In-person **2240 E. Gonzales Road #200** **Oxnard, CA**	Pre-hospital Services Committee Agenda	December 14, 2023 9:30 a.m.

I.	**Introductions**	
II.	**Approve Agenda**	
III.	**Minutes**	
IV.	**Medical Issues**	
	A. Other	
V.	**New Business or Policies for Review *with Proposed Changes***	
	A. 303 – EMT Optional Skills	Chris Rosa
	B. 705.17 – Nerve Agent/Organophosphate Poisoning	Adriane Gil-Stefansen
VI.	**Old Business**	
	A. N/A	
VII.	**Informational/Discussion Topics or Policies Approved at Specialty Care Committees**	
	A. Destination of Burn Patients	Dr. Shepherd
	B. Quality Improvement Plan	Chris Rosa
	C. 451 – Stroke Triage and Destination (Stroke Committee)	Adriane Gil-Stefansen
	D. 705.26 – Suspected Stroke (Stroke Committee)	Adriane Gil-Stefansen
	E.	
VIII.	**Policies Due for Review (*No proposed changes*)**	
	A. 724 – Brief Resolved Unexplained Event (BRUE)	Karen Beatty
	B. 630 - Infectious Disease	Kyle Culkin
IX.	**Agency Reports**	
	A. Fire Departments	
	B. Ambulance Providers	
	C. Base Hospitals	
	D. Receiving Hospitals	
	E. Law Enforcement	
	F. ALS Education Program	
	G. EMS Agency	
	H. Other	
X.	**Closing**	

In Person 2240 E. Gonzales rd. #200 Oxnard	Pre-hospital Services Committee Minutes	September 14, 2023 9:30 a.m.

Topic	Discussion	Action	Approval
I. Introductions	Jonathan Griffin nursing student - SVAH Resident group from Los Robles – Thankful to be a part of the team.		
II. Approve Agenda		Approved	Motion: Kristen Shorts Seconded: Joey Williams Passed: unanimous
III. Minutes	No changes	Approved	Motion: Ira Tilles Seconded: Chris Sykes Passed: unanimous
IV. **Medical Issues**	None		
A. Coronavirus/Flu/ Respiratory Virus Update	None		
V. New Business			
A. 303 – B-EMT Optional Skills Plan	**Rosa** – This has been in place for a couple years, (epi, duo dote, etc.). It was missing the plan outlining the overall program. Formalizing what we are required to do.	Approved	Motion: Kyle Blum Seconded: Kristen Passed: Unanimous
B. 305 - Emergency Medical Technician (EMT) Local Accreditation	**Rosa** – EMTS that practice any of the optional skills are supposed to be accredited by the local LEMSA. Intent is to continue to operate, new licenses…if you are a paramedic licensed also licensed as EMT, this also applies. Formalizing the process in form of a policy. **Beatty** - asked about standby companies, will this also apply to them? Rosa and Carroll addressing. **Villa** – authorize EMT iGel? Shepherd said if they are accredited. BLS iGel is an optional skill.	Approved	Motion: Kristen Seconded: Tom Passed: Unanimous
C. 306 - EMT: Requirements to Staff an ALS Unit	**Rosa** - Potential to move this policy altogether, what does group think?	Approved unanimously. Will sunset around December 1.	
D. 334 - Pre-Hospital Personnel Mandatory Training Requirements	**Rosa** – Tried to clean up a lot of stuff that is carry-over from older changes and consider things that have been active for a while. Removed/updated language. One request from Joey Williams had section 4, procedure C, the 1A that is outlined is moving up to section 3. Using AHA language to put in section three regarding the two-year training.	Approved with changes	Motion: Tom O'Connor Seconded: Joey Williams Passed: Unanimous

	Tom O'Connor – is this including all EMTs in the system? Rosa said yes. **Carroll** – need to clarify that this is for EMT's currently working in the system. "Employed by" **Jeffrey Winter** - Pediatric requirement for hand tevy, PALs after that? Clarify hand tevy or PALs. Add either/or, ok with group to change without sending it out.		
E. 350 - Prehospital Care Coordinator Job Duties	**Rosa** – Edited in response to some questions brought up at the last PSC. Updated to catch things up. New regulation references that needed to be added, clarification, formatting, updated language to safety. Overall process and intent do not change. **Carroll** – Formatting updates. **Kyle Blum** – ride along questions. Rosa left it open-ended, but it is not an absolute requirement. **Shepherd** – want policy to work for you. Tom O'Connor - Larsen – missing oxford comma…	Approved with changes	Motion: Kyle Blum Seconded: Tom O'Connor Passed: Unanimous
F. 400 - Ventura County Emergency Departments	Beatty - Changed PV to SJHC and put an asterisk by the two hospitals that do not have OB services.		Motion: Ira Tilles Seconded: Joey Williams Passed: Unanimous
VI. Old Business			
A. 318 - ALS Response Unit Staffing	**Rosa** - Previous PSC concerns address IV insertion, changed C to six months, on D added in coordination with ALS agencies. Work with small group to see what competency requirements look like. Appendix A and D updated with categories. In each shift, will correct the numerical order. **Kyle Blum** – Update hand tevy/pals language. **Tom O'Connor** – formatting…	Approved with changes Subcommittee with move forward	Motion: Ira Tilles Seconded: Joey Williams Passed: Unanimous
VII. Informational			
A. 614 – Spinal Motion Restriction (TORC)	**Beatty** – Approved by TORC. Formatting change to make more user friendly.		
B. 726 – 12-Lead ECG (STEMI Committee)	**Gil-Stefansen** - Went to STEMI to simplify policy, added Pulsara, changed flow sheet. **Kyle Blum** – Algorithm on EKG question, Gil-Stefansen explained the flow.		
C. 1402 – Trauma Committees (TORC)	Beatty – Language change.		
VIII. Policies for review			
A. None			
IX. Agency Reports			
A. Fire departments	**VCFD** – none		

	VFD – none **OFD -** none **Fed. Fire** – none **FFD** – none		
B. Transport Providers	**AMR/GCA/LMT** – Dom Savage went back into the field; Robin Westbrook is assisting Joey Williams. **All Town** - none **AIR RESCUE –** none		
C. Base Hospitals	**AHSV** – none **LRRMC** – ED residents, MICN course starts 10/3. Already have 19 signed up. **SJRMC –** EMS appreciation BBQ Cam 11th Oxnard 13th 11-1, **VCMC** – none		
D. Receiving Hospitals	**SJHC** – CT at Camarillo is back up and running. **SPH** – none **CMH** / **OVCH** – none		
E. Law Enforcement	**VCSO –** none **CSUCI PD –** none **Parks –** none		
F. ALS Education Programs	**Ventura College** – two new teaching cohorts started (PT and FT). Virtual Accreditation site visit is 9/25 and 9/26. Tom is reaching out to other areas for new paramedic interns. Anywhere that has MOUs with AMR and Dignity Health. **Moorpark College** – 10 paramedics in rotation, continue with off-cycle semester update in 2024. **Eric Eckels** – none		
G. EMS Agency	**Carroll** – RFP still in process, reviewing information and data requests. Met with hospital CEOs regarding stroke and STEMI contracts. Must go to the board for approval. **Rosa** – Sent notification about the EMS Authority 10/24-25, for Cal-MAT teams. Marine emergency, level II MCI, the state just hired a contractor and will be sending out updates. ReddiNet component. Also transporting at least two “patients” to regional hospitals. Also exercising burn surge plan. **Shepherd** – Commission next week, will get update from EMSA. Four medications up for review.		
H. Other	**Beatty for Dr. Duncan** – Fall Prevention Symposium on 9/29 at Oxnard Performing Arts Center.		
X. Closing	**Meeting adjourned at 10:32a**		

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: EMT Optional Skills		Policy Number 303
APPROVED: Administration:	Steve L. Carroll, Paramedic	Date: DRAFT
APPROVED: Medical Director:	Daniel Shepherd, M.D.	Date: DRAFT
Origination Date: Date Revised: Date Last Reviewed: Review Date:	July 13, 2017 December 14, 2023 December 14, 2023 November 30, 2025	Effective Date: DRAFT

I. PURPOSE: To define the process related to authorizing EMT optional skills and EMT trial studies

II. AUTHORITY: Health and Safety Code, Section 1797.107, 1797.109, 1797.160, 1797.170, and California Code of Regulations, Title 22, Division 9, Section 100064

III. POLICY:

A. In addition to the standard and expanded skills outlined in VCEMS Policy 300 – EMT Scope of Practice, the VCEMS Medical Director may establish policies and procedures for local accreditation of an EMT student or certified EMT to perform any or all of the following optional skills specified in this policy. Accreditation for EMTs to practice optional skills shall be granted in accordance with VCEMS Policy 305 – EMT Accreditation, and will be limited to those whose:

1. EMT certification is active,
2. have completed the minimum required education and training outlined in this policy,
3. ~~1.~~ and are employed ~~within the County of Ventura by an employer who is part of the organized EMS system.~~by a VCEMS approved optional skills provider.

B. Administration of epinephrine by prefilled syringe and/or drawing up the proper drug dose into a syringe for suspected anaphylaxis and/or severe asthma.

1. Training in the administration of epinephrine by prefilled syringe and/or drawing up the proper drug dose into a syringe for suspected anaphylaxis and/or severe asthma shall consist of no less than two (2) hours to result in the EMT being competent in the use and administration of epinephrine by prefilled syringe and/or drawing up the proper drug dose into a syringe and managing a patient of a suspected anaphylactic reaction and/or experiencing severe asthma

symptoms. Included in the training hours listed above shall be the following topics and skills:

a. Names
b. Indications and contraindications
c. Complications
d. Side/adverse effects and interactions
e. Routes of administration
f. Dosage calculation
g. Mechanisms of drug actions
h. Medical asepsis
i. Disposal of contaminated items and sharps
j. Medical administration

2. At the completion of this training, the student shall complete a competency based written and skills examination for the use and/or administration of epinephrine by prefilled syringe and/or drawing up the proper drug dose into a syringe, which shall include:

a. Assessment of when to administer epinephrine,
b. Managing a patient before and after administering epinephrine,
c. Using universal precautions and body substance isolation procedures during medication administration,
d. Demonstrating aseptic technique during medication administration,
e. Demonstrating preparation and administration of epinephrine by prefilled syringe and/or drawing up the proper drug dose into a syringe, and
f. Proper disposal of contaminated items and sharps

3. Administration of the following medications through the use of an auto-injector for the purposes of treating exposure to a nerve agent

a. Atropine
b. Pralidoxime Chloride

4. In addition to a basic weapons of mass destruction training, the nerve agent antidote training shall consist of no less than two (2) hours of didactic and skills training to result in competency. Training in the profile of the medications contained in the DuoDote/Mark I auto-injector and atropine auto-injector shall include, but not limited to:

a. Indications and contraindications

b. Side/adverse effects
c. Routes of administration
d. Dosages
e. Mechanisms of drug action
f. Disposal of contaminated items and sharps
g. Medication administration

5. At the completion of this training, the student shall complete a competency based written and skills examination for the administration of the Duo-dote/Mark I and atropine auto-injector.
   a. Assessment of when to administer the auto-injector,
   b. Managing a patient before and after administering the auto-injector
   c. Using the universal precautions and body substance isolation precautions during medication administration,
   d. Demonstrating aseptic technique during medication administration,
   e. Demonstrating the preparation and administration of medications by the intramuscular (IM) route, and
   f. Proper disposal of contaminated items and sharps.

C. Competency training in procedures and skills for all EMT optional skills shall be completed at least every two (2) years. At a minimum, ongoing training and demonstration of competency shall be comprised of the following:
   1. Review of indications and contraindications
   2. Patient assessment and management before and after medication administration
   ~~2.~~3. Demonstration of appropriate aseptic technique
   4. Appropriate preparation and administration of the medication by the intramuscular route utilizing the Ventura County EMS psychomotor skills evaluation form
   ~~3.~~5. Demonstration of proper disposal of contaminated items sharps.

~~C.~~D. VCEMS shall develop and maintain ~~specific~~ a plan~~s~~ for each EMT optional skill ~~permitted~~allowed. ~~These plans~~This plan will include:
   1. A description of the need for use of the optional skill
   2. A description of the geographic area within which the optional skills will be utilized

3. A description of the data collection methodology which shall also include an evaluation of the effectiveness of the optional skill
4. The policies and procedures to be instituted by the LEMSA regarding medical control and use of the optional skill

~~D.~~E. For an accredited EMT who fails to demonstrate competency in any of the optional skills outlined in this policy:

1. EMT accreditation shall be immediately suspended pending clinical remediation
2. Employer agency will submit a written plan of action to VCEMS to include: method of remediation, course curriculum, date(s) and location(s) of remediation training.
3. VCEMS will review and approve written plan of action prior to commencement of remediation training
4. Once complete, evidence of satisfactory training and minimum competency in the optional skills will be submitted to VCEMS prior to the reinstatement of the EMT accreditation.

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	
Patients that are exhibiting obvious signs ~~of exposure~~ (SLUDGEM) of organophosphate exposure and/or nerve agents	
Maintain airway and position of comfort	
Administer oxygen as indicated	
• **Mark I or DuoDote Antidote Kit (If Available)** ○ Mild Exposure: IM x 1 • May repeat in 10 minutes if symptoms persist ○ Severe Exposure: IM x 3 in rapid succession, rotating injection sites	
• ~~**Mark I or DuoDote Antidote Kit (If Available)**~~ ○ ~~Mild Exposure: IM x 1~~ ○ ~~May repeat in 10 minutes if symptoms persist~~ ○ ~~Severe Exposure: IM x 3 in rapid succession, rotating injection sites~~	
ALS Standing Orders	
~~*Patient's that are exhibiting obvious signs of exposure (SLUDGEM) of Organophosphate exposure and/or Nerve Agents*~~ ~~*If not already administered by BLS personnel:*~~	~~*Patient's that are exhibiting obvious signs of exposure (SLUDGEM) of Organophosphate exposure and/or Nerve Agents*~~ ~~*If not already administered by BLS personnel:*~~
• ~~**Mark I or DuoDote Antidote Kit (If Available)**~~ ○ ~~Mild Exposure: IM x 1~~ • ~~May repeat in 10 minutes if symptoms persist~~ ○ ~~Severe Exposure: IM x 3 in rapid succession, rotating injection sites~~	• ~~**Mark I or DuoDote Antidote Kit (If Available)**~~ • ~~Mild Exposure: IM x 1~~ • ~~May repeat in 10 minutes if symptoms persist~~ • ~~Severe Exposure: IM x 3 in rapid succession, rotating injection sites~~
When Mark I or DuoDote Antidote kit is not available:	When Mark I or DuoDote Antidote kit is not available:
• **Atropine** ○ Mild ~~-~~or Severe Exposure: ○ IV/IO – 2 mg ○ May repeat q 5 minutes for persistent symptoms ~~May repeat q 5 minutes for persistent symptoms~~ ~~For seizures:~~ • ~~Midazolam~~ ○ ~~IV/IO – 2 mg~~ • ~~Repeat 1 mg q 2 min as needed~~ • ~~Max 5 mg~~ ○ ~~IM – 0.1 mg/kg~~ ~~Max 5 mg~~ If CHEMPAK deployed: • **Diazepam** ○ IM/IV/IO – 5 mg ○ q 10 minutes titrated to effect ○ Max 30 mg	• **Atropine** ○ Mild or Severe Exposure: ○ IV/IO – 0.05 mg/kg mg ○ May repeat q 5 minutes for persistent symptoms ~~**Atropine**~~ • ~~Mild -or Severe Exposure:~~ • ~~IV/IO – 0.05 mg/kg~~ • ~~May repeat every 5 minutes for persistent symptoms~~ ~~For seizures:~~ • ~~Midazolam~~ • ~~IV/IO – 0.1 mg/kg~~ • ~~Repeat q 2 min as needed~~ • ~~Max single dose 2 mg~~ • ~~Max total dose 5 mg~~ • ~~IM – 0.1 mg/kg~~ ~~Max 5 mg~~ If CHEMPAK deployed: • **Diazepam** ○ IM/IV/IO - 0.1 mg/kg ○ q 10 min titrated to effect ○ Max single dose 5 mg ○ Max total dose 10 mg
Base Hospital Orders Only	

Consult with ED Physician for further treatment measures
Additional Information: • 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:~~ ○ ~~**Adult**: 5 mg IM/IV/IO q 10 min titrated to effect *(max 30 mg)*~~ ○ ~~**Pediatric**: 0.1 mg/kg IV/IM/IO (max initial dose 5 mg) over 2-3 min q 10 min titrated to effect *(max total dose 10 mg)*~~ • Mild Exposure symptoms: ○ Miosis, rhinorrhea, drooling, sweating, blurred vision, nausea, bradypnea or tachypnea, nervousness, fatigue, minor memory disturbances, irritability, unexplained tearing, wheezing, tachycardia, bradycardia, SOB, muscle weakness and fasciculations, GI effects. • Severe Exposure: ○ ~~Strange, confused~~Abnormal behavior, severe difficulty breathing, twitching, unconsciousness, seizing, flaccid, apnea ~~pinpoint pupils~~, involuntary defecation, urination

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Effective Date: January 3, 2023
Next Review Date: February 28, 2024

Date Revised: February 10, 2022
Last Reviewed: February 10. 2022

VCEMS Medical Director

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Stroke System Triage and Destination		Policy Number 451
APPROVED: Administration:	Steven L. Carroll, Paramedic	Date: December 1, 2023
APPROVED: Medical Director:	Daniel Shepherd, M.D.	Date: December 1, 2023
Origination Date: Date Revised: Date Last Reviewed: Review Date:	October 11, 2012 September 27, 2023 September 27, 2023 September 30, 2025	Effective Date: December 1, 2023

I. PURPOSE: To outline the process of pre-hospital triage and transport of suspected acute stroke patients to facilities designated as an Acute Stroke Center (ASC) or a Thrombectomy Capable Acute Stroke Center (TCASC).

II. AUTHORITY: California Health and Safety Code Sections 1797.220 and 1798, California Code of Regulations, Title 22, Division 9, Sections 100147, and 100169.

III. DEFINITIONS:

Acute Stroke Center (ASC): Hospital designated as an Acute Stroke Center, as defined in VCEMS Policy 450.

Comprehensive Stroke Center (CSC): Hospital certified by either The Joint Commission, Det Norske Veritas, or the Healthcare Facilities Accreditation Program as a Comprehensive Stroke Center.

Large Vessel Occlusion (LVO): An acute ischemic stroke caused by a large vessel occlusion.

LVO Alert: A pre-arrival notification by pre-hospital personnel to the base hospital that a patient is suffering a possible LVO ischemic stroke.

Stroke Alert: A pre-arrival notification by prehospital personnel that a patient is suffering a possible acute 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.

Time Last Known Well (TLKW): The date/time at which the patient was last known to be without the current signs and symptoms or at his or her baseline state of health.

Ventura LVO Score (VES): A tool designed for paramedics to screen for an LVO in the prehospital setting.

IV. POLICY:

A. Stroke System Triage: Patients meeting criteria listed below shall be triaged into the VCEMS stroke system.

1. Patient's TLKW is within 24 hours.
2. Blood Glucose is greater than sixty (60) OR patient continues to exhibit signs and symptoms of an acute stroke after pre-hospital treatment of abnormal blood glucose levels.
3. Identification of *ANY* abnormal finding of the Cincinnati Prehospital Stroke Scale (CPSS):

   FACIAL DROOP
   - Normal: Both sides of face move equally
   - Abnormal: One side of face does not move normally

   ARM DRIFT
   - Normal: Both arms move equally or not at all
   - Abnormal: One arm does not move, or one arm drifts down compared with the other side

   SPEECH
   - Normal: Patient uses correct words with no slurring
   - Abnormal: Slurred or inappropriate words or mute
4. Perform the Ventura LVO Score (VES) on all patients who have abnormal CSS findings.

   Forced Eye Deviation (1 point):
   - Force full deviation of BOTH eyes to one side or the other
   - Eyes will not pass midline

Aphasia (1 point): Patient is awake with *ANY* of the following present

- *Repetition:* Unable to repeat a sentence ("Near the chair in the dining room.")
- *Naming:* Unable to name an object (show a watch and a pen, ask patient to name the objects)
- *Mute:* Ask the patient 2 Questions (What is your name? How old are you?)
- *Talking gibberish and/or not following commands*

Neglect (1 point):

- Touch the Patient's right arm and ask if they can feel it.
- Touch the Patient's left arm and ask if they feel it.
- Now touch both of the Patient's arms simultaneously and ask the patient which side you touched.
- If patient can feel both sides individually, but only feels one side on simultaneous stimulation, this is neglect.
- If Aphasic: Neglect can be evaluated by noticing that patient is not paying attention to you if you stand on one side, but pays attention to you if you stand on the other side.

Obtundation: (1 point)

- Not staying awake in between conversation

B. ***Stroke Alert*** = TLKW is within 24 hours, BG is greater than 60, & Abnormal CPSS
    1. For a *Stroke Alert*, Base Hospital Contact (BHC) will be established with the regular catchment Base Hospital (BH) and a *Stroke Alert* will be activated.
    2. The BH will notify the appropriate ASC of the *Stroke Alert.*

C. ***LVO Alert*** = TLKW is within 24 hours, BG is greater than 60, & CSS is +3 with VES ≥1
    1. For an *LVO Alert*, BHC will be established with the appropriate TCASC.
        a. East of Lewis Rd in Camarillo is LRRMC.
        b. West of Lewis Rd in Camarillo is SJRMC.
    2. The appropriate specialist on-call will be notified by the MICN.

D. Destination Decision
    1. The BH will determine the nearest ASC or TCASC using the following criteria:
        a. Patient condition

b. TCASC or ASC availability on ReddiNet
c. Transport time
d. Patient request

2. Patients meeting stroke system criteria shall be transported to the nearest ASC/TCASC, except in the following cases:
    a. Stroke patients in cardiac arrest shall be transported to the nearest receiving hospital. Patients who have greater than thirty seconds of return of spontaneous circulation (ROSC) shall be transported to the nearest STEMI Receiving Center (SRC).
    b. The nearest ASC is incapable of accepting a stroke alert patient due to CT or Internal Disaster diversion, then transport to the next closest ASC.
    c. The patient requests transport to an alternate facility, not extending transport by more than twenty (20) minutes, and approved by the BH.
    d. Patients meeting *LVO Alert* criteria will be transported to the nearest TCASC if ***total*** transport time does not exceed 45 minutes. If nearest TCASC is on TCASC Diversion, then transport to the next closest TCASC.

E. Upon Arrival to ASC/TCASC: You may be asked to take your patient directly to the CT scanner.
    1. Give report to the nurse, transfer the patient from your gurney onto the CT scanner platform, and then return to service.
    2. If there is any delay, such as CT scanner not readily available, or a nurse not immediately available, you will not be expected to wait. You will take the patient to a monitored bed in the ED and give report as usual.

F. Documentation
    1. Care and findings related to an acute stroke patient shall be documented in the Ventura County electronic patient care reporting (VCePCR) system in accordance with VCEMS policy 1000.

Suspected Stroke

ADULT

BLS Procedures

Administer oxygen for SpO2 less than 94%

Perform Stroke Assessment
- Cincinnati Prehospital Stroke Scale (CPSS)
- Time Last Known Well
- Determine Blood Glucose level

ALS Standing Orders

IV/IO access

Cardiac monitor

Patients meeting Stroke Alert criteria:
- **Cincinnati Prehospital Stroke Scale (CPSS)** – *1 or more Abnormal results*
- **Time Last Known Well (TLKW)** - *within 24 hours*
- **Blood Glucose** *> 60 mg/dl*
- Notify Base hospital within 10 minutes of identifying a Stroke Alert
- Expedite transport to appropriate Acute Stroke Center (ASC)

Patients meeting LVO Alert criteria (3 + 1):
- **CPSS Score of 3** – *Abnormal results for facial droop, arm drift, and speech*
- **+ Ventura County LVO Score (VES) of 1 or more –** *1 or more Abnormal results*
- **Time Last Known Well (TLKW)** – *within 24 hours*
- **Blood Glucose** *> 60 mg/dl*
- Notify TCASC within 10 minutes of identifying an LVO Alert
- Expedite transport to appropriate Thrombectomy Capable Acute Stroke Center (TCASC)

Base Hospital Orders Only

Consult with ED Physician for further treatment measure

Additional Information

Cincinnati Prehospital Stroke Scale (CPSS)

Facial Droop
Normal: Both sides of face move equally
Abnormal: One side of face does not move normally

Arm Drift
Normal: Both arms move equally or not at all
Abnormal: One arm does not move, or one arm drifts down compared with the other side

Speech
Normal: Patient uses correct words with no slurring
Abnormal: Slurred or inappropriate words or mute

Ventura County LVO Score (VES)

Forced Eye Deviation

Aphasia

Neglect

Obtundation

- 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.
- Refer to VCEMS Policy 451 for CPSS, VES and alert criteria details.

Effective Date: December 1, 2023
Next Review Date: September 30, 2025
Date Revised: September 27, 2023
Last Reviewed: September 27, 2023

VCEMS Medical Director

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: December 1, 2021
APPROVED: Medical Director	Daniel Shepherd, MD	Date: December 1, 2021
Origination Date: Date Revised: Date Last Reviewed: Review Date:	March, 2005 March 8, 2018 September 9, 2021 September 30, 2023	Effective Date: December 1, 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 a 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, erythrism, 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 HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Ventura County Pre-Hospital Infectious Disease Policy	Policy Number 630
APPROVED: Administration: Steven L. Carroll, Paramedic	Date: July 1, 2022
APPROVED: Medical Director Daniel Shepherd, M.D.	Date: July 1, 2022
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I. PURPOSE: To provide direction to prehospital emergency personnel when responding to patients with potential infectious diseases and formalize response to infectious disease threats to implement best practices in an efficient manner. Furthermore, the intent is to provide minimum standards to protect providers/patients and to mitigate infectious disease transmission.

II. AUTHORITY: Health and Safety Code, Division 2.5, Sections 1797.220,1797.188. California Code of Regulations, Title 22, Division 9 Section 100062, 100063, 100145 and 100146. ASPR TRACIE EMS Infectious Disease Playbook as a reference guide.

III. DEFINITIONS:

A. Transmission Based Precautions: Supplemental infection control measures to be used in addition to Standard Precautions for patients who may be infected or colonized with a communicable disease. Basic infection control to be used in addition to Standard Precautions for patients who may be infected or colonized with certain infectious agents.

B. Emergency Medical Dispatcher (EMD): Personnel who receive emergent and non-emergent calls and dispatch responding units to the scene of an incident.

C. Prehospital Responders: Includes any person or agency who responds to the scene of an incident.

D. Screening: A process for evaluating the possible presence of a particular problem.

IV. PROCEDURE

A. Safe response by Emergency Medical Services (EMS) requires a cooperative effort and ongoing assessment to evaluate safety risks by following below:

1. EMDs will identify possible infectious disease patients when taking 911 calls through screening questions and provide potential infectious disease information to responding prehospital emergency personnel prior to arriving on scene.
2. EMD's and prehospital responders should be aware of local disease scenarios, communicable disease surges, clusters, and/or outbreaks. These notifications may be distributed by Ventura County EMS Agency, California Health Alert Network (CAHAN), and/or Public Health "Hot Tips". The screening questions for highly infectious pathogens may be adapted for local area outbreaks.
3. Prehospital responders need to remain vigilant and further evaluate patients when they arrive on-scene to re-assess and determine the appropriate level of precautions. Re-assessment may require the need to change the type of infection control precautions suggested by dispatch when arriving on-scene.
4. Screening for pathogens involves questioning patients about recent travel to high-risk areas and their signs/symptoms. The timeframe for these conditions varies. For example, the screening time frame for Middle East Respiratory Syndrome (MERS) is 14 days but Ebola Virus Disease/Viral Hemorrhagic Fever (EVD/VHF) requires a screening time frame of 21 days. A general timeline of 21 days may be used for suspected infectious disease screening consistency.
5. Fever may be a helpful sign/symptom but should not be used exclusively to determine the type of precaution needed.
6. Avoid direct contact with patients who have a high suspicion of serious communicable disease until the appropriate level of PPE can be determined and safely donned. Strict transmission-based precautions based on the patient's clinical information is essential to avoid contact with infectious bodily fluids, droplets, and airborne particles.
7. If COVID-19 is suspected or novel influenza with potential for pandemic: Refer to Appendix A: Ventura County EMS Agency SARS CoV-2 Prehospital Guidelines.

8. If EVD/VHF/Ebola is suspected, stage at a safe distance. Notify EMS Duty Officer and request augmented response. Refer to Appendix B: Ventura County EMS Agency Ebola Guidelines.
9. Destination hospital must be notified of potential infectious disease by EMS personnel prior to patient arrival. If base hospital contact is made, the base hospital will notify the destination/receiving hospital of patient status and infectious disease precaution level.
10. Responding agencies in the County of Ventura shall assure that employees are properly instructed on the use of protective equipment in accordance with the manufacturer's instructions per Cal OSHA regulations.

V. INFECTIOUS DISEASE PRECAUTION LEVELS

A. All transmission-based precautions include standard precaution measures. These are recommended minimum standards, and providers are encouraged to error on the side of caution when encountering a potentially infectious patient. Refer to Appendix C: CDC PPE for donning and doffing direction. Refer to Appendix D Guidelines for Isolation Precautions.

1. Standard Precautions: Hand hygiene, gloves, mask, eyewear
2. Contact Precautions: Gown
3. Droplet Precautions: Goggles or face shield, mask on patient if possible
4. Airborne Precautions: NIOSH approved N-95, mask on patient if possible
5. Special Respiratory Precautions: NIOSH approved N-95, gown, mask on patient if possible
6. VCEMSA SARS-CoV-2 Guidelines: Augmented Response (Appendix A) - NIOSH approved N-95, goggles or face shield, gown, mask on patient if possible
7. EVD-VHF/Ebola Precautions: Augmented Response (Appendix B) - Stage, notify EMS Duty Officer, and request augmented response

VI. CONSIDERATIONS

A. Resources not immediately needed may consider staging to limit potential infectious disease exposure to personnel.
B. When possible, a mask should be placed on patients with suspected potential infectious respiratory diseases.

C. When a determination of suspected infectious disease is difficult to determine, assume the highest level of contagious threat and use the appropriate level of protection.

D. Prehospital responders may consider assessing infectious disease potential from six feet away when arriving on-scene as appropriate to determine the level of precautions required.

E. If the medical personnel driving the transporting ambulance is not isolated, they must also wear the appropriate respiratory protection during transport even when not in direct patient contact.

F. American Medical Response houses a High-Risk Ambulance (HRA) in Ventura County for augmented medical transport needs. Refer to Appendix D: High Risk Ambulance Operations

G. Patients and their caregivers may find prehospital responders wearing high levels of personal protective equipment (PPE) alarming. Responders should be mindful of this potential and work to reassure patients while taking reasonable measures to address their distress.

H. Hand hygiene is one of the best ways to remove infectious contaminates, avoid getting sick and prevent the spread of infectious disease.

I. Circulate ambulance cabin air and utilize ambulance ventilation system.

J. Unprotected exposure to a suspected/confirmed communicable disease will be reported in accordance with VCEMSA Policy 612-Notification of Exposure to a Communicable Disease.

VII. APPENDICES

i. Ventura County EMS Agency SARS CoV-2 Prehospital Guidelines
Ventura County EMS Agency Ebola Guidelines

ii. CDC PPE

iii. Guidelines for Isolation Precautions

iv. High Risk Ambulance Operations

vi. VCEMSA Policy 612-Notification of Exposure to a Communicable Disease