.
 2. Transport must be offered and encouraged.
 3. Adults and emancipated minors may decline transport and/or assessment if all of the following criteria are met:
 - a. Alert, oriented (x4) person, place, time, and purpose/situation.
 - b. Able to demonstrate capacity by participating in a discussion of the risks and benefits of declining additional service. Must adequately acknowledge risks of declining.
 - c. Free of impairment due to drugs or alcohol.
 - d. No evidence of suicidality, homicidally, grave disability, or other acute psychiatric condition that may require a 5150.
 - e. No need for ALS level intervention.
 - f. No criteria for ALS assessment and base hospital contact as defined by VCEMS policy 704.
 4. Adults and emancipated minors may be released if ALL of the following criteria are met:
 - a. Alert, oriented (x4) person, place, time, and purpose/situation.
-

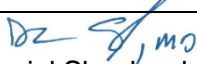
- b. Able to demonstrate capacity by participating in a discussion of the risks and benefits of declining additional service. Must adequately acknowledge risks of declining.
- c. Free of impairment due to drugs or alcohol.
- d. No evidence of suicidality, homicidally, grave disability, or other acute psychiatric condition that may require a 5150.
5. Minors and those lacking capacity may be released from care if a parent or dedicated decision maker is present and meets criteria listed above.
6. Documentation per VCEMS Policy 1000 – Documentation of Prehospital Care.
7. Discuss the risks of declining and document the discussion in your narrative.

D. AMA

1. Patient has evidence of an emergency medical condition, required an ALS intervention, or has a complaint and/or condition as described in VCEMS policy 704.
 2. Attempt to convince the patient to consent to care and/or transport.
 3. Engage patient in a discussion detailing the risks of declining additional services.
 4. Contact base hospital for further assistance and/or to document AMA.
 5. Direct communication between the MICN and/or base hospital physician and patient is encouraged.
 6. Adults and emancipated minors may be released by ALS providers after base hospital contact if the appropriate criteria are met:
 - a. Alert, oriented (x4) person, place, time, and purpose/situation.
 - b. Able to demonstrate capacity by participating in a discussion of the risks and benefits of refusal. Must adequately acknowledge risks of refusal.
 - c. Free of impairment due to drugs or alcohol.
 - d. No evidence of suicidality, homicidally, grave disability, or other acute psychiatric condition that may require a 5150.
 7. These are high-risk contacts for patients, providers, and EMS agencies. Therefore, they must be completed in a thorough and thoughtful manner. This includes detailed documentation of the history, exam, and all pertinent discussions.
 8. Have patient and witness complete relevant AMA documentation.
 9. If patient does not meet criteria outlined above, or AMA is discouraged by the base hospital, Law enforcement and/or Crisis Team may be requested to the scene and efforts to convince the patient to agree to transport should be continued.
-

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Guidelines For Base Hospital Contact		Policy Number: 704	
APPROVED: Administration:	 Steven L. Carroll, Paramedic	Date: June 1, 2018	
APPROVED: Medical Director:	 Daniel Shepherd, MD	Date: June 1, 2018	
Origination Date:	October 1984		
Date Revised:	March 8, 2018	Effective Date: June 1, 2018	
Date Last Reviewed:	March 8, 2018		
Review Date:	March 31, 2021		

- I. PURPOSE: To define patient conditions for which Paramedics 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 appropriate catchment area, based on the location of the incident in the following circumstances:
 - A. Any patient to which ALS care is rendered under VCEMS Policy 705: County Wide Protocols.
 - B. Patients with traumatic injuries who triage into steps 1-4 of VCEMS Policy 1405: Field Triage Decision Scheme.
 - 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. Any safely surrendered baby.
 5. AMA involving any of the conditions listed in this policy.
 6. AMA including suspected altered level of consciousness
 7. AMA involving an actual/suspected BRUE patient.
 8. AMA involving any pediatric patient under 2 years old
 9. 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: Treatment Protocols		Policy Number 705	
APPROVED: Medical Director:	 Daniel Shepherd, M.D.	Date: June 1, 2018	
Origination Date:	January 1988		
Date Revised:	See individual algorithms		
Date Last Revised:	See individual algorithms		
Review Date:	See individual algorithms		
	Effective Date:	As indicated on individual algorithms	

- I. PURPOSE: To provide uniform protocols for prehospital medical control in Ventura County.
- II. AUTHORITY: Health and Safety Code 1797.220 and 1798; California Code of Regulations, Title 22, Division 9, Sections 100063, 100064, and 100146.
 - A. DEFINITIONS:
 1. Unless otherwise specified in an individual treatment protocol or policy, the following definitions shall apply:
 - a. Adult: Age 12 or greater (12th birthday and older)
 - b. Pediatric: Age less than 12 (up to 12th birthday)
 - B. Exceptions to the pediatric definition rule are in the following policies:
 1. Policy 606: Withholding or Termination of Resuscitation and Determination of Death
 2. Policy 710: Airway Management
 3. Policy 717: Intraosseous Infusion
 - C. Cardiac Monitor/12 Lead EKG
 1. When cardiac monitoring or a 12 Lead ECG is performed, copies of rhythms strips and 12 Lead ECGs shall be submitted to the ALS Provider(s), Base Hospital, and Receiving Hospital.
- IV. POLICY: Treatment protocols shall be used as a basis for medical direction and control for prehospital use.
 - A. Effective July 1, 2018 BLS personnel are authorized to administer the following medications and/or perform the following procedures for certain conditions as outlined below. BLS personnel shall not administer these medications and/or perform these procedures until all required training has been completed, and all

necessary equipment has been distributed. Training and equipment deployment shall be completed by all agencies no later than July 1, 2019.

1. Epinephrine for anaphylaxis or severe respiratory distress as a result of asthma.
 2. Naloxone for suspected opioid overdose
 3. Nerve Agent Antidote Kit (Pralidoxime Chloride and Atropine Sulfate) for suspected nerve agent or organophosphate exposure.
 4. Determination of blood glucose level for altered neurological function and/or for suspected stroke
 5. Continuous Positive Airway Pressure (CPAP) for shortness of breath.
- B. In the event BLS personnel administer naloxone, epinephrine or a nerve agent antidote kit, ALS personnel will assume care of the patient as soon as possible and continue care at an ALS level, in accordance with all applicable VCEMS policies and procedures.
- C. Hypoglycemic patients with a history of diabetes, who are fully alert and oriented following determination of blood glucose level and a single administration of 15g of oral glucose may be transported at a BLS level of care.
- V. PROCEDURE: See the following pages for specific conditions.

Contents

- 00 - General Patient Assessment
- 01 - Trauma Assessment/Treatment Guidelines
- 02 - Allergic Reaction and Anaphylaxis
- 03 - Altered Neurological Function
- 04 - Behavioral Emergencies
- 05 - Bites and Stings
- 06 - Burns
- 07 - Cardiac Arrest – Asystole/Pulseless Electrical Activity (PEA)
- 08 - Cardiac Arrest – VF/VT
- 09 - Chest Pain – Acute Coronary Syndrome
- 10 - Childbirth
- 11 - Crush Injury/Syndrome
- 12 - Heat Emergencies
- 13 - Hypothermia
- 14 – Hypovolemic/Septic Shock
- 15 - Nausea/Vomiting
- 16 - Neonatal Resuscitation
- 17 - Nerve Agent / Organophosphate Poisoning
- 18 - Overdose
- 19 - Pain Control
- 20 - Seizures
- 21 - Shortness of Breath – Pulmonary Edema
- 22 - Shortness of Breath – Wheezes/Other
- 23 - Supraventricular Tachycardia
- 24 - Symptomatic Bradycardia
- 25 - Ventricular Tachycardia – Not in Arrest
- 26 – Suspected Stroke
- 27 – Sepsis Alert
- 28 – Smoke Inhalation

Allergic Reaction and Anaphylaxis

ADULT

PEDIATRIC

BLS Procedures

Administer oxygen as indicated

Anaphylaxis: Assist patient with prescribed epinephrine auto-injector, or

- If under 30 kg – Epinephrine IM 1 mg/mL
 - IM 0.15 mg via auto-injector, pre-filled syringe, or syringe/vial draw
 - May repeat x1 in 5 minutes if patient remains in distress
- If 30 kg and over – Epinephrine IM 1mg/mL
 - IM 0.3mg via auto-injector, pre-filled syringe, or syringe/vial draw
 - May repeat x1 in 5 minutes if patient remains in distress

ALS Prior to Base Hospital Contact

IV/IO access

Allergic Reaction:

- **Benadryl**
 - IV/IO/IM – 50 mg
- **Albuterol (if wheezing is present)**
 - Nebulizer – 5 mg/6 mL
 - Repeat as needed

IV/IO Access

Allergic Reaction:

- **Benadryl**
 - IV/IO/IM – 1 mg/kg
 - Max 50 mg
- **Albuterol (if wheezing is present)**
- Less than 2 years old
 - Nebulizer – 2.5 mg/3 mL
 - Repeat as needed
- 2 years old and greater
 - Nebulizer – 5 mg/6 mL
 - Repeat as needed

Anaphylaxis without shock:

- **Epinephrine** 1 mg/mL, if not already administered by BLS personnel
 - IM 0.3 mg
 - May repeat x 1 q 5 minutes if patient remains in distress

Anaphylaxis with Shock:

- Epinephrine IM 1 mg/mL as above “anaphylaxis without shock” if IV/IO has not been established
- Epinephrine IV/IO 0.1 mg/mL
 - 0.1 mg (1mL) increments – slow IV/IOP over 1-2 minutes
 - Max 0.3mg (3mL)
- Initiate 2nd IV/IO
- **Normal Saline**
 - IV/IO bolus – 1 Liter

Anaphylaxis without Shock:

- **Epinephrine 1 mg/mL, if not already administered by BLS personnel**
 - IM – 0.01 mg/kg to a max of 0.15 mg
 - May repeat q 5 minutes, if patient remains in distress
 - If patient under 30 kg, max dose is 0.3 mg
 - If patient 30 kg and over, max dose is 0.6 mg

Anaphylaxis with Shock:

- Epinephrine IM 1 mg/mL as above “anaphylaxis without shock” if IV/IO has not been established
- Epinephrine IV/IO 0.1 mg/mL
 - Slow IV/IOP - 0.01 mg/kg (0.1 mL/kg) increments over 1-2 minutes
 - Max 0.3mg (3mL)
- Initiate 2nd IV if possible or establish IO
- **Normal Saline**
 - IV/IO bolus – 20 mL/kg

Communication Failure Protocol

Anaphylaxis without Shock

- **Repeat Epinephrine 1 mg/mL**
 - IM – 0.3 mg q 5 min x 2 as needed

Anaphylaxis with Shock

- Epinephrine 1 mg/mL as above “anaphylaxis without shock” if IV/IO has not been established
 - **Repeat Normal Saline**
 - IV/IO bolus – 1 Liter
- Epinephrine IV/IO 0.1 mg/mL
 - Slow IV/IOP - 0.1 mg (1 mL) increments over 1-2 minutes
 - Max 0.3 mg (3 mL)

Anaphylaxis without Shock

- **Repeat Epinephrine 1 mg/mL**
 - IM – 0.01 mg/kg q 5 min x 2 as needed

Anaphylaxis with Shock

- Epinephrine 1 mg/mL as above “anaphylaxis without shock” if IV/IO has not been established
 - **Repeat Normal Saline**
 - IV/IO bolus – 20 mL/kg
- **Epinephrine 0.1 mg/mL**
 - Slow IV/IOP – 0.01 mg/kg (0.1 mL/kg) increments over 1-2 min
 - Max 0.3 mg (3 mL)

Base Hospital Orders Only

Consult with ED Physician for further treatment measures

Effective Date: June 1, 2018
Next Review Date: April 30, 2020

Date Revised: April 12, 2018
Last Reviewed: April 12, 2018



VCEMS Medical Director

Altered Neurologic Function										
ADULT	PEDIATRIC									
BLS Procedures										
<p>If suspected stroke, refer to VC EMS Policy 705.26 – Suspected Stroke Administer oxygen as indicated Determine blood glucose level If less than 60 mg/dl</p> <ul style="list-style-type: none"> • Oral Glucose – patient must be awake and able to swallow with a gag reflex intact <ul style="list-style-type: none"> ○ PO 15 g <p><i>* Treat as above if you have clinical suspicion of hypoglycemia and are unable to obtain glucose level due to glucometer malfunction or error reading.</i></p>										
ALS Prior to Base Hospital Contact										
<p>IV/IO Access Determine Blood Glucose level, if not already performed by BLS personnel or post oral glucose administration <u>If less than 60 mg/dl</u></p> <ul style="list-style-type: none"> • D10W - Preferred <ul style="list-style-type: none"> ○ IV/IOPB-100 mL (10 g)-Rapid Infusion • D5W <ul style="list-style-type: none"> ○ IV/IOPB-200 mL (10 g)-Rapid Infusion • D50W <ul style="list-style-type: none"> ○ IV/IO – 25 mL (12.5 g) • Glucagon (If no IV access) <ul style="list-style-type: none"> ○ IM – 1 mg <p>Recheck Blood Glucose level 5 min after D10W, D5W, D50W, or 10 min after Glucagon administration <u>If still less than 60 mg/dl</u></p> <ul style="list-style-type: none"> • D10W - Preferred <ul style="list-style-type: none"> ○ IV/IOPB-150 mL (15 g)-Rapid Infusion • D5W <ul style="list-style-type: none"> ○ IV/IOPB-250 mL (12.5 g)- Rapid Infusion • D50W <ul style="list-style-type: none"> ○ IV/IO – 25 mL (12.5 g) <p><i>* Treat as above if you have clinical suspicion of hypoglycemia and are unable to obtain glucose level due to glucometer malfunction or error reading.</i></p>	<p>IV/IO Access Determine Blood Glucose level, if not already performed by BLS personnel or post oral glucose administration <u>If less than 60 mg/dl</u></p> <ul style="list-style-type: none"> • All Pediatric Patients • D10W - Preferred <ul style="list-style-type: none"> ○ IV/IOPB-5 mL/kg-Rapid Infusion ○ Max 100 mL • D5W <ul style="list-style-type: none"> ○ IV/IOPB-10 mL/kg-Rapid Infusion ○ Max 200mL • Less than 2 years old • D25W <ul style="list-style-type: none"> ○ IV/IO – 2 mL/kg • 2 years old and greater • D50W <ul style="list-style-type: none"> ○ IV/IO – 1 mL/kg • All Pediatric Patients • Glucagon (If no IV/IO access) <ul style="list-style-type: none"> ○ IM – 0.1 mL/kg ○ Max 1 mg <p>Recheck Blood Glucose level 5 min after D25W, D50W, D10W, D5W or 10 min after Glucagon administration <u>If still less than 60 mg/dl</u></p> <p>All Pediatric Patients</p> <ul style="list-style-type: none"> • D10W - Preferred <ul style="list-style-type: none"> ○ IV/IOPB-7.5 mL/kg-Rapid Infusion ○ Max 150 mL • D5W <ul style="list-style-type: none"> ○ IV/IOPB-15 mL/kg-Rapid Infusion ○ Max 250 mL <p>Less than 2 years old</p> <ul style="list-style-type: none"> • D25W <ul style="list-style-type: none"> ○ IV/IO – 2 mL/kg <p>2 years old and greater</p> <ul style="list-style-type: none"> • D50W <ul style="list-style-type: none"> ○ IV/IO – 1 mL/kg <p><i>* Treat as above if you have clinical suspicion of hypoglycemia and are unable to obtain glucose level due to glucometer malfunction or error reading.</i></p>									
Base Hospital Orders only										
Consult with ED Physician for further treatment measures										
<p>Additional Information:</p> <ul style="list-style-type: none"> • Certain oral hypoglycemic agents (e.g. - sulfonylureas) and long-acting insulin preparations have a long duration of action, sometimes up to 72 hours. Patients on these medications who would like to decline transport MUST be warned about the risk of repeat hypoglycemia for up to 3 days, which can occur during sleep and result in the patient's death. If the patient continues to decline further care, every effort must be made to have the patient speak to the ED Physician prior to leaving the scene. • If patient has an ALOC and Blood Glucose level is greater than 60 mg/dl, consider alternate causes: <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">A - Alcohol</td> <td style="width: 33%;">O - Overdose</td> <td style="width: 33%;">I - Infection</td> </tr> <tr> <td>E - Epilepsy</td> <td>U - Uremia</td> <td>P - Psychiatric</td> </tr> <tr> <td>I - Insulin</td> <td>T - Trauma</td> <td>S – Stroke</td> </tr> </table>		A - Alcohol	O - Overdose	I - Infection	E - Epilepsy	U - Uremia	P - Psychiatric	I - Insulin	T - Trauma	S – Stroke
A - Alcohol	O - Overdose	I - Infection								
E - Epilepsy	U - Uremia	P - Psychiatric								
I - Insulin	T - Trauma	S – Stroke								

Effective Date: June 1, 2018
Next Review Date: April 30, 2020

Date Revised: April 12, 2018
Last Reviewed: April 12, 2018


VCEMS Medical Director

Behavioral Emergencies	
ADULT	PEDIATRIC
ALS Prior to Base Hospital Contact	
<p>IV/IO Access</p> <p>For Extreme Agitation</p> <ul style="list-style-type: none"> • Midazolam <ul style="list-style-type: none"> ○ IM – 5mg or 10 mg (5mg/ml) ○ IV/IO – 2 mg <ul style="list-style-type: none"> • Repeat 1 mg q 2 min as needed • Max 5 mg <p>FOR IV USE: Dilute 5 mg (1 mL) Midazolam with 4 mL NS for a final volume of 5 mL concentration of 1 mg/mL</p> <p>When safe to perform, determine blood glucose level</p>	<p>For Extreme Agitation</p> <ul style="list-style-type: none"> • Midazolam <ul style="list-style-type: none"> ○ IM – 0.1 mg/kg <ul style="list-style-type: none"> • Max 5 mg <p>When safe to perform, determine blood glucose level</p>
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	
<p>Additional Information:</p> <ul style="list-style-type: none"> • If patient refuses care and transport, and that refusal is because of “mental disorder”, consider having patient taken into custody according to Welfare and Institutions Code Section 5150 or 5585 “Mental disorders” do not generally include alcohol or drug intoxication, brain injury, hypoxemia, hypoglycemia, or similar causes. • Refer to VC EMS pre-hospital provider fact sheet for suspected excited delirium patients. Be sure to consider and rule out other possible causes or behavior (traumatic or medical). • Use of restraints (physical or chemical) shall be documented and monitored in accordance with VCEMS policy 732 • Welfare and Institutions Code Section 5585: <ul style="list-style-type: none"> ○ Known as the Children’s Civil Commitment and Mental Health Treatment Act of 1988, a minor patient may be taken into custody if, as a result of a mental disorder, there is a danger to self and 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. • Welfare and Institutions Code Section 5150: <ul style="list-style-type: none"> ○ A patient may be taken into custody if, as a result of a mental disorder, there is a danger to self and 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. • All patients shall be transported to the most accessible Emergency Department for medical clearance prior to admission to a psychiatric facility <p>Ventura County Mental Health Crisis Team: (866) 998-2243</p>	

Cardiac Arrest – Asystole/Pulseless Electrical Activity (PEA)	
ADULT	PEDIATRIC
BLS Procedures	
Initiate Cardiac Arrest Management (CAM) Protocol Airway management per VCEMS policy	
ALS Prior to Base Hospital Contact	
<p>Assess/treat causes IV/IO access</p> <ul style="list-style-type: none"> • PRESTO Blood Draw <p>Epinephrine</p> <ul style="list-style-type: none"> • IV/IO – 0.1mg/mL: 1 mg (10 mL) q 3-5 min <p>If suspected hypovolemia:</p> <ul style="list-style-type: none"> • Normal Saline <ul style="list-style-type: none"> ○ IV/IO bolus – 1 Liter <p>ALS Airway Management</p> <ul style="list-style-type: none"> • If unable to ventilate by BLS measures, initiate appropriate advanced airway procedures 	<p>Assess/treat causes IV/IO access</p> <ul style="list-style-type: none"> • PRESTO Blood Draw <p>Epinephrine 0.1mg/mL</p> <ul style="list-style-type: none"> • IV/IO – 0.01mg/kg (0.1 mL/kg) q 3-5 min <p>If suspected hypovolemia:</p> <ul style="list-style-type: none"> • Normal Saline <ul style="list-style-type: none"> ○ IV/IO bolus – 20 mL/kg <ul style="list-style-type: none"> • Repeat x 2 <p>ALS Airway Management</p> <ul style="list-style-type: none"> • If unable to ventilate by BLS measures, initiate appropriate advanced airway procedures <p>Make early Base Hospital contact for all pediatric cardiac arrests</p>
Base Hospital Orders only	
<p>Tricyclic Antidepressant Overdose</p> <ul style="list-style-type: none"> • Sodium Bicarbonate <ul style="list-style-type: none"> • IV/IO – 1 mEq/kg <ul style="list-style-type: none"> • Repeat 0.5 mEq/kg q 5 min <p>Beta Blocker Overdose</p> <ul style="list-style-type: none"> • Glucagon <ul style="list-style-type: none"> ○ IV/IO – 2 mg <ul style="list-style-type: none"> • May give up to 10mg if available <p>Calcium Channel Blocker Overdose</p> <ul style="list-style-type: none"> • Calcium Chloride <ul style="list-style-type: none"> ○ IV/IO – 1 g <ul style="list-style-type: none"> • Repeat x 1 in 10 min • Glucagon <ul style="list-style-type: none"> ○ IV/IO – 2 mg <ul style="list-style-type: none"> • May give up to 10mg if available <p>History of Renal Failure/Dialysis</p> <ul style="list-style-type: none"> • Calcium Chloride <ul style="list-style-type: none"> • IV/IO – 1 g <ul style="list-style-type: none"> • Repeat x 1 in 10 min • Sodium Bicarbonate <ul style="list-style-type: none"> • IV/IO – 1 mEq/kg <ul style="list-style-type: none"> • Repeat 0.5 mEq/kg q 5 min x2 	<p>Tricyclic Antidepressant Overdose</p> <ul style="list-style-type: none"> • Sodium Bicarbonate <ul style="list-style-type: none"> • IV/IO – 1 mEq/kg <ul style="list-style-type: none"> • Repeat 0.5 mEq/kg q 5 min <p>Beta Blocker Overdose</p> <ul style="list-style-type: none"> • Glucagon <ul style="list-style-type: none"> • IV/IO – 0.1 mg/kg <ul style="list-style-type: none"> • May give up to 10mg if available <p>Calcium Channel Blocker Overdose</p> <ul style="list-style-type: none"> • Calcium Chloride <ul style="list-style-type: none"> • IV/IO – 20 mg/kg <ul style="list-style-type: none"> • Repeat x 1 in 10 min • Glucagon <ul style="list-style-type: none"> • IV/IO – 0.1 mg/kg <ul style="list-style-type: none"> • May give up to 10mg if available <p>History of Renal Failure/Dialysis</p> <ul style="list-style-type: none"> • Calcium Chloride <ul style="list-style-type: none"> • IV/IO – 20 mg/kg <ul style="list-style-type: none"> • Repeat x 1 in 10 min • Sodium Bicarbonate <ul style="list-style-type: none"> • IV/IO – 1 mEq/kg <ul style="list-style-type: none"> • Repeat 0.5 mEq/kg q 5 min x2
Consult with ED Physician for further treatment measures	
<p>Additional Information :</p> <ul style="list-style-type: none"> • If sustained ROSC (> 30 seconds), perform 12-lead EKG. Transport to SRC. • If suspected hypovolemia, initiate immediate transport • In cases of normothermic cardiac arrest patients 18 years and older with unwitnessed cardiac arrest, adequate ventilations, vascular access, and persistent asystole or PEA despite 20 minutes of standard advanced cardiac life support, the base hospital should consider termination of resuscitation in the field. If transported, the patient may be transported Code 2. If unable to contact the base hospital, resuscitative efforts may be discontinued and patient determined to be dead. • If patient is hypothermic – only ONE round of medication administration prior to Base Hospital contact. Field determination of death is discouraged in these patients and they should be transported to the most accessible receiving facility. 	

Effective Date: June 1, 2018
Next Review Date: April 30, 2020

Date Revised: April 12, 2018
Last Reviewed: April 12, 2018



VCEMS Medical Director

Cardiac Arrest – VF/VT	
ADULT	PEDIATRIC
BLS Procedures	
Initiate Cardiac Arrest Management (CAM) Protocol Airway management per VCEMS policy	
ALS Prior to Base Hospital Contact	
<p>Defibrillate</p> <ul style="list-style-type: none"> Use the biphasic energy settings that have been approved by service provider medical director Repeat every 2 minutes as indicated <p>IV or IO access</p> <ul style="list-style-type: none"> PRESTO Blood Draw <p>Epinephrine</p> <ul style="list-style-type: none"> IV/IO – 0.1mg/mL: 1 mg (10 mL) q 3-5 min <p>Amiodarone</p> <ul style="list-style-type: none"> IV/IO – 300 mg – after second defibrillation If VT/VF persists, 150 mg IV/IO in 3-5 minutes <p>ALS Airway Management</p> <ul style="list-style-type: none"> If unable to ventilate by BLS measures, initiate appropriate advanced airway procedures <p>If VF/VT stops, then recurs, perform defibrillation at the last successful biphasic energy setting</p>	<p>Defibrillate – 2 Joules/kg</p> <ul style="list-style-type: none"> If patient still in VF/VT at rhythm check, increase to 4 Joules/kg Repeat every 2 minutes as indicated <p>IV or IO access</p> <ul style="list-style-type: none"> PRESTO Blood Draw <p>Epinephrine 0.1mg/mL</p> <ul style="list-style-type: none"> IV/IO – 0.01mg/kg (0.1 mL/kg) q 3-5 min <p>Amiodarone</p> <ul style="list-style-type: none"> IV/IO – 5 mg/kg – after second defibrillation If VT/VF-persists, 2.5 mg/kg IV/IO in 3-5 minutes <p>ALS Airway Management</p> <ul style="list-style-type: none"> If unable to ventilate by BLS measures, initiate appropriate advanced airway procedures <p>If VF/VT stops, then recurs, perform defibrillation at the last successful biphasic energy setting</p>
Base Hospital Orders only	
<p>Tricyclic Antidepressants</p> <ul style="list-style-type: none"> Sodium Bicarbonate <ul style="list-style-type: none"> IV/IO – 1 mEq/kg <ul style="list-style-type: none"> Repeat 0.5 mEq/kg q 5 min <p>Torsades de Pointes</p> <ul style="list-style-type: none"> Magnesium Sulfate <ul style="list-style-type: none"> IV/IO – 2 g over 2 min <ul style="list-style-type: none"> May repeat x 1 in 5 min <p>Consult with ED Physician for further treatment measures <u>ED Physician Order Only</u></p> <p>1. History of Renal Failure/Dialysis</p> <ul style="list-style-type: none"> Calcium Chloride <ul style="list-style-type: none"> IV/IO – 1g <ul style="list-style-type: none"> Repeat x 1 in 10 min Sodium Bicarbonate <ul style="list-style-type: none"> IV/IO – 1 mEq/kg <ul style="list-style-type: none"> Repeat 0.5 mEq/kg q 5 min 	<p>Tricyclic Antidepressants</p> <ul style="list-style-type: none"> Sodium Bicarbonate <ul style="list-style-type: none"> IV/IO – 1 mEq/kg <ul style="list-style-type: none"> Repeat 0.5 mEq/kg q 5 min <p>Consult with ED Physician for further treatment measures <u>ED Physician Order Only</u></p> <p>1. History of Renal Failure/Dialysis</p> <ul style="list-style-type: none"> Calcium Chloride <ul style="list-style-type: none"> IV/IO – 20 mg/kg over 1 min <ul style="list-style-type: none"> Repeat x 1 in 10 min Sodium Bicarbonate <ul style="list-style-type: none"> IV/IO – 1 mEq/kg <ul style="list-style-type: none"> Repeat 0.5 mEq/kg q 5 min
<p>Additional Information:</p> <ul style="list-style-type: none"> If sustained ROSC (>30 seconds), perform 12-lead EKG. Transport to SRC After 30 minutes of sustained VF/VT, make base contact for transport decision If patient is <u>hypothermic</u>–only ONE round of medication administration and limit <i>defibrillation to 6 times</i> prior to Base Hospital contact. Field determination of death is discouraged in these patients and they should be transported to the most accessible receiving facility Ventricular tachycardia (VT) is a rate > 150 bpm 	

Effective Date: June 1, 2018
Next Review Date: April 30, 2020

Date Revised: April 12, 2018
Last Reviewed: April 12, 2018


VCEMS Medical Director

Chest Pain – Acute Coronary Syndrome

BLS Procedures

Administer oxygen if dyspnea, signs of heart failure or shock, or SpO₂ < 94%
Assist patient with prescribed Nitroglycerin as needed for chest pain

- Hold if SBP less than 100 mmHg

ALS Prior to Base Hospital Contact

Perform 12-lead ECG

- Expedite transport to closest STEMI Receiving Center if monitor interpretation meets the manufacturer guidelines for a positive STEMI ECG.
- Document all initial and ongoing rhythm strips and ECG changes

For continuous chest pain consistent with ischemic heart disease:

- **Nitroglycerin**
 - SL or lingual spray – 0.4 mg q 5 min for continued pain
 - No max dosage
 - Maintain SBP less than 100 mmHg
- **Aspirin**
 - PO – 324 mg

IV/IO access

- 3 attempts only prior to Base Hospital contact

If pain persists and not relieved by NTG:

- **Morphine** – per policy 705 - Pain Control
 - Maintain SBP less than 100 mmHg

If patient presents or becomes hypotensive:

- Lay Supine
- **Normal Saline**
 - IV/IO bolus – 500 mL -may repeat x1 for total 1000 mL.
 - Unless CHF is present

Communication Failure Protocol

One additional IV/IO attempt if not successful prior to initial BH contact

- 4 attempts total per patient

If hypotensive (SBP less than 90 mmHg) and signs of CHF are present or no response to fluid therapy:

- **Epinephrine 0.1 mg/mL**
 - Slow IV/IOP – 0.1 mg (1 mL) increments over 1-2 minutes
 - Repeat every 3-5 min
 - Max 0.3 mg (3 mL)

Base Hospital Orders only

Consult ED Physician for further treatment measures

ED Physician Order Only: For ventricular ectopy [PVC's > 10/min, multifocal PVC's, or unsustained V-Tach], consider Amiodarone IV/IOPB - 150 mg in 50 mL D5W infused over 10 minutes

Additional Information:

- Nitroglycerin is contraindicated when phosphodiesterase inhibitor medications [Sildenafil (Viagra and Revatio), Vardenafil (Levitra), and Tadalafil (Cialis)] have been recently used (Viagra or Levitra within 24 hours; Cialis within 48 hours). These medications are most commonly used to treat erectile dysfunction or pulmonary hypertension. NTG then may only be given by ED Physician order
- Appropriate dose of Aspirin is 324mg. Aspirin may be withheld if able to confirm that patient has received appropriate dose prior to arrival. If unable to confirm appropriate dose, administer Aspirin, up to 324mg.

Effective Date: June 1, 2018
Next Review Date: March 31, 2020

Date Revised: March 8, 2018
Last Reviewed: March 8, 2018


VCEMS Medical Director

Nerve Agent / Organophosphate Poisoning	
The incident commander is in charge of the scene and you are to follow his/her direction for entering and exiting the scene. Patients in the hot and warm zones MUST be decontaminated prior to entering the cold zone.	
ADULT	PEDIATRIC
BLS Procedures	
<p><i>Patients that are exhibiting obvious signs of exposure (SLUDGEM) of organophosphate exposure and/or nerve agents</i></p> <p>Maintain airway and position of comfort</p> <p>Administer oxygen as indicated</p> <ul style="list-style-type: none"> • Mark I or DuoDote Antidote Kit <ul style="list-style-type: none"> ○ Mild Exposure: IM x 1 ○ Moderate Exposure: IM x1 <ul style="list-style-type: none"> • May repeat in 10 minutes if symptoms persist ○ Severe Exposure: IM x 3 in rapid succession, rotating injection sites 	
ALS Prior to Base Hospital Contact	
<p><i>Patients that are exhibiting obvious signs of exposure (SLUDGEM) of Organophosphate exposure and/or Nerve Agents</i> <i>If not already administered by BLS personnel:</i></p> <ul style="list-style-type: none"> • Mark I or DuoDote Antidote Kit <ul style="list-style-type: none"> ○ Mild Exposure: IM x 1 ○ Moderate Exposure: IM x1 <ul style="list-style-type: none"> • May repeat in 10 minutes if symptoms persist ○ Severe Exposure: IM x 3 in rapid succession, rotating injection sites <p><u>For seizures:</u></p> <ul style="list-style-type: none"> • Midazolam <ul style="list-style-type: none"> ○ IV/IO – 2 mg <ul style="list-style-type: none"> • Repeat 1 mg q 2 min as needed • Max 5 mg ○ IM – 0.1 mg/kg <ul style="list-style-type: none"> • Max 5 mg 	<p><i>Patients that are exhibiting obvious signs of exposure (SLUDGEM) of Organophosphate exposure and/or Nerve Agents</i> <i>If not already administered by BLS personnel:</i></p> <ul style="list-style-type: none"> • Mark I or DuoDote Antidote Kit <ul style="list-style-type: none"> ○ Mild Exposure: IM x 1 ○ Moderate Exposure: IM x1 <ul style="list-style-type: none"> • May repeat in 10 minutes if symptoms persist ○ Severe Exposure: IM x 3 in rapid succession, rotating injection sites <p><u>For seizures:</u></p> <ul style="list-style-type: none"> • Midazolam <ul style="list-style-type: none"> ○ IM – 0.1 mg/kg <ul style="list-style-type: none"> • Max 5 mg
Base Hospital Orders Only	
Consult with ED Physician for further treatment measures	
<ul style="list-style-type: none"> • Refer to VCEMS Policy 705.18-Overdose/Poisoning for organophosphate poisoning treatment guidelines. • DuoDote contains 2.1 mg Atropine Sulfate and 600 mg Pralidoxime Chloride. • Diazepam is available in the CHEMPACK 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: <ul style="list-style-type: none"> ○ Adult: 5 mg IM/IV/IO q 10 min titrated to effect (<i>max 30 mg</i>) ○ Pediatric: 0.1 mg/kg IV/IM/IO (max initial dose 5 mg) over 2-3 min q 10 min titrated to effect (<i>max total dose 10 mg</i>) • Mild exposure with symptoms: <ul style="list-style-type: none"> ○ Miosis, rhinorrhea, drooling, sweating, blurred vision, nausea, bradypnea or tachypnea, nervousness, fatigue, minor memory disturbances, irritability, unexplained tearing, wheezing, tachycardia, bradycardia • Moderate exposure with symptoms: <ul style="list-style-type: none"> ○ Miosis, rhinorrhea, SOB, wheezing, secretions, soft muscle weakness and fasciculations, GI effects • Severe exposure with symptoms: <ul style="list-style-type: none"> ○ Strange confused behavior, severe difficulty breathing, twitching, unconsciousness, seizing, flaccid, apnea pinpoint pupils involuntary defecation, urination 	

Effective Date: June 1, 2018
Next Review Date: April 30, 2020

Date Revised: April 12, 2018
Last Reviewed: April 12, 2018


 VCEMS Medical Director

Overdose	
ADULT	PEDIATRIC
BLS Procedures	
<p>Decontaminate if indicated and appropriate</p> <p>Administer oxygen and support ventilations as indicated</p> <p>Suspected opioid overdose with respirations less than 12/min and significant ALOC:</p> <ul style="list-style-type: none"> • Naloxone <ul style="list-style-type: none"> ○ IN – 4 mg in 0.1 mL, may repeat X 1, Max of 8 mg ○ IM – 2 mg, may repeat X 1, Max of 4 mg 	
ALS Prior to Base Hospital Contact	
<p>IV/IO access</p> <p>Suspected opioid overdose with respirations less than 12/min and significant ALOC</p> <ul style="list-style-type: none"> • Naloxone, if not already administered by BLS personnel or if patient continues with decreased resp rate and significant ALOC <ul style="list-style-type: none"> ○ IN – 4 mg in 0.1 mL, may repeat x1, Max of 8 mg ○ IM – 2 mg q 5 min ○ IV/IO – 0.4 mg q 1min <ul style="list-style-type: none"> • Initial max 6 mg ○ May repeat as needed to maintain respirations greater than 12/min <p>Dystonic Reaction</p> <ul style="list-style-type: none"> • Benadryl <ul style="list-style-type: none"> ○ IV/IO/IM – 50 mg 	<p>IV/IO access</p> <p>Suspected opioid overdose with respirations less than 12/min and significant ALOC:</p> <ul style="list-style-type: none"> • Naloxone, if not already administered by BLS personnel or if patient continues with decreased resp rate and significant ALOC <ul style="list-style-type: none"> ○ IM – 0.1 mg/kg <ul style="list-style-type: none"> • Initial max of 2 mg ○ IV/IO – 0.1 mg/kg <ul style="list-style-type: none"> • Initial max 2 mg ○ May repeat as needed to maintain respirations greater than 12/min <p>Dystonic Reaction</p> <ul style="list-style-type: none"> • Benadryl <ul style="list-style-type: none"> ○ IV/IO/IM – 1 mg/kg <ul style="list-style-type: none"> ▪ Max 50 mg
Base Hospital Orders only	
<p>Tricyclic Antidepressant Overdose</p> <ul style="list-style-type: none"> • Sodium Bicarbonate <ul style="list-style-type: none"> ○ IV/IO – 1 mEq/kg <p>Beta Blocker Overdose</p> <ul style="list-style-type: none"> • Glucagon <ul style="list-style-type: none"> ○ IV/IO – 2 mg <ul style="list-style-type: none"> • May give up to 10mg if available <p>Calcium Channel Blocker Overdose</p> <ul style="list-style-type: none"> • Calcium Chloride <ul style="list-style-type: none"> ○ IV/IO – 1 g over 1 min • Glucagon <ul style="list-style-type: none"> ○ IV/IO – 2 mg <ul style="list-style-type: none"> • May give up to 10 mg if available <p>Stimulant/Hallucinogen Overdose</p> <ul style="list-style-type: none"> • Midazolam <ul style="list-style-type: none"> ○ IV/IO – 2 mg <ul style="list-style-type: none"> • Repeat 1 mg q 2 min as needed • Max 5 mg ○ IM – 0.1 mg/kg <ul style="list-style-type: none"> • Max 5 mg 	<p>Tricyclic Antidepressant Overdose</p> <ul style="list-style-type: none"> • Sodium Bicarbonate <ul style="list-style-type: none"> ○ IV/IO – 1 mEq/kg <p>Beta Blocker Overdose</p> <ul style="list-style-type: none"> • Glucagon <ul style="list-style-type: none"> ○ IV/IO – 0.1 mg/kg <ul style="list-style-type: none"> • May give up to 10 mg if available <p>Calcium Channel Blocker Overdose</p> <ul style="list-style-type: none"> • Calcium Chloride <ul style="list-style-type: none"> ○ IV/IO – 20 mg/kg over 1 min • Glucagon <ul style="list-style-type: none"> ○ IV/IO – 0.1 mg/kg <ul style="list-style-type: none"> • May give up to 10 mg if available <p>Stimulant/Hallucinogen Overdose</p> <ul style="list-style-type: none"> • Midazolam <ul style="list-style-type: none"> ○ IM – 0.1 mg/kg <ul style="list-style-type: none"> • Max 5 mg
ED Physician Order Only: Ondansetron	
Consult with ED Physician for further treatment measures	
<p>Additional Information:</p> <ul style="list-style-type: none"> • Refer to VCEMS Policy 705.17-Nerve Agent Poisoning for nerve agent exposure treatment guidelines. • If chest pain present, refer to chest pain policy. DO NOT GIVE ASPIRIN OR NITROGLYCERING (Consult with ED Physician) • Organophosphate poisoning – SLUDGEM <ul style="list-style-type: none"> ○ S – Salivation ○ L – Lacrimation ○ U – Urination ○ D – Defecation ○ G – Gastrointestinal Distress ○ E – Elimination (vomiting) ○ M – Miosis • Narcan – it is not necessary that the patient be awake and alert. Administer until max dosage is reached or RR greater than 12/min. When given to chronic opioid patients, withdrawal symptoms may present. IM dosing is the preferred route of administration. <ul style="list-style-type: none"> ○ If base hospital contact cannot be made, naloxone should be administered sparingly, in doses no more than 0.1 mg every 2-3 minutes. 	

Effective Date: June 1, 2018
Next Review Date: April 30, 2020

Date Revised: April 12, 2018
Last Reviewed: April 12, 2018


VCEMS Medical Director

Pain Control	
ADULT	PEDIATRIC
BLS Procedures	
Place patient in position of comfort Administer oxygen as indicated	
ALS Prior to Base Hospital Contact	
<p>IV/IO access</p> <p>Cardiac Monitor</p> <p>Ondansetron</p> <ul style="list-style-type: none"> IV/IM/ODT – 4 mg <p>Morphine – Pain 5 out of 10 or greater</p> <p>Initial IV Dose</p> <ul style="list-style-type: none"> Slow IVP - 0.1 mg/kg over 2 minutes¹ Maximum for ANY IV dose is 10 mg <p>Initial IM Dose</p> <ul style="list-style-type: none"> IM - 0.1 mg/kg¹ Maximum for ANY IM dose is 10 mg <p>May give second IV/IM Dose, if pain persists 5 minutes after IV morphine, or 15 minutes after IM morphine</p> <ul style="list-style-type: none"> Administer half of the initial morphine dose <p>May give third IV/IM Dose, if pain persists 5 minutes after 2nd IV morphine, or 15 minutes after 2nd IM morphine</p> <ul style="list-style-type: none"> Ondansetron (only if third dose of morphine needed) IV/IM/ODT – 4 mg Administer half of the initial morphine dose <p>Check and document vital signs before and after each administration</p> <ul style="list-style-type: none"> Hold if SBP less than 100 mmHg <p><i>If patient has significant injury to head, chest, abdomen or is hypotensive, DO NOT administer pain control unless ordered by ED Physician</i></p>	<p>IV/IO access</p> <p>Cardiac Monitor</p> <p>Ondansetron: Patient 4 years of age or older</p> <ul style="list-style-type: none"> IV/IM/ODT – 4 mg <p>Morphine – Pain 5 out of 10 or greater</p> <p>Morphine – given for burns and isolated extremity injuries only. Consider early base contact for other pediatric complaints of pain (e.g. dog bite, cancer)</p> <p>Initial IV Dose</p> <ul style="list-style-type: none"> Slow IVP - 0.1 mg/kg over 2 minutes¹ Maximum for ANY IV dose is 10 mg <p>Initial IM Dose</p> <ul style="list-style-type: none"> IM - 0.1 mg/kg¹ Maximum for ANY IM dose is 10 mg <p>May give second IV/IM Dose, if pain persists 5 minutes after IV morphine, or 15 minutes after IM morphine</p> <ul style="list-style-type: none"> Administer half of the initial morphine dose <p>May give third IV/IM Dose, if pain persists 5 minutes after 2nd IV morphine, or 15 minutes after 2nd IM morphine</p> <ul style="list-style-type: none"> Ondansetron (only if third dose of morphine needed) <ul style="list-style-type: none"> IV/IM/ODT – 4 mg Administer half of the initial morphine dose <p>Check and document vital signs before and after each administration</p> <ul style="list-style-type: none"> Hold if SBP less than 100 mmHg <p><i>If patient has significant injury to head, chest, abdomen or is hypotensive, DO NOT administer pain control unless ordered by ED Physician</i></p>
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	
<p>Additional Information</p> <p>1. Special considerations, administer 0.05 mg/kg</p> <ul style="list-style-type: none"> Consider lower dose for patients 65 years of age and older. Chest pain not resolved by nitroglycerine (NTG) Patient with history of adverse reaction to morphine Symptomatic bradycardia for patients receiving transcutaneous pacing. 	

Effective Date: June 1, 2018
Next Review Date: April 30, 2020

Date Revised: April 12, 2018
Last Reviewed: April 12, 2018


VCEMS Medical Director

Seizures	
ADULT	PEDIATRIC
BLS Procedures	
<p>Protect from injury</p> <p>Maintain/manage airway as indicated</p> <p>Administer oxygen as indicated</p> <p>For suspected febrile seizures, begin passive cooling measures. If seizure activity persists, see below:</p> <p>Determine Blood Glucose level, and treat according to VC EMS policy 705.03 – Altered Neurologic Function</p>	
ALS Prior to Base Hospital Contact	
<p>IV/IO access</p> <p>If not already performed by BLS personnel, determine Blood Glucose level, and treat according to VC EMS policy 705.03 – Altered Neurologic Function</p> <p>Persistent Seizure Activity</p> <ul style="list-style-type: none"> • Midazolam (Give to <i>actively seizing</i> pregnant patients prior to magnesium) <ul style="list-style-type: none"> • IM – 0.1 mg/kg Max 5 mg • IV/IO – 2 mg Repeat 1 mg q 2 min as needed Max 5 mg <p>FOR IV/IO USE: Dilute 5 mg (1 mL) Midazolam with 4 mL NS for a final volume of 5 mL concentration of 1 mg/mL</p> <p><u>20 weeks gestation to one week postpartum & No Known Seizure History</u></p> <ul style="list-style-type: none"> • Magnesium Sulfate <ul style="list-style-type: none"> ○ IV/IOPB – 2 g in 50 mL D₅W infused over 5 min <ul style="list-style-type: none"> • MUST Repeat x 1 • Slow or stop infusion if bradycardia, heart block, or decreased respiratory effort occur 	<p>Consider IV/IO access</p> <p>If not already performed by BLS personnel, determine Blood Glucose level, and treat according to VC EMS policy 705.03 – Altered Neurologic Function</p> <p>Persistent Seizure Activity</p> <ul style="list-style-type: none"> • Midazolam <ul style="list-style-type: none"> ○ IM – 0.1 mg/kg Max 5 mg
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	
<p>Additional Information:</p> <ul style="list-style-type: none"> • Patients with a 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: June 1, 2018
Next Review Date: April 30, 2020

Date Revised: April 12, 2018
Last Reviewed: April 12, 2018


VCEMS Medical Director

Shortness of Breath – Pulmonary Edema

BLS Procedures

Administer oxygen as indicated

Initiate CPAP for moderate to severe distress

ALS Prior to Base Hospital Contact

Nitroglycerin

- SL or lingual spray – 0.4 mg q 1 min x 3
 - Repeat 0.4 mg q 2 min
 - No max dosage
 - Hold for SBP < 100 mmHg

If not already performed by BLS personnel, Initiate CPAP for moderate to severe distress

Perform 12-lead ECG (Per VCEMS Policy 726)

IV/IO access

If wheezes are present and suspect COPD/Asthma, consider:

- **Albuterol**
 - Nebulizer – 5 mg/6 mL

Communication Failure Protocol

If patient becomes or presents with hypotension

- **Epinephrine 0.1 mg/mL**
 - Slow IV/IOP – 0.1 mg (1 mL) increments over 1-2 min
 - Repeat q 3-5 min
 - Max 0.3 mg (3 mL)

Base Hospital Orders only

Consult with ED Physician for further treatment measures

Additional Information:

- Nitroglycerin is contraindicated when phosphodiesterase inhibitor medications [Sildenafil (Viagra and Revatio), Vardenafil (Levitra), and Tadalafil (Cialis)] have been recently used (Viagra or Levitra within 24 hours; Cialis within 48 hours). These medications are most commonly used to treat erectile dysfunction or pulmonary hypertension. In this situation, NTG may only be given by ED Physician order.

Effective Date: June 1, 2018
Next Review Date: April 30, 2020

Date Revised: April 12, 2018
Last Reviewed: April 12, 2018



EMS Medical Director

Shortness of Breath – Wheezes/Other	
ADULT	PEDIATRIC
BLS Procedures	
<p>Administer oxygen as indicated</p> <p>Initiate CPAP for both moderate and severe distress – 8 years of age and older</p> <p>Assist patient with prescribed Metered Dose Inhaler if available</p> <p>Severe Distress Only</p> <ul style="list-style-type: none"> • Epinephrine 1 mg/mL <ul style="list-style-type: none"> ○ If Under 30 kg <ul style="list-style-type: none"> • IM 0.15 mg <ul style="list-style-type: none"> ▪ May repeat x1 in 5 minutes if patient still in distress ○ If 30 kg and Over <ul style="list-style-type: none"> • IM – 0.3 mg <ul style="list-style-type: none"> ▪ May repeat x 1 in 5 minutes if patient still in distress 	
ALS Prior to Base Hospital Contact	
<p>Perform Needle Thoracostomy if indicated per VCEMS Policy 715</p> <p>Moderate Distress</p> <ul style="list-style-type: none"> • Albuterol <ul style="list-style-type: none"> ○ Nebulizer – 5 mg/6 mL <ul style="list-style-type: none"> • Repeat as needed • Epinephrine 1 mg/mL, if not already administered by BLS personnel <ul style="list-style-type: none"> ○ IM 0.3mg <ul style="list-style-type: none"> ▪ May repeat x 1 in 5 minutes if patient still in distress <p>Severe distress</p> <ul style="list-style-type: none"> • Epinephrine 1 mg/mL as above for moderate distress if IV/IO has not been established • Epinephrine IV/IO 0.1 mg/mL <ul style="list-style-type: none"> ○ Slow IV/IOP-0.1 mg (1 mL) increments over 1-2 minutes <ul style="list-style-type: none"> ▪ Max 0.3 mg (3 mL) <p>If not already performed by BLS personnel, consider CPAP for both moderate and severe distress</p> <p>IV/IO access</p>	<p>Perform Needle Thoracostomy if indicated per VCEMS Policy 715</p> <p>Moderate Distress</p> <ul style="list-style-type: none"> ○ Albuterol (patient less than 30kg) <ul style="list-style-type: none"> • Nebulizer – 2.5 mg/3 mL <ul style="list-style-type: none"> ○ Repeat as needed ○ Albuterol (patient over 30 kg) <ul style="list-style-type: none"> • Nebulizer – 5 mg/6 mL <ul style="list-style-type: none"> ○ Repeat as needed • Epinephrine 1 mg/mL, if not already administered by BLS personnel <ul style="list-style-type: none"> ○ IM – 0.01 mg/kg to a max of 0.15 mg <ul style="list-style-type: none"> • May repeat distress 5 minutes, if patient remains in distress <ul style="list-style-type: none"> ○ If patient under 30kg, max dose is 0.3 mg ○ If patient 30 kg and over, max dose is 0.6 mg <p>Severe Distress</p> <ul style="list-style-type: none"> • Epinephrine 1 mg/mL, as above for moderate distress if IV/IO has not been established. • Epinephrine IV/IO 0.1 mg/mL <ul style="list-style-type: none"> ○ Slow IV/IOP-0.01 mg/kg (0.1 mL/kg) increments over 1-2 minutes <ul style="list-style-type: none"> ▪ Max 0.3 mg (3 mL) <p>Suspected Croup</p> <ul style="list-style-type: none"> • Normal Saline <ul style="list-style-type: none"> ○ Nebulizer/Aerosolized Mask – 5 mL <p>If not already performed by BLS personnel, consider CPAP if age 8 years old and greater</p> <p>IV/IO access</p>
Communication Failure Protocol	
Base Hospital Orders only	
	<p>Suspected Croup and no improvement with Normal Saline nebulizer</p> <ul style="list-style-type: none"> • Less than 30 kg <ul style="list-style-type: none"> ○ Epinephrine 1mg/mL <ul style="list-style-type: none"> • Nebulizer/Aerosolized Mask – 2.5 mg/2.5mL • 30 kg and greater <ul style="list-style-type: none"> ○ Epinephrine 1mg/mL <ul style="list-style-type: none"> • Nebulizer/Aerosolized Mask – 5mg/5 mL
Consult with ED Physician for further treatment measures	
<p>Additional Information:</p> <ul style="list-style-type: none"> • High flow O₂ is indicated for severe respiratory distress, even with a history of COPD • COPD patients have a higher susceptibility to spontaneous pneumothorax due to disease process • If suspected Arterial Gas Embolus/Decompression Sickness secondary to SCUBA emergencies, transport patient in supine position on 15L/min O₂ via mask. Early BH contact is recommended to determine most appropriate transport destination. 	

Effective Date: June 1, 2018
Next Review Date: April 30, 2020

Date Revised: April 12, 2018
Last Reviewed: April 12, 2018

Dr. S. J. Mo
VCEMS Medical Director

Symptomatic Bradycardia	
ADULT (HR less than 45 bpm)	PEDIATRIC (HR less than 60 bpm)
BLS Procedures	
Administer oxygen as indicated Supine position as tolerated	Administer oxygen as indicated Assist ventilations if needed If significant ALOC, initiate CPR
ALS Prior to Base Hospital Contact	
IV/IO access Obtain 12-lead ECG Atropine <ul style="list-style-type: none"> IV/IO – 0.5 mg (1 mg/10 mL) Transcutaneous Pacing (TCP) <ul style="list-style-type: none"> Should be initiated only if patient has signs of hypoperfusion Should be started immediately for 3^o heart blocks and 2^o Type 2 (Mobitz II) heart blocks If pain is present during TCP <ul style="list-style-type: none"> Morphine – per policy 705.19 - Pain Control 	IV/IO access <ul style="list-style-type: none"> IO access only if patient in extremis Epinephrine 0.1mg/mL <ul style="list-style-type: none"> IV/IO – 0.01 mg/kg (0.1 mL/kg) q 3-5 min
Communication Failure Protocol	
If symptoms persist for 3 minutes after first atropine dose and if no capture with TCP <ul style="list-style-type: none"> Atropine <ul style="list-style-type: none"> IV/IO – 0.5 mg q 3-5 min <ul style="list-style-type: none"> Max 0.04 mg/kg Epinephrine 0.1 mg/mL <ul style="list-style-type: none"> Slow IV/IOP – 0.1 mg (1 mL) increments over 1-2 min <ul style="list-style-type: none"> Repeat q 3-5 min <ul style="list-style-type: none"> Max 0.3 mg (3 mL) 	
Base Hospital Orders only	
For suspected hyperkalemia <ul style="list-style-type: none"> Calcium Chloride <ul style="list-style-type: none"> IV/IO – 1 g over 1 min <ul style="list-style-type: none"> Withhold if suspected digitalis toxicity Sodium Bicarbonate <ul style="list-style-type: none"> IV/IO – 1 mEq/kg 	Atropine <ul style="list-style-type: none"> IV/IO – 0.02 mg/kg <ul style="list-style-type: none"> Minimum dose – 0.1 mg
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Additional Information <ul style="list-style-type: none"> Bradycardia does not require treatment unless signs and symptoms are present (chest pain, altered level of consciousness, abnormal skin signs, profound weakness, shortness of breath or low BP) 	

Ventricular Tachycardia Sustained – Not in Arrest

BLS Procedures

Administer oxygen as indicated

ALS Prior to Base Hospital Contact

IV/IO Access

Stable – Mild to moderate chest pain/SOB

- **Amiodarone**
 - IV/IOPB - 150 mg in 50mL D₅W infused over 10 minutes.

Unstable – ALOC, signs of shock or CHF

- **Midazolam**
 - IV/IO – 2 mg
 - Should only be given if it does not result in delay of synchronized cardioversion
 - For IV/IO use – Dilute 5 mg (1mL) Midazolam with 4 mL NS for a final volume of 5 mL concentration of 1 mg/mL
- **Synchronized Cardioversion**
 - Use the biphasic energy settings that have been approved by service provider medical director
- If patient needs sedation and there is a delay in obtaining sedation medication:
 - **Amiodarone**
 - IV/IOPB - 150 mg in 50mL D₅W infused over 10 minutes

Unstable polymorphic (irregular) VT:

- **Defibrillation**
 - Use the biphasic energy settings that have been approved by service provider medical director

If recurrent VT, perform synchronized cardioversion at last successful biphasic energy setting

After successful cardioversion, obtain an ECG per Policy 726.

Base Hospital Orders only

Torsades de Pointes

- **Magnesium Sulfate**
 - IV/IOPB – 2 g in 50 mL D₅W infused over 5 min
 - May repeat x 1 if Torsades continues or recurs

Consult with ED Physician for further treatment measures

ED Physician Order Only: After defibrillation, if patient converts to narrow complex rhythm greater than 50 bpm and not in 2nd or 3rd degree heart block, and amiodarone not already given, consider amiodarone - 150 mg IV/IOPB in D₅W infused over 10 minutes.

Additional Information:

- Early base hospital contact is recommended in unusual circumstances, e.g. Torsades de Pointes, Tricyclic OD and renal failure.
- Ventricular tachycardia (VT) is a rate greater than 150 bpm

Effective Date: June 1, 2018
Next Review Date: March 31, 2020

Date Revised: March 8, 2018
Last Reviewed: March 8, 2018



VCEMS Medical Director

Suspected Stroke	
ADULT	
BLS Procedures	
Cincinnati Stroke Scale (CSS)	
Administer oxygen as indicated	
Administer oxygen if SpO2 less than 94% or unknown	
Determine Blood Glucose level, treat according to VC EMS policy 705.03 – Altered Neurologic Function	
ALS Prior to Base Hospital Contact	
IV/IO access	
Cardiac monitor – document initial and ongoing rhythm strips	
If not already performed by BLS personnel, determine Blood Glucose level, treat according to VC EMS policy 705.03 – Altered Neurologic Function	
Patients meeting Stroke Alert criteria as defined in VC EMS Policy 451, expedite transport to appropriate Acute Stroke Center (ASC).	
Patients meeting ELVO Alert criteria as defined in VC EMS Policy 451, expedite transport to appropriate Thrombectomy Capable Acute Stroke Center (TCASC).	
Base Hospital Orders only	
Consult with ED Physician for further treatment measure	
Additional Information	
<u>Cincinnati Stroke Scale (CSS)</u>	<u>Ventura County ELVO Score (VES)</u>
Facial Droop Normal: Both sides of face move equally Abnormal: One side of face does not move normally	Forced Eye Deviation
Arm Drift Normal: Both arms move equally or not at all Abnormal: One arm does not move, or one arm drifts down compared with the other side	Aphasia
Speech Normal: Patient uses correct words with no slurring Abnormal: Slurred or inappropriate words or mute	Neglect
	Obtundation
	Refer to VC EMS Policy 451 for Detailed VES.
<ul style="list-style-type: none"> • Patients must meet Stroke Alert criteria in order to continue to VES • Document name and phone number in ePCR of person who observed patient's Time Last Known Well (TLKW), and report this information to the receiving facility. • Stroke patients in cardiac arrest with sustained ROSC (greater than 30 seconds) shall be transported to the nearest STEMI Receiving Center (SRC). • For seizure activity, refer to VC EMS Policy 705.20 Seizure. 	

Sepsis Alert

ADULT

BLS Procedures

Administer oxygen as indicated

EMS Sepsis Screening Tool

Are any 2 of the following present and new to the patient?

- Fever (Temperature >100.4) or Hot to the touch?
- Heart Rate >90/minute
- Respiratory Rate >20/min
- ALOC



If yes to above, evaluate for infection



Is the patient's history/physical exam suggestive of infection?

- Pneumonia
- Cellulitis
- Current Antibiotics
- UTI
- Wound Infection



If yes to both boxes, notify the receiving facility of a Sepsis Alert

ALS Prior to Base Hospital Contact

If Sepsis Suspected

IV/IO Access

- Normal Saline
 - 1 Liter Bolus

Additional Information



- For patients highly suspected of Sepsis, consider second IV access for fluids and administration of antibiotics upon arrival to hospital.

Smoke Inhalation	
ADULT	PEDIATRIC
BLS Procedures	
Remove individual from the environment	Remove individual from the environment
Consider gross decontamination	Consider gross decontamination
Assess ABCs	Assess ABCs
Assess for trauma and other acute medical conditions	Assess for trauma and other acute medical conditions
Administer high flow oxygen as indicated, or with evidence of smoke inhalation and ALOC or significant headache	Administer high-flow oxygen as indicated, or with evidence of smoke inhalation and ALOC or significant headache
ALS Prior to Base Hospital Contact	
Airway support in accordance with Policy 710 – Airway Management	Airway support in accordance with Policy 710 – Airway Management
IV/IO access as indicated	IV/IO access as indicated
If Wheezes present <ul style="list-style-type: none"> • Albuterol <ul style="list-style-type: none"> ○ Nebulizer – 5 mg/6 mL <ul style="list-style-type: none"> ▪ Repeat as needed 	If Wheezes present <ul style="list-style-type: none"> • Albuterol <ul style="list-style-type: none"> ○ Nebulizer – 5 mg/6 mL <ul style="list-style-type: none"> ▪ Repeat as needed
If smoke inhalation AND unconscious or ALOC <ul style="list-style-type: none"> • Hydroxocobalamin – If Available <ul style="list-style-type: none"> ○ IV/IO – 5 g in 200 mL NS over 15 minutes 	If smoke inhalation AND unconscious or ALOC <ul style="list-style-type: none"> • Hydroxocobalamin – If Available <ul style="list-style-type: none"> ○ IV/IO – 70 mg/kg to a max of 5 g in 200 mL NS over 15 minutes
Base Hospital Orders only	
Continued unconscious/ALOC OR poor response to initial dose <ul style="list-style-type: none"> • Hydroxocobalamin <ul style="list-style-type: none"> ○ IV/IO – 5 g in 200 mL NS over 15 to 120 minutes, depending on clinical presentation. 	Continued unconscious/ALOC OR poor response to initial dose <ul style="list-style-type: none"> • Hydroxocobalamin <ul style="list-style-type: none"> ○ IV/IO – 70 mg/kg to a max of 5 g in 200 mL NS over 15 to 120 minutes, depending on clinical presentation.
Consult with ED Physician for further treatment measures.	Consult with ED Physician for further treatment measures.
Additional Information: <ul style="list-style-type: none"> • If monitoring equipment is available, the patient's carboxyhemoglobin levels should be checked if smoke inhalation is suspected. • Evidence of smoke inhalation includes soot around mouth and/or nares, increased work of breathing, wheezing • If additional IV/IO medications are indicated, establish a second IV or IO. DO NOT administer other medications with hydroxocobalamin through the same IV/IO line. • DO NOT administer hydroxocobalamin if patient has a known allergy to hydroxocobalamin or cyanocobalamin 	

Effective Date: June 1, 2018
Next Review Date: March 31, 2019

Date Revised:
Last Reviewed:


 VCEMS Medical Director

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Guidelines for Limited Base Contact		Policy Number 720	
APPROVED Administrator:  Steven L. Carroll, Paramedic		Date: June 1, 2018	
APPROVED Medical Director:  Daniel Shepherd, MD		Date: June 1, 2018	
Origination Date: June 15, 1998		Effective Date: June 1, 2018	
Date Revised: March 8, 2018			
Date Last Reviewed: March 8, 2018			
Review Date: March 31, 2021			

I. PURPOSE: To define patient conditions for which Paramedics shall make limited base contact (LBC).

II. AUTHORITY: Health and Safety Code 1797.220.

III. POLICY: Paramedics shall make LBC for uncomplicated cases, which respond positively to initial treatment and require no further intervention or where symptoms have resolved.



A. Patient criteria:

1. Hypoglycemia Blood Glucose less than 60 mg/dl
2. Narcotic Overdose.
3. Chest pain – Acute Coronary Syndrome no arrhythmia, or associated shortness of breath.
4. Shortness of Breath - Wheezes/Other
5. Seizure: No drug ingestion, no dysrhythmias, Chemstick less than 60 mg/dl (no longer seizing, not status epilepticus, not pregnant).
6. Syncope or near-syncope (stable vs. no dysrhythmia, Chemstick less than 60 mg/dl.)
7. Pain (Except for head/neck/chest/abdominal and/or pelvic pain due to trauma)
8. Nausea and vomiting
9. BRUE

B. Treatment to include:

1. Hypoglycemia: Prior to Contact procedure up to Dextrose
2. Narcotic Overdose: Prior to Contact procedure up to Naloxone
3. Chest Pain: Prior to Contact procedure up to three sublingual nitroglycerin or nitroglycerin spray (administered by paramedic) and Aspirin 324 mg po.
4. Shortness of Breath – Wheezes/Other: Prior to Contact procedure up to one nebulized breathing treatment only (administered by paramedic).
5. Seizure: Prior to contact procedure up to administration of Dextrose and/or Versed.
6. Syncope or near-syncope: Prior to Contact procedure up to IV Chemstick check.
7. Pain: Prior to Contact procedure, including administration of Morphine.

8. Nausea/Vomiting: Prior to Contact procedure, up to and including administration of Ondansetron.
 9. Supportive Care
- C. Communication
1. The limited BH contact call-in shall include the following information:
 - a. ALS unit number
 - b. "We have a LBC"
 - c. Age/Sex
 - d. Brief nature of call
 - e. ETA and destination
- D. Documentation
1. ALS Unit
 - a. Complete a VCePCR with "ALS (Limited Base Hospital Contact)" selected in the "Level of Service Provided" drop-down list.
 2. MICN
 - a. Complete log entry with "LBC" noted in the treatment section.
 - b. Call will be documented on digital audio recording.

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:	 Steven L. Carroll, Paramedic	Date: June 1, 2018	
APPROVED: Medical Director:	 Daniel Shepherd, M.D.	Date: June 1, 2018	
Origination Date:	June 15, 1998	Effective Date: June 1, 2018	
Date Revised:	January 11, 2018		
Date Last Reviewed:	January 11, 2018		
Review Date:	January 31, 2021		

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/250 mL 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, defined as a systolic blood pressure < 90 mmHg, 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 10 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/250 mL, 25,000 units/500 mL 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. The medication drip will be discontinued and the base hospital notified if the patient develops new, rapidly worsening, or uncontrolled bleeding.
 4. Drip rates will not exceed 1600 units/hour.
 5. Vital signs will be monitored and documented every 10 minutes.
- D. All cases of IV Heparin and IV Nitroglycerin administration will be documented in the VCePCR, in accordance with VCEMS Policy 1000 – Documentation of Patient Care.
- E. 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.

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Continuous Positive Airway Pressure (CPAP)		Policy Number: 723	
APPROVED: Administration: Steven L. Carroll, Paramedic		Date: June 1, 2018	
APPROVED: Medical Director Daniel Shepherd, MD		Date: June 1, 2018	
Origination Date: December 2004		Effective Date: June 1, 2018	
Date Revised: April 12, 2018			
Last Reviewed: April 12, 2018			
Review Date: April 30, 2021			

- I. PURPOSE: To define the indications, procedure and documentation for the use of Continuous Positive Airway Pressure (CPAP) by EMS Personnel
- II. AUTHORITY: Health and Safety Code, Sections 1797.220 and 1798. California Code of Regulations, Title 22, Division 9, Section 100063.
- III. POLICY: EMS Personnel may utilize CPAP on patients in accordance with Ventura County Policy 705.
- IV. PROCEDURE:
 - A. Training: Prior to using CPAP EMS Personnel must successfully complete a training program approved by the VC EMS Medical Director, which includes operation of the device to be used.
 - B. Indications: Patients age 8 and above with one or more of the following:
 1. Congestive Heart Failure with acute pulmonary edema
 2. Near drowning
 3. Any cause of respiratory failure.
 - C. Contraindications:
 1. Absolute
 - a. Respiratory or cardiac arrest
 - b. Agonal respirations
 - c. Unconsciousness
 - e. Pneumothorax
 - f. Inability to maintain airway patency
 - g. Head injury with increased ICP
 2. Relative:
 - a. Decreased LOC
 - b. Unable to tolerate mask

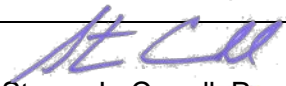

- c. Systolic blood pressure < 90 mmHg
- d. Vomiting

E. Patient Treatment

1. Place patient in a seated position with legs dependent
2. Monitor ECG(if available), Vital signs, SpO2
3. Set up CPAP system
4. Explain procedure to patient.
5. Apply mask while reassuring patient.
6. Frequently reevaluate patient. Normally, the patient should improve in the first 5 minutes with CPAP, as evidenced by a decreased heart rate, respiratory rate and/or blood pressure and an increased SpO2. Should the patient become worse with CPAP, remove the CPAP device and assist ventilations with BVM as needed.

D. DOCUMENTATION

1. The use of CPAP must be documented.
 2. Vital signs and SpO2 must be documented every 5 minutes.
 3. Narrative documentation should include a description of the patient's response to CPAP.
-

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Brief Resolved Unexplained Event (BRUE)		Policy Number: 724	
APPROVED: Administration:	 Steven L. Carroll, Paramedic	Date: June 1, 2018	
APPROVED: Medical Director	 Daniel Shepherd, MD	Date: June 1, 2018	
Origination Date:	March, 2005	Effective Date: June 1, 2018	
Date Revised:	March 8, 2018		
Date Last Reviewed:	March 8, 2018		
Review Date:	March 31, 2021		

- I. **PURPOSE:** To define and provide guidelines for the identification and management of pediatric patients with a Brief Resolved Unexplained Event (BRUE).
- II. **AUTHORITY:** Health and Safety Code, Sections 1797.220 and 1798.
- III. **POLICY:** All EMS personnel should be knowledgeable with BRUE and follow the guidelines listed below.
- IV. **PROCEDURE:**
 - A. **Recognition:**
 1. Chief Complaint.
 - a. BRUEs (or "ALTEs" as previously termed) usually occur in infants under 12 months old, however; any child less than 2 years of age who exhibits any of the symptoms listed below should be considered an BRUE.
 - b. A Brief Resolved Unexplained Event (BRUE) is any episode that is frightening to the observer (may even think infant or child has died) and usually involves any combination of the following symptoms:
 - 1) Marked change or loss in muscle tone
 - 2) Color change (cyanosis, pallor, erythrim, plethora)
 - 3) Absent, decreased, or irregular breathing
 - 4) Loss of consciousness or altered level responsiveness
 2. History:
 - a. Hx of any of the following:
 - 1) Absent, decreased, or irregular breathing
 - 2) Loss of consciousness or other altered level of responsiveness
 - 3) Color change
 - 4) Loss in muscle tone
 - 5) Episode of choking or gagging

- b. Determine the severity, nature and duration of the episode.
 - 1) Was child awake or sleeping at time of episode?
 - 2) What resuscitative measures were taken?
 - c. Obtain a complete medical history to include:
 - 1) Known chronic diseases?
 - 2) Evidence of seizure activity?
 - 3) Current or recent infections?
 - 4) Recent trauma?
 - 5) Medication history?
 - 6) Known gastro esophageal reflux or feeding difficulties?
 - 7) Unusual sleeping or feeding patterns?
3. Treatment
- a. **Assume the history given is accurate.**
 - b. Perform a comprehensive physical assessment that includes general appearance, skin color, extent of interaction with the environment, and evidence of current or past trauma. **Note: Exam May Be Normal**
 - c. Treat any identifiable causes as indicated.
 - d. Transport. **Note:** Base Hospital contact required.
4. Precautions and Comments
- a. In most cases, the infant/child will have a normal physical exam when assessed by prehospital personnel. The parent/caregiver's perception that "something is or was wrong" must be taken seriously.
 - b. Approximately 40-50% of BRUE cases can be attributed to an identifiable cause(s) such as child abuse, , swallowing dysfunction, gastro esophageal reflux, infection, bronchiolitis, seizures, CNS anomalies, cardiac disease, chronic respiratory disease, upper airway obstruction, metabolic disorders, or anemia. The remaining causes have no known etiology.
 - c. Keep in mind, especially if the parent/guardian declines transportation, that child abuse is one cause of BRUE.
-

COUNTY OF VENTURA EMERGENCY MEDICAL SERVICES		HEALTH CARE AGENCY POLICIES AND PROCEDURES
Policy Title 12 Lead ECG		Policy Number: 726
APPROVED: Administration:	<i>SLC</i> Steven L. Carroll, Paramedic	Date: June 1, 2018
APPROVED: Medical Director:	<i>Dz S, MD</i> Daniel Shepherd, MD	Date: June 1, 2018
Origination Date:	August 10, 2006	
Date Revised:	March 8, 2018	Effective Date: June 1, 2018
Date Last Reviewed:	March 8, 2018	
Review Date:	March 8, 2021	

- I. Purpose: To define the indications, procedure and documentation for obtaining 12-lead ECGs.
- II. Authority: California Health and Safety Code, Sections 1797.220 and 1798, California Code of Regulations, Title 22, Section 100175.
- III. Policy: Paramedics will obtain 12-lead ECGs in patients demonstrating symptoms of acute coronary syndrome. Treatment of these patients shall be done in accordance with this policy. Only paramedics who have received training in this policy are authorized to obtain a 12-lead ECG on patients. EMTs who are specially trained may be authorized to set up the 12 lead.
- IV. Procedure:
 - A. Indications for a 12-lead ECG: Medical history and/or presenting complaints consistent with an acute coronary syndrome. Patients will have the acute (within the previous 12 hours) onset or acute exacerbation of one or more of the following symptoms that have no other clear identifiable cause:
 1. Chest, upper back or upper abdominal discomfort.
 2. Generalized weakness.
 3. Dyspnea.
 4. Symptomatic bradycardia
 5. After successful cardioversion/defibrillation of sustained V-Tach (Policy 705.25)
 6. Paramedic Discretion
 - B. Contraindications: Do NOT perform an ECG on these patients:
 1. Critical Trauma: There must be no delay in transport.
 2. Cardiac Arrest unless return of spontaneous circulation
 - C. ECG Procedure:
 1. Attempt to obtain an ECG during initial patient evaluation. Oxygen should be administered if patient is dyspneic, shows signs of heart

failure or shock, or has SpO₂ < 94%. If the ECG can be completed without delay (less than 3 minutes after patient contact), and the patient is not in severe distress, perform ECG prior to medication administration.

2. The ECG should be done prior to transport.
3. If the ECG is of poor quality (artifact or wandering baseline), or the patient's condition worsens, repeat to a total of 3.
4. Once an acceptable quality ECG is obtained, switch the monitor to the standard 4-lead function.
5. If the interpretation on monitor meets your manufacturer guidelines for a POS STEMI ECG, note underlying rhythm, and verify by history and physical exam that the patient does not have a pacemaker or ICD.

D. Base Hospital Communication/Transportation:

1. If the interpretation on monitor meets your manufacturer guidelines for a POS STEMI ECG, report that to MICN immediately, along with the heart rate on ECG. If the ECG is of poor quality, or the underlying rhythm is paced, or atrial flutter, include that information in the initial report. All other information, except that listed in items 2, 4, and 5 below, is optional and can be given at the paramedic and MICN's discretion.
2. Paramedics are to ask the patient if they have a cardiologist and report the information to the base hospital.
3. If the interpretation on monitor meets your manufacturer guidelines for a POS STEMI ECG, patients should be transported to the closest and most appropriate STEMI Receiving Center (SRC) depending on patient preference and cardiac catheterization lab availability. MICN may direct ambulance to alternative SRC if cardiac catheterization lab not available.
4. If the interpretation on monitor meets your manufacturer guidelines for a POS STEMI ECG, and the underlying rhythm is Atrial Flutter or if the rate is above 140, the Base Hospital shall be notified at the beginning of the report. The Cath Lab will not be activated.
5. If the interpretation on monitor meets your manufacturer guidelines for a POS STEMI ECG, and the patient has a pacemaker or the ECG is of poor quality (wandering baseline and/or artifact) report that to the MICN.
6. If a first responder paramedic obtains an ECG that does **not have** an interpretation on monitor that meets your manufacturer guidelines for a

POS STEMI ECG, and the patient is stable, patient care may be turned over to the transporting paramedic. The ECG will be turned over to the transporting paramedic.

7. Positive ECGs will be handed to the receiving medical practitioner. The receiving practitioner will initial, time and date the ECG to indicate they have received and reviewed the ECG.

E. Patient Treatment:

1. Patient Communication: If the interpretation on monitor meets your manufacturer guidelines for a POS STEMI ECG, the patient should be told that “according to the ECG you may be having a heart attack”. If the ECG interpretation is anything else, the patient should NOT be told the ECG is normal or “you are not having a heart attack”. If the patient asks what the ECG shows, tell him/her that it will be read by the emergency physician.

F. Other ECGs

1. If an ECG is obtained by a physician and the physician interpretation is Acute MI, the patient will be treated as a POS STEMI. Do not perform an additional ECG unless the ECG is of poor quality, or the patient’s condition worsens.
2. If there is no interpretation of another ECG then repeat the ECG.
3. The original ECG performed by physician shall be obtained and accompany the patient.
4. 12 Lead ECG will be scanned and added as an attachment to the Ventura County electronic Patient Care Report (VCePCR), in addition to being hand delivered to the receiving facility.

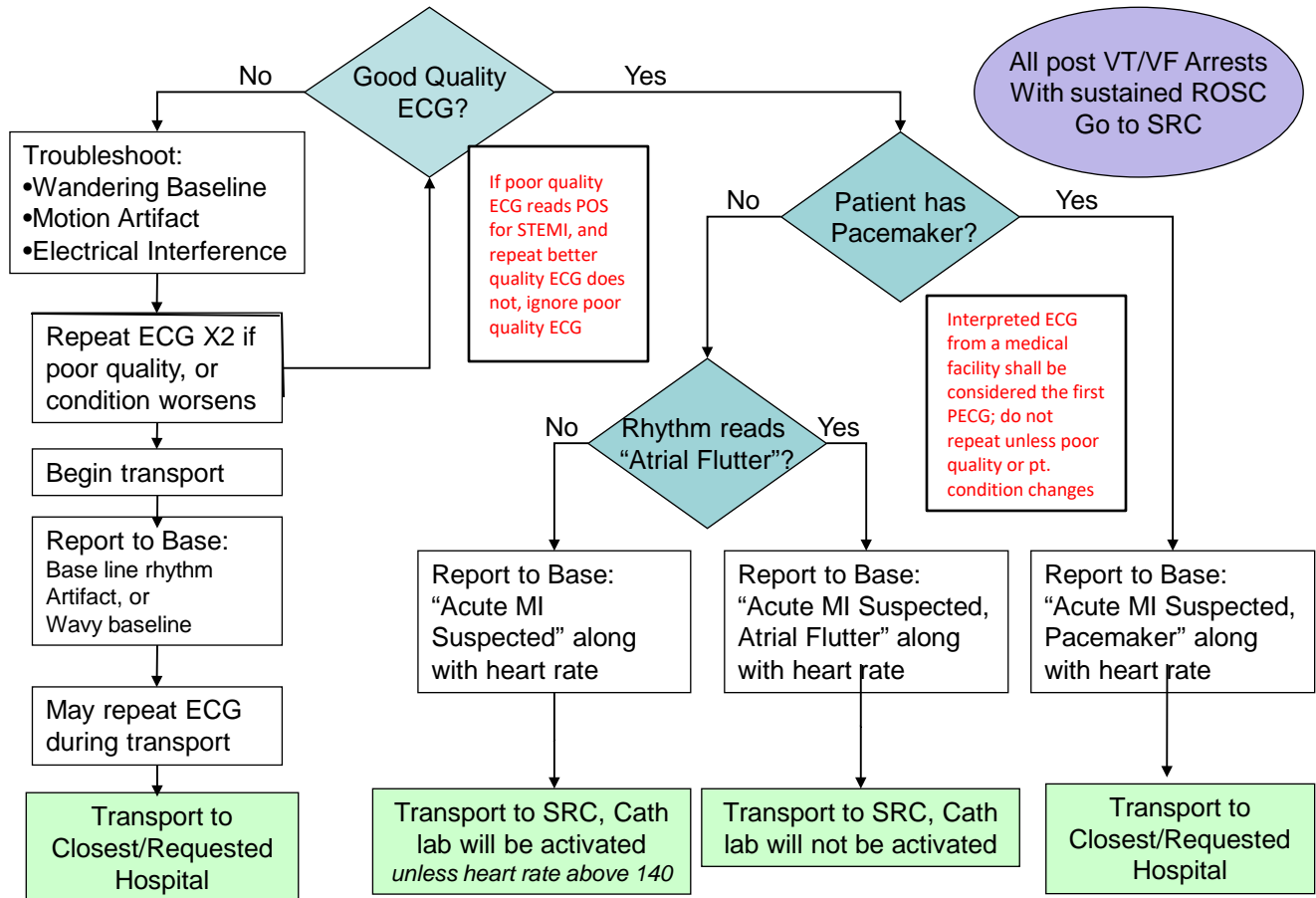
G. Documentation

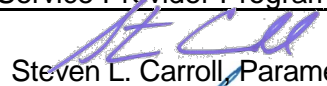

1. VCePCR will be completed per VCEMS policy 1000. The original ECG will be turned in to the base hospital and ALS Service Provider.

H. Reporting

1. False Positive ECGs not recognized and called in as such to the Base Hospital, will be reported to VC EMS as an Unusual Occurrence in accordance with VC EMS Policy 150.

Interpretation on monitor meets your manufacturer guidelines for a
POS STEMI ECG:



Policy Title: Emergency Medical Technician (EMT) Automatic External Defibrillation (AED) Service Provider Program Standards		Policy Number: 803
APPROVED: Administration:	 Steven L. Carroll, Paramedic	Date: June 1, 2018
APPROVED: Medical Director:	 Daniel Shepherd, M.D.	Date: June 1, 2018
Origination Date:	November 1988	Effective Date: June 1, 2018
Date Revised	April 12, 2018	
Date Last Reviewed:	April 12, 2018	
Review Date:	April 30, 2021	

- I. PURPOSE: To establish criteria and procedure for approval and oversight of EMT AED Service Provider programs.
- II. AUTHORITY: Health and Safety Code 1797.107, 1797.170, 1798 and California Code of Regulations, Title 22, 100063.1.
- III. DEFINITION: An EMT AED service provider is an agency or organization that employs individuals as defined in Title 22, Division 9, Section 100060, and who obtain AEDs for the purpose of providing AED services to the general public.
- IV. POLICY:
 - A. An AED Service Provider shall be approved by Ventura County Emergency Medical Services (VC EMS) prior to beginning service. In order to receive and maintain EMT AED Service Provider approval, an EMT AED Services Provider shall comply with the requirements of this policy.
 - B. An EMT AED Service Provider shall:
 1. Provide orientation of AED authorized personnel to the AED
 2. Ensure maintenance of AED equipment.
 3. Ensure initial training and continued competency of AED authorized personnel
 - a. Demonstration of skills competence at least every six months to the EMT Program Director or his/her designee as identified to the EMS office.
 - b. Skills competency records shall be maintained at least four years.
 4. Ensure that EMT personnel complete first responder BLS Prehospital Care Record (PCR) or electronic PCR (ePCR) for all patient contacts.
 5. Authorize personnel and maintain a current listing of all EMT AED Service Provider authorized personnel and provide a listing upon request by the VC EMS Agency. Authorized personnel means EMT personnel trained to operate an AED and authorized by an approved EMT AED Service Provider.
 6. Train all EMTs who have not already been trained in use of AED. Training shall include the following:
 - a. Perform emergency cardiac care in accordance with protocols developed and/or approved by the EMS Agency Medical Director.
 - b. Recognize that a patient is in cardiac arrest and that CPR and immediate application of the automated external defibrillator is required.
 - c. Set up the automated defibrillator correctly.
 - d. Correctly apply the defibrillator pads.
 - e. Ensure that rescuers or bystanders are not in contact with the patient while the AED is analyzing or delivering a shock.
 - f. Deliver shocks for ventricular fibrillation in the shortest time possible

- g. following their arrival at the patient side, ideally within 90 seconds.
 - g. Recognize that a shock was delivered to the patient.
 - h. Provide supportive care to a patient who has been successfully defibrillated.
 - i. Immediately recognize and respond to patients when an arrest recurs either at the scene or during transport, in accordance with protocols.
 - j. Record the pertinent events of the emergency response on a PCR.
 - k. Maintain the AED and voice/ECG recorder or other documentation device in accordance with manufacturer's recommendations.
7. Develop and maintain a quality improvement program, approved by the VC EMS Medical Director that contains the following:
- a. Assure timely and competent review of EMT managed cardiac arrest cases, accurate logging of required data, and timely, accurate and informative statistical summaries of system performance over time, as well as recommendations, as indicated, for modifications of system design, performance protocols, or training standards designed to improve patient outcome.
 - b. Collect, store and analyze, at a minimum, the following data related to EMT management of cardiac arrest patients:
 - (1) Patient Data:
 - a) Age,
 - b) Sex,
 - c) Whether arrest was witnessed or unwitnessed,
 - d) Distance of collapse from EMT responding unit, and
 - e) Initial cardiac rhythm.
 - (2) EMS System Data:
 - a) Estimated time from collapse to call for help,
 - b) Estimated time from collapse to initiation of CPR,
 - c) EMT responding unit response time, and
 - d) Scene to hospital transport time.
 - (3) EMT Performance:
 - a) Time from arrival to actual defibrillation,
 - b) Time between defibrillation attempts,
 - c) General adherence to established protocol.
 - (4) Patient Outcome:
 - a) Rhythm after each shock.
 - b) Return of pulse and/or spontaneous respirations in the field.
8. EMT AED documentation submission
- a. If EMT AED Service Provider has Ventura County Electronic Patient Care Record (ePCR) capabilities, documentation shall be consistent with VCEMS Policy 1000.
 - b. If EMT AED Service Provider does not have ePCR capabilities, documentation submission shall be as follows:
 - (1) EMT documentation (incident printout and prehospital care record (PCR) shall be submitted to the receiving hospital as soon as possible (not more than two hours after patient arrival).

- (2) EMT documentation for all arrests (incident printout and PCR including times) shall be submitted by the provider to the involved base hospital within 30 days of the end of the calendar month of the occurrence.
 - (3) EMT documentation (incident printout, PCR including times, and audio tape) shall be submitted to the EMT medical director or designee within 10 working days of the occurrence.
9. The EMT AED Service Provider shall submit an annual written report to the EMS Agency to include as a minimum the following information.
- a. The total number of cases in which the AED was activated. The number of those cases where return of spontaneous circulation (ROSC) was achieved.
 - b. The number of cases that presented in Ventricular Fibrillation (VF). The number of those cases where ROSC was achieved.
 - c. The number of cases that presented in witnessed VF. The number of those cases where ROSC was achieved.
 - d. The 90% fractile times from first notification to on-scene, to with patient and to first analysis, in case of secondary PSAP, time received.
 - e. The number of cases of cardiac arrest responded to where the AED was not activated and the 90% fractile time from first notification to on-scene for those cases, in case of secondary PSAP, time received.

IV. PROCEDURE:

A. Program Approval

1. Eligible programs shall submit a written request for EMT AED Service Provider approval to the EMS Agency and agree to comply with the provisions of this policy.
2. Application Receipt Process
Upon receipt of a complete application packet, the Agency will notify the applicant within fourteen business days that;
 - a. The request for approval has been received.
 - b. The request does or does not contain all required information.
 - c. What information, if any, is missing
5. Program Approval Time Frames
 - a. Program approval or disapproval shall be made in writing by the Agency to the requesting program, within sixty calendar days, after receipt of all required documentation.
 - b. The Agency shall establish an effective date for program approval in writing upon the satisfactory documentation of compliance with all program requirements.
 - c. Program approval shall be for four years following the effective date of the program and may be reviewed every four years subject to the procedure for program approval specified by the Agency.
6. Withdrawal of Program Approval
 - a. Noncompliance with any criterion required for program approval, use of any unqualified personnel, or noncompliance with any other applicable provision

of Title 22 may result in suspension or revocation of program approval by the Agency.

- b. An approved program shall have no more than sixty days to comply with corrections mandated by this policy.

B. Program Review and Reporting

- 1. All program materials are subject to periodic review by the Agency.
- 2. All programs are subject to periodic on-site evaluation by the Agency.
- 3. The Agency shall be advised of any change in Program staff.
- 4. Records shall be maintained by the EMT AED SERVICE PROVIDER for four years and shall contain the following:
 - a. Roster of Authorized Personnel
 - b. Documentation of skills competency

C. Application for Renewal

- . The EMT AED SERVICE PROVIDER shall submit an application for renewal at least sixty calendar days before the expiration date of their Program approval in order to maintain continuous approval.

Ventura County Emergency Medical Services Agency

Emergency Medical Technician AED Service Provider

APPROVAL REQUEST

General Information

Program/Agency Name: _____

Address: _____ City: _____ Zip: _____

Phone: _____ Fax: _____ Email: _____

Date Submitted: _____

Requirements

(All items below refer to Ventura County EMS Policy 803 and Title 22 Regulations)

1. Program Eligibility

Eligible Programs <ul style="list-style-type: none"> Programs eligible for approval shall be limited to public or private organizations that meet the requirements identified in this policy. All private entities must possess a valid business license and proof of organizational registry (partnership, sole proprietorship, corporation, etc.) 	Name of Program
Written request for EMT AED Service Provider Approval	<input type="checkbox"/> Attached

2. Records and Quality Improvement

Agree to maintain all records for a minimum of four years.	Signature: _____
Agree to participate in the VCEMS Quality Improvement Program and in research data accumulation.	Signature: _____

VCEMS Office Use Only

All Requirements Submitted:	Date:
EMT AED SERVICE PROVIDER Application Approved:	Date:
Approval Letter Sent:	Date:
Re-Approval Due:	Date:
Signature of person approving EMT AED SERVICE PROVIDER	Date

Typed or printed name		
-----------------------	--	--

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Continuing Education for EMS Personnel		Policy Number 1133	
APPROVED: Administration:	Steve L. Carroll, Paramedic	Date: June 1, 2018	
APPROVED: Medical Director:	Daniel Shepherd, M.D.	Date: June 1, 2018	
Origination Date:	January 11, 2018		
Date Revised:		Effective Date: June 1, 2018	
Date Last Reviewed:			
Review Date:	January 31, 2019		

- I. **PURPOSE:** To identify acceptable continuing education topics for prehospital providers, in addition to outlining acceptable delivery formats and limitations related to continuing education.
- II. **AUTHORITY:** California Health and Safety Code – Title 22, Division 2.5, Sections 1797 – 1799.207; California Code of Regulations – Title 22, Division 9, Chapter 11.
- III. **DEFINITIONS:**

EMS Continuing Education Provider: EMS Continuing Education Provider means an individual or organization approved by the requirements of VCEMS Policy 1130 – Continuing Education Provider Approval to conduct continuing education courses, classes, activities or experiences and issue earned continuing education hours to EMS Personnel for the purposes of maintaining certification/licensure or re-establishing lapsed certification or licensure.

Continuing Education (CE): A course, class, activity, or experience designed to be educational in nature, with learning objectives and performance evaluations for the purpose of providing EMS personnel with reinforcement of basic EMS training as well as knowledge to enhance individual and system proficiency in the practice of pre-hospital emergency medical care.

Continuing Education Unit (CEU): Shall be any one of the following:

 1. Every fifty minutes of approved classroom or skills laboratory activity.
 2. Each hour of structured clinical or field experience when monitored by a preceptor assigned by an EMS training program, EMS service provider, or receiving/base hospital.
 3. Each hour of media based / serial production CE as approved by VCEMS
- IV. **POLICY:**
 - A. CE Provider Approving Authority

1. VCEMS shall be the agency responsible for approving EMS Continuing Education Providers whose headquarters are located within the County of Ventura, if not otherwise approved by an item listed below.
 - a. Courses and/or CE providers approved by the Commission on Accreditation for Prehospital Continuing Education (formerly CECBEMS) or approved by EMS offices of other states are approved for use in California and need no further approval.
 - b. Courses in physical, social or behavioral sciences (e.g., anatomy, physiology, sociology, psychology) offered by accredited colleges and universities are approved for CE and need no further approval.
 - 1) Ten (10) CEHs will be awarded for each academic quarter unit
 - 2) Fifteen (15) CEHs will be awarded for each academic semester unit
 - 3) Unofficial transcripts from the accredited college / university shall be the only method of verification when issuing CEH for these types of courses.
 - c. The California EMS Authority shall be the agency responsible for approving CE providers for statewide public safety agencies and CE providers whose headquarters are located out-of-state if not otherwise approved according to one of the above items.
 - B. Continuing Education Topics
 1. Continuing education for EMS personnel shall be in any of the topics contained in the respective National Standard Curricula for training EMS personnel, including advanced topics in subject matter outside the scope of practice of the certified or licensed EMS personnel but directly relevant to emergency medical care (e.g. surgical airway procedures).
 - C. Continuing Education Delivery Formats
 1. Classroom - didactic and/or skills laboratory where direct interaction with instructor is possible.
 2. Organized field care audits of base hospital communication and/or patient care records;
 3. Courses offered by accredited universities and colleges, including junior and community colleges;
 4. Structured clinical experience, with instructional objectives, to review or expand the clinical expertise of the individual.
-

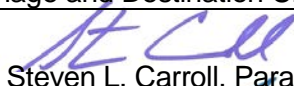

5. Media based and/or serial productions (e.g. films, videos, audiotape programs, magazine articles offered for CE credit, home study, computer simulations or interactive computer modules).
 6. Precepting EMS students or EMS personnel as a field preceptor or as a hospital clinical preceptor, as assigned by an approved EMS training program, an authorized EMS service provider, or as a receiving/base hospital that is approved as a continuing education provider, in accordance with VCEMS Policy 1130.
 - a. CE for precepting can only be given for actual time precepting a student and must be issued by the EMS training program or EMS service provider that has an agreement or contract with the field preceptor or with the preceptor's employer.
 - b. In order to issue CE for precepting EMS students or EMS personnel, an EMS service provider must be a CE provider approved in accordance with VCEMS Policy 1130.
 7. Precepting EMS students or EMS personnel as a hospital clinical preceptor, as assigned by an EMS training program, an EMS service provider, or a receiving/base hospital that is approved as a CE provider program in accordance with VCEMS Policy 1130.
 - a. In order to issue CE for precepting EMS students or EMS personnel, an EMS service provider, hospital or alternate base station must be a CE provider approved according to this Chapter.
 - b. CE for precepting can only be given for actual time spent precepting a student or EMS personnel and must be issued by the EMS training program, EMS service provider, or receiving/base hospital that has an agreement or contract with the hospital clinical preceptor or with the preceptor's employer.
- D. Limitations
1. CE courses shall not be approved for less than one hour of credit.
 - a. For CE courses greater than one (1) CEH, credit may be granted in no less than half-hour increments.
 2. No more than twelve (12) hours of continuing education, in any form, will be accepted within any twenty-four (24) hour period.
-

3. An individual may receive credit for taking the same CE course/class/activity no more than two times during a single certification or licensure cycle.
 4. At least fifty percent of the required CE hours must be in a format that is instructor based, which means that instructor resources are readily available to the student to answer questions, provide feedback, provide clarification, and address concerns (e.g., on-line CE courses where an instructor is available to the student).
 - a. This provision shall not include precepting or magazine articles for CE credit. VCEMS will determine whether a CE course, class or activity is instructor based.
 5. During a certification or licensure cycle, an individual may receive credit, one time only, for service as a CE course/class/activity instructor.
 - a. Credit received shall be the same as the number of CE hours applied to the course/class/activity.
 6. During a certification or licensure cycle, an individual may receive credit, one time only, for service as an instructor for an approved EMT or paramedic training program
 - a. The hours of service shall not exceed fifty percent of the total CE hours required in a single certification or licensure cycle.
 7. When guided by the EMS service provider's quality improvement plan, an EMS service provider that is an approved CE provider may issue CE for skills competency demonstrations to address any deficiencies identified by the service provider.
 - a. Skills competency demonstration shall be conducted in accordance with the respective National Standard Curriculum skills outline or in accordance with the policies and procedures of the VCEMS medical director.
 8. If it is determined through a quality improvement plan that EMS personnel need remediation or refresher in an area of the individual's knowledge and/or skills, the VCEMS medical director or an EMS service provider may require the EMS personnel to take an approved CE course with learning objectives that addresses the remediation or refresher needed, as part of the individual's required hours of CE for maintaining certification or licensure.
-

9. Because paramedic license renewal applications are due to the California EMS Authority thirty days prior to the expiration date of a paramedic license, a continuing education course(s) taken in the last month of a paramedic's licensure cycle may be applied to the paramedic's subsequent licensure cycle, only if that CE course(s) was not already applied to the licensure cycle during which the CE course(s) was taken.
10. VCEMS shall not require additional continuing education hours for accreditation, beyond the state required minimum of forty-eight (48) hours.

E. Continuing Education Records

1. In order to receive credit, CE shall be completed during the current certification/licensure cycle, except as provided in Section IV.D.8 of this policy.
 2. CE shall be valid for a maximum of two years prior to the date of a completed application for certificate/license renewal.
 3. EMS personnel shall maintain for four years all CE certificates issued to them by any CE provider.
 4. In order to verify the authenticity of continuing education certificates, or as part of a CE provider's approval process, CE certificates may be audited by VCEMS.
 5. Any/all continuing education records issued by a CE provider program shall meet the minimum requirements outlined in VCEMS Policy 1130.
-

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Trauma Triage and Destination Criteria		Policy Number: 1405	
APPROVED: Administration:	 Steven L. Carroll, Paramedic	Date: June 1, 2018	
APPROVED: Medical Director:	 Daniel Shepherd, MD	Date: June 1, 2018	
Origination Date:	July 1, 2010		
Date Revised:	April 12, 2018	Effective Date: June 1, 2018	
Date Last Reviewed:	April 12, 2018		
Review Date:	April 30, 2021		

- I. **PURPOSE:** To guide out-of-hospital personnel in determining which patients require the services of a designated trauma center. To serve as the EMS system standard for triage and destination of patients suffering acute injury or suspected acute injury.
- II. **AUTHORITY:** Health and Safety Code, §1797.160, §1797.161, and §1798. California Code of Regulations, Title 22, §100252 and §100255.
- III. **POLICY:** These criteria apply to any patient who is injured or has a physical complaint related to trauma, and is assessed by EMS personnel at the scene.
 - A. **Physiologic Criteria, Step 1:**
 1. Glasgow Coma Scale less than 14
 2. Systolic blood pressure less than 90 mmHg
(Less than 110 mmHg in patients older than 65 years of age)
 3. Respiratory rate less than 10 or greater than 29 breaths per minute
(Less than 20 in infant younger than 1 year of age)
 - B. **Anatomic Criteria, Step 2:**
 1. Penetrating wounds to the head, neck, torso, or extremities proximal to the elbow or knee
 2. Flail chest
 3. Two or more proximal long bone fractures (femur or humerus)
 4. Crushed, degloved, or mangled extremity
 5. Amputations proximal to wrist or ankle
 6. Pelvic fractures
 7. Open or depressed skull fracture
 8. Paralysis
 9. Seat belt injury: significant bruising to neck, chest, or abdomen
 10. Diffuse abdominal tenderness as a result of blunt trauma
 - C. **Mechanism of Injury Criteria, Step 3:**

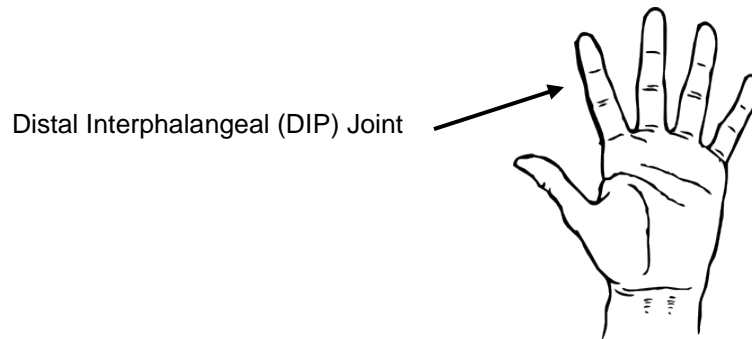
-
1. Adults: Greater than 20 feet (one story is equal to 10 feet)
Children less than 15 years old: Greater than 10 feet, or two times the height of the child
 2. High-risk auto crash:
 - a. Intrusion: interior measurement greater than 12 inches patient site or greater than 18 inches any occupant site
 - b. Ejection: partial or complete from automobile
 - c. Death in same passenger compartment
 3. Auto-pedestrian/auto-bicyclist thrown, run over, or with greater than 20 mph impact
 4. Unenclosed vehicle (e.g. motorcycle, bicycle, skateboard) crash greater than 20 mph
- D. Other Criteria, Step 4 (these are considerations to be used by the base hospital in determining the appropriate destination hospital):
1. Age greater than 65 years old
 2. Head injury with loss of consciousness AND on an anticoagulant or antiplatelet drug¹
 3. Burns with trauma mechanism
 4. Time sensitive extremity injury (open fracture, neurovascular compromise)
 5. Pregnancy greater than 20 weeks with known or suspected abdominal trauma
 6. Prehospital care provider or MICN judgment
 7. Amputation or partial amputation of any part of the hand²
 8. Penetrating injury to the globe of the eye, at risk for vision loss³
- V. PROCEDURE:
- A. Any patient who is suffering from an acute injury or suspected acute injury shall have the trauma triage criteria applied.
 - B. For patients who meet trauma triage criteria listed in Sections A, B, or C above, the closest trauma center is considered to be the base hospital for that patient. Paramedics shall make base hospital contact and provide patient report directly to the trauma center.
 - C. Transportation units (both ground and air) shall transport patients who meet at least one of the trauma triage criteria in Sections A or B to the closest appropriate designated trauma center. If the closest trauma center is on internal disaster, these patients shall be transported to the next closest appropriate trauma center. If the closest trauma center is on CT diversion, the paramedic shall make early base contact and the MICN shall determine the most appropriate destination.
 - D. For patients who meet trauma triage criteria in Section C, the paramedic shall make base hospital contact with the closest designated trauma center. Based on the paramedic's report of the incident and the patient's assessed injuries, the trauma center MICN or ED

physician shall direct destination to either the trauma center or the closest appropriate hospital.

- E. Paramedics providing care for patients who are injured but meet only the trauma triage criteria listed in Section D above will contact the base hospital in whose catchment area the incident occurred. Destination will be determined by the base hospital MICN or ED physician. If the patient is directed other than to the regular catchment base hospital, the MICN will notify the receiving hospital or trauma center of an inbound patient and relay paramedic report.
- F. A trauma patient without an effective airway may be transported to the closest available hospital with an emergency department for airway management prior to transfer to a designated trauma center. In this rare event, the paramedic will contact the base hospital in whose catchment area the incident occurred.
- G. A patient who does not meet trauma triage criteria and who, in the judgment of a base hospital, has a high probability of requiring immediate surgical intervention or other services of a designated trauma center shall be directed to a designated trauma center.

¹For a complete list of anticoagulant and antiplatelet drugs that should be considered for inclusion criteria in Step 4.2, please consult VC EMSA approved list.

²For patients with isolated traumatic amputations, partial or complete, of any portion of the hand (at or proximal to the DIP joint of any finger or any part of the thumb) ^{see illustration}, as long as bleeding is controlled and the amputated part may be transported with the patient, the regular catchment base hospital MICN may contact Los Robles Hospital and Medical Center (LRHMC) to determine the availability of a hand surgeon trained in microvascular replantation surgery. If a specialty hand surgeon is available at LRHMC and not at the regular catchment hospital, the MICN shall direct the patient to LRHMC.

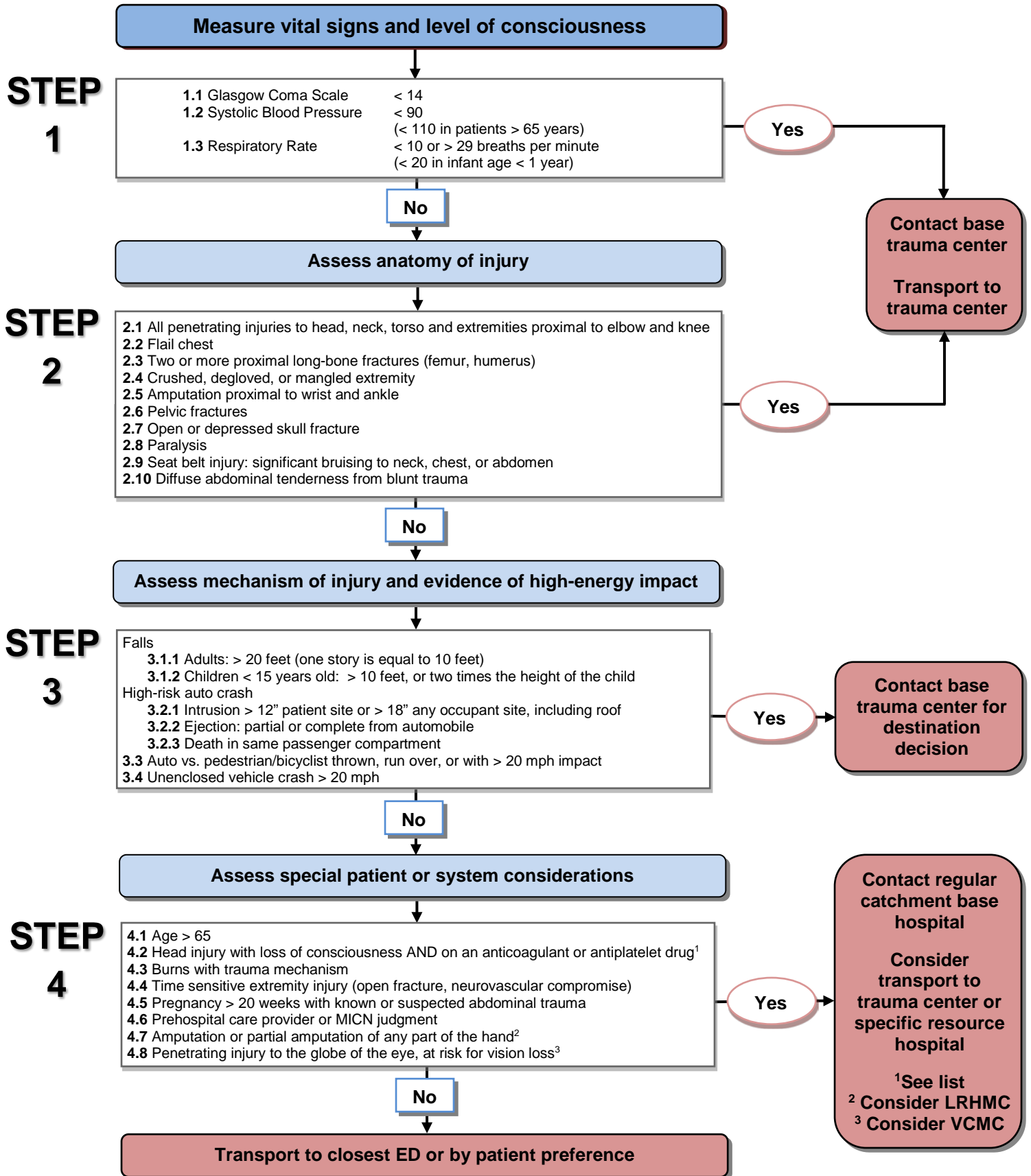


³For patients with isolated penetrating injury to the globe of the eye, at risk for vision loss, the regular catchment base hospital MICN may direct the patient to Ventura County Medical Center (VCMC) for specialized ophthalmologic care and possible surgical intervention.



Ventura County Field Triage Decision Scheme

For patients with visible or suspected traumatic injuries



¹See list
² Consider LRHMC
³ Consider VCMC

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Public Safety-First Aid (PSFA) and CPR / Tactical Casualty Care Training Program Approval		Policy Number 1601	
APPROVED: Administration: Steve L. Carroll, Paramedic		Date: June 1, 2018	
APPROVED: Medical Director: Daniel Shepherd, M.D.		Date: June 1, 2018	
Origination Date: April 13, 2017		Effective Date: June 1, 2018	
Date Revised: April 12, 2018			
Date Last Reviewed: April 12, 2018			
Review Date: April 30, 2021			

- I. PURPOSE: The Ventura County EMS Agency shall establish minimum requirements for Public Safety First Aid and CPR and/or Tactical Casualty Care training programs.
- II. AUTHORITY: California Health and Safety Code, Title 22, Division 2.5, Sections 1797.204, 1997.210 and 1797.212; California Code of Regulations, Title 22, Division 9 Chapter 1.5; California EMS Authority #370 – California Tactical Casualty Care Training Guidelines
- III. POLICY: The approving authority for Public Safety First Aid and CPR (PSFA) and/or Tactical Casualty Care (TCC) training programs, not meeting the definition of a statewide public safety agency operating within the County of Ventura shall be the Ventura County EMS Agency (VCEMS). This does not apply to PSFA or TCC programs authorized by statewide public safety agencies such as the California Highway Patrol, California State Parks, etc. and approved by the California EMS Authority This also does not apply to PSFA or TCC programs authorized by the Commission on Peace Officer Standards and Training (POST) and approved by the California EMS Authority.
 - A. Programs eligible for program approval shall be limited to:
 1. A course in public safety first aid, including CPR and AED, developed and/or authorized by the California Department of Forestry and Fire Protection (Cal Fire); or
 2. A course in public safety and first aid, including CPR and AED, authorized by the Commission on Peace Officer Standards and Training (POST) and approved by the California EMS Authority. No later than 24-months from the adoption of these regulations, POST, in consultation with the California EMS Authority, shall develop the course curriculum and testing competency standards for these regulations as they apply to peace officers; or

3. A course in public safety first aid, including CPR and AED, developed and authorized by the California Department of Parks and Recreation (DPR) and approved by the California EMS Authority; or
4. A course in public safety first aid, including CPR and AED, developed and authorized by the Department of the California Highway Patrol (CHP) and approved by the California EMS Authority; or
5. The U.S. Department of Transportation's emergency medical responder (EMR) course which includes first aid practices and CPR and AED, approved by the VCEMS; or
6. A course of at least 21 hours in first aid equivalent to the standards of the American Red Cross and healthcare provider level CPR and AED equivalent to the standards of the American Heart Association in accordance with the course content contained in Section 100017 of the California Code of Regulations, and approved by the VCEMS; or
7. A tactical training program course that meets or exceeds all mandatory minimum guidelines outlined in CalEMSA #370
8. An EMT or Paramedic training program approved pursuant to established VCEMS policies and procedures; or
9. An EMR course approved by the California EMS Authority, and developed and authorized by CAL FIRE, POST, DPR, CHP or other Statewide public safety agency, as determined by the California EMS Authority.

B. Approved training program course content shall meet or exceed all requirements outlined in Chapter 1.5, Section 100017 of the California Code of Regulations. If a Tactical Casualty Care Training program, all minimum requirements of CalEMSA #370 shall be met or exceeded.

IV. PROCEDURE:

A. Program Approval

1. Eligible training programs shall submit a written request for PSFA and/or TCC training program approval to VCEMS
2. VCEMS shall review the following prior to approving a PSFA/TCC training program:
 - a. Name of the sponsoring institution, organization, or agency.

- b. A statement verifying the initial course of instruction shall at a minimum consist of not less than twenty-one (21) hours of first aid and CPR training (If PSFA).
 - c. A statement verifying that the training course meets the appropriate minimum requirements outlined in CalEMSA #370 (If TCC)
 - d. A statement verifying CPR training equivalent to the current Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care (If PSFA).
 - e. A detailed course outline
 - 1) If PSFA - Any and all optional skills, as outlined in Section 100019 of the California Code of Regulations, the program chooses to apply to its curriculum shall have prior written authorization by VCEMS Medical Director.
 - f. Final written examination with pre-established scoring standards; and
 - g. Skill competency testing criteria, with pre-established scoring standards.
 - h. Provisions for the retraining of public safety first aid personnel in accordance with Section 100022 of the California Code of Regulations (If PSFA).
 - i. Educational Staff
Validation of the instructor's qualifications shall be the responsibility of the agency or organization whose training program has been approved by VCEMS. Training in PSFA and/or TCC shall be conducted by an instructor who is:
 - 1) Proficient in the skills taught; and
 - 2) Qualified to teach by education and/or experience
 - j. Testing Requirements
 - 1) The initial and retraining course of instruction shall include a written and skills examination which tests the ability to assess and manage all of the conditions, content and skills listed in sections 100017 and 100018 of Chapter 1.5 of the California Code of Regulations (If PSFA)
 - 2) A passing standard shall be established by the training program before administration of the examination and shall be in
-

compliance with the standard submitted to and approved by
VCEMS

- 3) Training programs shall test the knowledge and skills specified in California Code of Regulations or CalEMSA #370 and have a passing standard for successful completion of the course and shall ensure competency of each skill.
- k. Course Completion Records
- Training programs shall outline a process for validation of course completion, in accordance with Section 100029 of the California Code of Regulations or CalEMSA #370.
- 1) A sample of the course completion certificate shall be submitted to VCEMS as part of the program approval application.
 - 2) The training program shall maintain a record of the names of trainees and the date(s) on which training courses have been completed for at least four (4) years.
 - 3) All training records shall be made available for inspection by VCEMS upon request.
- l. A table of contents listing the required information detailed in this policy with corresponding page numbers.
- m. Facilities and Equipment
- 1) Facilities must comfortably accommodate all students, including those with disabilities
 - 2) Restroom access must be available
 - 3) Training equipment and supply shall be modern and up to date as accepted by the industry and shall be maintained and/or replaced as necessary.
3. Course approval is valid for four (4) years from the date of approval.
- a. Requests for re-approval shall be submitted in the form of a formal training program approval packet and shall include all items outlined in Section IV.A.1-2
 - b. Requests for re-approval shall be submitted to VCEMS no later than sixty (60) days prior to the date of program approval expiration.
 - c. VCEMS may request additional materials or documentation as a condition of course approval and/or re-approval.
-

4. Training Program Notification
 - a. VCEMS shall notify the training program submitting its request for training program approval within twenty-one (21) working days of receiving the request that:
 - 1) The request for approval has been received,
 - 2) The request for approval contains or does not contain the information outlined in this policy and,
 - 3) What information, if any, is missing from the request.
 - b. Program approval or disapproval shall be made in writing by VCEMS to the requesting training program within a reasonable period of time after receipt of all required documentation as specified in this policy.
 - c. VCEMS shall establish the effective date of program approval in writing upon the satisfactory documentation of compliance with all program requirements.
 - d. VCEMS shall notify the California EMS Authority concurrently with the training program of approval, renewal of approval, or disapproval of the training program, and include the effective date. This notification is in addition to the name and address of training program, name of the program director, phone number of the contact person, and program approval/ expiration date of program approval.
 5. Withdrawal of Program Approval
 - a. Noncompliance with any criterion required for training program approval, use of any unqualified teaching personnel, non-compliance with any provision of this policy, non-compliance with any applicable regulation outlined in the California Code of Regulations and/or CalEMSA #370 or non-compliance with any other applicable guidelines regulations or laws may result in the denial, probation, suspension or revocation of program approval by VCEMS.
 - b. Notification of non-compliance and action to place on probation, suspend, or revoke shall be done as follows:
 - 1) VCEMS shall notify the approved training program course director in writing, by registered mail, of the provisions of this Policy with which the training program is not in compliance.
-

- 2) Within fifteen (15) working days of receipt of the notification of noncompliance, the approved training program shall submit in writing, by registered mail, to VCEMS one of the following:
 - a) Evidence of compliance with the provisions of this policy, or
 - b) A plan for meeting compliance with the provisions of this Chapter within sixty (60) calendar days from the day of receipt of the notification of noncompliance.
 - 3) Within fifteen (15) working days of receipt of the response from the approved training program, or within thirty (30) calendar days from the mailing date of the noncompliance notification if no response is received from the approved training program, VCEMS shall notify the approved training program in writing, by registered mail, of the decision to accept the evidence of compliance, accept the plan for meeting compliance, place on probation, suspend or revoke the training program approval.
 - 4) If VCEMS decides to suspend, revoke, or place an training program on probation the notification shall include the beginning and ending dates of the probation or suspension and the terms and conditions for lifting of the probation or suspension or the effective date of the revocation, which may not be less than sixty (60) calendar days from the date of VCEMS's letter of decision to the training program.
6. Program Review and Reporting
- a. All course outlines, written exams, and competency testing criteria used in an approved training program shall be subject to periodic oversight and review as determined by VCEMS.
 - b. Program approval and renewal is contingent upon continued compliance with all required criteria and provisions outlined in this policy, the California Code of Regulations, and/or in CalEMSA #370 and may be revoked by VCEMS in accordance with section IV.5 of this policy.
-

PSFA CPR (PSFA) and Tactical Casualty Care (TCC) TRAINING PROGRAM APPROVAL CHECKLIST

PROGRAM APPROVAL APPLICATION PROCEDURE	
TRAINING PROGRAM AFFILIATION:	
The Training Program is affiliated with a: <input type="checkbox"/> Statewide PSFA/TCC course approved by CalEMSA <input type="checkbox"/> ARC equivalent first aid class of at least 21 hours AND an AHA equivalent CPR AED healthcare provider course <input type="checkbox"/> Tactical training program course that meets or exceeds all mandatory minimum guidelines outlined in CalEMSA #370 – California Tactical Casualty Care Training Guidelines. <input type="checkbox"/> VCEMS approved EMT or Paramedic training program <input type="checkbox"/> EMR course approved by CalEMSA and developed and authorized by CalFire POST DPR CHP or other statewide public safety agency as determined by CalEMSA	Name of Agency of Affiliation
EDUCATIONAL STAFF	
<input type="checkbox"/> Primary Teaching Staff CV/Resume(s) <input type="checkbox"/> Statement verifying each instructor is proficient in skills taught and qualified to teach by education and/or experience. <input type="checkbox"/> Applicable licenses and/or certifications	
Submission of the following:	Date Received
<input type="checkbox"/> Table of contents listing required information and corresponding page numbers	
<input type="checkbox"/> Written request for program approval IF PSFA: <input type="checkbox"/> Statement verifying AHA equivalent CPR and AED Healthcare Provider, and <input type="checkbox"/> Statement verifying 21 hours of ARC equivalent initial training, and <input type="checkbox"/> Statement verifying a minimum 8-hour retraining course, and IF TCC: <input type="checkbox"/> Statement verifying training course meets the appropriate minimum requirements outlined in CalEMSA #370 IF BOTH PSFA and TCC: <input type="checkbox"/> All requirements outlined above	
<input type="checkbox"/> A detailed course outline	
<input type="checkbox"/> Samples of skills and written exams used for periodic testing	
<input type="checkbox"/> Final psychomotor skills competency testing criteria with pre-established scoring standards	
<input type="checkbox"/> Final cognitive exam with pre-established scoring standards <input type="checkbox"/> Provisions for retraining of public safety first aid personnel in accordance with CCR Section 100022	
<input type="checkbox"/> Location and proposed dates at which the course(s) are to be offered.	
<input type="checkbox"/> Sample attendance record and training roster	
<input type="checkbox"/> Sample of course completion certificate	
As program director for the applicant training program or curriculum, I certify that I will adhere to the State of California EMS Regulations, Guidelines and all applicable VCEMS policies and procedures. Furthermore, I certify that all information submitted with this application is true and correct.	
Signature of PSFA/TCC program representative completing checklist (above)	Date (above)
Typed or printed name (above)	

VCEMS Use Only

All Requirements submitted	Date:
Approval letter sent	Date:
Re-approval date	Date