Virtual	Pre-hospital Services Committee Agenda	April 8, 2021 9:30 a.m.

I.	**Introductions**	
II.	**Approve Agenda**	
III.	**Minutes**	
IV.	**Medical Issues**	
	A. Coronavirus Update	Dr. Shepherd/Steve Carroll
V.	**New Business**	
	A. 334 – Prehospital Personnel Mandatory Training Requirements	Andrew Casey
	B. New Policy - Prehospital Capnography	Dr. Shepherd/ Andrew Casey
	C. 504 - BLS and ALS Unit Equipment and Supplies	Andrew Casey
VI.	**Old Business**	
	A. PSC - Chairman Nominations	
VII.	**Informational/Discussion Topics**	
	A. Intraosseous Devices	
VIII.	**Policies for Review**	
	A. 335 - Out of County Paramedic Internship Approval Process	
	B. 342 - Notification of Personnel Changes-Provider	
	C. 601 – Medical Control at the Scene: EMS Prehospital Personnel	
	D. 629 – Hospice Patient Care	
	E. 705.16 – Neonatal Resuscitation	
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**	

Prehospital Services Committee 2021

For Attendance, please initial your name for the current month

Agency	LastName	FirstName	1/7/2021	2/11/2021	3/11/2020	4/8/2021	5/13/2021	6/10/2021	7/8/2021	8/12/2021	9/9/2021	10/14/2021	11/11/2021	12/9/2021	%
AMR	Goguen	Daniel			DG										
AMR	Riggs	Cassie													
CMH - ER	Levin	Ross		RL	RL										
CMH - ER	Querol	Amy			AQ										
OVCH - ER	Pulido	Ed			EP										
OVCH - ER	Ferguson	Catherine			CF										
CSUCI PD	Drehsen	Charles		CD											
CSUCI PD	Deboni	Curtis													
FFD	Herrera	Bill													
FFD	Panke	Chad													
GCA	TBD														
GCA	Sanders	Mike		MS											
Lifeline	Rosolek	James													
Lifeline	Williams	Joey													
LRRMC - ER	Brooks	Kyle		KB											
LRRMC - ER	Moore	Bethany		BM	BM										
OFD	Strong	Adam			AS										
OFD	Villa	Jaime		JV	JV										
SJPVH - ER	Hutchison	Stacy													
SJPVH - ER	Sikes	Chris			CS										
SJRMC - ER	Larsen	Todd		TL	TL										
SJRMC - ER	McShea	Kathy		KM	KM										
SVH - ER	Tilles	Ira		IT	IT										
SVH - ER	Shorts	Kristen			KS										
V/College	O'Connor	Tom		TO	TO										
VCFD	Tapking	Aaron		AT	AT										
VCFD	Ellis	Heather		HE	HE										
VNC	Williams	Joseph		JW	JW										
VNC	Schwab	David													
VNC - Dispatch	Gregson	Erica			EG										
VCMC - ER	Gillett	John		JG	JG										
VCMC - ER	Gallegos	Tom		TG	TG										

Agency	LastName	FirstName	1/7/2021	2/11/2021	3/11/2020	4/8/2021	5/13/2021	6/10/2021	7/8/2021	8/12/2021	9/9/2021	10/14/2021	11/11/2021	12/9/2021	%
VCMC-SPH	Vicencio	Angela													
VCSO SAR	Conahey	Dave		DC	DC										
VCSO SAR	Tolle	Jonathon													
VFF	Lane	Mike													
VFF	Vilaseca	James		JV	JV										
Below names a	**Date Change/cancelled - not counted against member for attendance**														
EMS	Carroll	Steve		SC	SC										
EMS	Frey	Julie		JF											
EMS	Perez	Randy		RP	RP										
EMS	Shepherd	Daniel		DS	DS										
EMS	Rosa	Chris		CR	CR										
EMS	Salvucci	Angelo													
EMS	Hansen	Erik													
EMS	Beatty	Karen			KB										
EMS	Gil-Stefansen	Adriane		AS	AS										
EMS	Garcia	Martha		MG	MG										
EMS	Casey	Andrew		AC	AC										
LMT	Winter	Jeff		JW	JW										
LMT	Frank	Steve													
AMR/GCA	Gonzales	Nicole													
State Parks	Futoran	Jack		JF											
VCMC	Hill	Jessica													
VCMC	Duncan	Thomas		TD	TD										
Hospital Assoc.	Strickland	Audra			AS										
CMH	Hall	Elaina													
VNC	Chase	David		DC	DC										
VCSO SAR	Hadland	Don													

Virtual	Pre-hospital Services Committee Minutes	March 11, 2021 9:30 a.m.

Topic	Discussion	Action	Approval
II. Approve Agenda	705.27 was not on the agenda as stated last meeting by Andrew Casey. This policy will be presented at the next meeting.	Approved	Motion: Kathy McShea Seconded: Tom O'Connor Passed unanimous
III. Minutes	Change - VCMC will be a back up to St. Johns Oxnard construction project.	Approved	Motion: Kathy McShea Seconded: Tom O'Connor Passed unanimous
IV. **Medical Issues**			
Coronavirus Update	COVID numbers still dropping and we anticipate being in the red tier next week Vaccinating the education sector System wide ED diversion We are adjusting policies as needed for COVID issues Mask mandate will be adjusted in the near future for vaccinated personnel		
V. New Business			
A. 310 – Paramedic Scope of Practice	The committee felt there should be a new policy for paramedic students.	Approved	Motion: Kathy McShea Seconded: Jaime Villa Passed unanimous
B. 705.07	Dr. Chase discussed the treatment for cardiac arrest due to exsanguination	Tabled until next meeting for further review. Dr. Shepherd and Andrew Casey will work on this policy.	
C. 705.08	Dr. Chase discussed the treatment for cardiac arrest due to exsanguination	Tabled until next meeting for further review. Dr. Shepherd and Andrew Casey will work on this policy.	
D. 705.12		Approved	Motion: Ira Tilles Seconded: John Gillett Passed unanimous
E. 705.14 -		Approved	Motion: Ira Tilles Seconded: John Gillett Passed unanimous

F. 727 -	Need to change heart rate from 45 to 40 to match 705. (brady policy)		
G. 1105 – Mobile MICN Developmental Course and Examination Procedure		Approved	Motion: Kathy McShea Seconded: Tom O'Connor Passed unanimous
VI. Old Business			
A. PSC Chairman Nominations	The 4 people chosen to be on the nominating committee are: Dr. Tilles, Heather Ellis, Jeff Winter and Bethany Moore.	Bring back recommendation to PSC in April.	
VII. Informational			
A. 1404-	These policies were presented to PSC.	Approved at TORC Minor formatting issues	
B. 1405 -	These policies were presented to PSC.	Approved at TORC List of anti-coagulants and anti-platelets will be placed on VCEMS website by EMS.	
VIII. Policies for review			
303 -		Approved	Motion: Chris Sikes Seconded: Tom O'Connor Passed unanimous
507 -		Tabled – Will meet with providers and bring back.	
705.13 -		Approved with changes	Motion: Kathy McShea Seconded: Tom O'Connor Passed unanimous
717 -		Will bring back	Motion: Chris Sikes Seconded: Charles Drehsen Passed unanimous
X. Agency Reports			
A. Fire departments	**VCFPD** – none **VCFD- none** **OFD** – none **Fed. Fire** – none **SPFD** – none **FFD** – none		
B. Transport Providers	**LMT –** none		

		AMR/GCA – none **AIR RESCUE – none**	
C.	Base Hospitals	**SAH** – none **LRRMC** – none **SJRMC –** Construction is 1 month from completion. No change to ambulances. The day our base station is moved, VCMC will act as base. **VCMC** – none	
D.	Receiving Hospitals	**PVH –** none **SPH** – none **CMH** –. none **OVCH** – none	
E.	Law Enforcement	**VCSO –**none **CSUCI PD –** none	
F.	ALS Education Programs	**Ventura College** – Students are at clinical sites and will be in the field in March.	
G.	EMS Agency	**Steve –** none **Dr. Shepherd –** none **Chris** – none **Katy** –none **Karen** – none **Julie** –none **Randy** – none	
H.	Other		
XI.	**Closing**	**Meeting adjourned at 11:30**	

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Pre-Hospital Personnel Mandatory Training Requirements	Policy Number: 334
APPROVED: Administration: Steven L. Carroll, EMT-P	Date: DRAFT~~June 1, 2014~~
APPROVED: Medical Director Angelo Salvucci, MD	Date: DRAFT~~June 1, 2014~~
Origination Date: September 14, 2000 Date Revised: May 8, 2014 Date Last Reviewed: May 8, 2014 Review Date: May 31, 2017	Effective Date: DRAFT ~~June 1, 2014~~

I. PURPOSE: To define the requirements for mandatory training sessions for EMTs, Paramedics, EMT-ALS Assist SAR EMTs, MICNs and Flight Nurses in Ventura County.

II. AUTHORITY: Title 22, California Code of Regulation, Division 9, Section 100175 and Chapter 6. Health and Safety Code Section 1797.214, 1797.220 and 1798.200.

III. POLICY: All pre-hospital personnel have requirements for on-going authorization or accreditation to provide pre-hospital care in Ventura County. These requirements are outlined in VCEMS Policy 318 for Paramedics, 306 and 803 for EMTs, 1201 for Flight Nurses and SAR EMTs and 322 for MICNs.

III. PROCEDURE:

A. EMS Updates – Applies to all personnel listed above except EMTs.
Personnel shall attend mandatory education and/or testing on updates to local policies and procedures (EMS Update), which will be presented by the Base Hospitals in May and November each year (minimum of 12 opportunities to attend each session). Prehospital Services Committee members who attend 75% of the scheduled meetings over the previous 6 months may have this requirement waived.

B. MCI Training – Applies to all personnel listed above.
Personnel shall attend initial Basic or Advanced MCI training within 6 months of initially starting the certification or accreditation process and complete bi-annual refreshers as indicated in VC EMS Policy 131.

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C. Resuscitation Training – Applies to Paramedics, MICN's, and Flight Nurses only.
1. Adult Resuscitation– Paramedic, MICN, and Flight Nurse providers must obtain AHA ACLS certification or American Red Cross ALS certification within three months of initially starting the certification or accreditation process. Adult resuscitation certification must be maintained as current while practicing in Ventura County.

2. Pediatric – All personnel listed above with the exception of MICN's, shall obtain a Handtevy Pediatric Provider course completion certification within 3 months of initially starting the accreditation process. Course completion must be maintained as current while practicing in Ventura County. MICN's who have received Handtevy Orientation training may utilize AHA or American Red Cross Pediatric Advanced Life Support (PALS), Pediatric Education for Prehospital Providers (PEPP), or Emergency Nurse Pediatric Course (ENPC), to meet the pediatric resuscitation training requirement. In all cases certification must be maintained as current while practicing in Ventura County.

~~C. Grief Training – Applies to all personnel listed above except MICNs.~~

~~All personnel shall be provided the self-study packet titled "Dealing with Grief: A Workbook for Prehospital Personnel." After finishing the self-study packet, personnel shall complete the post-test and evaluation and mail them to VC EMS for a course completion and 2 hours CE credit. This requirement shall be completed within 6 months of initially starting the certification or accreditation process.~~

~~D. Emergency Response to Terrorism – Applies to all personnel listed above.~~

~~All personnel shall be provided the self-study packet titled "Emergency Response to Terrorism." After finishing the self-study packet, personnel shall complete the post-test and mail it to VC EMS for a course completion and 3 hours CE credit. This requirement shall be completed within 6 months of initially starting the certification or accreditation process.~~

DE. Paramedic Skills Refresher – Applies to Paramedics only

1. Paramedics shall attend one skills refresher session during the first year of licensure and one skills refresher in the second year of licensure.
2. Skills Refreshers will be offered at least 4 times in March and 4 times in September and will be offered over a 3 week period. Dates, times, and locations for the Skills Refreshers will be published one year in advance. Late arrivals will not be admitted into the Skills Refresher.

~~F. Nerve Agent Training – Applies to Paramedics only~~

~~All personnel shall be provided the self-study PowerPoint presentation entitled "Ventura County EMS Nerve Agents: Recognition and Treatment". Providers shall forward a copy of the attendance roster to VCEMS to verify completion of the training. New employees shall complete training within 6 months of initially starting the accreditation process.~~

~~G. Field Intubation Refresher Training – Applies to Paramedic and SAR Flight Nurses only~~

~~One intubation refresher session per six (6) month period based on license cycle as described in Policy 318.~~

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~~H. Advanced Cardiac Life Support (ACLS) - Applies to all personnel listed above except EMTs and SAR-EMTs.~~

~~ACLS course completion certificate shall be obtained within three months of initially starting the certification or accreditation process and remain current.~~

~~I. Pediatric Advanced Life Support (PALS) or Pediatric Education for Prehospital Providers (PEPP) - Applies to Paramedics and MICNs.~~

~~PALS or PEPP course completion certificate shall be obtained within six months of initially starting the accreditation process and remain current. Emergency Nurse Pediatric Course (ENPC) is also an acceptable pediatric course for the purposes of MICN authorization / reauthorization.~~

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E~~J~~. Failure to complete mandatory requirements:

1. Level II Paramedics who fail to complete any of these requirements will immediately revert to a Level I Paramedic according to VCEMS Policy 318. The Paramedic's accreditation to practice in Ventura County will be suspended after the State required 15 day notice until the following remediation criteria has been met. All other required personnel who fail to complete these requirements will have their authorization immediately suspended.
2. Reinstatement of authorization or accreditation:
   a. Personnel who have not completed or maintained MCI ~~Training~~, ~~-~~adult resuscitation, or pediatric resuscitation training requirements as outlined above ~~Grief Training or Emergency Response to Terrorism~~ must complete the requirement~~s~~ and provide documentation of completion to VC ~~-~~EMS for determination on reinstatement.
   b. Personnel not attending EMS Update must complete the following remediation criteria.
      1) Personnel will attend a make-up session to be scheduled by VC EMS within 2 weeks of the last regularly scheduled EMS Update session.
      2) Personnel will submit a written statement to VC EMS explaining the circumstances why this requirement could not be met.
      3) Submit a $125.00 fine~~.~~
      4) A written post-test will be administered, and must be successfully completed by achieving a minimum passing score of 85%.
      5) If the VC EMS make up session is not attended, the employer may elect to assist the person in completing the requirement.
         a) The employer shall use the materials and test supplied by VC EMS.

b) The employer will be responsible to forward the written statement and $125.00 fine to VC EMS.

c) The employer will administer the written test and will forward it to VC EMS for scoring. Minimum passing score will be 85%.

d) A make up session arranged by an employer will be approved by VC EMS before it is presented.

c. Paramedics not attending Skills Refresher must complete the following remediation criteria.

1). Paramedic will submit a written statement to VC EMS explaining the circumstances why this requirement could not be met.

2) Submit a $125.00 fine.

3) Paramedic will attend a remediation session on documentation and review of VC EMS Policy 318 to be administered by VC EMS.

4) ALS provider will confirm paramedic has read and reviewed VC EMS Policy and Procedure Sections 6 & 7.

5) ALS provider will be responsible to coordinate a Skills Refresher make-up session conducted by either an ALS Service Provider Medical Director, base hospital physician or their designee. Skills Refresher make-up will include all skills covered at the most recent Skills Refresher.

6) ALS provider will submit a written plan of action to VC EMS to include: course curriculum, date and location of Skills Refresher make-up, equipment to be used and names of instructors.

7) Completed reinstatement checklist, will be submitted to VC EMS for review and determination on reinstatement of paramedic accreditation.

PARAMEDIC SKILLS REFRESHER REINSTATEMENT CHECKLIST

Paramedic Name: _____ **CA License No.:** _____

Action	Date	Signature
1. Read and reviewed EMS Policy and Procedure Sections 6 & 7 (signed by provider).		
2. Orientation at EMS Office, Policy 318 review.		
3. Documentation Station: Administered by EMS		
4. Skills refresher verification: The skills must be signed off by a BH physician or Medical Director associated with your employer.		
a.		
b.		
c.		
d.		
e.		
f.		
g.		

After the above is completed, please forward the checklist to the EMS Agency for review and determination on reinstatement of paramedic accreditation.

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Prehospital Capnography	Policy Number
APPROVED: Administration: Steve L. Carroll, Paramedic	Date:
APPROVED: Medical Director: Daniel Shepherd, M.D.	Date:
Origination Date: Date Revised: Date Last Reviewed: Review Date:	Effective Date:

I. PURPOSE: To outline the use of capnography in the assessment and treatment of EMS patients.

II. AUTHORITY: California Health and Safety Code, §1798, §1798.2; §1798.160 and §1798.170 and California Code of Regulations, Title 22, §100145 and §100146.

III. PRINCIPLES:

1. Ventilation is an active process, which is assessed with end-tidal CO_2 measurement. End-tidal CO_2 measurement is an indication of air movement in and out of the lungs. The “normal” value of exhaled CO_2 is 35-45 mmHg.

2. Oxygenation is a passive process, which occurs by diffusion of oxygen across the alveolar membrane into the blood. The amount of oxygen available in the bloodstream is assessed with pulse oximetry.

3. Capnography provides both a specific value for the end-tidal CO_2 measurement and a continuous waveform representing the amount of CO_2 in the exhaled air. A normal capnography waveform is square, with a slight upslope to the plateau phase during exhalation. (See figures below) The height of the waveform at its peak corresponds to the $ETCO_2$.

4. Capnography is necessary to monitor ventilation. For patients requiring positive pressure ventilation, capnography is most accurate with proper mask seal (two-hand mask hold for adults during bag-mask ventilation) or with an advanced airway.

5. Capnography can also be applied via a nasal cannula device to measure end-tidal CO_2 in the spontaneously breathing patient. It is useful to monitor for hypoventilation, in patients who are

sedated either due to ingestion of substances or treatment with medication with sedative properties such as midazolam or opioids.

6. Capnography is standard of care for confirmation of advanced airway placement. Unlike simple colorimetric devices, capnography is also useful to monitor the airway position over time, for ventilation management, and for early detection of return of spontaneous circulation (ROSC) in patients in cardiac arrest.
7. Capnography is the most reliable way to immediately confirm advanced airway placement. Capnography provides an instantaneous measurement of the amount of CO_2 in the exhaled air. The absence of a waveform, and/or values < 10 mmHg, suggest advanced airway misplacement. However, patients in cardiac arrest or profound shock may also have end-tidal CO_2 values <10 despite proper airway placement.

8. Capnography provides the most reliable way to continuously monitor advanced airway position. The waveform provides a continuous assessment of ventilation over time. A normal waveform which becomes suddenly absent suggests dislodgement of the airway and requires clinical confirmation.

9. The value of exhaled CO_2 is affected by ventilation (effectiveness of CO_2 elimination), perfusion (transportation of CO_2 in the body) and metabolism (production of CO_2 via cellular metabolism). In addition to the end-tidal CO_2 value, the ventilation rate as well as the size and shape of the capnograph must be used to interpret the results.

10. Decreased perfusion will reduce the blood flow to the tissues, decreasing offload of CO_2 from the lungs. Therefore, patients in shock and patients in cardiac arrest will generally have reduced end-tidal CO_2 values.

11. A sudden increase in perfusion will cause a sudden rise in end-tidal CO_2 values and is a reliable indicator of ROSC. It is common to have an elevated $ETCO_2$ reading after ROSC. Hyperventilation should not be done to in attempt to normalize the $ETCO_2$.

12. Ventilation can have varied effect on CO_2 measurement. Generally, hyperventilation will reduce end-tidal CO_2 by increasing offload from the lungs. Hypoventilation and disorders of ventilation that reduce CO_2 elimination (e.g., COPD), will cause CO_2 to build up in the body.

13. End-tidal CO_2 can be detected using a colorimetric device ($ETCO_2$ detector). These devices provide limited information about $ETCO_2$ as compared to capnography. Colorimetric devices do not provide continuous measurement of the value of CO_2 in the exhaled air and cannot be used in ongoing monitoring. Colorimetric devices should only be used for confirmation of endotracheal tube placement if capnography is unavailable due to equipment failure.

IV. POLICY:

1. Capnography monitoring is indicated and shall be used for patients meeting any of the following indications;
    a. Patients receiving positive pressure ventilation via CPAP or BVM.
    b. Patients at risk of developing respiratory failure, hypoventilation, or apnea due to overdose, recreational use of, or EMS administration of medications or substances with sedative properties such as alcohol, benzodiazepines, or opiates.
    c. Patients in cardiac arrest.
    d. Patients who in the paramedic's judgement are at risk for developing respiratory failure, hypoventilation, or apnea.

2. Capnography may also be utilized when the paramedic determines it may aid the clinical assessment.

3. Providers will initiate capnography monitoring as soon as feasible and ensure that the capnography waveform is visible on screen throughout patient care or until no longer indicated.

4. Once initiated, ALS providers will continuously evaluate the capnography waveform and intervene accordingly..

5. Once capnography monitoring is in place providers will ensure that the waveform remains visible on the monitor screen continuously throughout the duration of care or until no longer indicated.

V. PROCEDURE:

1. Chose the appropriate CO2 measuring device;
    a. Nasal cannula device for spontaneously breathing patients with or without CPAP
    b. Sidestream or mainstream inline measuring device for patients receiving BVM ventilations via BLS or ALS airway adjunct.

2. Attach measuring device to the monitor, wait for device to initialize, then attach to patient.

3. Assess that a capnography waveform is present with each breath prior to considering measurements to be accurate.

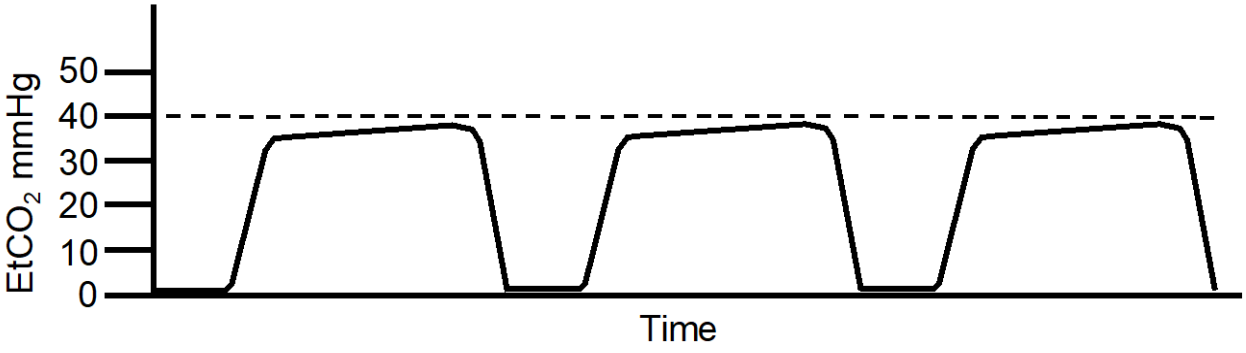
4. Assess EtCO2 value.

5. Assess for abnormalities in capnography waveform or EtCO2 value initially and for trends over time.

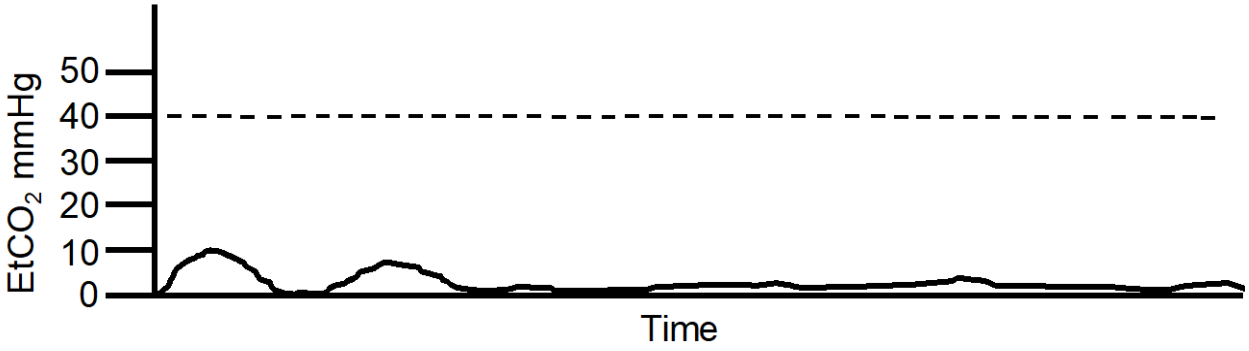
6. Endotracheal tube confirmation: per policy 710

VI. WAVEFORM INTERPRETATION

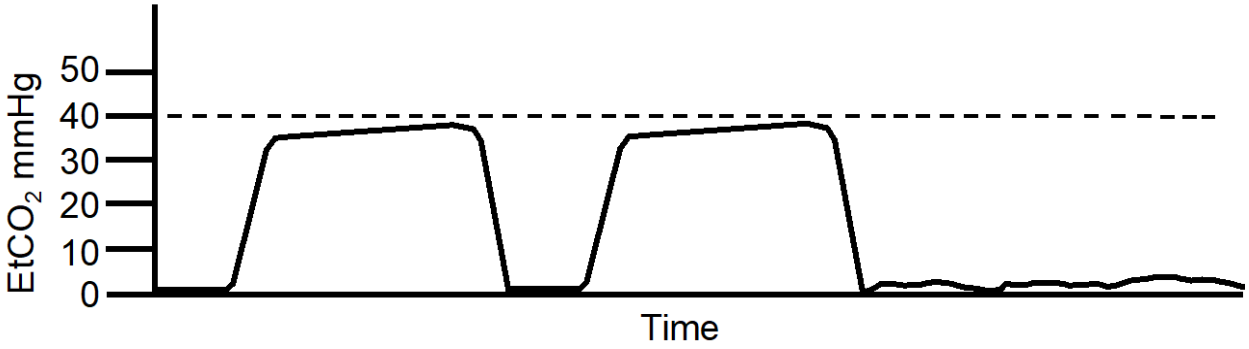
1. Normal shape of the capnograph depicted below



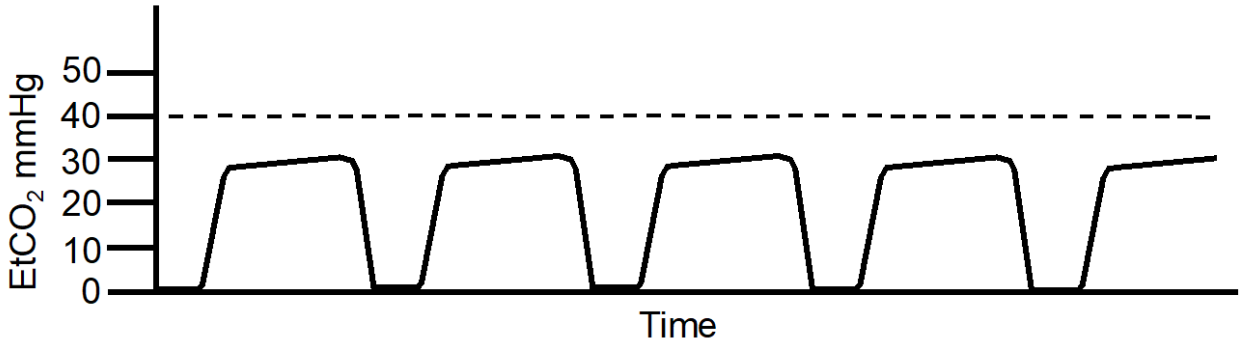
2. Esophageal Intubation (Low values and irregular waveform or flat line).



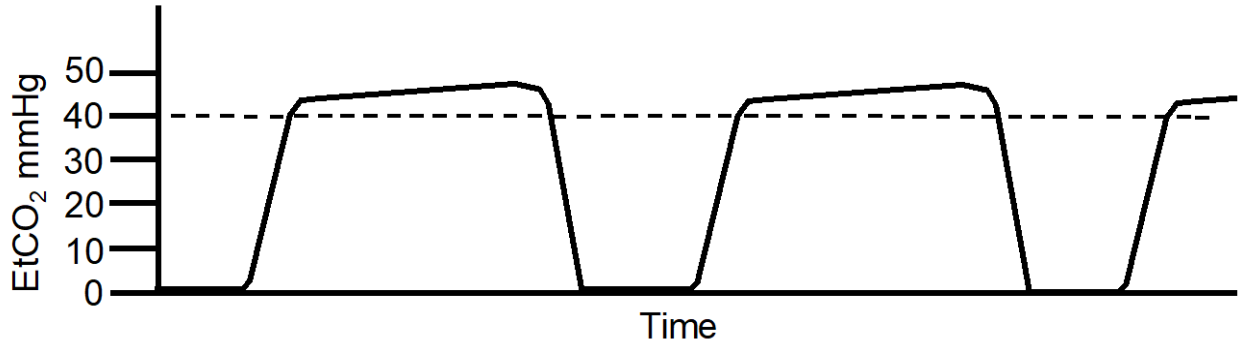
3. Obstructed or dislodged endotracheal tube (sudden loss of normal waveform followed by low irregular waveform or flat line).



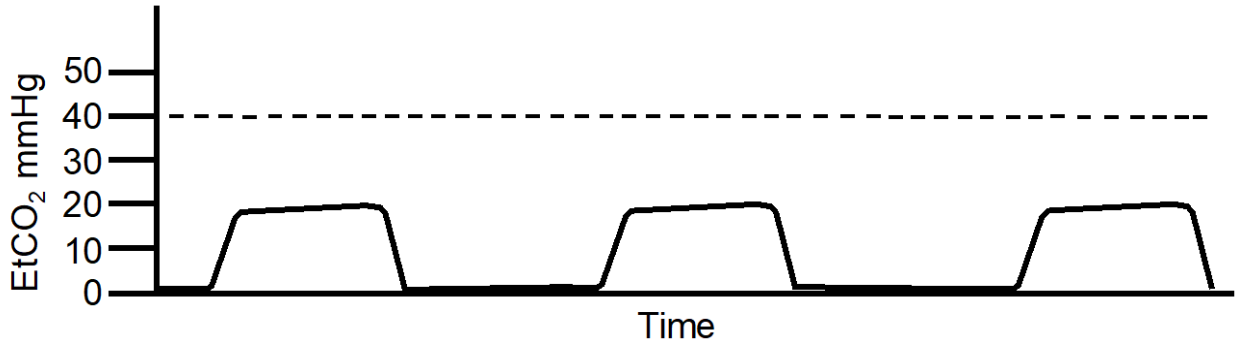
4. Hyperventilation (Normal waveform with reduced height, < 35 mmHg, and high ventilation rate)



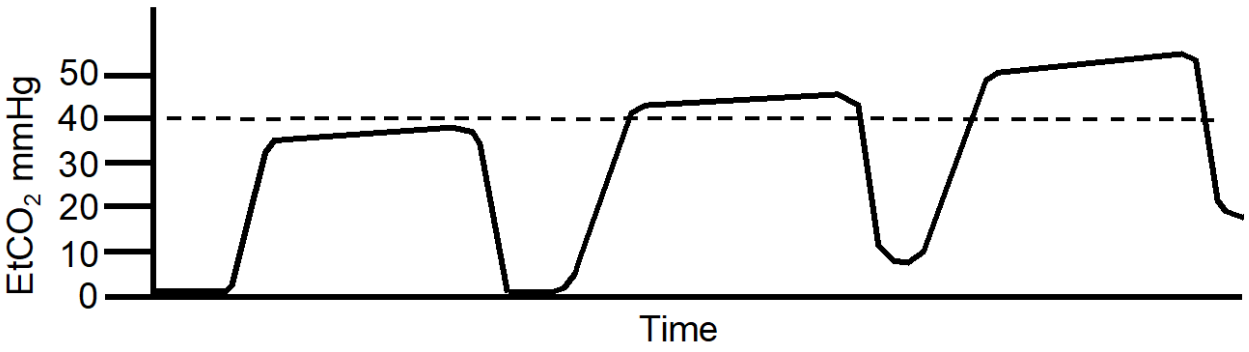
5. Hypoventilation/ Bradypnea (Normal waveform with increased height, > 45 mmHg)



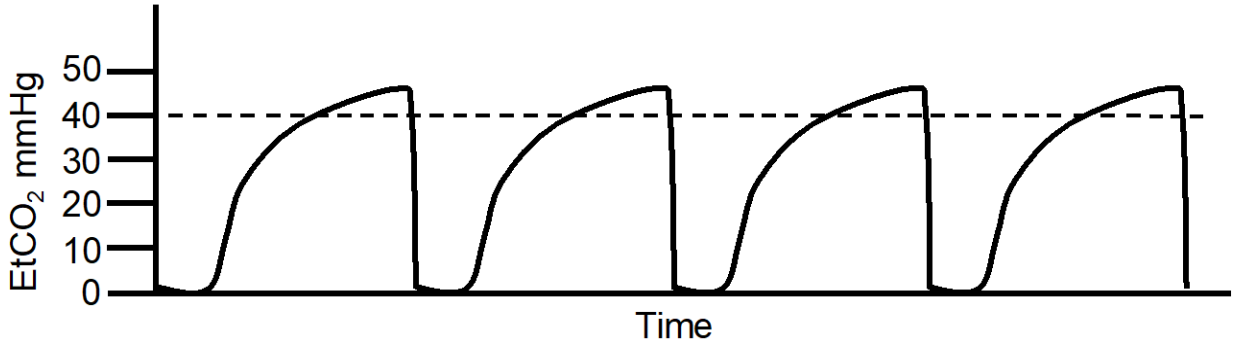
6. Hypoventilation/ Low tidal volumes (Normal waveform with reduced height, < 35 mmHg, and slow ventilation rate; A similar reduced height waveform can also be seen with shock - see progressive hypotension below).



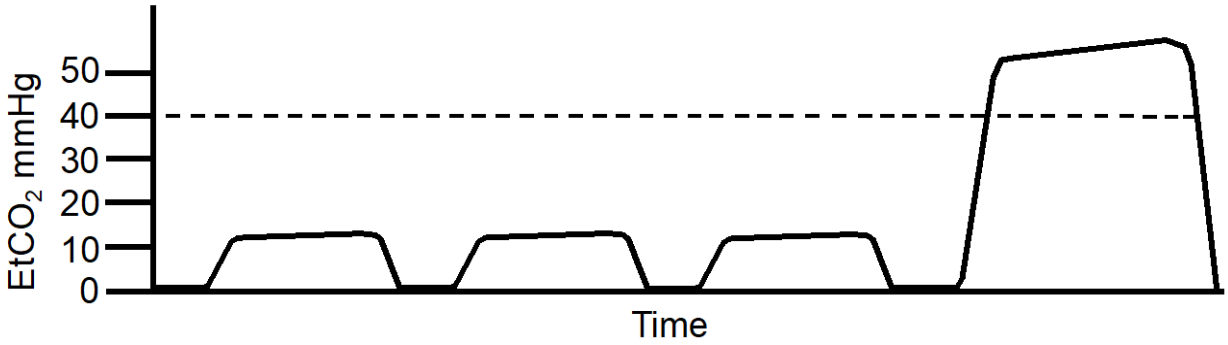
7. Air Trapping / Breath Stacking (Box wave forms that show increasing values with each successive breath)



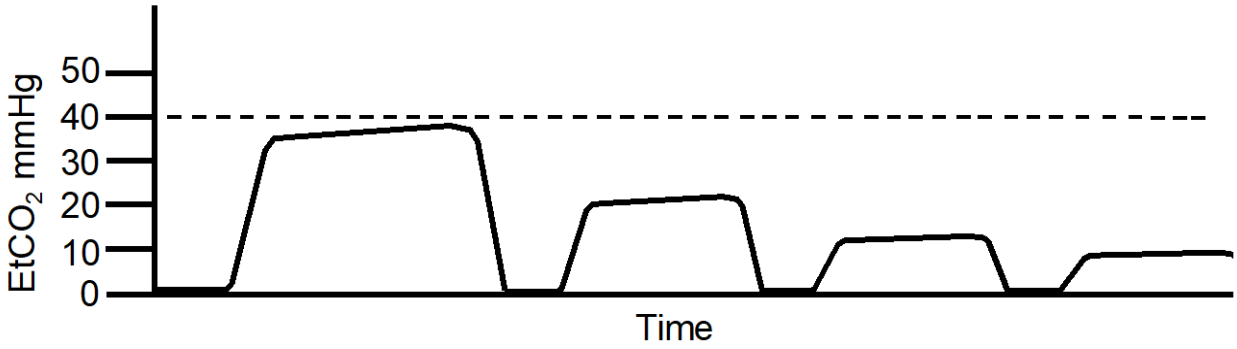
8. Bronchospasm (“Shark Fin Pattern”)



9. Return of Spontaneous Circulation (Sudden increase in values in a patient in cardiac arrest)



10. Progressive Hypotension or Re-arrest (Progressive decrease in values with each successive breath)



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: December 1, 2020
APPROVED: Medical Director	Daniel Shepherd, MD	Date: December 1, 2020
Origination Date: Date Revised: Last Reviewed: Review Date:	May 24, 1987 October 15, 2020 October 15, 2020 October 31, 2021	Effective Date: December 1, 2020

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 (see attached Equipment/Medication Waiver Request form) from the VCEMS Medical Director. Mitigation attempts should be documented in the comment section on the waiver request form, such as what vendors were contacted, etc.

	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 (1,000 mL) Child (500 mL) Infant (240 mL)	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 *(optional for non-911 BLS units)*	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 • 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				

	ALS / BLS Unit Minimum Amount	PSV/CCT Minimum Amount	FR/ALS Minimum Amount	Search and Rescue Minimum Amounts
KED or equivalent	1	1	1	1
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,5 mL, and 10 mL syringes with IM needles	4	4	4	4
Automated External Defibrillator (if not equipped with ALS monitor/defibrillator)	**1**	**1**	**1**	**1**
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
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
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

	ALS / BLS Unit Minimum Amount	PSV/CCT Minimum Amount	FR/ALS Minimum Amount	Search and Rescue Minimum Amounts
C. ALS UNIT REQUIREMENTS				
Cellular telephone	1	1	1	1
Supraglottic Airway Devices: I-Gel with passive oxygenation port Sizes 1, 1.5, 2, 2.5, 3, 4, 5	2 of each	1 of each	1 of each	1 of each
I-Gel Airway Support Straps	2	2	2	2
Arm Boards 9” 18”	 3 3	 0 0	 1 1	 0 0
Cardiac and waveform capnography monitoring equipment	1	1	1	1
CO_2 monitor Infant (<0.5 mL sidestream or <1 mL mainstream adaptor) Pediatric / Adult (6.6 mL sidestream or < 5 mL mainstream adaptor)	2 of each	2 of each	2 of each	2 of each
CO_2 Monitor Adult size EtCO2 sampling nasal cannula Pediatric size EtCO2 sampling nasal cannula	1 of each	1 of each	1 of each	1 of each
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 6.0, 6.5, 7.0, 7.5, 8.0 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, 100 ml • Normal saline solution, 500 ml • Normal saline solution, 1000 ml	 2 2 6	 1 1 2	 1 1 4	 1 1 3
IV admin set - macrodrip	4	1	4	3
IV catheter, Sizes l4, l6, l8, 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 Curved blade #2, 3, 4 Straight blade #1, 2, 3	1 set 1 each 1 each	1 set 1 each 1 each	1 set 1 each 1 each	1 set 1 each 1 each
Magill forceps Adult Pediatric	 1 1	 1 1	 1 1	 1 1
Intranasal mucosal atomization device	2	2	2	2
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
SpO2 Adhesive Sensor (Adult, Pediatric, Infant)	1 of each	1 of each	1 of each	1 of each

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	ALS / BLS Unit Minimum Amount	PSV/CCT Minimum Amount	FR/ALS Minimum Amount	Search and Rescue Minimum Amounts
~~OPTIONAL ALS EQUIPMENT (No minimums apply)~~				
Flexible intubation stylet				
OPTIONAL ALS EQUIPMENT (No minimums apply)				
Cyanide Antidote Kit				

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	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, AND		2	1	2	1
• 10% 250 ml, OR		5	2	2	2
• 50%, 25 GM/50		2	1	2	1
Epinephrine					
• Epinephrine , 1mg/ml					
• 1 mL ampule / vial, OR	2	5	5	5	5
• Adult auto-injector (0.3 mg), AND	2	4	2	2	2
Peds auto-injector (0.15 mg)	2	4	2	2	2
• Epinephrine 0.1mg/ml (1 mg/10ml preparation)		6	3	6	4
Fentanyl, 50 mcg/mL		2	2	2	2
Glucagon, 1 mg/ml		2	1	2	1
Lidocaine, 100 mg/5ml		2	2	2	2
Magnesium sulfate, 1 gm per 2 ml		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
Morphine sulfate, 10 mg/ml (Only required during a Fentanyl shortage)		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)	2	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
Ondansetron (Zofran)					
• 4 mg IV single use vial		4	4	4	4
• 4 mg oral		4	4	4	4
Sodium Bicarbonate, 1 mEq/mL		2	1	1	1
Tranexamic Acid (TXA) 1 gm/10 mL		2	1	1	1

Prehospital Services Committee
Agenda Item Request

Upon completion of this form, submit to the EMS Agency for review.

Submitted by: Robert Miner Date: 3-18-21

Representing: Ventura County Fire Department

A. Description

Title of Agenda Item: Removal of EZ-IO language in Policy 717 to allow for other similar devices

Description of Item

We are currently looking at the San IO instead of EZ-IO. Device doesn't require batteries and needles or more cost effective Placement of needles is identical as well as sizing and color coding of needles. It is compatible with EZ-IO needles. Studies seem promising.

B. Analysis

How will this enhance the Ventura County EMS System?

Will allow providers to add another IO device that is lighter and easier to carry. Could benefit in remote type situations. Never have to worry about battery failure.

Advantages

Needle placement, boring instead of drilling needle, light weight device, no batteries, pricing, less chance of going through bone. San IO reports better flow rates.

Disadvantages

Need to train all paramedics in department, stabilizer a bit larger.

Financial Impact

The initial cost to replace the EZ-IO device would be a bit. Long run savings on needles would make it more cost effective.

Who has this item been presented to or reviewed by?

I have been shown the device by Sam IO representative. I have spoke to Dr. Chase about it but he has not reviewed it yet.

Attach any proposals or supportive documentation to this form.

C. EMS Agency Review

Received by VC EMS Agency: _____

Reviewed by EMS Administrator: _____

Assigned to:

_____ Purpose: _____
_____ Purpose: _____
_____ Purpose: _____
_____ Purpose: _____

EMS Staff Review Summary

_____
_____
_____
_____
_____
_____

D. Disposition

- ☐ Add as PSC Agenda item on: _____
- ☐ Inadequate or incomplete information - return submission
- ☐ Not to be addressed at this time, resubmit in _____.
- ☐ Adopt item
- ☐ Refer to: (for review and comment)
  - ☐ CQI Subcommittee
  - ☐ EMD Subcommittee
  - ☐ Prehospital Educators
  - ☐ MCI Subcommittee
  - ☐ Other: _____

EMS Administrator Signature: _____ Date: _____

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: INTRAOSSEOUS INFUSION	Policy Number: 717
APPROVED: Administration: Steven L. Carroll, Paramedic	Date: September 1, 2017
APPROVED: Medical Director: Daniel Shepherd, MD	Date: September 1, 2017
Origination Date: September 10, 1992 Date Revised: April 13, 2017 Date Last Reviewed: April 13, 2017 Review Date: April, 2019	Effective Date: September 1, 2017

I. PURPOSE: To define the indications, procedure, and documentation for intraosseous insertion (IO) and infusion by paramedics.

II. AUTHORITY: Health and Safety Code, Sections 1797.178, 1797.214, 1797.220, 1798 and California Code of Regulations, Title 22, Sections 100145 and 100169.

III. POLICY: IO may be performed by paramedics who have successfully completed a training program approved by the EMS Medical Director.

A. Training

The EMS service provider will ensure their paramedics successfully complete an approved training program and will notify EMS when that is completed.

B. Indications

Patient with an altered level of consciousness (ALOC) or in extremis AND there is an urgent need to administer intravenous fluids or medications AND venous access is not readily available.

1. Manual IO: For patients less than 8 years of age.
2. EZ-IO device: For patients of all ages.

C. Contraindications

1. Recent fracture (within 6 weeks) of selected bone.
2. Congenital deformities of selected bone.
3. Grossly contaminated skin or infection at the insertion site.
4. Excessive adipose tissue at the insertion site with the absence of anatomical landmarks.
5. IO in same bone within previous 48 hours.
6. History of significant orthopedic procedures at insertion site (ex. prosthetic limb or joint).

IV. PROCEDURE:

A. Manual IO insertion

1. Assemble the needed equipment
    a. 16-18 gauge IO needle (1.5 inches long)
    b. Alcohol wipes
    c. Sterile gauze pads
    d. Two (2) 5 mL syringes and a primed IV line (with or without stopcock)
    e. IV fluids: 500 mL NS only
    f. Tape
    g. Splinting device
2. Choose the appropriate insertion site. Locate the landmarks approximately 2 cm below the patella and 1 cm medial, on the anteromedial flat bony surface of the proximal tibia.
3. Prepare the site utilizing aseptic technique with alcohol wipe.
4. Fill one syringe with NS
5. To insert the IO needle:
    a. Stabilize the site.
    b. Grasp the needle with obturator and insert through skin over the selected site at a 90° angle to the skin surface.
    c. Once the bone has been reached, continue to apply pressure rotating and gently pushing the needle forward.
    d. When the needle is felt to 'pop' into the bone marrow space, remove the obturator, attach the empty 5 mL syringe and attempt to aspirate bone marrow.
    e. For responsive patient infuse 2% cardiac lidocaine prior to fluid/medication administration for pain management: 0.5 mg/kg (max 40 mg) slow IVP over 60 seconds.
    f. Attach the 5 mL syringe containing NS and attempt to flush the IO needle. If successful, remove the syringe, connect the IV tubing and secure the needle.
    g. Infuse NS and/or medications.
    h. Splint and secure the IO needle.
    i. Document distal pulses and skin color to extremity utilized for IO insertion before and after procedure. Monitor for complications.

B. EZ-IO insertion
    1. Assemble the needed equipment

a. Choose appropriate size IO needle
    1) 15 mm needle sets (pink): 3-39 kg
    2) 25 mm needle sets (blue): ≥ 40 kg
    3) 45 mm needle sets (yellow): For humerus insertion or patients with excessive adipose tissue at insertion site
b. Alcohol wipes
c. Sterile gauze pads
d. 10 mL syringe
e. EZ Connect tubing
f. IV fluids
    1) 3-39 kg: 500 mL NS
    2) ≥40 kg: 1 L NS
g. Tape or approved manufacturer securing device

2. Prime EZ Connect tubing with 1 mL fluid
    a. If unresponsive use normal saline.
    b. If responsive prime with cardiac lidocaine as instructed below.
3. Locate the appropriate insertion site. The proximal tibia site is preferred. The proximal humerus is an acceptable alternative for adult patients (18 years of older).
4. For a proximal tibia IO the correct insertion site is on the anteromedial flat surface of the proximal tibia.
    a. Pediatric: 2 cm below the patella, 1 cm medial
    b. Adult: 2 cm medial to the tibial tuberosity
5. The correct insertion site for the proximal humerus is on the most prominent portion of the greater tubicle, 1-2cm above the surgical neck.
6. Prepare the site utilizing aseptic technique with alcohol wipes.
7. To insert the EZ-IO needle at the proximal tibia:
    a. Connect appropriate size needle set to the EZ-IO driver.
    b. Stabilize the site.
    c. Position the EZ-IO needle at 90° to the underlying bone and insert it into the skin. Continue to insert the needle until contacting the bone. Ensure at least one black band is visible above the skin.
    d. Once contact with the bone is made, activate the driver and advance the needle with light steady pressure until the bone has been penetrated.

e. Once properly placed, attach primed EZ Connect tubing and attempt to aspirate bone marrow.

f. For responsive patients, slow infusion of 2% cardiac lidocaine **over 60 seconds** prior to fluid/medication administration for pain management.

1) 3-39 kg: 0.5 mg/kg

2) ≥40 kg: 40 mg

3) Adjust for EZ-IO connector tubing

g. Flush with 10 mL NS to assess patency. If successful, begin to infuse fluid.

h. Splint the IO needle with tape or an approved manufacturer stabilization device.

i. Document time of insertion on included arm band and place on patient's wrist.

j. Document distal pulses and skin color before and after procedure and monitor for complications.

k. Manual insertion can be attempted in the event of driver failure.

8. To insert the EZ-IO at the proximal humerus:

a. Connect the yellow (45mm) needle to the EZ-IO driver.

b. Locate and stabilize the site.

c. Point the needle set tip at a 45-degree angle to the anterior plane and posteromedial. Insert the needle into the skin until you contact bone. Ensure at least one black band (5mm) is visible above the skin.

d. Activate the driver and advance the needle with light, steady pressure until the bone has been penetrated.

e. Once properly placed, attach primed EZ Connect tubing and attempt to aspirate bone marrow.

f. For responsive patients, slow infusion of 2% cardiac lidocaine over 60 seconds prior to fluid/medication administration for pain management.

1) 3 – 39 kg: 0.5 mg/kg

2) ≥40 kg: 40 mg

3) Adjust for EZ-IO connector tubing

g. Flush with 10 ml NS to assess patency. If successful, begin to infuse fluid.

h. Splint the IO needle with tape or an approved manufacturer stabilization device. Maintain adduction of the arm and avoid extension of the shoulder.

i. Document time of insertion on included arm band and place on patient's wrist.

j. Document distal pulses and skin color before and after procedure and monitor for complications.

C. IO Fluid Administration

1. Active pushing of fluids may be more successful than gravity infusion. Use of a pressure to assist with fluid administration is recommended, and usually needed, but not required.
2. Fluid administration on smaller patients should be given via syringe boluses to control/monitor amount infused. Close observation of the flow rate and total amount of fluid infused is required.
3. If infiltration occurs or the IO needle is accidentally removed, stop the infusion, leave the connector tubing attached.

D. Documentation

1. Document any attempt(s) at establishing a peripheral IV prior to attempting/placing an IO infusion in the Ventura County Electronic Patient Care Report (VCePCR) system.
2. The site and number of attempts, success, complications, and any applicable comments related to attempting an IO infusion shall be documented on the VCePCR. Any medications administered shall also be documented in the appropriate manner on the VCePCR.

E. Quality Assurance

Each use of an IO infusion will be reviewed by EMS. Data related to IO attempts will be collected and analyzed directly from the VCePCR system.

Appendix B

VENTURA COUNTY
EMERGENCY MEDICAL SERVICES AGENCY

Skills Assessment

Name_____Agency_____Date_____

- ☐ Demonstrates, proper body substance isolation
- ☐ States indication for EZ-IO use
- ☐ States contraindication for EZ-IO use
- ☐ Correctly locates target site
- ☐ Cleans site according to protocol
- ☐ Considers 2% cardiac lidocaine for patients responsive to pain
- ☐ Correctly assembles EZ-IO Driver and Needle Set
- ☐ Stabilizes the insertion site, inserts EZ-IO Needle Set, removes stylet and confirms placement
- ☐ Demonstrates safe stylet disposal
- ☐ Connects primed extension set and flushes the catheter
- ☐ Connects appropriate fluid with pressure infuser and adjusts flow as instructed
- ☐ Demonstrates appropriate securing of the EZ-IO
- ☐ States requirements for VC EMS documentation

Instructor Signature: _____**Date**_____

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Out of County Paramedic Internship Approval Process	Policy Number 335
APPROVED: Administrator: Steven L. Carroll, EMT-P	Date: December 1, 2017
APPROVED: Medical Director: Daniel Shepherd, M.D.	Date: December 1, 2017
Origination Date: October 13, 2005 Date Revised: April 19, 2013 Date Last Reviewed: October 12, 2017 Next Review Date: October 31, 2020	Effective Date: December 1, 2017

I. PURPOSE: To establish a mechanism for notifying the EMS Agency of out of county paramedic student placement within the local EMS system and ensure appropriate medical control and oversight of Paramedic Interns prior to practicing within the local jurisdiction.

II. AUTHORITY: Health and Safety Code Sections 1797.107, 1797.172, 1797.173, 1798, and California Code of Regulation, Title 22, Sections 100147 and 100153.

III. DEFINITIONS: This policy defines the standards for field interns, whose paramedic training program is located outside the jurisdiction of the paramedic training program approving authority, and who wish to complete all or a portion of their field internship requirements with an advanced life support provider in Ventura County.

A paramedic intern is a person trained by a VCEMS approved training program who while under the supervision of an approved preceptor may provide ALS care as directed by local EMS medical control. The intern shall be supervised, trained, counseled and evaluated by the designated preceptor and his/her affiliated training program.

IV. POLICY: The following requirements must be completed prior to internship commencement.

A. Paramedic Training Program Responsibilities:

1. Letter requesting approval for out of county paramedic student placement within the local EMS system
2. Copy of Paramedic Training Program's CAAHEP accreditation.
3. Evidence of a contract to provide field training between the ALS training program and the ALS provider agency where the intern will be training.
4. Copies of forms used to document student's progress, continuum of care and the training program's collaboration with the field preceptor.

5. Confirmation that the intern successfully completed didactic and clinical training at the same institution that is requesting internship placement. This requirement may be reduced at the discretion of the VCEMS Medical Director.

B. Paramedic Intern Responsibilities:
   1. Completed VCEMS application
   2. Copy of intern's valid government issued photo identification.
   3. Copy of intern's professional rescuer level CPR card.
   4. Completion of a California Department of Justice (CA DOJ Live Scan) background check through VCEMS. A copy of the Request for Live Scan Services form must be submitted to VCEMS at time of application.
   5. Letter from training program confirming intern's good standing and current affiliation with a VCEMS approved training program including dates of hospital clinical completion and contact name and phone number for the instructor responsible for the intern.
   6. Letter from training program confirming that the intern has performed five (5) successful live patient endotracheal intubations during primary ALS training.
   7. Upon completion of above requirements, intern shall contact VCEMS to schedule appointment to complete internship process.

C. ALS Provider Responsibilities:
   1 Notify VCEMS of intention to provide field internship for a specific intern.
   2. Provider agency shall submit a completed Appendix A to VCEMS for each intern who is placed for internship prior to the start date.
   3. Ensure that the student has been oriented to the Ventura County EMS System including local policies, procedures and treatment protocols.

D. Paramedic Intern Photo Identification:
   1. Upon VCEMS verification of all above requirements including background check results, intern will be issued a Paramedic Intern photo identification badge that must be worn visible at all times while providing pre-hospital care in Ventura County. Internship shall not start until the Paramedic Intern photo identification badge is issued.

E. In order to ensure an adequate number of internship placements for in county paramedic students, no internships involving out of county students will be permitted from February 1st through May 31st of each year. Placement for internships for out of county interns must be initiated prior to November 1st in order to allow adequate time for completion before January 31st.

ATTACHMENT A

Out of County Paramedic Internship Authorization
(To be completed by ALS provider agency and submitted to VCEMS)

Intern Name	
Start date of internship	
Agency sponsoring intern	
Preceptor name	
Training Institute	

Information below is to be completed by the EMS Agency

Authorization approved:	Date
Authorization is not approved because:	
ALS Provider notified on:	Date
Training Program notified on:	Date
EMS Representative	Signature

AVCDS LOGIN

LOGIN	PASSWORD

The password issued is a default password. You must change it upon successful login.

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Notification Of Personnel Changes-Provider		Policy Number 342
APPROVED: Administration:	Steven L. Carroll, EMT-P	Date: June 1, 2017
APPROVED: Medical Director:	Daniel Shepherd, MD	Date: June 1, 2017
Origination Date: Date Revised: Last Review: Review Date:	May 15, 1987 May 11, 2017 May 11, 2017 May 2020	Effective Date: June 1, 2017

I. PURPOSE

To define a procedure to assure that the Ventura County Emergency Services Agency is notified of hiring or termination of employment of an EMT or paramedic and MICN.

II. AUTHORITY:

Health and Safety Code, Chapter 1, Article 1.

III. POLICY

Each provider of prehospital EMS services shall notify, Emergency Medical Services Administrative Office, in writing or by e-mail, of hiring or termination of employment of an EMT, paramedic or MICN within 5 days of taking action.

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: MEDICAL CONTROL AT THE SCENE: EMS PREHOSPITAL PERSONNEL	Policy Number: 601
APPROVED: Administration: Steven L. Carroll, EMT-P	Date: December 1, 2017
APPROVED: Medical Director Daniel Shepherd, MD	Date: December 1, 2017
Origination Date: October 1, 1993 Date Revised: September 14, 2017 Date Last Reviewed: September 14, 2017 Review Date: September, 2020	Effective Date: December 1, 2017

I. PURPOSE: To establish guidelines for medical control at the scene of a medical emergency.

II. AUTHORITY: California Health and Safety Code, Sections 1797.220, and 1798.6

II. POLICY: Authority for patient health care management in an emergency shall be vested in that licensed and/or certified health care professional, which may include any paramedic or other prehospital emergency medical personnel, at the scene of an emergency who is most medically qualified specific to the provision of rendering emergency medical care. If no licensed or certified health care professional is available, the authority shall be vested in the most appropriate medically qualified representative of public safety agencies who may have responded to the scene of the emergency. (Health and Safety Code, Section 1796(a))

III. PROCEDURE: The following shall be utilized to determine authority for medical control on scene:

A. Prehospital care personnel, certified and/or accredited in Ventura County, have authority for health care management in the following ascending order:

1. EMT
3. EMT-ALS Assist
4. Paramedic, operating in accordance with established Ventura County EMS Agency policies and procedures, under medical control from a BH, or who is providing care under the direct order of a physician on scene.
   a. This does not allow the paramedic to receive orders from medical personnel at the scene who are not MD's or DO's. This order is determined by training hours, scope of practice, and available supplies and equipment.

6. The first paramedic on scene assumes initial medical control of the patient. Medical Control of the patient and the best course of patient care will be determined by paramedics on scene, in conjunction with the base hospital MICN/base physician (when indicated). In all cases, transfer of medical control and/or patient care will be done in a coordinated fashion.

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Hospice Patient Care	Policy Number: 629
APPROVED: Administration: Steven L. Carroll, Paramedic	Date: December 1, 2019
APPROVED: Medical Director: Daniel Shepherd, M.D.	Date: December 1, 2019
Origination Date: 10/10/2019 Date Revised: Date Last Reviewed: Next Review Date: 10/31/2020	Effective Date: December 1, 2019

I. PURPOSE: To define the management of patients enrolled in hospice.

II. AUTHORITY: California Health and Safety Code, §1798, §1798.2; §1798.160 and §1798.170; California Code of Regulations, Title 22, §100145 and §100146

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III. POLICY: A. EMS personnel shall evaluate and treat patients enrolled in hospice programs with the goal of enabling them to remain at home and continue their desired treatment plan according to the following procedures.

IV. PROCEDURE:

A. Patient Management:

1. The responding EMS personnel will evaluate the presenting complaint, confirm that the patient is on hospice and identify the current hospice provider.
2. A phone call shall be established between EMS and the on call hospice provider to communicate on scene findings.
3. EMS and Hospice communication will be centered around the following goals;
   a. Identifying a need for the hospice provider to respond to the scene
   b. Identifying EMS interventions or actions which may facilitate patient comfort and prevent transport.
   c. Identifying hospice resources or interventions which may facilitate patient comfort and prevent transport.

d. Identifying the unique cases where transport is necessary for hospital treatment or diagnostics which are required in order to best continue in home treatment. In such cases the hospice provider should be able to confirm that hospice enrollment will not be cancelled as a result of transport to ED.

B. Resources / response:

1. Most often transport can be avoided and comfort optimized utilizing only the initial paramedic response along with follow up from the hospice agency.
2. EMS providers should consult with or request a response from one of the following:
    a. Online medical direction from base hospital physician
    b. Community paramedic response
    c. EMS supervisor response

Neonatal Resuscitation

BLS Procedures

Newly Born Infant

Provide warmth, dry briskly and discard wet linen
- Suction ONLY if secretions, including meconium, cause airway obstruction

Assess while drying infant
1. Full term?
2. Crying or breathing?
3. Good muscle tone?

If "YES" to all three
- Place skin-to-skin with mother
- Cover both with dry linen
- Observe breathing, activity, color

If "NO" to any of three
- Stimulate briefly (<15 seconds)
  - Flick soles of infant's feet
  - Briskly rub infant's back
- Provide warm/dry covering
- Continue to assess

Infant up to 48 hours old

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

Provide warm/dry covering
Continue to assess

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

Assess Circulation
- If HR between 60 and 100 bpm
  - PPV with BVM and ROOM AIR at 40-60 breaths per minute for 30 seconds
    - Continue PPV, reassessing every 30 seconds, until infant maintains HR >100 bpm
- If HR < 60 bpm
  - CPR at 3:1 ratio for 30 seconds
    - 90/min compressions
    - 30/min ventilations
    - Continue CPR, reassessing every 60 seconds, until HR > 60 bpm
  - If no improvement after 90 seconds of ROOM AIR CPR, add supplemental O_2 until HR > 100

ALS Prior to Base Hospital Contact

Establish IO line only in presence of CPR

Asystole OR Persistent Bradycardia < 60 bpm

- **Epinephrine 0.1mg/mL**
  - IO – 0.01mg/kg (0.1mL/kg) q 3-5 min
- **Normal Saline**
  - IO bolus – 10mL/kg

PEA

- **Epinephrine 0.1mg/mL**
  - IO – 0.01mg/kg (0.1mL/kg) q 3-5 min
- **Normal Saline**
  - IO bolus – 10mL/kg

Base Hospital Orders only

Consult with ED Physician for further treatment measures

Additional Information:
- Resuscitation efforts may be withheld for extremely preterm infants (< 21 weeks or < 9 inches long). Sensitivity to the desires of the parent(s) may be considered. If uncertain as to gestational age, begin resuscitation.
- A rising heart rate is the best indicator of adequate PPV

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VCEMS Medical Director