

To: ALL VENTURA COUNTY EMS POLICY MANUAL HOLDERS

Change No.: 2

DATE: December 1, 2012

Policy Status	Policy #	Title/New Title	Notes
Replace		Table of Contents	
Replace	105	PSC Operating Guidelines	
Review Only	106	Development of Proposed Policies/Procedures	
Replace	112	Ambulance Rates	
Replace	410	ALS Base Hospital Approval Process	
Replace	420	Receiving Hospital Standards	
Review Only	440	Code STEMI Interfacility Transfer	
New	450	Acute Stroke Center (ASC) Standards	
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Replace	500	Ventura County EMS Services Provider Agencies	
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Replace	705.00	General Patient Guidelines	
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Review Only	705.11	Crush Injury/Syndrome	
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Replace	705.14	Hypovolemic/Septic Shock	
Replace	705.18	Overdose/Poisoning	
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Policy Status	Policy #	Title/New Title	Notes
Review Only	705.21	Shortness of Breath – Pulmonary Edema	
Review only	705.22	Shortness of Breath – Wheezes/Other	
Replace	705.23	Supraventricular Tachycardia	
Replace	705.24	Symptomatic Bradycardia	
New	705.26	Suspected Stroke	
New	705.27	Sepsis Alert	
Replace	710	Airway Management	
Replace	717	Intraosseous Infusion	
Replace	726	12 Lead ECG	
Review Only	731	Tourniquet Use	
Replace	732	Restraints	
Replace	905	Required Frequencies	
Replace	1000	Documentation	
Review Only	1001	Paramedic/BH Communication Record	
Replace	1135	Paramedic Program Approval Process	
Review Only	1204	EMS Aircraft Classification	
Replace	1400	Trauma System General Provisions	
Replace	1404	Guidelines for IFT of a Trauma Patient to a Trauma Hospital	

Policy No.	Title	Effect. Date	Origin. Date	Revised Date	Last Review	Review Date
I. Administrative Policies						
100	Emergency Medical Service, Local Agency (9/13/84)	6/15/1998	7/1/1980	10/1/2003	11/12/2009	1/31/2013
105	Prehospital Services Committee Operating Guidelines	12/1/2012	3/1/1999	8/9/2012	8/9/2012	8/30/2014
106	Development of Proposed Policies/Procedures; Amendments to Existing Policies	12/1/2009	3/7/1990	6/11/2009	7/12/2012	6/30/2015
110	County Ord. No. 4099 Ambulance Business License Code	12/1/2007	7/10/1984	9/13/2007	6/9/2011	6/30/2014
111	Ambulance Company Licensing Procedure	12/1/2006	9/26/1986	6/8/2006	6/9/2011	6/30/2014
112	Ambulance Rates	7/1/2012	1984	07-001-12	7/1/2012	7/1/2013
120	Prehospital Emergency Medical Care Quality Assurance Program	6/1/2009	1/1/1996	12/11/2009	12/11/2008	12/31/2012
124	Hospital Emergency Services Reduction Impact Assessment	12/1/2004	6/1/1999	5/13/2004	11/12/2009	4/30/2013
131	Multi-Casualty Incident Response	3/13/2008	9/1/1991	3/13/2008		3/31/2010
150	Unusual Occurrence Reportable Event/Sentinel Event	3/11/2010	6/1/1999	3/10/2010	3/10/2010	6/30/2013
151	Medication Error Reporting	6/1/2011	11/1/2003	4/10/2008	12/11/2010	12/31/2013
II. Legislation/Regulations						
210	Child, Dependent Adult, or Elder Abuse Reporting	11/1/2003	6/14/1984	9/11/2003	6/1/2011	6/30/2014
III. Personnel Policies						
300	Scope of Practice Emergency Medical Technician	12/1/2010	8/1/1988	10/14/2010	10/14/2010	10/31/2013
301	Emergency Medical Technician I Certification - Ventura County	12/1/2010	6/1/1984	10/14/2010	10/14/2010	10/31/2013
302	Emergency Medical Technician I Recertification - Ventura County	12/1/2010	6/1/1984	10/14/2010	10/14/2010	10/31/2013
304	Emergency Medical Technician I Completion by Challenge	12/1/2010	6/1/1984	10/14/2010	10/14/2010	10/31/2013
306	EMT-I Requirements to Staff and ALS Unit	6/1/2011	6/1/1997	8/10/2006	2/14/2011	2/28/2014
310	Paramedic Scope of Practice	12/1/2010	5/1/1984	10/14/2010	10/14/2010	10/31/2013
315	Emergency Medical Technician-Paramedic Accreditation To Practice	12/1/2010	1/1/1990	10/14/2010	10/14/2010	10/31/2013
318	Paramedic Training and Continuing Education Standards to Staff an ALS Response Unit	12/1/2010	6/1/1997	10/14/2010	10/14/2010	10/31/2013
319	Paramedic Preceptor	12/1/2008	6/1/1997	7/10/2008	6/9/2011	6/30/2014
321	Mobile Intensive Care Nurse: Authorization Criteria	12/1/2008	4/1/1983	8/14/2008	6/9/2011	6/30/2014
322	Mobile Intensive Care Nurse: Reauthorization Requirements	12/1/2008	4/1/1983	8/14/2008	6/9/2011	6/30/2014
323	Mobile Intensive Care Nurse: Authorization Challenge	6/1/2008	4/1/1983	11/8/2007	6/11/2009	11/30/2012
324	Mobile Intensive Care Nurse: Authorization Reactivation	12/1/2008	12/1/1991	8/14/2008	6/9/2011	6/30/2014
330	EMT/Paramedic/MICN Decertification and Discipline	6/1/2009	4/9/1985	12/12/2008	4/9/2012	4/30/2014
332	EMS Personnel Background Check Requirements	6/1/2011	7/31/1990	5/13/2004	12/9/2010	12/31/2013
333	Denial of Prehospital Care Certification or Accreditation	12/1/2010	4/1/1993	10/14/2010	10/14/2010	10/31/2013
334	Prehospital Personnel Mandatory Training Requirements	6/1/2009	9/14/2000	12/11/2008	12/11/2008	12/31/2012
335	Out of County Paramedic Internship Approval Process	6/1/2011	10/13/2005	10/9/2008	12/9/2010	12/31/2013
342	Notification of Personnel Changes - Provider	12/1/2007	5/15/1987	9/13/2007	6/11/2009	9/30/2012
350	Prehospital Care Coordinator Job Duties	12/1/2010	1/0/1900	6/10/2010	6/10/2010	6/30/2013
351	EMS Update Procedure	12/1/2009	2/9/2005	9/10/2009	9/10/2009	9/30/2012
IV. Emergency Medical Services - Facilities						
400	Ventura County Emergency Departments	12/1/2006	10/1/1984	8/10/2006	8/11/2011	10/31/2014
402	Patient Diversion/Emergency Department Closures	10/1/2003	12/1/1990	3/31/2003	12/11/2008	11/30/2012
410	ALS Base Hospital Approval Process	12/1/2012	8/22/1986	7/12/2012	7/12/2012	7/31/2015
420	Receiving Hospital Standards	12/1/2012	4/1/1984	7/12/2012	7/12/2012	7/31/2015
430	STEMI Receiving Center (SRC) Standards	12/1/2009	7/28/2006	6/11/2009	6/11/2009	6/30/2012
440	Code STEMI Interfacility Transfer	12/1/2009	7/1/2007	6/11/2009	7/12/2012	9/30/2014
450	Stroke Center Standards	12/1/2012	10/11/2012			10/31/2013
451	Stroke System Triage	12-001-12				10/31/2013

Policy No.	Title	Effect. Date	Origin. Date	Revised Date	Last Review	Review Date
V. Emergency Medical Services - Field Providers						
500	Basic/Advanced Life Support Ventura County Ambulance Providers	12/1/2012	7/1/1987	10/11/2012	10/11/2012	10/31/2015
501	Advanced Life Support Service Provider Criteria	12/1/2005	4/1/1984	9/8/2005	11/12/2009	4/30/2013
502	Advanced Life Support Service Provider Approval Process	6/1/2008	5/1/1984	1/10/2008	11/12/2009	1/31/2013
504	BLS And ALS Unit Equipment and Supplies	6/1/2012	5/24/1987	4/12/2012	4/12/2012	10/31/2014
506	Advanced Life Support (ALS) Support Vehicles	6/1/2008	10/1/1995	11/8/2007	8/13/2009	11/30/2012
507	Critical Care Transports	12/1/2011	10/31/1995	10/13/2011	10/13/2011	11/1/2014
508	First Responder Advanced Life Support Units	12/1/2005	6/1/1997	10/13/2005	11/12/2009	4/30/2013
VI. General Emergency Medical Services - Policies						
600	Control At The Scene of An Emergency	10/31/1999	1/31/1995	9/30/1999		9/30/2001
601	Medical Control At The Scene: EMS Prehospital Personnel	6/1/2000	10/1/1993	10/31/1999		6/1/2002
603	Against Medical Advice/Release From Liability Form	10/31/1995	6/3/1986			10/31/1997
604	Transport and Destination Guidelines	12/1/2010	6/3/1986	6/10/2010	6/10/2010	6/30/2013
605	Interfacility Transfer of Patients	12/1/2011	7/26/1991	8/11/2011	8/11/2011	10/31/2014
606	Withholding or Termination of Resuscitation and Determination of Death	12/1/2012	6/1/1984	7/12/2012	7/12/2012	7/12/2014
607	Hazardous Material Exposure: Prehospital Protocol	6/10/2010	2/12/1987	3/11/2010	3/11/2010	3/31/2013
612	Notification of Exposure to a Communicable Disease	4/27/1990	4/27/1990	4/14/2011	4/14/2011	6/30/2014
613	Do Not Resuscitate (DNR)	6/1/2011	10/1/1993	2/10/2011	2/10/2011	2/28/2014
614	Spinal Immobilization	6/1/2009	10/31/1992	12/11/2008	12/11/2008	6/30/2011
615	Organ Donor Information Search	6/1/2004	10/1/1993	3/11/2004	11/12/2009	1/31/2013
618	Unaccompanied Minors	10/31/1995	5/1/1995			10/31/1997
619	Safely Surrendered Babies	6/1/2008	2/13/2003	11/8/2007	8/13/2009	11/30/2012
620	EMT-I Administration of Oral Glucose	6/1/2006	11/18/1982	3/9/2006		10/31/2011
622	ICE - In Case of Emergency for Cell Phones	12/1/2008	5/11/2006	7/10/2008	6/9/2011	6/30/2014
624	Patient Medications	12/1/2008	12/6/2006		2/9/2012	10/31/2014
625	POLST	1/8/2009	1/7/2009		2/10/2011	1/31/2014
626	Chempack	6/1/2010	2/2/2010		11/12/2009	6/30/2013
627	Fireline Medic	12/1/2012	10/5/2011	10/11/2012	10/11/2012	10/31/2014
VII. Advanced Life Support Medical Control and Treatment Policies						
701	Medical Control: Base Hospital Medical Director	6/1/2008	8/1/1988	1/10/2008	11/12/2009	1/31/2013
703	Medical Control At Scene, Private Physician	6/1/2008	1/31/1985	3/13/2008	11/12/2009	8/31/2013
704	Guidelines For Base Hospital Contact	12/1/2010	10/1/1984	10/14/2010	10/14/2010	10/31/2013
705	00 - General Patient Guidelines	12/1/2012	8/1/2010	10/11/2012	10/11/2012	12/1/2014
705	01 - Trauma Treatment Guidelines	12/1/2012	8/1/2010	10/11/2012	10/11/2012	12/1/2014
705	02 - Allergic/Adverse Reaction and Anaphylaxis	6/1/2011	8/1/2010	4/14/2011	8/9/2012	8/31/2014
705	03 - Altered Neurologic Function	12/1/2012		10/11/2012	10/11/2012	12/1/2014
705	04 - Behavioral Emergencies	12/1/2010		8/1/2010	8/9/2012	8/31/2014
705	05 - Bites and Stings	12/1/2010	8/1/2010	8/1/2010	8/9/2012	8/31/2014
705	06 - Burns	12/1/2010		8/1/2010	7/12/2012	7/31/2014
705	07 - Cardiac Arrest - Asystole/Pulseless/PEA	12/1/2012	8/1/2010	7/12/2012	7/12/2012	7/31/2012
705	08 - Cardiac Arrest - VF/VT	12/1/2012	8/1/2010	10/11/2012	10/11/2012	12/31/2014
705	09 - Chest Pain - Acute Coronary Syndrome	6/1/2012	8/1/2010	4/12/2012	4/12/2012	6/30/2014
705	10 - Childbirth	12/1/2011		8/31/2013	8/31/2011	12/31/2013
705	11 - Crush Injury/Syndrome	12/1/2010		8/1/2010	8/9/2012	7/31/2014
705	12 - Heat Emergencies	12/1/2012		10/11/2012	10/11/2012	10/31/2014
705	13 - Hypothermia	12/1/2012		8/9/2012	8/9/2012	8/31/2014

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705	14 - Hypovolemic/Septic Shock	12/1/2012		10/11/2012	10/11/2012	10/31/2014
705	15 - Nausea/Vomiting	12/1/2011	8/1/2010	10/13/2011	10/13/2011	12/1/2013
705	16 - Neonatal Resuscitation	6/1/2011	8/1/2010	4/14/2011	4/14/2011	6/1/2012
705	17 - Nerve Agent Poisoning	12/1/2011		11/10/2011	11/10/2011	12/31/2013
705	18 - Overdose/Poisoning	12/1/2012		8/12/2012	8/12/2012	8/31/2014
705	19 - Pain Control	12/1/2012		8/9/2012	8/9/2012	12/1/2014
705	20 - Seizures	12/1/2010		8/1/2010	8/9/2012	8/31/2014
705	21 - Shortness of Breath - Pulmonary Edema	12/1/2010	8/1/2010	8/1/2010	8/9/2012	7/31/2014
705	22 - Shortness of Breath - Wheezes/Other	12/1/2010	8/1/2010	8/1/2010	8/9/2012	8/31/2014
705	23 - Supraventricular Tachycardia	12/1/2012		8/9/2012	8/9/2012	7/31/2014
705	24 - Symptomatic Bradycardia	12/1/2010		8/1/2010	8/9/2012	8/31/2014
705	25 - Ventricular Tachycardia, Sustained Not In Arrest	12/1/2011		10/13/2011	10/13/2011	12/1/2013
705	26 - Suspected Stroke	12/1/2012	12/1/2012			12/31/2013
705	27- Sepsis Alert	12/1/2012	12/1/2012			12/31/2013
708	Patient Transfer From One Prehospital Team To Another	6/1/2009	10/31/1992	12/11/2008	12/11/2008	6/30/2011
710	Airway Management	12/1/2010	6/1/1986	10/14/2010	10/14/2010	10/31/2012
715	Needle Thoracostomy	12/1/2010	11/1/1990	10/14/2010	10-14-10\	10/31/2012
716	Use of Pre-existing Vascular Access Devices	12/1/2011	3/2/1992	8/11/2011	8/11/2011	12/1/2013
717	Pediatric Intraosseous Infusion	12/1/2012	9/10/1992	7/12/2012	7/12/2012	7/31/2014
720	Guidelines For Limited Base Hospital Contact	6/1/2011	6/15/1998	12/11/2008	12/11/2008	2/28/2013
722	Interfacility Transport of Patient with Patient with IV Heparin	1/10/2008	6/15/1998	1/10/2008	2/9/2012	1/31/2014
723	Continuous Positive Airway Pressure (CPAP)	12/1/2011	12/1/2004	8/11/2013	8/11/2013	9/30/2013
724	Apparent Life-Threatening Event (ALTE)	6/1/2005	3/1/2005		11/12/2009	4/30/2013
725	Patients After TASER Use	12/1/2011	8/10/2006	8/13/2011	8/13/2011	12/1/2014
726	12-Lead ECG	12/1/2012	8/10/2006	10/11/2012	10/11/2012	12/31/2014
727	Transcutaneous Cardiac Pacing	12/1/2008	12/1/2008	12/11/2008	12/11/2010	12/31/2013
728	King Airway	8/14/2008	4/10/2008			6/30/2010
729	Trauma Treatment Protocol		6/5/2008			
731	Tourniquet Use	12/1/2010	8/10/2010	8/10/2010	8/9/2012	8/31/2014
732	Use of Restraint	12/1/2012	6/30/2011	7/12/2012	7/12/2012	7/31/2014
VIII.	Emergency Medical Technician - Defibrillation Policies					
802	Emergency Medical Technician-I Defibrillation (EMT-ID) Medical Director	11/30/2002	11/1/1988	6/30/2002	4/14/2011	4/30/2014
803	EMT Automatic External Defibrillation (AED) Service Provider Program Standards	6/1/2006	11/1/1998	3/1/2006	4/14/2011	4/30/2014
805	Emergency Medical Technician Defibrillation (EMT-ID) Medical Cardiac Arrest	6/1/2006	10/1/1993	4/24/2006	4/14/2011	4/30/2014
808	Emergency Medical Technician Defibrillation Integration with Public AED Operation	11/30/2002	5/9/2002	8/31/2002		11/30/2004
IX.	Emergency Medical Services Communications					
905	Ambulance Provider Response Units: Required Frequencies	12/1/2012	7/1/1999	8/9/2012	8/9/2012	8/31/2015
910	Emergency Medical Dispatch System Guidelines	12/1/2005	10/31/1994	9/8/2005		5/31/2007
920	ReddiNet Policy	12/1/2010	4/26/2007	10/14/2010	10/14/2010	10/31/2013

Policy No.	Title	Effect. Date	Origin. Date	Revised Date	Last Review	Review Date
X. Documentation						
1000	Documentation of Prehospital Care	9/4/2012	6/15/1998	8/9/2012	8/9/2012	9/4/2014
1001	EMT-P/BH Communication Record	12/1/2007	7/6/2007	7/9/2007	7/1/2012	7/31/2014
XI. Education						
1100	Emergency Medical Technician-1 Program Approval	12/1/2011	2/28/2001	10/14/2011	10/14/2011	10/1/2014
1105	MICN Developmental Course and Exam	12/1/2011	7/2/1984	6/9/2011	6/9/2011	6/30/2014
1130	Advanced Life Support Continuing Educations Lectures	12/1/2011	2/28/2001	10/13/2011	10/13/2011	12/31/2014
1131	Field Care Audit	6/1/2012	8/1/1984	2/9/2012	2/9/2012	2/28/2015
1132	Continuing Education: Attendance Roster	6/9/2011	6/1/1993	6/9/2011	6/9/2011	6/30/2014
1135	Paramedic Training Program Approval	12/1/2012	10/20/1993	7/12/2012	7/12/2012	7/31/2015
1140	Emergency Medical Dispatcher Training Guidelines	5/1/2003	10/1/1991	1/31/2003		1/31/2005
XII. Search and Rescue						
1200	Air Unit Program	6/1/2008	5/1/1999	12/11/2010	12/11/2010	6/30/2013
1201	Air Unit Staffing Requirements	12/1/2011	5/30/1988	11/10/2011	11/10/2011	11/30/2014
1202	Air Unit Dispatch for Emergency Medical Responses	12/1/2011	10/31/1998	11/10/2011	11/10/2011	11/30/2014
1203	Criteria for Patient Emergency Transport	6/1/2011	10/31/1994	4/14/2011	4/14/2011	10/31/2013
1204	EMS Aircraft Classification	12/1/2007	5/31/1999	9/13/2007	8/9/2012	8/31/2015
1205	Air Unit Specifications Equipment and Supplies	12/1/2007	5/1/1999	9/13/2007	2/9/2012	2/28/2015
XIII. Public Access Defibrillation						
1301	Public Access Defibrillation (PAD) Provider Standards	6/1/2008	9/14/2000	3/11/2010	3/11/2010	3/31/2012
XIV. Trauma System Protocols						
1400	Trauma Care System - General Provisions	6/1/2012	7/1/2010	4/1/2012	4/1/2012	4/30/2014
1401	Trauma Center Designation	7/1/2010	7/1/2010			7/1/2011
1402	Trauma Committees	6/9/2011	6/9/2011		6/9/2011	7/31/2013
1403	Trauma Hospital Data Elements					
1404	Guidelines for Interfacility Transfer of Patients to a Trauma Center	10/4/2012	7/1/2010	10/1/2012	10/4/2012	10/31/2014
1405	Trauma Triage and Destination Criteria	8/2/2010	7/1/2010	8/2/2010	8/2/2010	7/31/2012
1406	Trauma Center Standards	6/1/2012	7/1/2010	2/9/2012	2/9/2012	2/28/2014

Policy No.	Title	Effect. Date	Origin. Date	Revised Date	Review Date	Deleted
I. Administrative Policies						
102	Coordination of Ambulance Program (New policy #102)	6/15/1998	10/1/1984			6/1/2004
104	EMCC (old policy #106)	6/1/1984	6/1/1984			2/1/1996
118	Coordination of Ambulance Program (New policy #102)	10/1/1984	10/1/1984			See 102
119	Ambulance Business License (New policy # 110)	7/10/1984	7/10/1984			See 110
122	Trial Study – Additional ALS Procedure (old policy #105)	2/28/1985	2/28/1985			11/1/2003
130	Medical Disaster Response Procedure (old policy #108)	6/1/1984	6/1/1984			?
140	Special Events Medical (Old policy #109)	6/1/1984	6/1/1984			12/1/2004
II. Legislation/Regulations						
200	Health and Safety Code	2/21/2003				11/1/2003
201	CCR - EMT-I Regulations	1/11/2000	6/17/1994			11/1/2003
202	CCR - Paramedic Regulations	2/20/2003	6/1/1997			11/1/2003
203	CCR - First Aid Standards for Public Safety Personnel	6/30/2000				11/1/2003
204	CCR - EMS Personnel Certification Review Process	3/25/2000				11/1/2003
205	CCR -Prehospital EMS Aircraft Regulations	1/10/1997	3/29/1988			11/1/2003
206	CCR – Process for Applicant Verification	8/4/1998				11/1/2003
207	EMT-I Certification Disciplinary Action Guidelines	3/2/2000				6/1/2001
III. Personnel Policies						
303	Procedure for EMT-NA to become EMT-IA	6/1/1984				6/1/2002
305	EMT-I Ambulance Challenge Exam (New policy # 304)	4/25/1985				See 304
311	EMT-P Certification	4/30/1994	6/16/1980			10/31/1999
312	EMT-P Recertification	4/30/1994	1/6/1986			10/31/1999
313	EMT-P Reactivation of Certification	7/1/1992	6/16/1980			11/1/2003
314	EMT-P Out of State Challenge	1/1/1990	4/25/1985	1/1/1990	12/1/1991	11/1/2003
316	EMT-P Reactivation of Inactive Accreditation to Practice	10/31/1996	10/1/1990			11/1/2003
317	EMT-P Continuous Accreditation Requirements	5/1/1996	1/1/1990			6/1/2002
331	Certification Review: Base Hospital and Provider Responsibilities	10/1/1987	10/1/1987			4/9/1996
340	Ventura County Ambulance Personnel Listing	6/1/1984				5/1/2003
341	Basic and Advanced Life Support Notification of Personnel Changes –	5/15/1987				5/1/2003
IV. Emergency Medical Services - Facilities						
401	Approved Burn Centers	8/8/1988				6/1/2002
406	Basic and Advanced Life Support Notification of Personnel Changes –	5/15/1987				See 342
411	Advanced Life Support Base Hospital Approval Process)					12/1/2002
412	ALS New Hospital six month evaluation of provision of ALS service	6/1/2002	4/1/1984	2/1/2002	6/30/2004	12/1/2002
413	ALS Base Hospital Program Review	5/22/1984				12/1/2002
421	Receiving Hospital Approval Process	6/1/2002	5/22/1984	3/14/2002	6/30/2004	12/1/2002
422	ALS New Receiving Hospital – six month evaluation of provision of ALS	7/22/1984				12/1/2002
423	ALS Receiving Hospital Program Review	5/22/1984				12/1/2002
V. Emergency Medical Services - Field Providers						
503	Provider Program Review	5/22/1984				11/1/2003
505	ALS Unit Staffing Exception	7/1/1995	12/12/1988			6/1/2002
VI. General Emergency Medical Services - Policies						
608	Staffing on Helicopter for Patient Transport (New Policy # 1201)	5/20/1988				See 1201
609	Non-Breather Masks	3/31/1990	1/1/1988	2/1/1990	1/1/1992	6/1/2002
611	EMT-I Monitoring of IV Fluids	6/1/2004	6/1/1984	1/1/2004	1/31/2004	6/12/2007

616	Comfort Measures Only	6/1/1990	10/1/1993	2/1/1999	2/1/2001	5/1/2003
621	EMT-IA-Monitoring IV Fluid Administration (Old policy number 904) (New	6/1/1984				See 611
VII.	Advanced Life Support Medical Control and Treatment					
700	Medical Control – Emergency Medical Services Medical Director	8/1/1988			8/1/1990	1/1/2004
702	Medical Control- Physician At the Scene	10/31/1995	1/31/1985			12/1/2005
705	Airway Obstruction	12/1/2007		9/13/2007		12/1/2010
705	Altered Level of Consciousness/Coma	12/1/2008		10/9/2008		12/1/2010
705	Anaphylaxis	6/1/2009		1/8/2009	1/8/2009	12/1/2010
705	Apnea or Agonal Respirations	12/11/2008		12/11/2008	5/4/2009	12/1/2010
705	Bradycardia: Adult, Symptomatic*, Not In Arrest	12/1/2008		10/9/2008	5/4/2009	12/1/2010
705	Cardiac Arrest, Adult	6/1/2010		6/1/2010	5/10/2010	12/1/2010
705	Cardiac Arrest, Pediatric	6/1/2009		4/9/2009	5/4/2009	12/1/2010
705	Decompression Injuries	6/1/2008		4/10/2008		12/1/2010
705	Hypovolemic Shock, Trauma	12/1/2008		8/14/2008	8/31/2010	12/1/2010
705	Hypovolemic Shock Non Trauma	12/1/2008		8/14/2008	8/31/2010	12/1/2010
705	Non-Traumatic Focal Neurological Changes	12/11/2008		12/11/2008	12/31/2010	12/1/2010
705	Newborn Resuscitation	6/1/2008		12/31/2006	12/31/2010	12/1/2010
705	Snake Bite	12/1/2007		9/13/2007	12/31/2009	12/1/2010
705	Symptomatic* Bradycardia, Pediatric, Not In Arrest	12/1/2005		12/1/2004	12/31/2010	12/1/2010
706	Prior to BH Contact -Bradycardia, Adult, Symptomatic, not in arrest	1/5/1993				10/31/1994
706	Prior to BH Contact -Cardiac Arrest	5/13/1993				10/31/1994
706	Prior to BH Contact -Chest Pain	11/12/1992				5/1/1995
706	Prior to BH Contact -Hypovolemic Shock	5/13/1993				4/30/1994
706	Prior to BH Contact -Shortness of Breath	3/31/1994				10/31/1994
706	Prior to BH Contact -Venous Access	12/31/1992	3/30/1983			10/31/1995
707	Communication Failure Protocols	2/24/1993	3/1/1983			10/31/1995
707	Communication Failure Protocols – Airway Obstruction					10/31/1994
707	Communication Failure Protocols – ALOC	9/30/1993	11/1/1990			10/31/1994
707	Communication Failure Protocols - Anaphylaxis	11/1/1990	4/1/1990			10/31/1994
707	Communication Failure Protocols – Apnea	9/30/1993				10/31/1994
707	Communication Failure Protocols - Cardiac Arrest, Asystole, Bradycardic	5/13/1993				5/1/1995
707	Communication Failure Protocols – Chest Pain	5/13/1993				5/1/1995
707	Communication Failure Protocols – Hypovolemia	3/31/1994				10/1/1994
707	Communication Failure Protocols – Needle Thoracostomy					10/1/1995
707	Communication Failure Protocols – Shortness of Breath	9/30/1993				10/1/1994
707	Communication Failure Protocols – Status Epilepticus	4/22/1992				10/1/1994
709	Alternative ALS Airway Management Devices Indications For Use	12/1/2005	9/10/1985	10/13/2004	12/31/2007	10/1/2008
710	Endotracheal Intubation Indications For Use	6/1/2008	6/1/1986	4/13/2008	4/30/2010	
711	ALS Verapamil Hydrochloride	6/3/1986				12/1/2005
712	Administration of Nebulized Metaproterenol	2/1/1989	2/1/1989			6/1/2002
713	Intraosseous Injection	6/1/2004	8/30/1990	1/8/2004	7/31/2011	12/1/2011
714	Glucose Testing	10/1/1990	8/1/1990			11/1/2003

719	Saline Locks		5/15/1993			12/1/2005
721	Pulse Oximetry Monitoring	6/1/2004	6/1/2004			6/12/2007
730	Narcotic Control					
VIII.	Emergency Medical Technician - Defibrillation Policies					
800	EMT-I Defibrillation Plan, Equipment Requirements, Program Parameters	6/1/2000	11/1/1988	10/31/1999	6/1/2002	12/1/2002
801	EMT-I Defibrillation Base Hospital	10/31/1996	11/1/1988			12/1/2002
804	EMT-I Defibrillation Performance Standards	5/1/1996	11/1/1988			12/1/2002
806	EMT-I Defibrillation Initial and Continuing Accreditation Requirements	7/1/1995	11/1/1988			12/1/2002
807	EMT-I Defibrillation Criteria for Hospitals Receiving patients	5/1/1996	11/1/1988			12/1/2002
IX.	Emergency Medical Services Communications					
901	Paramedic Communication Plan	10/11/1984	10/11/1984			6/12/2007
902	Frequencies (New policy #905) Contents moved to 905					12/1/2006
906	Verapamil Hydrochloride	1/30/1985 ?				
X.	Documentation					
1002	Inability to Make or Maintain Base Hospital Contact Report Form	6/1/2008	10/31/2001	11/8/2007		11/30/2009
1004	Paramedic/MICN Lecture Approval Form (form only)					6/12/2007
1005	EMT-P/MICN Attendance Roster (form coversheet)	7/6/2007	7/6/2007	7/9/2007	7/31/2009	
1009	EMT-P/MICN Continuing Education Record (New policy #1132) Contents	11/9/1984				10/20/1993
1011	ALS MICN Continuing Education Requirements (New policy 322)					See 322
XI.	Education					
1101	EMT-I Curriculum for IV Monitoring (New policy 611) Contents moved to		6/1/1984			1/8/2004
1102	EMT-I Training Programs Approval in California					6/1/2002
1106	ALS Personnel Written Examination Process	1/1/1990				6/1/2002
1107	EMT-ID Training Module	6/1/2000	10/31/1998	3/1/2000		6/1/2002
1110	MICN Developmental Course	6/14/1984				11/1/2003
1115	MICN Continuing Education Requirements	12/1/1989	6/14/1984			11/1/2003
1116	MICN Continuing Education Field Observation	11/9/1984	11/9/1984			11/1/2003
1120	Endotracheal Intubation Training, Accreditation and Skills Maintenance	4/30/1994	11/5/1985			1/8/2004
1121	EMT-P Training: Verapamil Hydrochloride	6/3/1986				10/31/1995
1122	Needle Thoracostomy Training	10/31/1996	11/1/1990			12/1/2005
1123	Pre Existing Vascular Access Devices	6/1/2005	7/31/1992	12/9/2004	6/30/2007	6/1/2002
1124	EMT-P Training: Adenosine					1/8/2004
1125	EMT-P Continuing Education Requirements	1/1/1990	6/16/1980	1/1/1990	12/1/1991	6/1/2002
1126	EMT-P Clinical Hours					1/8/2004
1127	Esophageal Tracheal Double Lumen Airway Training	10/11/2001	4/30/1994			?
1128	Training for IV Heparin for Use in a Transfer Setting	6/15/1998	4/23/1998			?
1129	Cervical Spine Immobilization Training	6/1/1999	3/25/1999			?
1133	Continuing Education Record	9/1/1989	11/9/1984	9/1/1989	9/1/1990	6/1/2002
1134	Training and Testing Criteria		7/21/1989		7/1/1991	1/8/2004
XII.	Search and Rescue					
1210	Criteria for Patient Transport Via Helicopter	10/31/1994	10/31/1994			11/1/1998
XIII.	Public Access Defibrillation					
XIII.	Trauma System Protocols					
1407	Code Trauma": Emergent Transfer of Patients with Critical Trauma to Trau	2/10/2011	1/18/2011	2/10/2011	2/28/2013	5/1/2012

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Prehospital Services Committee Operating Guidelines		Policy Number 105	
APPROVED: Administration: Steve L. Carroll, EMT-P		Date: December 1, 2012	
APPROVED: Medical Director: Angelo Salvucci, M.D.		Date: December 1, 2012	
Origination Date: March, 1999		Effective Date: December 1, 2012	
Date Revised: August 9, 2012			
Date Last Reviewed: August 9, 2012			
Review Date: August, 2014			

I. Committee Name

The name of this committee shall be the Ventura County (VC) Prehospital Services Committee (PSC).

II. Committee Purpose

The purpose of this committee shall be to provide input to the VC Emergency Medical Services (EMS) Medical Director and VC EMS administration on matters pertaining to emergency medical services, including, but not limited to, dispatch, first responders, ambulance services, communications, medical equipment, training, personnel, facilities, and disaster medical response.

III. Membership

A. Voting Membership

Voting membership in the committee shall be composed of 2 representatives, as appointed by the organization administrator, from each of the following organizations:

Type of Organization	Member	Member
Base Hospitals	PCC	PLP
Receiving Hospitals	ED Manager	ED Physician
First Responders	Administrative	Field (provider of "hands-on" care)
Ambulance Companies	Administrative	Field (provider of "hands-on" care)
Emergency Medical Dispatch Agency	Emergency Medical Dispatch Coordinator (1 representative selected by EMD Agency coordinators)	
Air Units	Administrative	Field (provider of "hands-on" care)
Paramedic Training Programs	Director (1 representative from each program.)	

B. Non-voting Membership

Non-voting members of the committee shall be composed of the following

1. VC EMS Medical Director
2. VC EMS Administrator
3. VC EMS Administrative Support
4. VC County Counsel, as appropriate
5. VC EMS CQI Coordinator
6. VCEMS Deputy Administrator
7. VCEMS Trauma Coordinator

C. Membership Responsibilities

Representatives to PSC represent the views of their agency. Representative should ensure that agenda items have been discussed/reviewed by their agency prior to the meeting.

D. Voting Rights

Designated voting members shall have equal voting rights.

E. Attendance

1. Members shall remain as active voting members by attending 75% of the meetings in a (calendar) year. If attendance falls below 75%, the organization administrator will be notified and the member will lose the right to vote.
 - (a) Physician members may have a single designated alternate attend in their place, no more than two times per calendar year.
 - (b) Agencies may designate one representative to be able to vote for both representatives, no more than two times per calendar year.
2. The member whose attendance falls below 75% may regain voting status by attending two consecutive meetings.
3. If meeting dates are changed or cancelled, members will not be penalized for not attending.

IV. Officers

- A. The chairperson of PSC is the only elected member. The chairperson shall perform the duties prescribed by these guidelines and by the parliamentary authority adopted by the PSC.

- B. A nominating committee, composed of 3 members, will be appointed at the regularly scheduled March meeting to nominate candidates for PSC Chair. The election will take place in May, with duties to begin at the July meeting.
- C. The term of office is one (1) year. A member may serve as Chair for up to three (3) consecutive terms.

V. Meetings

A. Regular Meetings

The PSC will meet on the second Thursday of each month, unless otherwise determined by the PSC membership. VCEMS will prepare and distribute electronic PSC Packet no later than one week prior to a scheduled meeting.

B. Special Meetings

Special meetings may be called by the chairman, VC EMS Medical Director, VC EMS Administrator or Public Health Director. Except in cases of emergency, seven (7) days notice shall be given.

C. Quorum

The presence of a simple majority (1/2 of committee membership plus 1) of voting members shall constitute a quorum. The presence of a quorum at the beginning of the meeting shall allow the committee to continue to do business until adjournment, regardless of the number of members who leave during the meeting.

VI. Task Forces and Ad-hoc Committees

The PSC Chair, VC EMS Administrator, VC EMS Medical Director or Public Health Director may appoint task forces or ad-hoc committees to make recommendations to the PSC on particular issues. The person appointing the task force or ad-hoc committee will name the chair. A task force or ad-hoc committee shall be composed of at least three (3) members and no more than seven (7) individuals. Persons other than voting members may be appointed to task forces or ad-hoc committees.

VII. Calendar Year

The Prehospital Services Committee will operate on a calendar year

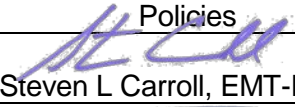

VIII. Parliamentary Authority

The rules contained in the current edition of Robert's Rules of Order, newly revised, shall govern the organization in all cases to which they are applicable and in which they are not inconsistent with these guidelines, and any special rules of order the PSC may adopt.

IX. Submission of Agenda Items

Agenda items shall be received by the Ventura County EMS Office 14 days before the meeting it is to be presented. Items may be submitted by US mail, fax or e-mail and must include the following information:

- A. Subject
- B. Reason for request
- C. Description/Justification
- D. Supporting medical information/other research as applicable
- E. List of affected VC EMS policies, if a requested policy change
- F. Agenda Category:
 - 1. Operational
 - 2. Medical

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Development Of Proposed Policies/Procedures; Amendments To Existing Policies		Policy Number 106
APPROVED: Administration	 Steven L Carroll, EMT-P	Date: 12/01/09
APPROVED: Medical Director	 Angelo Salvucci, M.D.	Date: 12/01/09
Origination Date:	March 7, 1990	Effective Date: December 1, 2009
Date Revised:	June 11, 2009	
Last Reviewed:	July 12, 2012	
Review Date:	June 30, 2015	

- I. PURPOSE: To establish procedures to be followed when proposing new policies or amendments to existing policies
- II. AUTHORITY: Health and Safety Code Section 1797.220
- III. POLICY: Development/revision of policies and proposals for projects will follow the sequence outlined below
- IV. PROCEDURE:
 - A. New Policies and/or Procedures
 1. Proposals for new or revised policies and/or procedures will be considered from any interested agency or individual and will be submitted to Ventura County EMS using the attached form. Proposals shall include a complete description of the request and a system analysis including: advantages, disadvantages and any potential fiscal impact.
 2. The proposal or amendment will be placed on the Prehospital Services Committee (PSC) agenda as an information item. The time interval between date of submission and the date of the next meeting will be considered when determining agenda placement. The PSC will review, amend, and make recommendations to the EMS Agency regarding adoption.
 3. A first draft will be developed from the proposal by VC EMS staff for presentation at the PSC meeting.
 4. The proposal and draft policy will be evaluated for need, impact on other policies, training needs, impact on Base Hospitals and Providers, etc. If necessary, special committees will be assigned for further evaluation. Composition of special committees will be determined by the type of policy/procedure to be assessed.
 5. If special committees are assigned:

- a. The evaluation will take place as quickly as possible.
Representatives of the special committees will confer as needed.
 - b. The consensus evaluation and consensus recommendations will be presented to the PSC for further action.
 6. The EMS Medical Director and EMS Administrator will receive copies of all comments to proposals and draft policies for review and comment.
 7. Proposals and policies may be distributed to potentially affected provider agencies and/or organizations, as appropriate for review and comment.
- C. Amendments/Revisions to Existing Policies
1. Suggestions for amendment/revision to an existing policy will be submitted to VC EMS for review by the EMS Medical Director and EMS Administrator using the attached form.
 2. The item will be placed on the agenda of the next meeting of the PSC.
 3. Information regarding discussion and recommendations will be submitted to the EMS Medical Director for appropriate action.



Prehospital Services Committee Agenda Item Request

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

Submitted by: _____ Date: _____

Representing: _____

A. Description

Title of Agenda Item: _____

Description of Item

B. Analysis

How will this enhance the Ventura County EMS System?

Advantages

Disadvantages

Financial Impact

Who has this item been presented to or reviewed by?

Attach any proposals or supportive documentation to this form.

C. EMS Agency Review

Received by VC EMS Agency: _____

Reviewed by EMS Administrator: _____

Assigned to:

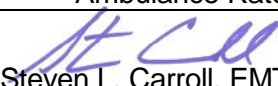
_____	Purpose:	_____
_____	Purpose:	_____
_____	Purpose:	_____
_____	Purpose:	_____

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: Ambulance Rates		Policy Number 112	
APPROVED: Administration:	 Steven L. Carroll, EMT-P	Date: July 1, 2012	
Origination Date:	1984	Effective Date: July 1, 2012	
Date Revised:	July 1, 2012		
Last Review:	July 1, 2012		
Review Date:	July 1, 2013		

- I. PURPOSE: To define the allowable ambulance rates for the County of Ventura.
- II. AUTHORITY: Ventura County Ambulance Ordinance.
- III. POLICY: The rates described in this policy shall be the maximum charged by the ambulance companies in Ventura County.
- IV. PROCEDURE: Ambulance rates are approved by the Board of Supervisors and are established based upon the cost to the ambulance operators to provide emergency ambulance service to the citizens of Ventura County. The rates listed are revised annually as needed, and are the maximum to be charged by all licensed ambulance companies to all users of the service. No rates shall be set, established, changed, modified or amended, unless according to the Ventura County Ambulance Ordinance.

COUNTY OF VENTURA
2012/13 Maximum Allowable Ambulance Rates

Pursuant to Ventura County Ordinance Code Section 2423-3, the following constitutes the schedule of maximum rates that may be charged, effective July 1, 2012

NON-EMERGENCY & ADVANCED LIFE SUPPORT RATES

Charge	2012-13	Definition
Non-Emergency Base Rate	\$829.25	Transport from site of illness or injury to hospital or from hospital to home or other facility resulting from a non-emergency request.
Advanced Life Support Base Rate	\$1,588.00	Transport from site of illness or injury to hospital as the result of an emergency request or for provision of ALS level services during any request for service.
Mileage	\$33.00	Rate per mile from point of pickup to hospital. This charge is pro rated among the patients if more than one (1) patient is transported.
Oxygen Administration	\$103.75	Charge made to patient for administration of oxygen and related adjuncts.

No charge is made for dispatch that is cancelled or that results in no provision of prehospital care.

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title ALS Base Hospital Standards		Policy Number: 410	
APPROVED Administration:	Steven L. Carroll, Paramedic	Date: December 1, 2012	
APPROVED Medical Director:	Angelo Salvucci, M.D.	Date: December 1, 2012	
Origination Date:	August 22, 1986	Effective Date: December 1, 2012	
Date Revised:	July 12, 2012		
Date Last Reviewed:	July 12, 2012		
Review Date:	July 2015		

- I. PURPOSE: To define the criteria, which shall be met by an acute care hospital in Ventura County for Base Hospital (BH) designation.
- II. AUTHORITY: Health and Safety Code, Division 2.5, Sections 1798, 1798.101, 1798.105, 1798.2 and California Code of Regulations, Title 22, Section 100175.
- III. POLICY:
 - A. An Advanced Life Support (ALS) BH, approved and designated by the Ventura County Emergency Medical Services (VCEMS), shall:
 1. Meet all requirements of an ALS Receiving Hospital (RH) per VCEMS Policy 420.
 2. Have an average emergency room census of 1200 or more visits per month.
 3. Have the capability to provide, at all times, operational phone with the capability to record the communications, between the BH and paramedics.
 - a. If the communications capability of the BH is interrupted, the ALS provider and the nearest BH shall be notified immediately by telephone.
 - b. ALS calls shall be routed to the nearest BH until communication capability is restored and telephone notification of the ALS provider and nearest BH is made.
 - c. All equipment used for ALS communications shall operate within the frequency requirements of the Ventura County Communications Department. At the time that a countywide communication system is implemented, all ALS providers shall comply with the Ventura County Communications Department ALS communications plan.
 4. Assure that communication between the BH and ALS Unit for each ALS call shall be provided only by the BH Emergency Department (ED) physician or Ventura County authorized Mobile Intensive Care Nurse (MICN) by radio or telephone.
 5. Designate a Prehospital Liaison Physician (PLP) who shall be a physician on the hospital staff, licensed in the State of California and have experience in emergency medical care. The PLP shall:

- a. Be regularly assigned to the ED.
 - b. Have experience in and knowledge of BH operations.
 - c. Be responsible for overall medical control and supervision of the ALS program within the BH's area of responsibility including review of patient care records and critique of personnel involved.
 - d. Be responsible for reporting deficiencies in patient care to VCEMS.
 - e. Coordinate BH activities with RH, Prehospital Services Committee (PSC) and VCEMS policies and procedures.
 - f. Attend PSC meetings.
 - g. Provide ED staff education.
 - h. Evaluate paramedics for clinical performance and makes recommendation to VCEMS.
 - j. Evaluate MICN's for authorization/reauthorization and makes recommendation to VCEMS.
6. Have on duty, on a 24-hour basis, one (1) MICN who meets who meets the criteria in VCEMS Policy 321.
 7. Identify an MICN with experience in, and knowledge of, BH communications operations and VCEMS policies and procedures as a Prehospital Care Coordinator (PCC) to assist the PLP in the medical control, supervision, and continuing education (CE) of prehospital care personnel.
 8. Provide for the CE of prehospital care personnel, paramedics MICNs, EMTs, and first responders, in accordance with VCEMS:
 9. Cooperate with and assist the PSC and the VCEMS MD in the collection of statistics and review of necessary records for program evaluation and compliance.
 10. Assure that paramedics perform medical procedures only under medical direction of a physician or Ventura County authorized MICN except for approved standing orders.
 11. Agree to maintain all recorded communications and prehospital data in a manner consistent with hospital data requirements. Prehospital data includes, but is not limited to, the recording of the prehospital communication, prehospital care record, paramedic BH communications form and documentation of telephone communication with the RH (if utilized). All prehospital data except the recording will be integrated with the patient chart.
 12. Resident physicians shall attend BH Physician course.

- B. There shall be a written agreement between the BH and VCEMS indicating the commitment of hospital administration medical staff, and emergency department staff to meet requirements for ALS program participation as specified by State regulations and VCEMS policies and procedures.
- C. The VCEMS shall review its agreement with each BH at least every two years.
- D. The VCEMS may deny, suspend, or revoke the approval, of a BH for failure to comply with any applicable policies, procedures, or regulations. Requests for review or appeal of such decisions shall be brought to the PSC and Board of Supervisors for appropriate action.
- E. A hospital wishing to become an ALS BH in Ventura County must meet Ventura County BH Criteria and agree to comply with Ventura County regulations.
 - 1. Application:
Eligible hospitals shall submit a written request for BH approval to VCEMS documenting the compliance of the hospital with the Ventura County BH Criteria.
 - 2. Approval:
 - a. Program approval or disapproval shall be made in writing by the VCEMS to the requesting BH within a reasonable period of time after receipt of the request for approval and all required documentation. This time period shall not exceed three (3) months.
 - b. The VCEMS shall establish the effective date of program approval in writing upon the satisfactory documentation of compliance with all the program requirements.
 - 3. Withdrawal of Program Approval:
Non-compliance of any criterion associated with program approval, use of non-certified personnel, or non-compliance with any other Ventura County regulation applicable to a BH, may result in withdrawal, suspension or revocation of program approval by the VCEMS.
- F. Advanced Life Support BH s shall be reviewed on an annual basis.
 - 1. All BH's shall receive notification of evaluation from the VCEMS.
 - 2. All BH's shall respond in writing regarding program compliance.
 - 3. On-site visits for evaluative purposes may occur.
 - 4. Any BH shall notify the VCEMS by telephone, followed by a letter within 48 hours of changes in program compliance or performance.

COUNTY OF VENTURA
EMERGENCY MEDICAL SERVICES

BASE HOSPITAL
CRITERIA COMPLIANCE CHECK LIST

Base Hospital: _____

Date: _____

	YES	NO
An Advanced Life Support (ALS) Base Hospital (BH), approved and designated by the Ventura County Emergency Medical Services (VCEMS), shall:		
1. Meet all requirements of an ALS Receiving Hospital (RH) per (VCEMS) Policy 420.		
2. Have the capability to provide, at all times, operational phone with the capability to record the communications, between the BH and paramedics. If the communications capability of the BH is interrupted, the ALS provider and the nearest BH shall be notified immediately by telephone. All equipment used for ALS communications shall operate within the frequency requirements of the Ventura County Communications Department. At the time that a countywide communication system is implemented, all ALS providers shall comply with the Ventura County Communications Department ALS communications plan.		
3. Have the capability to provide, at all times, operational phone with the capability to record the communications, between the BH and paramedics.		
4. Designate a Prehospital Liaison Physician (PLP) who shall be a physician on the hospital staff, licensed in the State of California, and have experience in emergency medical care. The PLP shall:		
• Be regularly assigned to the Emergency Department (ED).		
• Have experience in and knowledge of BH operations.		
• Be responsible for overall medical control and supervision of the ALS program within the BH's area of responsibility including review of patient care records and critique of personnel involved.		
• Be responsible for reporting deficiencies in patient care to VCEMS.		
• Coordinate BH activities with RH, Prehospital Services Committee (PSC) and VCEMS policies and procedures.		
• Attend PSC meetings.		
• Provide ED staff education.		
•		
• Evaluate MICNs for authorization/reauthorization and make recommendation to VCEMS.		
5. All BH MICN's shall:		
• Be authorized in Ventura County by the VCEMS MD		
• Be assigned only to the ED while functioning as an MICN.		
• Maintain current ACLS certification.		
• Be a BH employee.		

	YES	NO
6. Identify an MICN with experience in and knowledge of BH communication operations and VCEMS policies and procedures as a Prehospital Care Coordinator (PCC) to assist the PLP in the medical control, supervision, and continuing education (CE) of prehospital care personnel.		
7. Provide for the CE of prehospital care personnel (paramedics MICN's, EMTs, and first responders), in accordance with VCEMS Policy 1131:		
8. Cooperate with and assist the Prehospital Services Subcommittee (PSC) and the VCEMS MD in the collection of statistics and review of necessary records for program evaluation and compliance.		
9. Assure that paramedics perform medical procedures only under medical direction of a physician or Ventura County authorized MICN except for approved standing orders and medical procedures.		
10. Agree to maintain all recorded communications and prehospital data in a manner consistent with hospital data requirements. Prehospital data includes, but is not limited to the tape of the prehospital communication, prehospital care record paramedic BH communications form, documentation of telephone communication with the RH (if utilized). All prehospital data except the tape recording will be integrated with the patient chart.		
11. Submit a letter to VCEMS indicating the commitment of hospital administration medical staff, and emergency department staff to meet requirements for program participation as specified by State regulations and VCEMS policies and procedures.		
12. Resident physicians shall attend BH Physician course.		

COUNTY OF VENTURA EMERGENCY MEDICAL SERVICES		HEALTH CARE AGENCY POLICIES AND PROCEDURES	
Policy Title: Receiving Hospital Standards		Policy Number 420	
APPROVED Administration:	Steven L. Carroll, Paramedic	Date: December 1, 2012	
APPROVED Medical Director:	Angelo Salvucci, M.D.	Date: December 1, 2012	
Origination Date:	April 1, 1984	Effective Date:	December 1, 2012
Date Revised:	July 12, 2012		
Date Last Reviewed:	July 12, 2012		
Review Date:	July, 2015		

- I. PURPOSE: To define the criteria, which shall be met by an acute care hospital in Ventura County for Receiving Hospital (RH) designation.
- II. AUTHORITY: Health and Safety Code, Division 2.5, Sections 1798, 1798.101, 1798.105, 1798.2 and California Code of Regulations, Title 22, Section 100175.
- III. POLICY:
 - A. A RH , approved and designated by the Ventura County, shall:
 1. Be licensed by the State California as an acute care hospital.
 2. Meet the requirements of the Health and Safety Code Sections 1250-1262 and Title 22, Sections 70411, 70413, 70415, 70417, 70419, 70649, 70651, 70653, 70655 and 70657 as applicable.
 3. Be accredited by a CMS accrediting agency.
 4. Operate an Intensive Care Unit.
 5. Have the following specialty services available at the hospital or appropriate referral hospital (at the discretion of the Emergency Department Physician. and consultant Physician.) within 30 minutes:

Cardiology	Anesthesiology	Neurosurgery
Orthopedic Surgery	General Surgery	General Medicine
Thoracic Surgery	Pediatrics	Obstetrics
 6. Have operating room services available within 30 minutes.
 7. Have the following services available within 15 minutes.

X-ray	Laboratory	Respiratory Therapy
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 8. Evaluate all ambulance transported patients promptly, either by RH Physician, Private Physician or other qualified medical personnel designated by hospital policy.

9. Have the capability at all times to communicate with the ambulances and the Base Hospital (BH).
10. Designate a ED Medical Director who shall be a physician on the hospital staff, licensed in the State of California and have experience in emergency medical care. The Medical Director shall:
 - a. Be regularly assigned to the ED.
 - b. Have knowledge of VCEMS policies and procedures.
 - c. Coordinate RH activities with BH, Prehospital Services Committee (PSC), and VCEMS policies and procedures.
 - d. Attend, or have designee attend, PSC meetings.
 - e. Provide ED staff education.
 - f. Schedule medical staffing for the ED on a 24-hour basis.
11. Agree to provide, at a minimum, on a 24-hour basis, a physician and a RN that meets the following criteria:
 - a. All Emergency Department physicians shall:
 - 1) Be immediately available to the Emergency Department at all times.
 - 2) Be certified by the American Board of Emergency Medicine or be board eligible or have all of the following:
 - a) Have and maintain current Advanced Cardiac Life Support (ACLS) certification.
 - b. Have and maintain current Advanced Trauma Life Support certification.
 - c) Complete at least 25 Category I CME hours per year with content applicable to Emergency Medicine.
 - 3) Full-time resident physicians working in their own institution's Emergency Departments whose function as backup to Advanced Life Support (ALS) personnel shall fulfill Section 11.a and shall be senior (second and third year) residents.
 - b. RH ED's shall be staffed by:
 - 1) Full-time staff: those physicians who practice emergency medicine 120 hours per month or more, and/or
 - 2) Regular part-time staff: those physicians who see 90 patients or more per month in the practice of emergency medicine.

- a) Formula: Average monthly census of acute patients divided by 720 hours equals average number of patients per hour. This figure multiplied by average hours worked by physician in emergency medicine equals patients per physician per month.
 - b) Physicians working in more than one hospital may total their hours.
 - c) Acute patients exclude scheduled and return visits, physicals, and patients not seen by the ED Physician.
 - d) During period of double coverage, the whole shall be met if one of the physician's meets the above standards.
- c. All RH RNs shall:
- 1) Be regular hospital staff assigned solely to the ED for that shift.
 - 2) Maintain current ACLS certification.
- d. All other nursing and clerical personnel for the Emergency Department shall maintain current Basic Cardiac Life Support certification.
- e. Sufficient licensed personnel shall be utilized to support the services offered.
12. Cooperate with and assist the PSC and EMS Medical Director in the collection of statistics for program evaluation.
13. Agree to maintain all prehospital data in a manner consistent with hospital data requirements and provide that the data be integrated with the patient's chart. Prehospital data shall include the Prehospital Care Record, Paramedic Base Hospital communication form (from the BH), and documentation of a BH telephone communication with the RH.
14. Participate with the BH in evaluation of paramedics for reaccreditation.
15. Permit the use of the hospital helipad as an emergency rendezvous point if a State-approved helipad is maintained on hospital premises.
- B. There shall be a written agreement between the RH and EMS indicating the commitment of hospital administration, medical staff, and emergency department staff to meet requirements for ALS program participation as specified by EMS policies and procedures.
- C. EMS shall review its agreement with each RH at least every two years.

- D. EMS may deny, suspend, or revoke the approval of a RH for failure to comply with any applicable policies, procedures, or regulations. Requests for review or appeal of such decisions shall be brought to the Board of Supervisors for appropriate action.
- E. The EMS Medical Director may grant an exception to a portion of this policy upon substantiation of need by the PSC that, as defined in the regulations, compliance with the regulation would not be in the best interests of the persons served within the affected local area.
- F. A hospital that applies to become a RH in Ventura County must meet Ventura County RH Criteria and agree to comply with Ventura County regulation.
 - 1. Application:
Eligible hospital shall submit a written request for RH approval to the VCEMS, documenting the compliance of the hospital with the Ventura County RH.
 - 2. Approval:
Program approval or denial shall be made in writing by EMS to the requesting RH within a reasonable period of time after receipt of the request for approval and all required documentation. This period shall not exceed three (3) months.
- G. ALS RHs shall be reviewed on an annual basis.
 - 1. All RH shall receive notification of evaluation from the EMS.
 - 2. All RH shall respond in writing regarding program compliance.
 - 3. On-site visits for evaluative purposes may occur.
 - 4. Any RH shall notify the EMS by telephone, followed by a letter within 48 hours, of changes in program compliance or performance.

COUNTY OF VENTURA
EMERGENCY MEDICAL SERVICES

RECEIVING HOSPITAL
CRITERIA COMPLIANCE CHECKLIST

Receiving Hospital: _____

Date: _____

	YES	NO
A. Receiving Hospital (RH), approved and designated by the Ventura County, shall:		
1. Be licensed by the State of California as an acute care hospital.		
2. Meet the requirements of the Health and Safety Code Section 1250-1262 and Title 22, Sections 70411, 70413, 70415, 70417, 70419, 70649, 70651, 70653, 70655 and 70657 as applicable.		
3. Be accredited by a CMS accrediting agency		
4. Operate an Intensive Care Unit.		
5. Have the following specialty services available at the hospital or appropriate referral hospital (at the discretion of the Emergency Department (ED) Physician. and consultant Physician.) within 30 minutes:		
• Cardiology		
• Anesthesiology		
• Neurosurgery		
• Orthopedic Surgery		
• General Surgery		
• General Medicine		
• Thoracic Surgery		
• Pediatrics		
• Obstetrics		
6. Have operating room services available within 30 minutes.		
7. Have the following services available within 15 minutes.		
• X-Ray		
• Laboratory		
• Respiratory Therapy		
8. Evaluate all ambulance transported patients promptly, either by RH Physician, Private Physician or other qualified medical personnel designated by hospital policy.		
9. Have the capability at all times to communicate with the ambulances and the BH.		
10. Designate an Emergency Department Medical Director who shall be a physician on the hospital staff, licensed in the State of California and have experience in emergency medical care. The Medical Director shall:		
a. Be regularly assigned to the Emergency Department.		
b. Have knowledge of VC EMS policies and procedures.		

	YES	NO
c. Coordinate RH activities with Base Hospital, Prehospital Services Committee (PSC), and VCEMS policies and procedures.		
d. Attend or have designee attend PSC meetings.		
e. Provide Emergency Department staff education.		
f. Schedule medical staffing for the ED on a 24-hour basis.		
11. Agree to provide, at a minimum, on a 24-hour basis, a physician and a Registered Nurse that meets the following criteria:		
a. All Emergency Department physicians shall:		
1). Be immediately available to ED at all times.		
2) Be certified by the American Board of Emergency Medicine or be board eligible or have all of the following:		
a). Have and maintain current Advanced Cardiac Life Support (ACLS) certification.		
b) Have and maintain current Advanced Trauma Life Support (ATLS) certification.		
c) Complete at least 25 Category I CME hours per year with content applicable to Emergency Medicine.		
3) Full-time resident physician working in their own Institution's ED. Resident physicians who function, as backup to ALS personnel shall fulfill Section 11.a and shall be senior (second and third year) residents.		
b. RH EDs shall be staffed by:		
1). Full-time staff: those physicians who practice emergency medicine 120 hours per month or more, and/or		
2) Regular part-time staff: those physicians who see 90 patients or more per month in the practice of emergency medicine.		
a) Formula: Average monthly census of acute patients divided by 720 hours equals average number of patients per hour. This figure multiplied by average hours worked by physician in emergency medicine equals patients per physician per month		
b) Physicians working in more than one hospital may total their hours		

		YES	NO
	c) Acute patients exclude scheduled and return visits, physicals, and patients not seen by the ED Physician		
	d) During period of double coverage, the whole shall be met if one of the physicians meets the above standards.)		
	c. All RH RNs shall:		
	1) Be regular hospital staff assigned solely to the ED for that shift.		
	2) Maintain current ACLS certification.		
	d. All other nursing and clerical personnel for the ED shall maintain current Basic Cardiac Life Support certification.		
	e. Sufficient licensed personnel shall be utilized to support the services offered.		
12.	Cooperate with and assist the PSC and EMS Medical Director in the collection of statistics for program evaluation.		
13.	Agree to maintain all prehospital data in a manner consistent with hospital data requirements and provide that the data be integrated with the patient's chart. Prehospital data shall include the Prehospital Care Record paramedic Base Hospital communication form (from the BH), and documentation of a BH telephone communication with the RH.		
14.	Participate with the BH in evaluation of paramedics for reaccreditation.		
15.	Permit the use of the hospital helipad as an emergency rendezvous point if a State-approved helipad is maintained on hospital premises.		
B.	There shall be a written agreement between the RHand EMS indicating the commitment of hospital administration, medical staff, and emergency department staff to meet requirements for employment as specified by EMS policies and procedures.		

Physician Name: _____

Date: _____

All Emergency Department physicians shall:		YES	NO
1.	Be immediately available to the RH ED at all times.		
2.	Be certified by the American Board of Emergency Medicine or have the following:		
	a. Have and maintain current ACLS certification.		
	b. Complete at least 25 Category I CME hours per year with content applicable to Emergency Medicine.		
	c. It is recommended that RH physicians be ATLS certified.		
3.	Full-time resident physician working in their own Institution's EDs. Resident physicians who function, as backup to ALS personnel shall fulfill Section 14.a and shall be senior (second and third year) residents.		

The above named physician is:

1)	Full-time staff: A physician who practices emergency medicine 120 hours per month or more, and/or		
2)	Regular part-time staff: A physician who see 90 patients or more per month in the practice of emergency medicine (Average monthly census of acute patients divided by 720 hours equals average number of patients per hour. This figure multiplied by average hours worked by physician in emergency medicine equals patients per physician per month, Physicians working in more than one hospital may total their hours, Acute patients exclude scheduled and return visits, physicals, and patients not seen by the ED Physician)		

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: "Code STEMI": Transfer of Patients with STEMI for PCI		Policy Number 440	
APPROVED: Administration: Steven L. Carroll, EMT-P		Date: 12/01/09	
APPROVED: Medical Director: Angelo Salvucci, M.D.		Date: 12/01/09	
Origination Date: July 1, 2007		Effective Date: December 1, 2009	
Date Revised: June 11, 2009			
Last Reviewed: July 12, 2012			
Review Date: September, 2014			

- I. PURPOSE: To define the "Code STEMI" process by which patients with a STEMI are transferred to a STEMI Receiving Center (SRC) for emergency percutaneous coronary intervention (PCI).
- II. AUTHORITY: Health and Safety Code, Sections 1797.220 and 1798. California Code of Regulations, Title 22, Sections 100147 and 100169.
- III. DEFINITIONS:
 - A. STEMI: ST Segment Elevation Myocardial Infarction.
 - B. STEMI Receiving Center (SRC): an acute care hospital with percutaneous coronary intervention (PCI) services that has been designated according to VC EMS Policy 430.
 - C. STEMI Referral Hospital (SRH): an acute care hospital in Ventura County that meets the requirements for a receiving hospital in VC EMS Policy 420 and is not designated as a STEMI Receiving Center according to VC EMS Policy 430.
 - D. PCI: Percutaneous Coronary Intervention.
- IV. POLICY:
 - A. STEMI Referral Hospitals will:
 1. Assemble and maintain a "STEMI Pack" in the emergency department to contain all of the following:
 - a. Checklist with phone numbers of Ventura County SRCs.
 - b. Preprinted template order sheet with recommended prior-to-transfer treatments. Treatment guidelines will be developed with input from the SRH and SRC cardiologists.
 - c. Patient Consent/Transfer Forms.
 - d. Treatment summary sheet.
 - e. Ventura County EMS Code STEMI data entry form.
 2. Have policies, procedures, and a quality improvement system in place to minimize door-to-ECG and STEMI-Dx-to-transfer times.

3. Establish policies and procedures to make personnel available to accompany the patient during the transfer to the SRC. These policies will include patient criteria for requiring an RN to accompany patient.

B. Ambulance Dispatch Center will:

1. Respond to a "Code STEMI" transfer request by immediately dispatching the closest available ALS ambulance to the requesting SRH.

C. Ambulance Companies

1. Ambulance Companies will:
 - a. Respond immediately upon request for "Code STEMI" transfer.
 - b. Staff all ambulances with a minimum of one paramedic who has been trained in the use of intravenous heparin and nitroglycerine drips, and the pump being used, according to VC EMS Policy 722.
2. Transports performed according to this policy are not to be considered an interfacility transport as it pertains to ambulance contract compliance.

D. STEMI Receiving Centers will:

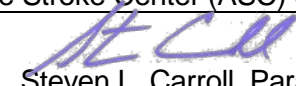

1. Maintain accurate status information on ReddiNet regarding the availability of a cardiac catheterization lab.
2. Publish a single phone number, that is answered 24/7, to receive notification of a STEMI transfer.
3. Immediately upon initial notification by a transferring physician at an SRH, accept in transfer all patients who have been diagnosed with a STEMI and who, in the judgment of the transferring physician, require urgent PCI.
4. Authorize the emergency physician on duty to confirm the acceptance in transfer of any patient with a STEMI.
5. Establish an internal communications plan that assures the immediate notification of all necessary individuals, including the cardiac catheterization services staff and on-call interventional cardiologist, of the transfer.
6. Adopt procedures to make an ICU/CCU bed available or to make alternate arrangements for post-PCI care.

V. PROCEDURE:

A. Upon diagnosis of STEMI, and after discussion with the patient, the SRH will:

1. Determine availability of the SRC by checking ReddiNet.
2. Immediately call the Ventura County Fire Communication Center at 805-384-1500 for an ambulance.

3. Identify their facility to the dispatcher and advise they have a Code STEMI transfer to [SRC].
 4. After calling for ambulance, the SRH transferring physician will notify the SRC emergency physician of the transfer.
 5. Perform all indicated diagnostic tests and treatments.
 6. Complete transfer consent, treatment summary, and Code STEMI data forms.
 7. Include copies of the ED face sheet and demographic information.
 8. Arrange for one or more healthcare staff, as determined by the clinical status of the patient, to accompany the patient to the SRC.
 - a. If, because of unusual and unanticipated circumstances, no healthcare staff is available for transfer, the SRH may contact the responding ambulance company to make a paramedic or EMT available.
 - b. If neither the SRH or ambulance company has available personnel, a CCT transfer may be requested.
 9. Contact SRC for nurse report at the time of, or immediately after, the ambulance departs.
- B. Upon request for “Code STEMI” transfer, the dispatch center will dispatch the closest ALS ambulance and verbalize “MEDxxx Code STEMI from [SRH]”. The SRC will be denoted in the Incident Comments, which will display on the Mobile Data Computer (MDC). If a unit does not have an operational MDC, the SRH will advise the responding ambulance personnel of the SRC.
- C. Upon notification, the ambulance will respond Code (lights and siren) and the ambulance personnel will notify their ambulance company supervisor of the “Code STEMI” transfer.
- D. Ambulance units will remain attached to the incident and FCC will track their dispatch, en-route, on scene, en-route hospital, at hospital, and available times.
- E. The patient shall be urgently transferred without delay. Every effort will be made to minimize on-scene time.
1. All forms should be completed prior to ambulance arrival.
 2. Any diagnostic test results may be relayed to the SRC at a later time.
 3. Intravenous drips may be discontinued or remain on the ED pump.
 4. Ambulance personnel will place defibrillation pads on the patient.
- F. Upon notification, the SRC will notify the interventional cardiologist and cardiac catheterization staff, who will respond immediately and prepare for the PCI procedure.
- G. The SRH and SRC shall review all STEMI transfers within 24 hours for appropriate and timely care and to identify opportunities for improvement. Results will be reviewed and discussed at the Countywide EMS STEMI CQI Committee.

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Acute Stroke Center (ASC) Standards		Policy Number 450	
APPROVED: Administration:	 Steven L. Carroll, Paramedic	Date: December 1, 2012	
APPROVED: Medical Director:	 Angelo Salvucci, M.D.	Date: December 1, 2012	
Origination Date:	October 11, 2012	Effective Date:	December 1, 2012
Date Revised:			
Last Review:			
Review Date:	October 31, 2013		

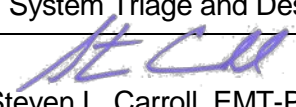
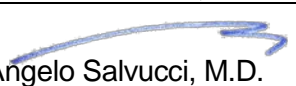
- I. PURPOSE: To define the criteria for designation as an Acute Stroke Center in Ventura County.
- II. AUTHORITY: California Health and Safety Code, Sections 1797.114, 1797.220, 1798, 1798.2, 1798.101, and California Code of Regulations, Title 22, Section 100147 and 100169.
- III. POLICY:
 - A. An Acute Stroke Center (ASC), approved and designated by Ventura County EMS (VC EMS) shall meet the following requirements:
 1. All the requirements of a Receiving Hospital in VCEMS Policy 420.
 2. Certification as a Primary Stroke Center (PSC) by either The Joint Commission, Det Norske Veritas, or the Healthcare Facilities Accreditation Program.
 3. Participate in the Ventura County Stroke Registry.
 4. Actively participate in the Ventura County EMS Stroke Quality Improvement Program.
 5. Have policies and procedures that allow the automatic acceptance of any stroke patient from a hospital within Ventura County that is not designated as an ASC, upon notification by the transferring physician.
 - B. Designation Process:
 1. Application:
Eligible hospitals shall submit a written request for ASC designation to VC EMS no later than 30 days prior to the desired date of designation, documenting the compliance of the hospital with Ventura County ASC Standards.
 2. Approval:

- a. Upon receiving a written request for ASC designation, VC EMS will arrange an on-site survey of the requesting hospital to assure compliance with stated requirements.
 - b. ASC approval or denial shall be made in writing by VC EMS to the requesting hospital within two weeks after receipt of the request for approval and all required documentation and completion of the VC EMS site survey.
 - c. Certification as a Primary Stroke Center by either The Joint Commission, Det Norske Veritas, or the Healthcare Facilities Accreditation Program, shall occur no later than six months following designation as an ASC by VC EMS.
3. VCEMS may deny, suspend, or revoke the designation of an ASC for failure to comply with any applicable policies, procedures, or regulations. Requests for review or appeal of such decisions shall be brought to the Ventura County Board of Supervisors for appropriate action.
 4. The VC EMS Medical Director may grant an exception to a portion of this policy upon substantiation of need by the ASC that compliance with the regulation would not be in the best interests of the persons served within the affected area.
 5. ASCs shall be reviewed on a biannual basis.
 - a. ASCs shall receive notification of evaluation from the VCEMS.
 - b. ASCs shall respond in writing regarding program compliance.
 - c. On-site ASC visits for evaluative purposes may occur.
 - d. ASCs shall notify VCEMS by telephone, followed by a letter or email within 48 hours, of changes in program compliance or performance.
- C. Provisional Designation Process
- VC EMS may grant provisional designation as an ASC to a requesting hospital that has satisfied the requirements of an ASC as outlined in section B of this policy, but has yet to receive certification as a PSC by an approving body. Only when the following requirements are satisfied will VC EMS grant a provisional designation:
1. Application:

Eligible hospitals shall submit a written request for provisional ASC designation to VC EMS no later than 30 days prior to the desired date of

provisional designation, documenting the compliance of the hospital with Ventura County ASC Standards.

2. Provisional Approval:
 - a. Upon receiving a written request for provisional ASC designation, VC EMS will arrange an on-site survey of the requesting hospital to assure compliance with stated requirements.
 - b. Provisional ASC approval or denial shall be made in writing by VC EMS to the requesting hospital within two weeks after receipt of the request for approval and all required documentation, as well as completion of the VC EMS site survey.
 - c. Certification as a Primary Stroke Center by either The Joint Commission, Det Norske Veritas, or the Healthcare Facilities Accreditation Program, shall occur no later than six months following provisional designation as an ASC by VC EMS.
3. VC EMS may deny, suspend, or revoke the designation of an ASC for failure to comply with any applicable policies, procedures, or regulations. Requests for review or appeal of such decisions shall be brought to the Ventura County Board of Supervisors for appropriate action.
4. The VC EMS Medical Director may grant an exception to a portion of this policy upon substantiation of need by the provisional ASC that compliance with the regulation would not be in the best interests of the persons served within the affected area.
5. VC EMS may deny, suspend, or revoke the provisional designation of an ASC for failure to comply with any applicable policies, procedures, or regulations. Requests for review or appeal of such decisions shall be brought to the Ventura County Board of Supervisors for appropriate action.

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, EMT-P	Date: December 1, 2012	
APPROVED: Medical Director:	 Angelo Salvucci, M.D.	Date: December 1, 2012	
Origination Date:	October 11, 2012	Effective Date: December 1, 2012	
Date Revised:			
Date Last Reviewed:			
Review Date:	October 31, 2013		

- I. **PURPOSE:** To outline the process of prehospital triage and transport of suspected acute stroke patients to facilities designated as an Acute Stroke Center (ASC).
- 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): Hospitals that are designated as an Acute Stroke Center, as defined in VCEMS Policy 450

Stroke Alert: An early notification by prehospital personnel to the base hospital that a patient is suffering a possible acute stroke.
- IV. **POLICY:**
 - A. **Stroke System Triage:** A patient meeting the following three criteria shall be triaged into the VC EMS stroke system and transported to the nearest ASC.
 1. Identification of any abnormal finding of the Cincinnati Stroke Scale (CSS).
 - 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
 2. Patient was last seen normal within the last 4.5 hours.

3. Blood Glucose is greater than sixty (60) OR patient continues to exhibit signs and symptoms of an acute stroke after prehospital treatment of abnormal blood glucose levels.
- B. Stroke Alert: Upon identification of a patient meeting stroke system criteria, Base Hospital Contact (BHC) will be established and a Stroke Alert will be activated.
1. The base hospital will determine the closest appropriate ASC based on several factors including patient presentation, hospital availability, and transport time. Upon receipt of the Stroke Alert, the Base Hospital will notify the appropriate ASC, unless the base hospital receiving the Stroke Alert will also be the receiving the patient.
- C. Destination Decision: patients meeting stroke system criteria shall be transported to the nearest ASC, except in the following cases:
1. 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).
 2. The nearest ASC is incapable of accepting a stroke alert patient due to CT or neuro diversion. In the event of CT or neuro diversion, the patient shall be transported to the next closest ASC.
 3. The patient requests transport to an alternate facility, not extending transport by more than twenty (20) minutes, and approved by the Base Hospital.
- D. 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.

Policy Title: Ventura County Emergency Medical Services Provider Agencies	Policy Number 500
APPROVED: Administration: Steven L. Carroll, Paramedic	Date: December 1, 2012
APPROVED: Medical Director: Angelo Salvucci, M.D.	Date: December 1, 2012
Origination Date: July 1987	
Date Revised: October 11, 2012	Effective Date: December 1, 2012
Date Last Reviewed: October 11, 2012	
Review Date: October, 2015	

Air Rescue

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

First Responder Agencies

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

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

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

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

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

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

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

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



Transport Agencies

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

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

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

* ALS First Responder

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Withholding or Termination of Resuscitation and Determination of Death		Policy Number: 606	
APPROVED: Administration:  Steven L. Carroll, Paramedic		Date: December 1, 2012	
APPROVED: Medical Director  Angelo Salvucci, MD		Date: December 1, 2012	
Origination Date: June 1984		Effective Date: December 1, 2012	
Date Revised: July 12, 2012			
Date Last Reviewed: July 12, 2012			
Next Review Date: July, 2014			

- I. PURPOSE: To establish criteria for withholding or termination of resuscitation and determination of death by prehospital EMS personnel.
- II. AUTHORITY: Health and Safety Code, Division 2.5, Sections 1797.220, 1798 and 7180. Government Code 27491 and 27491.2. California Code of Regulations, Title 22, Division 9, Section 100175.
- III. POLICY: Prehospital EMS personnel may withhold or terminate resuscitation and determine that a patient is dead, and leave the body in custody of medical or law enforcement personnel, according to the procedures outlined in this policy.
- IV. DEFINITION:
 1. Prehospital EMS personnel: Prehospital EMS personnel mean all responding EMT-Is and Paramedics, and flight nurses.
 2. Further Assessment: "Further assessment" refers to a methodical evaluation for signs/symptoms of life in the apparently deceased person. This evaluation includes examination of the respiratory, cardiac and neurological systems, and a determination of the presence or absence of rigor mortis and dependent lividity. The patient who displays any signs of life during the course of this assessment may NOT be determined to be dead,
 3. Hospital: A licensed health care institution that provides acute medical care.
 4. Skilled Nursing Facility: A licensed health care institution that provides non-acute care for elderly or chronically ill patients, and has licensed medical personnel on scene (RN or LVN).
 5. Hospice: A care program into which terminally ill patients may be enrolled, to assist with the management of palliative care during the terminal stages of illness.

V. PROCEDURE:

A. General Guidelines:

1. The highest medical authority on scene shall determine death in the field.
 - a. If BLS responders have any questions or uncertainty regarding determination of death, BLS measures shall be instituted until arrival of ALS personnel.
 - b. If ALS responders have questions or uncertainty regarding determination of death, ALS measures shall be instituted until base hospital contact is made and orders received.
2. Prehospital EMS personnel who have determined death in the field in accordance with the parameters of this policy are not required to make base hospital contact.
3. Prehospital EMS personnel who arrive on scene after the patient is determined to be dead shall not re-evaluate the patient.

PATIENTS WHO ARE OBVIOUSLY DEAD

Upon arrival, prehospital EMS personnel shall rapidly assess the patient. For patients suffering any of the following conditions, no further assessment is required. No treatment shall be started and the patient shall be determined to be dead.

- Decapitation,
- Incineration,
- Hemitorporectomy, or
- Decomposition.

**PATIENTS WHO APPEAR TO BE DEAD
(WITH Rigor Mortis and/or Dependent Lividity)**

- B. Patients who are apneic and pulseless require further assessment as described in table 1.
 1. If rigor mortis and/or dependent lividity are present, and if no response for all the assessment procedures indicates signs of life, the patient shall be determined to be dead.
 2. Rigor mortis is determined by checking the jaw and other joints for rigidity.

3. Dependent lividity is determined by checking dependent areas of the body for purplish-red discoloration.

Table 1.

CATEGORY	ASSESSMENT PROCEDURES	FINDINGS FOR DETERMINATION OF DEATH
Respiratory	Open the patient's airway. Auscultate lungs or feel for breaths while observing the chest for movement for a minimum of 30 seconds	No spontaneous breathing No breath sounds on auscultation.
Cardiac	Palpate the carotid artery (brachial for infant) for a minimum of 1 minute. Auscultate for heart sounds for minimum 1 minute. <u>OR</u> ALS ONLY- Monitor the patient's cardiac rhythm for minimum of 1 minute. Check asystole in 2 leads. Obtain a 6-second strip to be retained with the EMS provider documentation.	No pulse. No heart sounds.
Neurological	Check for pupil response to light. Check for response to painful stimuli.	No pupillary response. No response to painful Stimuli.

1. While in the process of the assessment procedures, if any response indicates signs of life, resuscitation measures shall take place immediately.
2. **If rigor mortis and/or dependent lividity are present**, and if no response for all the assessment procedures indicates signs of life, the patient shall be determined to be dead.

**PATIENTS WHO APPEAR TO BE DEAD:
 (WITHOUT Rigor Mortis and/or DEPENDENT LIVIDITY)**

- C. Patients who appear to be dead but display no signs of rigor mortis and/or dependent lividity shall have the cause of apparent death determined to be **MEDICAL** (including drowning, ingestion, asphyxiation, hanging, poisoning, lightning strikes, and electrocution), or **TRAUMATIC** (and injuries are sufficient to cause death).
 1. **MEDICAL ETIOLOGY:** Resuscitation measures shall take place.
 2. **TRAUMATIC ETIOLOGY:** Further assessment as defined in Table 1 shall be performed. If no response for all the assessment procedures, the

patient's age should be determined. (reasonable estimation appropriate if positive determination of age is not possible)

a. For patients younger than 18 years of age, resuscitation measures, including transport to the closest trauma center, shall take place.

b. For patients 18 years or older:

1) BLS RESPONDERS:

a) If the time from **initial determination** of pulselessness and apnea until trauma center arrival is estimated to be less than 20 minutes, resuscitation measures, including transport to the closest trauma center, shall take place.

b) If the time from **initial determination** of pulselessness and apnea until trauma center arrival is estimated to be 20 minutes or more, the patient may be determined to be dead.

2) ALS RESPONDERS:

a) If the time from **initial determination** of pulselessness and apnea until trauma center arrival is estimated to be less than twenty minutes, using a cardiac monitor, the patient's rhythm should be assessed.

(1) If the rhythm is narrow complex PEA, wide complex PEA greater than 30 beats per minute, ventricular tachycardia or ventricular fibrillation, resuscitation measures, including transport to the closest trauma center, shall take place.

(2) If the rhythm is asystole or wide complex PEA at a rate of 30 beats per minute or slower, the patient shall be determined to be dead.

b) If the time from **initial determination** of pulselessness and apnea until trauma center arrival is estimated to be twenty minutes or more, the patient may be determined to be dead, regardless of cardiac rhythm..

D. Termination of Resuscitation

1. Base hospitals and EMS personnel should consider terminating resuscitation measures on adult patients (age 18 and older) who are in cardiopulmonary

arrest and fail to respond to treatment under VC EMS Policy 705: Cardiac Arrest, Adult.

2. If resuscitation measures have been initiated, base hospital contact should be attempted before resuscitation is terminated and the patient determined to be dead.
3. If unable to make base hospital contact, resuscitation efforts may be terminated and the patient determined to be dead using the following criteria:
 - a. Patients without evidence of trauma who meet termination of resuscitation criteria in VC EMS Policy 705: Cardiac Arrest, Adult.
 - b. Patients with blunt or penetrating trauma if the cardiac rhythm is or becomes asystole or wide complex PEA at a rate less than 30 beats per minute.
4. In cases of cardiopulmonary arrest as a result of a lightning strike, electrocution or suspected hypothermia, CPR shall be performed for a minimum of one hour. **BLS responders in these circumstances shall make all reasonable attempts to access ALS care.**

E. Documentation

1. EMS personnel will document determination of death in the approved Ventura County Documentation System (AVCDS).

F. Disposition of Decedent's Body

1. Deaths that occur in hospitals or skilled nursing facilities, or to patients enrolled in hospice programs, do not require law enforcement response. Under these circumstances the body may be left at the scene.
2. Deaths that occur anyplace other than a hospital or skilled nursing facility **except to patients enrolled in hospice programs**, must be reported to law enforcement personnel and the body must be left in their custody.

Ventura County EMS Determination of Death

DECAPITATION, INCINERATION, HEMICORPORECTOMY OR DECOMPOSITION?

NO

YES

DOD

RIGOR OR LIVIDITY?

RIGOR: Check the jaw and other joints for rigidity.
LIVIDITY: Check the dependent areas of the body for purplish-red discoloration.

YES

NO

ANY RESPONSE TO FURTHER ASSESSMENT?*

MEDICAL
(Including drowning, ingestion, asphyxiation, hanging, poisoning, lightning strike, electrocution)

TRAUMATIC
Blunt or penetrating trauma (sufficient to cause death)

ANY RESPONSE TO FURTHER ASSESSMENT?*

YES

NO

TREAT

DOD

TREAT

YES

NO

TREAT

YOUNGER THAN 18 YEARS OF AGE?

YES

NO

TREAT

TRAUMA CENTER ETA LESS THAN 20 MIN?

YES

NO

ALS PROVIDER

BLS PROVIDER

DOD

TREAT

Narrow complex PEA, Wide Complex PEA > 30/min, VT or VF?

YES

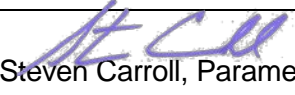
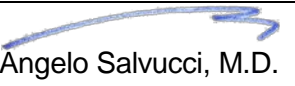
NO

TREAT, TX TRAUMA CENTER

DOD

* FURTHER ASSESSMENT PROCEDURES

#1 Respiratory	BLS and ALS: 1. Open airway. 2. Auscultate lungs or feel for breaths, while observing the chest for 30 seconds.
#2 Cardiac	BLS: 1. Palpate carotid pulse for 1 minute. (Check brachial pulse in infants.) 2. Auscultate heart sounds for 1 minute. ALS: 1. Palpate carotid pulse for 1 minute. (Check brachial pulse in infants.) 2. Monitor rhythm for 1 minute; check asystole in 2 leads. Print 6-second strip.
#3 Neuro	BLS and ALS: 1. Check pupils for response to light. 2. Check for response to painful stimuli.

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Fireline Medic		Policy Number 627	
APPROVED: Administration:	 Steven Carroll, Paramedic	Date: December 1, 2012	
APPROVED: Medical Director	 Angelo Salvucci, M.D.	Date: December 1, 2012	
Origination Date:	October 5, 2011	Effective Date:	December 1, 2012
Date Revised:	October 11, 2012		
Date Last Reviewed:	October 11, 2012		
Review Date:	October 31, 2014		

- I. **PURPOSE:** To establish procedures for a fireline paramedic (FEMP) response from and to agencies within or outside local EMS agency (LEMSA) jurisdiction when requested through the statewide Fire and Rescue Mutual Aid System, to respond to and provide advanced life support (ALS) care on the fireline at wildland fires.
- II. **AUTHORITY:** California Health and Safety Code, Division 2.5, Sections 1797.204, 1797.220; California Code of Regulations, Title 22, Division 9, Sections 100165 and 100167
- III. **POLICY:**
 - A. County accredited paramedics shall carry the ALS/BLS inventory consistent with the FIRESCOPE FEMP position description. Reasonable variations may occur; however, any exceptions shall have prior approval of the VCEMSA. The equipment lists are a scaled down version of standard inventory in order to meet workable/packable weight limitations (45 lbs including wildland safety gear, divided between a two person team).
 1. It will not be possible to maintain standard ALS minimums on the fireline. The attached ALS inventory essentially prioritizes critical and probable fireline needs.
 2. VCEMS accredited paramedics may function within their scope of practice, when serving in an authorized capacity assignment, as an agent of their authorized ALS fire agency.

IV. PROCEDURE:

- A. Under the authority of State regulations, a paramedic may render ALS care during emergency operations as long as the following conditions are met:
1. The paramedic is currently licensed by the State of California and is accredited by the Ventura County EMS Agency.
 2. The paramedic is currently employed with a Ventura County ALS provider and possesses the requisite wildland fireline skills and equipment.
 3. The paramedic practices within the treatment guidelines set forth in VCEMSA policies and procedures manual. Paramedics operating in the capacity of a fireline paramedic (FEMP) shall follow VCEMSA communication failure protocol.
 4. The FEMP is expected to check in and obtain a briefing from the Logistics Section Chief, or the Medical Unit Leader (MEDL) if established at the Wildfire Incident.
 5. Documentation of patient care will be completed as per VCEMSA policy 1000.
 - a. Documentation of patient care will be submitted to incident host agencies. A VCePCR shall be completed for all ALS patients contacted, and shall be completed by the FEMP upon return to camp, or as soon as practical.
 6. Continuous Quality Improvement activities shall be in accordance with VCEMSA standards.

APPENDIX A

**FIRELINE EMERGENCY MEDICAL TECHNICIAN
BASIC LIFE SUPPORT (BLS) PACK INVENTORY**

Airway, NPA Kit (1)	Mask, Face, Disposable w/eye shield (1)
Airway, OPA Kit (1)	Mylar Thermal Survival Blanket (2)
Bag Valve Mask (1)	Pad, Writing (1)
Bandage, Sterile 4 x 4 (6)	Pen and Pencil (1 ea.)
Bandage, Triangular (2)	Pen Light (1)
Biohazard Bag (2)	Petroleum Dressing (2)
Burn Sheet (2)	Shears (1)
Cervical Collar, Adjustable (1)	Sphygmomanometer (1)
Coban Wraps/Ace Bandage (2 ea.)	Splint, Moldable (1)
Cold Pack (3)	Splinter Kit (1)
Dressing, Multi-Trauma (4)	Stethoscope (1)
Exam Gloves	Suction, Manual Device (1)
Eye Wash (1 bottle)	Tape, 1 inch, Cloth (2 rolls)
Glucose, Oral (1 Tube)	Triage Tags (6)
Kerlix, Kling, 4.5, Sterile (2)	Triangular Dressing with Pin (2)
Digital Thermometer (1)	

APPENDIX B**FIRELINE EMERGENCY MEDICAL TECHNICIAN**

PARAMEDIC (ALS) PACK INVENTORY **IN ADDITION TO THE BASIC LIFE SUPPORT INVENTORY, THE FOLLOWING ADDITIONAL ITEMS OR EQUIVALENTS SHALL BE CARRIED BY THE FEMP

ALS AIRWAY EQUIPMENT:

Endotracheal Intubation Equipment (6.0, 7.5 ET – Mac 4, Miller 4, stylette and handle)	ETT Verification Device
End Tidal CO2 Detector	Needle Thoracostomy Kit (1)
ETT Restraint	Rescue Airway (1)

IV/MEDICATION ADMIN SUPPLIES:

1 ml TB Syringe (2)	20 ga. IV Catheter (2)
10 ml Syringe (2)	IV Site Protector (2)
18 ga. Needle (4)	IV Administration Set-Macro-Drip (2)
25 ga. Needle (2)	Alcohol Preps (6)
Adult EZ-IO Kit (1)	Betadine Swabs (4)
EZ Connect tubing (2)	Glucometer Test Strips (4)
25 mm EZ-IO Needle (1)	Lancet (4)
45 mm EZ-IO Needle (1)	Razor (1)
14 ga. IV Catheter (2)	Tape (1)
16 ga. IV Catheter (2)	Tourniquet (2)
18 ga. IV Catheter (2)	

MISCELLANEOUS:

AMA Paper Forms (3)	PCR Paper Forms (6)
FEMP Pack Inventory Sheet (1)	Sharps Container – Small (1)
Narcotic Storage (per agency policy)	

BIOMEDICAL EQUIPMENT:

Defibrillator Electrodes (2)	Glucometer (1)
Defibrillator with ECG waveform display (1)	

MEDICATIONS:

Amiodarone 50 mg/ml 3 ml (2)	Epinephrine 1:1,000 1 mg (4)
Albuterol – 90mcg/puff (1 MDI)	Glucagon 1 mg/unit (1)
Aspirin-Chewable (1 Bottle)	Midazolam 20 mg
Atropine Sulfate 1mg (2)	Morphine Sulfate 10 mg/ml (6)
Dextrose 50% 25 G. Pre-Load (1)	Nitroglycerin 1/150 gr (1)
Diphenhydramine 50 mg (4)	Saline 0.9% IV 1,000 ml – Can be configured into two 500 ml or four 250 ml
Epinephrine 1:10,000 1mg (2)	5% Dextrose in Water, 50 ml (1)

VCEMS General Patient Guidelines

- I. Purpose: To establish a consistent approach to patient care
 - A. Initial response
 1. Review dispatch information with crew members and dispatch center as needed
 2. Consider other potential issues (location, time of day, weather, etc.)
 - B. Scene arrival and Size-up
 1. Address Body Substance Isolation/Personal Protection Equipment (BSI/PPE)
 2. Evaluate scene safety
 3. Determine the mechanism of injury (if applicable) or nature of illness
 4. Determine the number of patients
 5. Request additional help if necessary (refer to VCEMS Policy 131)
 6. Consider spinal precautions (refer to VCEMS Policy 614)
 - C. Initial assessment
 1. Airway
 - a. Open airway as needed, maintaining inline cervical stabilization if trauma is suspected
 - b. Insert appropriate airway adjunct if indicated
 - c. Suction airway if indicated
 - d. If a partial or complete Foreign Body Airway Obstruction (FBAO) is present, utilize appropriate interventions
 2. Breathing
 - a. Assess rate, depth, and quality of respirations
 - b. Assess lung sounds
 - c. If respiratory effort inadequate, assist ventilations with BVM
 - d. Initiate airway management and oxygen therapy as indicated
 3. Circulation
 - a. Assess skin color, temperature, and condition
 - b. Check distal/central pulses, including capillary refill time
 - c. Control major bleeding
 - d. Initiate shock management as indicated
 4. Disability
 - a. Determine level of consciousness
 - b. Assess pupils
 - c. Assess Circulation, Sensory, Motor (CSM)
 5. Exposure
 - a. If indicated, remove clothing for proper assessment/treatment of injury location. Attempt to maintain patient dignity

- b. Maintain patient body temperature at all times
 - D. Determine chief complaint. Initiate treatment per VCEMS policies/protocols
 - II. History of Present Illness – including pertinent negatives and additional signs/symptoms
 - 1. Onset of current illness or chief complaint
 - 2. Provoking factors
 - 3. Quality
 - 4. Radiation
 - 5. Severity – 1 to 10 on pain scale
 - 6. Time
 - III. Vital Signs
 - 1. Blood Pressure and/or Capillary Refill
 - 2. Heart Rate
 - 3. Respirations
 - 4. ALS assessments shall include:
 - a. Cardiac rhythm
 - b. 12-lead ECG as indicated per VCEMS Policy 726
 - c. Pulse Oximetry
 - d. Capnography (after advanced airway placement)
 - IV. Obtain history, including pertinent negatives
 - 1. Signs/Symptoms leading up to the event
 - 2. Allergies
 - 3. Medications taken
 - 4. Past medical history
 - 5. Last oral intake (as indicated)
 - 6. Events leading up to present illness
 - V. Perform Detailed Physical Examination per Trauma Assessment/Treatment Guidelines
 - VI. Base Hospital contact shall be made for all ALS patients in accordance with VCEMS Policy 704
 - VII. Transport to appropriate facility per VCEMS guidelines
 - 1. Transport and Destination Guidelines – Policy 604
 - 2. STEMI Receiving Center Standards – Policy 430
 - 3. Post cardiac arrest with ROSC – Policy 705 (Cardiac Arrest VF/VT)
 - 4. Trauma Triage and Destination Criteria – Policy 1405
 - 5. Hospital Diversion – Policy 402
 - VIII. Continuously monitor vital signs and document all findings. Continue appropriate treatments and reassess throughout transport to assess for changes in patient status
 - IX. Documentation
 - 1. Completion of patient care documentation per VCEMS Policy 1000

2. Document all assessment findings, pertinent negatives, vital signs, interventions/treatments (both initial and ongoing), responses to treatments, and all changes in patient status
3. Submit ECG strips for all ALS patients
4. Maintain patient confidentiality at all times

Effective Date: December 1, 2012
Next Review Date: December, 1, 2014

Date Revised: October, 2012
Last Reviewed: October, 2012



Trauma Assessment/Treatment Guidelines

- I. Purpose: To establish a consistent approach to the care of the trauma patient
 - A. Rapid trauma survey
 1. Airway
 - a. Maintain inline cervical stabilization
 - 1) Follow spinal precautions per VCEMS Policy 614
 - b. Open airway as needed
 - 2) Utilize a trauma jaw thrust to maintain inline cervical stabilization if indicated
 - c. Suction airway if indicated
 2. Breathing
 - a. Assess rate, depth and quality of respirations
 - b. If respiratory effort inadequate, assist ventilations with BVM
 - c. Insert appropriate airway adjunct if indicated
 - d. Assess lung sounds
 - e. Initiate airway management and oxygen therapy as indicated
 - 1) Maintain SpO₂ ≥ 95%
 3. Circulation
 - a. Assess skin color, temperature, and condition
 - b. Check distal/central pulses and capillary refill time
 - c. Control major bleeding
 - d. Initiate shock management as indicated
 4. Disability
 - a. Determine level of consciousness (Glasgow Coma Scale)
 - b. Assess pupils
 5. Exposure
 - a. If indicated, remove clothing for proper assessment/treatment of injury location. Maintain patient dignity
 - b. Maintain patient body temperature
 - B. Detailed physical examination
 1. Head
 - a. Inspect/palpate skull
 - b. Inspect eyes, ears, nose and throat
 2. Neck
 - a. Palpate cervical spine
 - b. Check position of trachea
 - c. Assess for jugular vein distention (JVD)

3. Chest
 - a. Visualize, palpate, and auscultate chest wall
 4. Abdomen/Pelvis
 - a. Inspect/palpate abdomen
 - b. Assess pelvis, including genitalia/perineum if pertinent
 5. Extremities
 - a. Visualize, inspect, and palpate
 - b. Assess Circulation, Sensory, Motor (CSM)
 6. Back
 - a. Visualize, inspect, and palpate thoracic and lumbar spines
- C. Trauma care guidelines
1. Head injuries
 - a. General treatments
 - 1) Evaluate head and face – maintain high index of suspicion for injury if significant mechanism of injury is present or physical examination is remarkable for findings
 - 2) If in spinal precautions, elevate head of backboard 30° unless contraindicated
 - 3) Do not attempt to intubate head injured patients unless unable to manage with BLS airway measures
 - 4) Do not delay transport if significant airway compromise
 - b. Penetrating injuries
 - 1) DO NOT REMOVE IMPALED OBJECT (unless airway obstruction is present)
 - 2) Stabilize object manually or with bulky dressings
 - c. Facial injuries
 - 1) Assess airway and suction as needed
 - 2) Remove loose teeth or dentures if present
 - d. Eye injuries
 - 1) Remove contact lenses
 - 2) Irrigate eye thoroughly with suspected acid/alkali burns
 - 3) Avoid direct pressure
 - 4) Cover both eyes
 - 5) Stabilize any impaled object manually or with bulky dressings
 2. Spinal cord injuries
 - a. General treatments

- 1) Evaluate spinal column – maintain high index of suspicion for injury if significant mechanism of injury is present or physical examination is remarkable for findings
- 2) Place patient in supine position if hypotension is present
- b. Penetrating injuries – DO NOT REMOVE IMPALED OBJECT
 - 1) Stabilize object manually or with bulky dressings
 - 2) Control bleeding if present
 - 3) In the presence of penetrating injuries, if no neurologic deficit is present upon physical examination, withhold spinal immobilization
- c. Neck injuries
 - 1) Monitor airway
 - 2) Control bleeding if present
3. Thoracic Trauma
 - a. General treatments
 - 1) Evaluate chest – maintain high index of suspicion for internal injury if significant mechanism of injury is present or physical examination is remarkable for findings
 - 2) Keep patients sitting high-fowlers
 - a) If in spinal precautions, elevate head of backboard 30° unless contraindicated
 - b) In the presence of isolated penetrating injuries, if no neurologic deficit is present upon physical examination, consider withholding spinal immobilization
 - b. Penetrating injuries – DO NOT REMOVE IMPALED OBJECT
 - a) Remove object if CPR is interfered
 - b) Stabilize object manually or with bulky dressings
 - c) Control bleeding if present
 - c. Flail Chest/Rib injuries
 - a) Immobilize with padding and bulky dressings to affected area
 - b) Assist ventilations if respiratory status deteriorates
 - d. Pneumothorax/Hemothorax
 - a) Keep patient sitting high-fowlers
 - b) Assist ventilations if respiratory status deteriorates
 - 1) Suspected tension pneumothorax should be managed per VCEMS Policy 715
 - e. Open (Sucking) Chest Wound

- a) Place an occlusive dressing to wound site. Secure on 3 sides only
- b) Assist ventilations if respiratory status deteriorates
- f. Cardiac Tamponade – If suspected, expedite transport
 - a) Beck's Triad
 - 1) Muffled heart tones
 - 2) JVD
 - 3) Hypotension
 - g. Traumatic Aortic Disruption
 - a) Assess for quality of radial and femoral pulses
 - b) If suspected, expedite transport
- 4. Abdominal/Pelvic Trauma
 - a. General Treatments
 - 1) Evaluate abdomen and pelvis – maintain high index of suspicion for internal injury if significant mechanism of injury is present or physical examination is remarkable for findings
 - 2) Goal of fluid resuscitation is to maintain SBP of > 80 mmHg. If SBP > 80 mmHg, then maintain IV at TKO rate
 - b. Blunt injuries
 - 1) Place patient in supine position if hypotension is present
 - c. Penetrating injuries – DO NOT REMOVE IMPALED OBJECT
 - 1) Stabilize object manually or with bulky dressings
 - 2) Control bleeding if present
 - d. Eviscerations
 - 1) DO NOT REPLACE ABDOMINAL CONTENTS
 - a) Cover wound with saline-soaked dressings
 - 2) Control bleeding if present
 - e. Pregnancy
 - 1) Place patient in left-lateral position
 - 2) If in spinal immobilization, place padding under backboard to tilt to the left
 - f. Pelvic injuries
 - 1) DO NOT LOG ROLL PATIENT
 - a) Assessment of pelvis should be only performed once to limit additional injury
 - 2) Control bleeding if present
 - 3) Consider wrapping a bed sheet tightly around the pelvis and tying it together for use as a sling

4. Extremity Trauma
 - a. General Treatments
 - 1) Evaluate CSM distal to injury
 - a) If decrease or absence in CSM is present:
 - (1) Manually reposition extremity into anatomical position
 - (2) Re-evaluate CSMb) If no change in CSM after repositioning, splint in anatomical position and expedite transport
 - c) Cover open wounds with sterile dressings
 - d) Place ice pack on injury area (if closed wound)
 - e) Splint/elevate extremity with appropriate equipment
 - b. Dislocations
 - 1) Splint in position found with appropriate equipment
 - c. Penetrating injuries – DO NOT REMOVE IMPALED OBJECTS
 - 1) Stabilize object manually or with bulky dressings
 - 2) Control bleeding if present
 - d. Femur fractures
 - 1) Utilize traction splint only if isolated mid-shaft femur fracture is suspected
 - 2) Assess CSM before and after traction splint application
 - e. Amputations
 - 1) Clean the amputated extremity with NS
 - 2) Wrap in moist sterile gauze
 - 3) Place in plastic bag

- 4) Place bag with amputated extremity into a separate bag containing ice packs
- 5) Prevent direct tissue contact with the ice packs

Effective Date: December 1, 2012
Next Review Date: December, 1, 2014

Date Revised: October, 2012
Last Reviewed: October 2012

Allergic/Adverse Reaction and Anaphylaxis	
ADULT	PEDIATRIC
BLS Procedures	
Assist with prescribed Epi-Pen Administer oxygen as indicated	Assist with prescribed Epi-Pen Jr. Administer oxygen as indicated
ALS Prior to Base Hospital Contact	
<p>Allergic Reaction or Dystonic Reaction</p> <ul style="list-style-type: none"> • Benadryl <ul style="list-style-type: none"> ○ IV/IM – 50 mg <p>If Wheezing is present</p> <ul style="list-style-type: none"> • Albuterol <ul style="list-style-type: none"> ○ Nebulizer – 5 mg/6 mL <ul style="list-style-type: none"> • Repeat as needed <p>Anaphylaxis without Shock</p> <ul style="list-style-type: none"> • Epinephrine 1:1,000 <ul style="list-style-type: none"> ○ IM – <ul style="list-style-type: none"> • Less than 40 years old – 0.5 mg • 40 years old and greater – 0.3 mg <ul style="list-style-type: none"> ○ Only if severe respiratory distress is present • IV access • Benadryl <ul style="list-style-type: none"> ○ IV/IM – 50 mg <ul style="list-style-type: none"> • May repeat x 1 in 10 min <p>Anaphylaxis with Shock</p> <ul style="list-style-type: none"> • Treatment as above for Anaphylaxis without Shock • Initiate 2nd IV • Normal Saline <ul style="list-style-type: none"> ○ IV bolus – 1 Liter <p>For Profound Shock</p> <ul style="list-style-type: none"> • Epinephrine 1:10,000 <ul style="list-style-type: none"> ○ Slow IVP – 0.1 mg (1 mL) increments <ul style="list-style-type: none"> • Max 0.3 mg (3 mL) over 1-2 min 	<p>Allergic Reaction or Dystonic Reaction</p> <ul style="list-style-type: none"> • Benadryl <ul style="list-style-type: none"> ○ IV/IM – 1 mg/kg <ul style="list-style-type: none"> • Max 50 mg <p>If Wheezing is present</p> <ul style="list-style-type: none"> • Albuterol <ul style="list-style-type: none"> ○ Less than 2 years old <ul style="list-style-type: none"> • Nebulizer – 2.5 mg/3 mL <ul style="list-style-type: none"> ○ Repeat as needed ○ 2 years old and greater <ul style="list-style-type: none"> • Nebulizer – 5 mg/6 mL <ul style="list-style-type: none"> ○ Repeat as needed <p>Anaphylaxis without Shock</p> <ul style="list-style-type: none"> • Epinephrine 1:1,000 <ul style="list-style-type: none"> ○ IM – 0.01 mg/kg <ul style="list-style-type: none"> • Max 0.3 mg • IV access • Benadryl <ul style="list-style-type: none"> ○ IV/IM – 1 mg/kg <ul style="list-style-type: none"> • May repeat x 1 in 10 min • Max 50 mg <p>Anaphylaxis with Shock</p> <ul style="list-style-type: none"> • Treatment as above for Anaphylaxis without Shock • Initiate 2nd IV if possible or establish IO • Normal Saline <ul style="list-style-type: none"> ○ IV/IO bolus – 20 mL/kg <p>For Profound Shock</p> <ul style="list-style-type: none"> • Epinephrine 1:10,000 <ul style="list-style-type: none"> ○ Slow IVP – 0.01 mg/kg (0.1 mL/kg) increments <ul style="list-style-type: none"> • Max 0.3 mg (3 mL) over 1-2 min
Communication Failure Protocol	
<p>Anaphylaxis without Shock</p> <ul style="list-style-type: none"> • Repeat Epinephrine 1:1,000 <ul style="list-style-type: none"> ○ IM – 0.3 mg q 5 min x 2 as needed <p>Anaphylaxis with Shock</p> <ul style="list-style-type: none"> • For continued shock <ul style="list-style-type: none"> ○ Repeat Normal Saline <ul style="list-style-type: none"> • IV bolus – 1 Liter ○ Repeat Epinephrine 1:1,000 <ul style="list-style-type: none"> • IM – 0.3 mg q 5 min x 2 as needed 	<p>Anaphylaxis without Shock</p> <ul style="list-style-type: none"> • Repeat Epinephrine 1:1,000 <ul style="list-style-type: none"> ○ IM – 0.01 mg/kg q 5 min x 2 as needed <p>Anaphylaxis with Shock</p> <ul style="list-style-type: none"> • For continued shock <ul style="list-style-type: none"> ○ Repeat Normal Saline <ul style="list-style-type: none"> • IV/IO bolus – 20 mL/kg ○ Repeat Epinephrine 1:1,000 <ul style="list-style-type: none"> • IM – 0.01 mg/kg q 5 min x 2 as needed
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures

Effective Date: June 1, 2011
Next Review Date: August, 2014

Date Revised: April 14, 2011
Last Reviewed: August 9, 2012



Altered Neurologic Function										
ADULT	PEDIATRIC									
BLS Procedures										
<p>If suspected stroke, refer to VC EMS Policy 705.26 – Suspected Stroke Administer oxygen as indicated If low blood sugar suspected</p> <ul style="list-style-type: none"> • Oral Glucose <ul style="list-style-type: none"> ○ PO – 15 gm 	<p>If suspected stroke, refer to VC EMS Policy 705.26 – Suspected Stroke Administer oxygen as indicated If low blood sugar suspected</p> <ul style="list-style-type: none"> • Oral Glucose <ul style="list-style-type: none"> ○ PO – 15 gm 									
ALS Prior to Base Hospital Contact										
<p>IV access Determine Blood Glucose level <u>If < 60</u></p> <ul style="list-style-type: none"> • D₅₀ <ul style="list-style-type: none"> ○ IV – 25 mL • Glucagon (if no IV access) <ul style="list-style-type: none"> ○ IM – 1 mg <p>Recheck Blood Glucose level 5 min after D₅₀ or 10 min after Glucagon administration <u>If still < 60</u></p> <ul style="list-style-type: none"> • D₅₀ <ul style="list-style-type: none"> ○ IV – 25 mL 	<p>Consider IV access Determine Blood Glucose level <u>If < 60</u></p> <ul style="list-style-type: none"> • Less than 2 years old <ul style="list-style-type: none"> ○ D₂₅ <ul style="list-style-type: none"> • IV – 2 mL/kg ○ Glucagon (if no IV access) <ul style="list-style-type: none"> • IM – 0.1 mg/kg <ul style="list-style-type: none"> ○ Max 1 mg • 2 years old and greater <ul style="list-style-type: none"> ○ D₅₀ <ul style="list-style-type: none"> • IV – 1 mL/kg ○ Glucagon (if no IV access) <ul style="list-style-type: none"> • IM – 0.1 mg/kg <ul style="list-style-type: none"> ○ Max 1 mg <p>Recheck Blood Glucose level 5 min after D₅₀ or 10 min after Glucagon administration <u>If still < 60</u></p> <ul style="list-style-type: none"> • Less than 2 years old <ul style="list-style-type: none"> ○ D₂₅ <ul style="list-style-type: none"> • IV – 2 mL/kg • 2 years old and greater <ul style="list-style-type: none"> ○ D₅₀ <ul style="list-style-type: none"> • IV – 1 mL/kg 									
Base Hospital Orders only										
<p>Consider IO Access if unable to establish IV access or administer glucagon IM</p>	<p>Consider IO Access if unable to establish IV access or administer glucagon IM</p>									
<p>Additional Information:</p> <ul style="list-style-type: none"> • Certain oral hypoglycemic agents (e.g. - sulfonylureas) and long-acting insulin preparations have a long duration of action, sometimes up to 72 hours. Patients on these medications who would like to decline transport MUST be warned about the risk of repeat hypoglycemia for up to 3 days, which can occur during sleep and result in the patient's death. If the patient continues to decline further care, every effort must be made to have the patient speak to the ED Physician prior to leaving the scene. • If patient has an ALOC and Blood Glucose level is >60 mg/DL, consider alternate causes: <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">A - Alcohol</td> <td style="width: 33%;">O - Overdose</td> <td style="width: 33%;">I - Infection</td> </tr> <tr> <td>E - Epilepsy</td> <td>U - Uremia</td> <td>P - Psychiatric</td> </tr> <tr> <td>I - Insulin</td> <td>T - Trauma</td> <td>S - Stroke</td> </tr> </table>		A - Alcohol	O - Overdose	I - Infection	E - Epilepsy	U - Uremia	P - Psychiatric	I - Insulin	T - Trauma	S - Stroke
A - Alcohol	O - Overdose	I - Infection								
E - Epilepsy	U - Uremia	P - Psychiatric								
I - Insulin	T - Trauma	S - Stroke								

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Behavioral Emergencies	
ADULT	PEDIATRIC
ALS Prior to Base Hospital Contact	
<p>IV Access</p> <p>For Extreme Agitation</p> <ul style="list-style-type: none"> • Midazolam <ul style="list-style-type: none"> ○ IV – 2 mg <ul style="list-style-type: none"> • Repeat 1 mg q 2 min as needed • Max 5 mg ○ IM – 0.1 mg/kg <ul style="list-style-type: none"> • Max 5 mg <p>FOR IV USE: Dilute 5 mg (1 mL) Midazolam with 4 mL NS for a final volume of 5 mL concentration of 1 mg/mL</p> <p>When safe to perform, determine blood glucose level</p>	<p>For Extreme Agitation</p> <ul style="list-style-type: none"> • Midazolam <ul style="list-style-type: none"> ○ IM – 0.1 mg/kg <ul style="list-style-type: none"> • Max 5 mg <p>When safe to perform, determine blood glucose level</p>
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
<p>Additional Information:</p> <ul style="list-style-type: none"> • If patient refuses care and transport, and that refusal is because of “mental disorder”, consider having patient taken into custody according to Welfare and Institutions Code Section 5150. “Mental disorders” do not generally include alcohol or drug intoxication, brain injury, hypoxemia, hypoglycemia, or similar causes. • Refer to VC EMS pre-hospital provider fact sheet for suspected excited delirium patients. Be sure to consider and rule out other possible causes or behavior (traumatic or medical). • Use of restraints (physical or chemical) shall be documented and monitored in accordance with VCEMS policy 732 • Welfare and Institutions Code Section 5150: <ul style="list-style-type: none"> ○ A patient may be taken into custody if, as a result of a mental disorder, there is a danger to self and others or is gravely disabled. A California peace officer, a California licensed psychiatrist in an approved facility, Ventura County Health Officer or other County-designated individuals, can take the individual into custody, but it must be enforced by the police in the field. • Patients shall be medically cleared prior to transporting to a psychiatric facility if patient is placed on 5150 hold by law enforcement. • Patient may be transported directly to a psychiatric facility if evaluated by Crisis Team or PAT Team in the field. • All patients that are deemed medically unstable shall be transported to the most accessible Emergency Department. <p>Ventura County Mental Health Crisis Team: (866) 998-2243</p>	

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Bites and Stings

BLS Procedures

Animal/insect bites:

- Flush site with sterile water
- Control bleeding
- Apply bandage

Snake bites/envenomations:

- Remove rings and constrictions
- Immobilize the affected part in dependent position
- Avoid excessive activity

Bee stings:

- If present, remove stinger
- Apply ice pack

Jellyfish stings:

- Rinse thoroughly with normal saline
 - DO NOT:
 - Rinse with fresh water
 - Rub with wet sand
 - Apply heat

All other marine animal stings:

- If present, remove barb
- Immerse in hot water if available

Administer oxygen as indicated

All bites other than snake bites may be treated as a BLS call

ALS Prior to Base Hospital Contact

IV access for snake bites

Monitor for allergic reaction or anaphylaxis

Morphine – per Policy 705 - Pain Control

Base Hospital Orders only

Consult with ED Physician for further treatment measure

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Burns	
ADULT	PEDIATRIC
BLS Procedures	
<ul style="list-style-type: none"> Remove rings, constrictive clothing and garments made of synthetic material Assess for chemical, thermal, electrical, or radiation burns and treat accordingly If < 10% Total Body Surface Area (TBSA) is burned, cool with saline dressings and elevate burned extremities if possible Once area is cooled, remove saline dressings and cover with dry, sterile burn sheets Maintain body heat at all times Administer oxygen as indicated 	<ul style="list-style-type: none"> Remove rings, constrictive clothing and garments made of synthetic material Assess for chemical, thermal, electrical, or radiation burns and treat accordingly If < 10% Total Body Surface Area (TBSA) is burned, cool with saline dressings and elevate burned extremities if possible Once area is cooled, remove saline dressings and cover with dry, sterile burn sheets Maintain body heat at all times Administer oxygen as indicated
ALS Prior to Base Hospital Contact	
<p>IV access Morphine – per Policy 705 - Pain Control</p> <p>If TBSA > 10% or hypotension is present:</p> <ul style="list-style-type: none"> Normal Saline <ul style="list-style-type: none"> IV bolus – 1 Liter 	<p>IV/IO access Morphine – per Policy 705 - Pain Control</p> <p>If TBSA > 10% or hypotension is present:</p> <ul style="list-style-type: none"> Normal Saline <ul style="list-style-type: none"> IV/IO bolus – 20 mL/kg
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures



Cardiac Arrest – Asystole/Pulseless Electrical Activity (PEA)	
ADULT	PEDIATRIC
BLS Procedures	
If collapse before dispatch, complete 5 cycles (2 minutes) of CPR, then attach AED If witnessed, immediately attach AED Airway management per VCEMS policy	If collapse before dispatch, complete 5 cycles (2 minutes) of CPR, then attach AED If witnessed, immediately attach AED Airway management per VCEMS policy
ALS Prior to Base Hospital Contact	
Assess/treat causes IV/IO access Epinephrine <ul style="list-style-type: none"> IV/IO – 1:10,000: 1 mg (10 mL) q 3-5 min If suspected hypovolemia: <ul style="list-style-type: none"> Normal Saline <ul style="list-style-type: none"> IV/IO bolus – 1 Liter ALS Airway Management <ul style="list-style-type: none"> If unable to ventilate by BLS measures, initiate appropriate advanced airway procedures 	Assess/treat causes IV/IO access Epinephrine 1:10,000 <ul style="list-style-type: none"> IV/IO – 0.01mg/kg (0.1 mL/kg) q 3-5 min If suspected hypovolemia: <ul style="list-style-type: none"> Normal Saline <ul style="list-style-type: none"> IV/IO bolus – 20 mL/kg <ul style="list-style-type: none"> Repeat x 2 ALS Airway Management <ul style="list-style-type: none"> If unable to ventilate by BLS measures, initiate appropriate advanced airway procedures Make early Base Hospital contact for all pediatric cardiac arrests
Base Hospital Orders only	
Tricyclic Antidepressant Overdose <ul style="list-style-type: none"> Sodium Bicarbonate <ul style="list-style-type: none"> IV/IO – 1 mEq/kg <ul style="list-style-type: none"> Repeat 0.5 mEq/kg q 5 min Beta Blocker Overdose <ul style="list-style-type: none"> Glucagon <ul style="list-style-type: none"> IV/IO – 2 mg <ul style="list-style-type: none"> May give up to 10mg if available Calcium Channel Blocker Overdose <ul style="list-style-type: none"> Calcium Chloride <ul style="list-style-type: none"> IV/IO – 1 gm <ul style="list-style-type: none"> Repeat x 1 in 10 min Glucagon <ul style="list-style-type: none"> IV/IO – 2 mg <ul style="list-style-type: none"> May give up to 10mg if available History of Renal Failure/Dialysis <ul style="list-style-type: none"> Sodium Bicarbonate <ul style="list-style-type: none"> IV/IO – 1 mEq/kg <ul style="list-style-type: none"> Repeat 0.5 mEq/kg q 5 min Calcium Chloride <ul style="list-style-type: none"> IV/IO – 1 gm <ul style="list-style-type: none"> Repeat x 1 in 10 min 	Tricyclic Antidepressant Overdose <ul style="list-style-type: none"> Sodium Bicarbonate <ul style="list-style-type: none"> IV/IO – 1 mEq/kg <ul style="list-style-type: none"> Repeat 0.5 mEq/kg q 5 min Beta Blocker Overdose <ul style="list-style-type: none"> Glucagon <ul style="list-style-type: none"> IV/IO – 0.1 mg/kg <ul style="list-style-type: none"> May give up to 10mg if available Calcium Channel Blocker Overdose <ul style="list-style-type: none"> Calcium Chloride <ul style="list-style-type: none"> IV/IO – 20 mg/kg <ul style="list-style-type: none"> Repeat x 1 in 10 min Glucagon <ul style="list-style-type: none"> IV/IO – 0.1 mg/kg <ul style="list-style-type: none"> May give up to 10mg if available History of Renal Failure/Dialysis <ul style="list-style-type: none"> Sodium Bicarbonate <ul style="list-style-type: none"> IV/IO – 1 mEq/kg <ul style="list-style-type: none"> Repeat 0.5 mEq/kg q 5 min Calcium Chloride <ul style="list-style-type: none"> IV/IO – 20 mg/kg <ul style="list-style-type: none"> Repeat x 1 in 10 min
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Additional Information : <ul style="list-style-type: none"> If sustained ROSC (> 30 seconds), perform 12-lead EKG. Transport to SRC. If suspected hypovolemia, initiate immediate transport In cases of normothermic cardiac arrest patients 18 years and older with unwitnessed cardiac arrest, adequate ventilations, vascular access, and persistent asystole or PEA despite 20 minutes of standard advanced cardiac life support, the base hospital should consider termination of resuscitation in the field. If transported, the patient may be transported Code II. If unable to contact the base hospital, resuscitative efforts may be discontinued and patient determined to be dead. If patient is hypothermic – only ONE round of medication administration prior to Base Hospital contact. Field determination of death is discouraged in these patients and they should be transported to the most accessible receiving facility. 	

Effective Date: December 1, 2012
Next Review Date: July, 2014

Date Revised: July 12, 2012
Last Reviewed: July 12, 2012



Cardiac Arrest – VF/VT	
ADULT	PEDIATRIC
BLS Procedures	
<p>If collapse before dispatch, complete 5 cycles (2 minutes) of CPR, then attach AED If witnessed, immediately attach AED Airway management per VCEMS policy</p>	<p>If collapse before dispatch, complete 5 cycles (2 minutes) of CPR, then attach AED If witnessed, immediately attach AED Airway management per VCEMS policy</p>
ALS Prior to Base Hospital Contact	
<p>Defibrillate</p> <ul style="list-style-type: none"> Use the biphasic energy settings that have been approved by service provider medical director Repeat every 2 minutes as indicated <p>IV or IO access</p> <p>Epinephrine</p> <ul style="list-style-type: none"> IV/IO – 1:10,000: 1 mg (10 mL) q 3-5 min <p>Amiodarone</p> <ul style="list-style-type: none"> IV/IO – 300 mg – after second defibrillation If VT/VF persists, 150 mg IV/IO in 3-5 minutes <p>ALS Airway Management</p> <ul style="list-style-type: none"> If unable to ventilate by BLS measures, initiate appropriate advanced airway procedures <p>If VF/VT stops, then recurs, perform defibrillation at the last successful biphasic energy setting</p>	<p>Defibrillate – 2 Joules/kg</p> <ul style="list-style-type: none"> If patient still in VF/VT at rhythm check, increase to 4 Joules/kg Repeat every 2 minutes as indicated <p>IV or IO access</p> <p>Epinephrine 1:10,000</p> <ul style="list-style-type: none"> IV/IO – 0.01mg/kg (0.1 mL/kg) q 3-5 min <p>Amiodarone</p> <ul style="list-style-type: none"> IV/IO – 5 mg/kg – after second defibrillation If VT/VF-persists, 2.5 mg/kg IV/IO in 3-5 minutes <p>ALS Airway Management</p> <ul style="list-style-type: none"> If unable to ventilate by BLS measures, initiate appropriate advanced airway procedures <p>If VF/VT stops, then recurs, perform defibrillation at the last successful biphasic energy setting</p>
Base Hospital Orders only	
<p>Tricyclic Antidepressants</p> <ul style="list-style-type: none"> Sodium Bicarbonate <ul style="list-style-type: none"> IV/IO – 1 mEq/kg <ul style="list-style-type: none"> Repeat 0.5 mEq/kg q 5 min <p>Torsades de Pointes</p> <ul style="list-style-type: none"> Magnesium Sulfate <ul style="list-style-type: none"> IV/IO – 2 gm over 2 min <ul style="list-style-type: none"> May repeat x 1 in 5 min <p>Consult with ED Physician for further treatment measures</p> <p><u>ED Physician Order Only:</u> If patient converts to narrow complex rhythm greater than 50 bpm and not in 2nd or 3rd degree heart block, and amiodarone not already given, consider amiodarone 150 mg IVPB</p>	<p>Tricyclic Antidepressants</p> <ul style="list-style-type: none"> Sodium Bicarbonate <ul style="list-style-type: none"> IV/IO – 1 mEq/kg <ul style="list-style-type: none"> Repeat 0.5 mEq/kg q 5 min <p>Consult with ED Physician for further treatment measures</p> <p><u>ED Physician Order Only:</u> If patient converts to narrow complex rhythm greater than 50 bpm and not in 2nd or 3rd degree heart block, and amiodarone not already given, consider amiodarone 2.5 mg/kg IVPB</p>
<p>Additional Information:</p> <ul style="list-style-type: none"> If sustained ROSC (>30 seconds), perform 12-lead EKG. Transport to SRC If patient is <u>hypothermic</u>–only ONE round of medication administration and limit <i>defibrillation to 6 times</i> prior to Base Hospital contact. Field determination of death is discouraged in these patients and they should be transported to the most accessible receiving facility Ventricular tachycardia (VT) is a rate > 150 bpm 	

Effective Date: December 15, 2012
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Crush Injury/Syndrome	
ADULT	PEDIATRIC
BLS Procedures	
Perform spinal precautions as indicated Determine Potential vs. Actual Crush Syndrome Administer oxygen as indicated	Perform spinal precautions as indicated Determine Potential vs. Actual Crush Syndrome Administer oxygen as indicated
ALS Prior to Base Hospital Contact	
Potential crush injury <ul style="list-style-type: none"> • IV access • Maintain body heat • Release compression • Monitor for cardiac dysrhythmias 	Potential crush injury <ul style="list-style-type: none"> • IV access • Maintain body heat • Release compression • Monitor for cardiac dysrhythmias
Communication Failure Protocol	
Actual crush syndrome <ul style="list-style-type: none"> • Initiate 2nd IV access • Normal Saline <ul style="list-style-type: none"> ○ IV bolus – 1 Liter <ul style="list-style-type: none"> • Caution with cardiac and/or renal history • Sodium Bicarbonate <ul style="list-style-type: none"> ○ IV mix – 1 mEq/kg <ul style="list-style-type: none"> • Added to 1st Liter of Normal Saline • Albuterol <ul style="list-style-type: none"> ○ Nebulizer – 5 mg/6 mL <ul style="list-style-type: none"> • Repeat x 2 • Morphine – Per Policy 705 - Pain Control • Maintain body heat • Release compression • Monitor for cardiac dysrhythmias • For cardiac dysrhythmias: <ul style="list-style-type: none"> ○ Calcium Chloride <ul style="list-style-type: none"> • IV – 1 gm over 1 min 	Actual crush syndrome <ul style="list-style-type: none"> • Initiate 2nd IV access if possible or establish IO • Normal Saline <ul style="list-style-type: none"> ○ IV/IO bolus – 20 mL/kg <ul style="list-style-type: none"> • Caution with cardiac and/or renal history • Sodium Bicarbonate <ul style="list-style-type: none"> ○ IV mix– 1 mEq/kg <ul style="list-style-type: none"> • Added to 1st Liter of Normal Saline • Albuterol <ul style="list-style-type: none"> ○ Less than 2 years old <ul style="list-style-type: none"> • Nebulizer – 2.5 mg/3 mL <ul style="list-style-type: none"> ○ Repeat x 2 ○ 2 years old and greater <ul style="list-style-type: none"> • Nebulizer – 5 mg/6 mL <ul style="list-style-type: none"> ○ Repeat x 2 • Maintain body heat • Release compression • Monitor for cardiac dysrhythmias • For cardiac dysrhythmias: <ul style="list-style-type: none"> ○ Calcium Chloride <ul style="list-style-type: none"> • IV/IO – 20 mg/kg over 1 min
For continued shock <ul style="list-style-type: none"> • Repeat Normal Saline <ul style="list-style-type: none"> ○ IV bolus – 1 Liter 	For continued shock <ul style="list-style-type: none"> • Repeat Normal Saline <ul style="list-style-type: none"> ○ IV/IO bolus – 20 mL/kg
Base Hospital Orders only	
For ongoing extended entrapment and no response to fluid therapy: <ul style="list-style-type: none"> • Dopamine <ul style="list-style-type: none"> ○ IVPB – 10 mcg/kg/min 	For ongoing extended entrapment and no response to fluid therapy: <ul style="list-style-type: none"> • Dopamine <ul style="list-style-type: none"> ○ IVPB – 10 mcg/kg/min
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Additional Information: <ul style="list-style-type: none"> • If elderly or cardiac history is present, use caution with fluid administration. Reassess and treat accordingly. • Dysrhythmias are usually secondary to Hyperkalemia. ECG monitor may show: Peaked T-waves, Absent P-waves, widened QRS complexes, bradycardia • Calcium Chloride and Sodium Bicarbonate precipitate when mixed. Strongly consider starting a second IV (if feasible) for administration of Calcium Chloride 	

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Heat Emergencies	
ADULT	PEDIATRIC
BLS Procedures	
Place patient in cool environment Initiate active cooling measures <ul style="list-style-type: none"> • Remove clothing • Fan the patient, or turn on air conditioner • Apply ice packs to axilla, groin, back of neck Administer oxygen as indicated	Place patient in cool environment Initiate active cooling measures Administer oxygen as indicated
ALS Prior to Base Hospital Contact	
Determine Blood Glucose IV access Normal Saline <ul style="list-style-type: none"> • IV bolus – 1 Liter <ul style="list-style-type: none"> ○ Caution with cardiac and/or renal history 	Determine Blood Glucose IV/IO access Normal Saline <ul style="list-style-type: none"> • IV/IO bolus – 20 mL/kg <ul style="list-style-type: none"> ○ Caution with cardiac and/or renal history
Communication Failure Protocol	
If hypotensive after initial IV fluid bolus: <ul style="list-style-type: none"> • Repeat Normal Saline <ul style="list-style-type: none"> ○ IV bolus – 1 Liter 	If hypotensive after initial IV fluid bolus: <ul style="list-style-type: none"> • Repeat Normal Saline <ul style="list-style-type: none"> ○ IV/IO bolus – 20 mL/kg
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures

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Hypothermia

BLS Procedures

Gently move patient to warm environment and begin passive warming

Increase ambulance cabin heat, if applicable

Remove wet clothing and cover patient, including head, with dry blankets

Administer oxygen as indicated

Monitor vital signs for 1 minute. If vital signs are within the acceptable range for severe hypothermia, do not initiate respiratory assistance or chest compressions

- Acceptable range for severe hypothermia:
 - Respiratory Rate: at least 4 breaths per minute
 - Heart rate: at least 20 beats per minute
- Expedite transport if no shivering (indicates core temp below 90°)

ALS Prior to Base Hospital Contact

IV access (if needed for medication or fluid administration)

- If administering fluid, avoid administering cold fluids.

Base Hospital Orders only

Consult with ED Physician for further treatment measures

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Hypovolemic/Septic Shock	
ADULT	PEDIATRIC
BLS Procedures	
Place patient in supine position Administer oxygen as indicated Maintain body temperature	Place patient in supine position Administer oxygen as indicated Maintain body temperature
ALS Prior to Base Hospital Contact	
IV access Normal Saline <ul style="list-style-type: none"> • IV bolus – 1 Liter <ul style="list-style-type: none"> ○ Caution with cardiac and/or renal history ○ Evaluate lung sounds. If signs of CHF, decrease IV to TKO ○ If vital signs return to within normal limits, decrease IV to TKO <u>Traumatic Injury</u> <ul style="list-style-type: none"> • Do not delay transport for first IV attempt • Attempt second IV while enroute to ED • Maintain SBP of 80 mmHg • If SBP > 80 mmHg keep IV at TKO rate 	IV/IO access Normal Saline <ul style="list-style-type: none"> • IV/IO bolus – 20 mL/kg <ul style="list-style-type: none"> ○ Caution with cardiac and/or renal history ○ Evaluate lung sounds. If signs of CHF, decrease IV to TKO ○ If vital signs return to within normal limits, decrease IV to TKO <u>Traumatic Injury</u> <ul style="list-style-type: none"> • Do not delay transport for first IV attempt • Attempt second IV while enroute to ED • Maintain SBP of 80 mmHg • If SBP > 80 mmHg keep IV at TKO rate
Communication Failure Protocol	
If shock persists: <ul style="list-style-type: none"> • <i>Repeat Normal Saline</i> <ul style="list-style-type: none"> ○ IV bolus – 1 Liter 	If shock persists: <ul style="list-style-type: none"> • <i>Repeat Normal Saline</i> <ul style="list-style-type: none"> ○ IV/IO bolus – 20 mL/kg
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures



Overdose/Poisoning	
ADULT	PEDIATRIC
BLS Procedures	
Decontaminate if indicated and appropriate Administer oxygen as indicated	Decontaminate if indicated and appropriate Administer oxygen as indicated
ALS Prior to Base Hospital Contact	
IV access Oral ingestion within 1 hour and gag reflex present: <ul style="list-style-type: none"> • Activated Charcoal <ul style="list-style-type: none"> ○ PO – 1 gm/kg <ul style="list-style-type: none"> • Max 50 gm Suspected opiate overdose with respirations less than 12/min and significant ALOC:: <ul style="list-style-type: none"> • Narcan <ul style="list-style-type: none"> ○ IM – 2 mg ○ IV – 0.4 mg q 1 min <ul style="list-style-type: none"> • Initial max 2 mg ○ May repeat as needed to maintain respirations greater than 12/min 	IV/IO access <ul style="list-style-type: none"> • IO access only if pt in extremis Oral ingestion within 1 hour and gag reflex present: <ul style="list-style-type: none"> • Activated Charcoal <ul style="list-style-type: none"> ○ PO – 1 gm/kg <ul style="list-style-type: none"> • Max 25 gm Suspected opiate overdose with respirations less than 12/min and significant ALOC: <ul style="list-style-type: none"> • Narcan <ul style="list-style-type: none"> ○ IV/IM/IO – 0.1 mg/kg <ul style="list-style-type: none"> • Initial max 2 mg ○ May repeat as needed to maintain respirations greater than 12/min
Base Hospital Orders only	
Tricyclic Antidepressant Overdose <ul style="list-style-type: none"> • Sodium Bicarbonate <ul style="list-style-type: none"> ○ IV – 1 mEq/kg Beta Blocker Overdose <ul style="list-style-type: none"> • Glucagon <ul style="list-style-type: none"> ○ IV – 2 mg <ul style="list-style-type: none"> • May give up to 10 mg if available Calcium Channel Blocker Overdose <ul style="list-style-type: none"> • Calcium Chloride <ul style="list-style-type: none"> ○ IV – 1 gm over 1 min • Glucagon <ul style="list-style-type: none"> ○ IV – 2 mg <ul style="list-style-type: none"> • May give up to 10 mg if available Stimulant/Hallucinogen Overdose <ul style="list-style-type: none"> • Midazolam <ul style="list-style-type: none"> ○ IV – 2 mg <ul style="list-style-type: none"> • Repeat 1 mg q 2 min as needed • Max 5 mg ○ IM – 0.1 mg/kg <ul style="list-style-type: none"> • Max 5 mg Organophosphate Poisoning <ul style="list-style-type: none"> • Atropine <ul style="list-style-type: none"> ○ IV – 2 mg q 1 min <ul style="list-style-type: none"> • Repeat until symptoms are relieved 	Tricyclic Antidepressant Overdose <ul style="list-style-type: none"> • Sodium Bicarbonate <ul style="list-style-type: none"> ○ IV/IO – 1 mEq/kg Beta Blocker Overdose <ul style="list-style-type: none"> • Glucagon <ul style="list-style-type: none"> ○ IV/IO – 0.1 mg/kg <ul style="list-style-type: none"> • May give up to 10 mg if available Calcium Channel Blocker Overdose <ul style="list-style-type: none"> • Calcium Chloride <ul style="list-style-type: none"> ○ IV/IO – 20 mg/kg over 1 min • Glucagon <ul style="list-style-type: none"> ○ IV/IO – 0.1 mg/kg <ul style="list-style-type: none"> • May give up to 10 mg if available Stimulant/Hallucinogen Overdose <ul style="list-style-type: none"> • Midazolam <ul style="list-style-type: none"> ○ IM – 0.1 mg/kg <ul style="list-style-type: none"> • Max 5 mg Organophosphate Poisoning <ul style="list-style-type: none"> • Atropine <ul style="list-style-type: none"> ○ IV/IO – 0.02 mg/kg q 1 min <ul style="list-style-type: none"> • Minimum dose – 0.1mg • Repeat until symptoms are relieved
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Additional Information: <ul style="list-style-type: none"> • For Caustic/Corrosive or petroleum distillate ingestions, DO NOT GIVE CHARCOAL OR INDUCE VOMITING • For Tricyclic Antidepressant Overdose, DO NOT GIVE CHARCOAL • If chest pain present, refer to chest pain policy. DO NOT GIVE ASPIRIN • Organophosphate poisoning – SLUDGE <ul style="list-style-type: none"> ○ S – Salivation ○ L – Lacrimation ○ U – Urination ○ D – Defecation ○ G – Gastrointestinal Distress ○ E – Elimination (vomiting) • Narcan – it is not necessary that the patient be awake and alert. Administer until max dosage is reached <u>or</u> RR greater than 12/min. When given to chronic opioid patients, withdrawal symptoms may present. IM dosing is the preferred route of administration. 	

Effective Date: December 1, 2012
Next Review Date: August, 2014

Date Revised: August 12, 2012
Last Reviewed: August 12, 2012



VCEMS Medical Director

Pain Control	
ADULT	PEDIATRIC
BLS Procedures	
Place patient in position of comfort Administer oxygen as indicated	Place patient in position of comfort Administer oxygen as indicated
ALS Prior to Base Hospital Contact	
<p>IV access</p> <p>Morphine</p> <ul style="list-style-type: none"> • IV – 2-4 mg over 1-2 min <ul style="list-style-type: none"> ○ Repeat q 3 min as needed for pain relief ○ Max 10 mg • IM – 0.1 mg/kg <ul style="list-style-type: none"> ○ Max 10 mg <p>Recheck vital signs before and after each administration</p> <ul style="list-style-type: none"> • Hold if SBP < 100 mmHg <p><i>If patient has significant injury to head, chest, abdomen or is hypotensive, DO NOT administer pain control unless ordered by ED Physician</i></p>	<p>IV access</p> <p>Morphine – given for burns and isolated extremity injuries only</p> <ul style="list-style-type: none"> • IV – 0.1 mg/kg over 1-2 min <ul style="list-style-type: none"> ○ May repeat x 1 after 3 min as needed for pain relief ○ Max 0.2 mg/kg or 10 mg • IM – 0.1 mg/kg <ul style="list-style-type: none"> ○ Max 10 mg <p>Recheck vital signs before and after each administration</p> <p><i>If patient has significant injury to head, chest, abdomen or is hypotensive, DO NOT administer pain control unless ordered by ED Physician</i></p>
Communication Failure Protocol	
<p>If significant pain continues:</p> <ul style="list-style-type: none"> • Morphine <ul style="list-style-type: none"> ○ IV – 2-4 mg over 1-2 min <ul style="list-style-type: none"> • Max repeat dose of 10 mg • Max total dosage of 20 mg ○ IM – 0.1 mg/kg <ul style="list-style-type: none"> • Max repeat dose of 10 mg 	<p>If significant pain continues:</p> <ul style="list-style-type: none"> • Morphine <ul style="list-style-type: none"> ○ IV – 0.1 mg/kg over 1-2 min <ul style="list-style-type: none"> • May repeat x 1 after 3 min as needed for pain relief • Max repeat dose of 10 mg • Max total dosage of 0.4 mg/kg or 20 mg ○ IM – 0.1 mg/kg <ul style="list-style-type: none"> • May repeat x 1 after 20 minutes • Max repeat dose of 10 mg
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures

Effective Date: December 1, 2012
Next Review Date: December, 1, 2014

Date Revised: August, 2012
Last Reviewed: August, 2012



Seizures	
ADULT	PEDIATRIC
BLS Procedures	
Protect from injury Maintain/manage airway as indicated Administer oxygen as indicated	Protect from injury Maintain/manage airway as indicated For suspected febrile seizures, begin passive cooling measures. If seizure activity persists, see below Administer oxygen as indicated
ALS Prior to Base Hospital Contact	
IV access Determine Blood Glucose level <u>If < 60</u> <ul style="list-style-type: none"> • D₅₀ <ul style="list-style-type: none"> ○ IV – 25 mL • Glucagon (if no IV access) <ul style="list-style-type: none"> ○ IM – 1 mg Persistent Seizure Activity <ul style="list-style-type: none"> • Midazolam <ul style="list-style-type: none"> ○ IV – 2 mg <ul style="list-style-type: none"> • Repeat 1 mg q 2 min as needed • Max 5 mg ○ IM – 0.1 mg/kg <ul style="list-style-type: none"> • Max 5 mg FOR IV USE: Dilute 5 mg (1 mL) Midazolam with 4 mL NS for a final volume of 5 mL concentration of 1 mg/mL <u>3rd Trimester Pregnancy & No Known Seizure History</u> <ul style="list-style-type: none"> • Magnesium Sulfate <ul style="list-style-type: none"> ○ IVPB – 2 gm in 50 mL D₅W infused over 5 min <ul style="list-style-type: none"> • MUST Repeat x 1 • Slow or stop infusion if bradycardia, heart block, or decreased respiratory effort occur Recheck Blood Glucose level 5 min after D ₅₀ or 10 min after Glucagon administration <u>If still < 60</u> <ul style="list-style-type: none"> • Repeat D₅₀ <ul style="list-style-type: none"> ○ IV – 25 mL 	Consider IV/IO access Determine Blood Glucose level <u>If < 60</u> <ul style="list-style-type: none"> • Less than 2 years old <ul style="list-style-type: none"> ○ D₂₅ <ul style="list-style-type: none"> • IV – 2 mL/kg ○ Glucagon (if no IV access) <ul style="list-style-type: none"> • IM – 0.1 mg/kg <ul style="list-style-type: none"> ○ Max 1 mg • 2 years old and greater <ul style="list-style-type: none"> ○ D₅₀ <ul style="list-style-type: none"> • IV – 1 mL/kg ○ Glucagon <ul style="list-style-type: none"> • IM – 0.1 mg/kg <ul style="list-style-type: none"> ○ Max 1 mg Persistent Seizure Activity <ul style="list-style-type: none"> • Midazolam <ul style="list-style-type: none"> ○ IM – 0.1 mg/kg <ul style="list-style-type: none"> • Max 5 mg Recheck Blood Glucose level 5 min after D ₅₀ or 10 min after Glucagon administration <u>If still < 60</u> <ul style="list-style-type: none"> • Less than 2 years old <ul style="list-style-type: none"> ○ D₂₅ <ul style="list-style-type: none"> • IV – 2 mL/kg • 2 years old and greater <ul style="list-style-type: none"> ○ D₅₀ <ul style="list-style-type: none"> • IV – 1 mL/kg
Base Hospital Orders only	
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Additional Information: <ul style="list-style-type: none"> • Treatment with Midazolam as indicated in the following: <ul style="list-style-type: none"> ○ Continuous seizures > 5 min (or > 2 min in pregnancy) ○ Repetitive seizures without regaining consciousness • Patients with a known seizure disorder or uncomplicated, apparent pediatric febrile seizures, no longer seizing and with a normal postictal state, may be treated as a BLS call 	

Effective Date: December 1, 2010
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Date Revised: August, 2010
Last Reviewed: August, 2012



Shortness of Breath – Pulmonary Edema

BLS Procedures

Administer oxygen as indicated

ALS Prior to Base Hospital Contact

Nitroglycerin

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

Initiate CPAP for moderate to severe distress

Perform 12-lead ECG

IV access

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

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

Communication Failure Protocol

Lasix

- IV – 40 mg
 - Only if patient prescribed Lasix or Bumex

If patient becomes or presents with hypotension

- **Dopamine**
 - IVPB – 10 mcg/kg/min

Base Hospital Orders only

Consult with ED Physician for further treatment measures

Effective Date: December 1, 2010
Next Review Date: July, 2014

Date Revised: August, 2010
Last Reviewed: August, 2012



Shortness of Breath – Wheezes/Other	
ADULT	PEDIATRIC
BLS Procedures	
Assist patient with prescribed Metered Dose Inhaler if available Administer oxygen as indicated	Assist patient with prescribed Metered Dose Inhaler if available Administer oxygen as indicated
ALS Prior to Base Hospital Contact	
Perform Needle Thoracostomy if indicated per Policy 715 Moderate Distress <ul style="list-style-type: none"> • Albuterol <ul style="list-style-type: none"> ○ Nebulizer – 5 mg/6 mL <ul style="list-style-type: none"> • Repeat as needed Severe Distress <ul style="list-style-type: none"> • Treatment for moderate distress • Less than 40 years old <ul style="list-style-type: none"> ○ Epinephrine 1:1,000 <ul style="list-style-type: none"> • IM – 0.3 mg Consider CPAP for both moderate and severe distress IV access	Perform Needle Thoracostomy if indicated per Policy 715 Moderate Distress <ul style="list-style-type: none"> • Less than 2 years old <ul style="list-style-type: none"> ○ Albuterol <ul style="list-style-type: none"> • Nebulizer – 2.5 mg/3 mL <ul style="list-style-type: none"> ○ Repeat as needed • 2 years old and greater <ul style="list-style-type: none"> ○ Albuterol <ul style="list-style-type: none"> • Nebulizer – 5 mg/6 mL <ul style="list-style-type: none"> ○ Repeat as needed Severe Distress <ul style="list-style-type: none"> • Treatment for moderate distress • Epinephrine 1:1,000 <ul style="list-style-type: none"> ○ IM – 0.01 mg/kg <ul style="list-style-type: none"> • Max 0.3 mg Suspected Croup <ul style="list-style-type: none"> • Normal Saline <ul style="list-style-type: none"> ○ Nebulizer/Aerosolized Mask – 5 mL Consider CPAP if age 8 years old and greater IV access
Communication Failure Protocol	
Severe Distress <ul style="list-style-type: none"> • Less than 40 years old <ul style="list-style-type: none"> ○ If no change is apparent 10 minutes after first Epinephrine administration: <ul style="list-style-type: none"> • Repeat Epinephrine 1:1,000 <ul style="list-style-type: none"> ○ IM – 0.3 mg • 40 years old and greater <ul style="list-style-type: none"> ○ Epinephrine 1:1,000 <ul style="list-style-type: none"> • IM – 0.3 mg <ul style="list-style-type: none"> ○ Only if apparent asthma ○ Only if age less than 60 years old ○ Only if no improvement with initial therapies 	Severe Distress <ul style="list-style-type: none"> • If no change is apparent 10 minutes after first Epinephrine administration <ul style="list-style-type: none"> ○ Repeat Epinephrine 1:1,000 <ul style="list-style-type: none"> • IM – 0.01 mg/kg <ul style="list-style-type: none"> ○ Max 0.3 mg
Base Hospital Orders only	
	Suspected Croup and no improvement with Normal Saline nebulizer <ul style="list-style-type: none"> • Less than 2 years old <ul style="list-style-type: none"> ○ Epinephrine 1:1,000 <ul style="list-style-type: none"> • Nebulizer/Aerosolized Mask – 2.5 mL • 2 years old and greater <ul style="list-style-type: none"> ○ Epinephrine 1:1,000 <ul style="list-style-type: none"> • Nebulizer/Aerosolized Mask – 5 mL
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Additional Information: <ul style="list-style-type: none"> • High flow O₂ is indicated for severe respiratory distress, even with a history of COPD • COPD patients have a higher susceptibility to spontaneous pneumothorax due to disease process • If suspected Arterial Gas Embolus/Decompression Sickness secondary to SCUBA emergencies, transport patient in supine position on 15L/min O₂ via mask. Early BH contact is recommended to determine most appropriate transport destination. 	

Effective Date: December 1, 2010
Next Review Date: August, 2014

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Last Reviewed: August, 2012



Supraventricular Tachycardia	
ADULT	PEDIATRIC
BLS Procedures	
Administer oxygen as indicated	Administer oxygen as indicated
ALS Prior to Base Hospital Contact	
Valsalva maneuver IV access <u>Stable</u> – Mild to moderate chest pain/SOB <u>Unstable</u> – ALOC, signs of shock or CHF <ul style="list-style-type: none"> Place on backboard and prepare for synchronized cardioversion 	Valsalva maneuver IV access <u>Stable</u> – Mild to moderate chest pain/SOB <u>Unstable</u> – ALOC, signs of shock or CHF <ul style="list-style-type: none"> Place on backboard and prepare for synchronized cardioversion
Communication Failure Protocol	
<u>Stable</u> <ul style="list-style-type: none"> Adenosine <ul style="list-style-type: none"> IV – 6 mg rapid push immediately followed by 10-20 mL NS flush No conversion or rate control <ul style="list-style-type: none"> Adenosine <ul style="list-style-type: none"> IV – 12 mg rapid push immediately followed by 10-20 mL NS flush May repeat x 1 if no conversion or rate control <u>Unstable</u> <ul style="list-style-type: none"> Midazolam <ul style="list-style-type: none"> IV – 2 mg <ul style="list-style-type: none"> Should only be given if it does not result in delay of synchronized cardioversion For IV use – Dilute 5 mg (1 mL) Midazolam with 4 mL NS for a final volume of 5 mL concentration of 1 mg/mL IO Access for unstable adults only. Synchronized Cardioversion <ul style="list-style-type: none"> Use the biphasic energy settings that have been approved by service provider medical director. 	<u>Stable</u> <ul style="list-style-type: none"> Adenosine <ul style="list-style-type: none"> IV – 0.1 mg/kg (max dose 6 mg) rapid push immediately followed by 10-20 mL NS flush No conversion or rate control <ul style="list-style-type: none"> Adenosine <ul style="list-style-type: none"> IV – 0.2 mg/kg (max dose 12 mg) rapid push immediately followed by 10-20 mL NS flush May repeat x 1 if no conversion or rate control <u>Unstable</u> <ul style="list-style-type: none"> Synchronized Cardioversion <ul style="list-style-type: none"> Use the biphasic energy settings that have been approved by service provider medical director.
Base Hospital Orders only	
Consult with ED Physician for further treatment measure	
Additional Information: <ul style="list-style-type: none"> Adenosine is contraindicated in pt with 2° or 3rd° AV Block, Sick Sinus Syndrome (except in pt with functioning pacemaker), or known hypersensitivity to adenosine. Unless the patient is in moderate or severe distress, consider IV access and transport only. Consider withholding adenosine administration if patient is stable until ED Physician evaluation. Prior to administering Adenosine in pediatric patients, evaluate for possible underlying causes of tachycardia (infection, dehydration, trauma, etc.) Document all ECG strips during adenosine administration and/or synchronized cardioversion. 	

Effective Date: December 1, 2012
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Symptomatic Bradycardia	
ADULT (HR < 45 bpm)	PEDIATRIC (HR < 60 bpm)
BLS Procedures	
Administer oxygen as indicated Supine position as tolerated	Administer oxygen as indicated Assist ventilations if needed If significant ALOC, initiate CPR
ALS Prior to Base Hospital Contact	
IV access Atropine <ul style="list-style-type: none"> • IV – 0.5 mg (1 mg/10 mL) Transcutaneous Pacing (TCP) <ul style="list-style-type: none"> • Should be initiated only if patient has signs of hypoperfusion • Should be started immediately for 3^o heart blocks and 2^o Type 2 (Mobitz II) heart blocks • If pain is present during TCP <ul style="list-style-type: none"> ○ Morphine – per policy 705 - Pain Control 	IV access <ul style="list-style-type: none"> • IO access only if pt in extremis Epinephrine 1:10,000 <ul style="list-style-type: none"> • IV/IO – 0.01 mg/kg (0.1 mL/kg) q 3-5 min
Communication Failure Protocol	
If symptoms persist for 3 minutes after first atropine dose and if no capture with TCP <ul style="list-style-type: none"> • Atropine <ul style="list-style-type: none"> ○ IV – 0.5 mg q 3-5 min <ul style="list-style-type: none"> • Max 0.04 mg/kg • Dopamine <ul style="list-style-type: none"> ○ IVPB – 10 mcg/kg/min <ul style="list-style-type: none"> • Use if patient continues to be unresponsive to atropine and TCP 	
Base Hospital Orders only	
For suspected hyperkalemia <ul style="list-style-type: none"> • Calcium Chloride <ul style="list-style-type: none"> ○ IV – 1 gm over 1 min <ul style="list-style-type: none"> • Withhold if suspected digitalis toxicity • Sodium Bicarbonate <ul style="list-style-type: none"> ○ IV – 1 mEq/kg 	Atropine <ul style="list-style-type: none"> • IV/IO – 0.02 mg/kg <ul style="list-style-type: none"> ○ Minimum dose – 0.1 mg
Consult with ED Physician for further treatment measures	Consult with ED Physician for further treatment measures
Additional Information <ul style="list-style-type: none"> • Bradycardia does not require treatment unless signs and symptoms are present (chest pain, altered level of consciousness, abnormal skin signs, profound weakness, or low BP) 	

Effective Date: December 1, 2010
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Date Revised: August, 2010
Last Reviewed: August, 2012



Suspected Stroke	
ADULT	
BLS Procedures	
Cincinnati Stroke Scale (CSS) Administer oxygen as indicated If low blood sugar suspected, refer to VC EMS Policy 705.03 – Altered Neurologic Function	
ALS Prior to Base Hospital Contact	
IV/IO access Cardiac monitor – document initial and ongoing rhythm strips Determine Blood Glucose level, treat according to VC EMS policy 705.03 – Altered Neurologic Function If patient meets Stroke Alert Criteria, as defined in VC EMS Policy 451, expedite transport to nearest Acute Stroke Center (ASC)	
Base Hospital Orders only	
Consult with ED Physician for further treatment measure	
Additional Information <ul style="list-style-type: none">• Cincinnati Stroke Scale (CSS).<ul style="list-style-type: none">Facial Droop<ul style="list-style-type: none">Normal: Both sides of face move equallyAbnormal: One side of face does not move normallyArm Drift<ul style="list-style-type: none">Normal: Both arms move equally or not at allAbnormal: One arm does not move, or one arm drifts down compared with the other sideSpeech<ul style="list-style-type: none">Normal: Patient uses correct words with no slurringAbnormal: Slurred or inappropriate words or mute• Patients meeting Stroke Alert Criteria, as defined in VC EMS Policy 451, shall be transported to the nearest Acute Stroke Center (ASC).• Stroke patients in cardiac arrest with sustained ROSC (>30 seconds) shall be transported to the nearest STEMI Receiving Center (SRC).• For seizure activity, refer to VC EMS Policy 705.20 Seizure.• Minimize scene time and transport Code 3 if symptoms present for 4.5 hours or less.	

Effective Date: December 1, 2012
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Date Revised:
Last Reviewed:



Sepsis Alert

ADULT

BLS Procedures

Administer oxygen as indicated

EMS Sepsis Screening Tool

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

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



If yes to above, evaluate for infection



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

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



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

ALS Prior to Base Hospital Contact

If Sepsis Suspected

IV Access

- Normal Saline
1 Liter Bolus

Effective Date: December 1, 2012
Next Review Date: December, 1, 2013

Date Revised:
Last Reviewed:

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Airway Management		Policy Number 710	
APPROVED: Administration:	Steven L. Carroll, EMT-P	Date: December 1, 2012	
APPROVED: Medical Director:	Angelo Salvucci, M.D.	Date: December 1, 2012	
Origination Date:	June 1986		
Date Revised:	October 11, 2012	Effective Date: December 1, 2012	
Date Last Reviewed:	October 11, 2012		
Review Date:	October 31, 2014		

- I. PURPOSE: To define the indications, procedure and documentation for airway management by prehospital emergency medical personnel within Ventura County
- II. AUTHORITY: Health and Safety Code, §1798 and §1798.2; §1798.160, and §1798.170 and California Code of Regulations, Title 22, §100218 and §100254.
- III. Policy: Airway management shall be performed on all patients that are unable to maintain or protect their own airway. Paramedics may utilize oral endotracheal intubation on patients eight (8) years of age or older, in accordance with Ventura County Policy 705.
- IV. Definitions: Intubation Attempt – an interruption of ventilation, with laryngoscope insertion, for the purpose of endotracheal tube (ETT) placement.
- V. Procedure:
 - A. Bag-Valve-Mask (BVM) ventilations
 1. Indications
 - a. Respiratory arrest or severe respiratory compromise
 - b. Cardiac arrest – according to VCEMS Policy 705
 2. Contraindications
 - a. None
 3. Impedance Threshold Device (ITD, ResQPOD) – CARDIAC ARREST ONLY
 - a. MUST UTILIZE 2-RESCUER VENTILATION TECHNIQUE
 - b. For all rhythms, in patients 18 y/o and above, start continuous compressions at 100/min. Attach ResQPOD to BVM. As soon as BVM/ResQPOD is ready, insert oral airway and perform CPR at

- 30:2 compression to ventilation ratio, utilizing the BVM/ResQPOD to deliver the 2 breaths.
 - c. Maintain a 2-handed face mask seal throughout compressions.
 - d. If the patient has return of spontaneous circulation (ROSC), immediately remove ResQPOD.
 - e. Continue to assist ventilations at 1 breath every 5-6 seconds.
- B. Endotracheal Intubation (ETI)
- 1. Indications
 - a. Cardiac arrest – according to VCEMS Policy 705 – ONLY if unable to adequately ventilate with BVM.
 - b. Respiratory arrest or severe respiratory compromise **AND** unable to maintain an adequate airway and adequately ventilate with BVM.
 - c. After Base Hospital (BH) contact has been made, the BH Physician may order endotracheal intubation in other situations.
 - 2. Contraindications
 - a. Traumatic brain injury – unless unable to maintain adequate airway (e.g. – persistent vomiting).
 - b. Intact gag reflex.
 - 3. Intubation Attempts
 - a. There shall be no more than two (2) attempts to perform ETI, lasting no longer than 40 seconds each, and prior to BH contact. For patients in cardiac arrest, each ETI attempt shall interrupt chest compressions for no longer than 20 seconds.
 - b. The patient shall be ventilated with 100% O₂ by BVM for one minute before each attempt.
 - c. If ETI cannot be accomplished in 2 attempts, the airway shall be managed by BLS techniques.
 - d. If ETI and BLS techniques are unsuccessful, the approved alternate ALS airway device may be inserted.
 - 4. [OPTIONAL] - ITD (ResQPOD) – CARDIAC ARREST ONLY
 - a. If/when advanced airway is established, transfer the ResQPOD to the advanced airway and start continuous compressions at

- 100/min with one breath each 6 seconds (timing light) or every 10th compression
- b. If patient has ROSC, immediately remove ResQPOD from advanced airway and continue to assist ventilations at 1 breath every 5-6 seconds as needed.
5. Special considerations
- a. Flexible Stylet. A flexible stylet may be used for any ETI attempt that involves an ETT size of at least 6.0 mm.
 - 1) Two Person Technique (recommended when visualization is less than ideal):
 - a) Visualize as well as possible.
 - b) Place stylet just behind the epiglottis with the bent tip anterior and midline.
 - c) Gently advance the tip through the cords maintaining anterior contact.
 - d) Use stylet to feel for tracheal rings.
 - e) Advance stylet past the black mark. A change in resistance indicates the stylet is at the carina.
 - f) Withdraw the stylet to align the black mark with the teeth.
 - g) Have your assistant load and advance the ETT tip to the black mark.
 - h) Have your assistant grasp and hold steady the straight end of the stylet.
 - i) While maintaining laryngoscope blade position, advance the ETT.
 - j) At the glottic opening turn the ETT 90 degrees counter-clockwise to assist passage over the arytenoids.
 - k) Advance the ETT to 22 cm at the teeth.
 - l) While maintaining ETT position, withdraw the stylet.
 - 2) One Person Technique (recommended when visualization is good but cords are too anterior to pass ET tube).

- a) Load the stylet into the ETT with the bent end approximately 4 inches (10 cm) past the distal end of the ETT.
 - b) Pinch the ETT against the stylet.
 - c) With the bent tip anterior, while visualizing the cords advance the stylet through the cords.
 - d) Maintain laryngoscope blade position.
 - e) When the black mark is at the teeth ease your grip to allow the tube to slide over the stylet. If available have an assistant stabilize the stylet.
 - f) At the glottic opening turn the ETT 90 degrees counter-clockwise to assist passage over the arytenoids.
 - g) Advance the ETT to 22 cm at the teeth.
 - h) While maintaining ETT position, withdraw the stylet.
- b. Tracheal stoma intubation
- 1) Select the largest endotracheal tube that will fit through the stoma without force (it should not be necessary to use lubricant).
 - 2) Do not use stylet.
 - 3) Pass ETT until the cuff is just past the stoma.
 - 4) Inflate cuff.
 - 5) Attach the CO₂ measurement device to the ETT and confirm placement (as described below).
 - 6) Secure tube.
6. Confirmation of Placement – It is the responsibility of the paramedic who has inserted the ETT to personally confirm (using air aspiration, auscultation, and CO₂ detection/measurement) and document proper placement. Responsibility for the position of the ETT shall remain with the intubating paramedic until a formal transfer of care has been made.
- a. Prior to intubation, prepare both the air aspiration and the CO₂ measurement devices.
 - b. Insert ETT, advance, and hold at the following depth:
 - 1) Less than 5 ft. tall: balloon 2 cm past the vocal cords.

- 2) 5'-6'6" tall: 22 cm at the teeth.
 - 3) Over 6'6" tall: 24 cm at the teeth or 2 cm past the vocal cords.
- c. After inserting the ETT, in the patient requiring CPR, resume chest compressions while confirming ETT placement.
- d. Before inflating ETT balloon, perform the air aspiration technique.
- 1) Deflate the bulb, connect to the ETT, and observe for refilling.
 - 2) Refilling of the bulb in less than 5 seconds indicates tube placement in trachea.
 - 3) If the bulb does not completely refill within 5 seconds, unless able to definitively confirm placement on repeat direct laryngoscopy, remove the ETT. Suspect delayed filling with the ETT in the trachea if the patient is morbidly obese, has fluid in the airway (pulmonary edema, aspiration, pneumonia, drowning), or the ETT is against the carina.
- e. Inflate the ETT cuff, attach the CO₂ measurement device, and begin ventilations. During the first 5-6 ventilations, auscultate both lung fields (in the axillae) and the epigastrium.
- f. After 6 ventilations, observe the CO₂ measurement device:
- 1) If a colorimetric CO₂ detector device is used for initial placement confirmation prior to capnography, observe the color at the end of exhalation. Yellow indicates the presence of >5% exhaled CO₂ and tan 2-5% CO₂. Yellow or tan indicates tube placement in the trachea. Purple indicates less than 2% CO₂ and in the patient with spontaneous circulation is a strong indicator of esophageal intubation.
 - 2) When capnography is applied, a regular waveform with each ventilation should be seen with tracheal placement. If the patient has been in cardiac arrest for a prolonged time (more than 5-10 minutes) the waveform may be diminished or, rarely, absent. In the patient with spontaneous

circulation, if a regular waveform with a CO₂ of 25 or higher is not seen, that is a strong indicator of esophageal intubation.

- g. Using information from auscultation and CO₂ measurement, determine the ETT position.
 - 1) If breath sounds are equal, there are no sounds at the epigastrium, and the CO₂ measurement device indicates tracheal placement, secure the ETT using an ETT holder.
 - 2) If auscultation or the CO₂ measurement device, indicates that the ETT may be in the esophagus, immediately reevaluate the patient. If you are not CERTAIN that the ETT is in the trachea, the decision to remove the ETT should be based upon the patient's overall clinical status (e.g., skin color, respirations, pulse oximetry)
 - 3) If breath sounds are present but unequal, the ETT position may be adjusted as needed.
- h. Once ETT position has been confirmed, reassessment, using CO₂ measurement, pulse oximetry (if able to obtain), and auscultation of breath sounds should be performed each time patient is moved.
- i. Continue to monitor the CO₂ measurement device during treatment and transportation. If a change occurs from positive (yellow/tan) to negative (purple), or the waveform diminishes or disappears, reassess the patient for possible accidental extubation or change in circulation status.
- j. After confirmation of proper ETT placement and prior to movement, all intubated patients shall have their head and neck maintained in a neutral position with head supports. A cervical collar will only be used if a cervical spine injury is suspected.
 - 1) Reconfirm ETT placement after any manipulation of the head or neck, including positioning of a head support, and after each change in location of the patient.
 - 2) Report to nurse and/or physician that the head support is for the purpose of securing the ETT and not for trauma (unless otherwise suspected).

7. Documentation
 - a. All ETI attempts must be documented in the “ALS Airway” section of the Ventura County Electronic Patient Care Report (VCePCR).
 - b. All validated fields related to an advanced airway attempt shall be completed on the VCePCR. Anything related to the advanced airway attempt that does not have an applicable corresponding field in VCePCR, but needs to be documented, shall be entered into the report narrative. All data related to an advanced airway attempt (successful or not) shall be documented on a VCePCR. In addition, an electronic signature shall be captured on the mobile device used to document the care provided. The treating emergency room physician will sign the ‘Advanced Airway Verification’ section of the VCePCR, as well as document the supporting information (placement, findings, method, comments, name, and date). In the event the patient was not transported, another on scene paramedic (if available) will sign and complete the verification section.
 - c. Documentation of the intubation in the approved Ventura County Documentation System must include the following elements. The acronym for the required elements is “SADCASES.”
 - 1) Size of the ETT
 - 2) Attempts, number
 - 3) Depth of the ETT at the patient’s teeth
 - 4) Confirmation devices used and results. For capnography, recording of waveform at the following points:
 - a. Initial ETT placement confirmation;
 - b. Movement of patient; and
 - c. Transfer of care.
 - 5) Auscultation results
 - 6) Secured by what means
 - 7) ETCO₂, initial value
 - 8) Support of the head or immobilization of the cervical spine.
 - d. An electronic upload of Cardiac Monitor data, including ETCO₂ waveform “snapshots” to the VCePCR is required. In the event an

upload cannot occur, a printed code summary, mounted and labeled, displaying capnography waveform at the key points noted above is required. This printed code summary shall be scanned and attached to the VCePCR.

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: December 1, 2012	
APPROVED: Medical Director:	Angelo Salvucci, MD	Date: December 1, 2012	
Origination Date:	September 10, 1992	Effective Date: December 1, 2012	
Date Revised:	July 12, 2012		
Date Last Reviewed:	July 12, 2012		
Review Date:	July, 2014		

- 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, skin injury, burn, 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.
- 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:
1 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 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 less than 2 years old, prime with NS
 - b. If ≥ 2 years old, and conscious, prime with 2% cardiac lidocaine (20 mg)
3. Locate the appropriate insertion site 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 mid tibial tuberosity
4. Prepare the site utilizing aseptic technique with alcohol wipes.
5. To insert the EZ-IO needle:
 - 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 without 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: 1 mg/kg
 - 2) ≥ 40 kg: 40 mg
- 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.
- 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.



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** _____

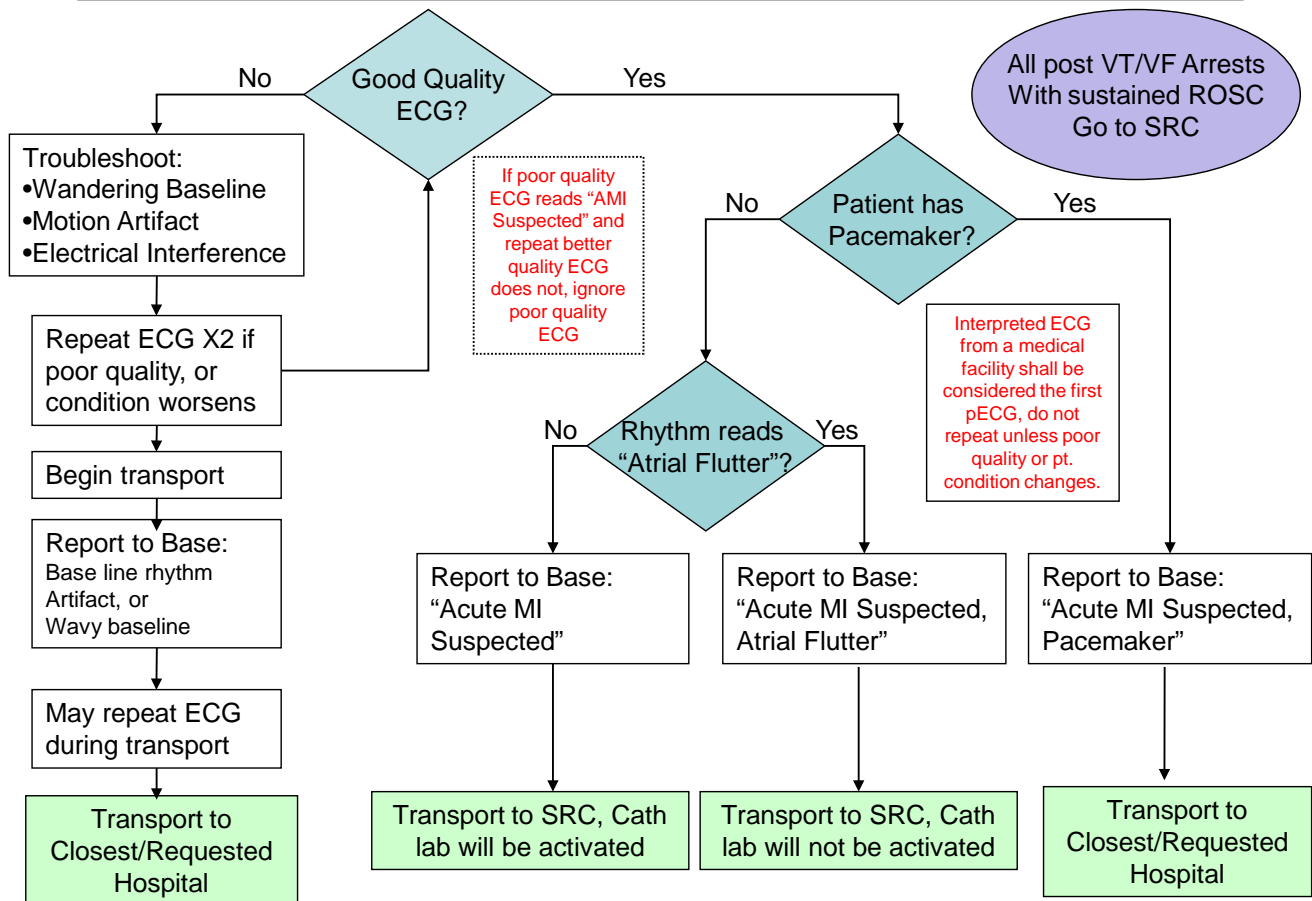
COUNTY OF VENTURA EMERGENCY MEDICAL SERVICES		HEALTH CARE AGENCY POLICIES AND PROCEDURES	
Policy Title 12 Lead ECG		Policy Number: 726	
APPROVED: Administration:	Steven L. Carroll, Paramedic	Date: December 1, 2012	
APPROVED: Medical Director:	Angelo Salvucci, MD	Date: December 1, 2012	
Origination Date:	August 10, 2006		
Date Revised:	October 11, 2012	Effective Date:	December 1, 2012
Date Last Reviewed:	October 11, 2012		
Review Date:	December, 2014		

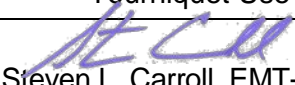

- I. Purpose: To define the indications, procedure and documentation for obtaining 12-lead ECGs.
- II. Authority: California Health and Safety Code, Sections 1797.220 and 1798, California Code of Regulations, Title 22, Section 100175.
- III. Policy: Paramedics will obtain 12-lead ECGs in patients demonstrating symptoms of acute coronary syndrome. Treatment of these patients shall be done in accordance with this policy. Only paramedics who have received training in this policy are authorized to obtain a 12-lead ECG on patients. EMTs who are specially trained may be authorized to set up the 12 lead.
- IV. Procedure:
 - A. Indications for a 12-lead ECG: Medical history and/or presenting complaints consistent with an acute coronary syndrome. Patients will have the acute (within the previous 12 hours) onset of one or more of the following symptoms that have no other identifiable cause:
 1. Chest, upper back or upper abdominal discomfort.
 2. Generalized weakness.
 3. Dyspnea.
 - B. Contraindications: Do NOT perform an ECG on these patients:
 1. Critical Trauma: There must be no delay in transport.
 2. Cardiac Arrest unless return of spontaneous circulation
 - C. ECG Procedure:
 1. Attempt to obtain an ECG during initial patient evaluation. Oxygen should be administered if patient is dyspneic, shows signs of heart failure or shock, or has SAO₂ < 94% If the ECG can be completed without delay (less than 3 minutes after patient contact), and the patient is not in severe distress, perform ECG prior to medication administration.

2. The ECG should be done prior to transport.
 3. If the ECG is of poor quality (artifact or wandering baseline), or the patient's condition worsens, may repeat to a total of 3.
 4. Once an acceptable quality ECG is obtained, switch the monitor to the standard 3-lead function. Repeat the 12-lead ECG only if the original ECG interpretation is NOT *****ACUTE MI SUSPECTED*****, and patient's condition worsens.
 5. If interpretation is *****ACUTE MI SUSPECTED****, note underlying rhythm, and verify by history and physical exam that the patient does not have a pacemaker or ICD.
- D. Base Hospital Communication/Transportation:
1. If the ECG interpretation is **ACUTE MI SUSPECTED**; report that to MICN at the beginning of the report. If the ECG is of poor quality, or the underlying rhythm is paced, or atrial flutter, include that information in the initial report. All other information, except that listed in items 2, 4, and 5 below, is optional and can be given at the paramedic and MICN's discretion.
 2. Paramedics are to ask the patient if they have a cardiologist and report the information to the base hospital.
 3. If ECG Interpretation is **ACUTE MI SUSPECTED**, patients should be transported to the closest and most appropriate STEMI Receiving Center (SRC) depending on patient preference and cardiac catheterization lab availability. MICN may direct ambulance to alternative SRC if cardiac catheterization lab not available.
 4. If the ECG interpretation is ******ACUTE MI SUSPECTED******, and the underlying rhythm is Atrial Flutter the Base Hospital shall be notified at the beginning of the report. The Cath Lab will not be activated.
 5. If the ECG interpretation is *****ACUTE MI SUSPECTED***** and the patient has a pacemaker or the ECG is of poor quality (wandering baseline and/or artifact) report that to the MICN.
 6. If a first responder paramedic obtains an ECG that is **not ***ACUTE MI SUSPECTED***** and the patient is stable, patient care may be turned over to the transporting paramedic. The ECG will be turned over to the transporting paramedic.

7. Positive ECGs will be handed to the receiving medical practitioner. The receiving practitioner will initial, time and date the ECG to indicate they have received and reviewed the ECG.
- E. Patient Treatment:
1. Patient Communication: If the ECG interpretation is ***ACUTE MI SUSPECTED***, the patient should be told that “according to the ECG you may be having a heart attack”. If the ECG interpretation is anything else, the patient should NOT be told the ECG is normal or “you are not having a heart attack”. If the patient asks what the ECG shows, tell him/her that it will be read by the emergency physician.
- F. Other ECGs
1. If an ECG is obtained by a physician and the physician interpretation is Acute MI, the patient will be treated as an ***ACUTE MI SUSPECTED***. Do not perform an additional ECG unless the ECG is of poor quality, or the patient's condition worsens.
 2. If there is no interpretation of another ECG then repeat the ECG.
 3. The original ECG performed by physician shall be obtained and accompany the patient.
- G. Documentation
1. Approved Ventura County Documentation System (AVCDS) documentation will be completed per VCEMS policy. The original ECG will be turned in to the base hospital and ALS Service Provider.
- H. Reporting
1. False Positive ECGs not recognized and called in as such to the Base Hospital, will be reported to VC EMS as an Unusual Occurrence in accordance with VC EMS Policy 150.

*** ACUTE MI SUSPECTED ***



COUNTY OF VENTURA EMERGENCY MEDICAL SERVICES		HEALTH CARE AGENCY POLICIES AND PROCEDURES	
Policy Title: Tourniquet Use		Policy Number: 731	
APPROVED: Administration:	 Steven L. Carroll, EMT-P	Date: December 1, 2010	
APPROVED: Medical Director	 Angelo Salvucci, M.D.	Date: December 1, 2010	
Origination Date:	July 2010	Effective Date:	December 1, 2010
Date Revised:	August, 2010		
Date Last Reviewed:	August, 2012		
Review Date:	August 31, 2014		

- I. Purpose: To define the indications, procedure and documentation for tourniquet use by EMTs and paramedics.
- II. Authority: Health and Safety Code, Sections 1797.220 and 1798.
- III. Policy: EMTs and Paramedics may utilize tourniquets on patients in accordance with this policy.
- IV. Procedure:
 - A. Indications
 1. Life threatening extremity hemorrhage that can not be controlled by other means.
 - B. Contraindications
 1. Non-extremity hemorrhage.
 2. Proximal extremity location where tourniquet application is not practical.
 - C. Tourniquet Placement:
 1. Visually inspect injured extremity and avoid placement of tourniquet over joint, angulated or open fracture, stab or gun shot wound sites.
 2. Assess and document circulation, motor and sensation distal to injury site.
 3. Apply tourniquet proximal to wound (usually 2-4 inches).
 4. Tighten tourniquet rapidly to least amount of pressure required to stop bleeding.
 5. Cover wound with appropriate sterile dressing and/or bandage.
 6. Do not cover tourniquet- the device must be visible.
 7. Re-assess and document absence of bleeding distal to tourniquet.
 8. Remove any improvised tourniquet that may have been previously applied.
 9. Tourniquet placement time must be documented on the tourniquet device.
 10. Ensure receiving facility staff is aware of tourniquet placement and time tourniquet was placed.

D. Tourniquet Removal (Paramedic only)

1. Indications

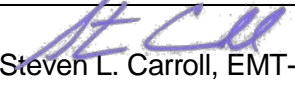

- a. Releasing the tourniquet should only be considered if applied for 60 minutes or longer.
- b. Absence of bleeding distal to the tourniquet should be confirmed.

2. Procedure

- a. Obtain IV/ IO access.
- b. Maintain continuous ECG monitoring.
- c. Hold firm direct pressure over wound for at least 5 minutes before releasing tourniquet.
- c. Gently release the tourniquet and monitor for reoccurrence of bleeding
- d. Document time tourniquet was released.
- e. Bandage wound and re-assess and document circulation, motor and sensation distal to the wound site regularly.

E. Documentation

1. All tourniquet uses must be documented in the Ventura County Approved Documentation System.
2. Documentation will include location of tourniquet, time of application, and person at the receiving hospital to whom the tourniquet is reported.

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Use of Restraints		Policy Number 732	
APPROVED: Administration:	 Steven L. Carroll, EMT-P	Date: December 1, 2012	
APPROVED: Medical Director:	 Angelo Salvucci, M.D.	Date: December 1, 2012	
Origination Date:	April 1, 2011	Effective Date: December 1, 2012	
Date Revised:	July 12, 2012		
Date Last Reviewed:	July 12, 2012		
Review Date:	July, 2014		

- I. PURPOSE: To provide guidelines for the use of physical and chemical restraints during the course of emergency medical treatment or during an inter-facility transport (IFT) for patients who are violent or potentially violent to themselves or others.
- II. AUTHORITY: California Health and Safety Code, Sections: 1797.2, 1798; California Code of Regulations, Title 22, Sections: 100075, 100147, 100160; California Administrative Code, Title 13, Section 1103.2.
- III. DEFINITIONS:
 - A. Verbal Restraint: Any verbal communication from a pre-hospital provider to a patient utilized for the sole purpose of limiting or inhibiting the patient's behavior.
 - B. Physical Restraint: Any method in which a technique or piece of equipment is applied to the patient's body in a manner that reduces the subject's ability to move his arms, legs, head, or body.
 - C. Chemical Restraint: Any pharmaceutical administered by healthcare providers that is used specifically for the purpose of limiting or controlling a person's behavior or movement.
- IV. POLICY:
 - A. Physical Restraint
 1. Prior to use of physical or chemical restraints, every attempt to calm patient should be made using verbal, non physical means.
 2. Perform a physical assessment and obtain a medical history as soon as safe and appropriate. Treat any underlying conditions per VCEMS 705 Treatment guidelines.
 3. If necessary, apply soft physical restraints while performing assessment and obtaining history.

4. Padded soft restraints shall be the only form of restraints utilized by EMS providers.
5. Restraints shall be applied in a manner that does not compromise vascular, neurological, or respiratory status.
6. Extremities in which restraints are applied shall be continuously monitored for signs of decreased neurologic and vascular function
7. Patients shall not be transported in a prone position. The patient's position shall be in a manner that does not compromise vascular or respiratory status at any point. Additionally, the patient position shall not prohibit the provider from performing any and all assessment and treatment tasks.
8. Restraints shall be attached to the frame of the gurney.
9. Handcuffs applied by law enforcement require that an officer accompany the patient to ensure provider and patient safety and to facilitate removal of the restraint device if a change in the patient's condition requires it.
 - a. If the patient is restrained with handcuffs and placed on a gurney, both arms shall be restrained to the frame of the gurney in a manner that in no way limits the ability to care for the patient. The patient should not be placed on gurney with hands or arms restrained behind patient's back.
 - b. In the event that the law enforcement agency is not able to accompany the patient in the ambulance, a law enforcement unit must follow the ambulance in tandem along a predetermined route to the receiving facility.


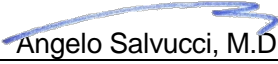
B. Chemical Restraint

1. If while in restraints, the patient demonstrates behavior that may result in harm to the patient or providers, chemical restraint should be considered.
 - a. Refer to VCEMS Policy 705: Behavioral Emergencies for guidance and administration of appropriate chemical restraint.
 - b. It is important again to investigate and treat possible underlying causes of erratic behavior (e.g. hypoglycemia, trauma, meningitis).

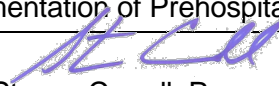
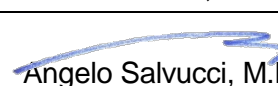
C. Required Documentation

1. Instances in which physical or chemical restraints are applied shall be documented according to VCEMS Policy 1000. Required documentation shall include:
 - a. Type of restraint applied (e.g. soft padded restraint, Midazolam, handcuffs by law enforcement)
 - b. Reason restraints were utilized.
 - c. Location on patient restraints were utilized
 - d. Personnel and agency applying restraints.
 - e. Time restraints were applied
 - f. Every 10 minute neurologic and vascular checks

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
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Policy Title: Ambulance Provider Response Units: Required Frequencies	Policy Number 905
APPROVED: Administration:  Steven L. Carroll, EMT-P	Date: December 1, 2012
APPROVED: Medical Director:  Angelo Salvucci, M.D.	Date: December 1, 2012
Origination Date: July 1, 1999 Date Revised: August 9, 2012 Date Last Reviewed: August 9, 2012 Next Review Date: August, 2015	Effective Date: December 1, 2012

- I. **PURPOSE:** To define the communications frequencies required on ambulance provider response units.
- II. **AUTHORITY:** Health and Safety Code, Division 2.5, Section 1797.204
- III. **POLICY:** Ambulance provider response units shall be equipped as listed in this policy.
- IV. **PROCEDURE:**
 - A. Ambulance provider response unit mobile radios shall be programmed with the first 64 channels of the current Ventura County Fire Protection District radio plan. To reduce confusion, assignments for channels 1-64 will be programmed exactly as listed in the radio plan on all vehicle mounted mobile radios. It is recommended that all portable radios also utilize the same program list; however, providers may adjust the portable lists to accommodate agency specific issues.
 - B. Channels 30, 31 and 32, in the Ventura County Fire Protection District radio plan, are available for the ambulance provider to program agency specific frequencies, if desired. Frequencies on channels 65 and above may be programmed at provider's discretion.
 - C. Any ambulance provider units that respond to 911 calls shall have a minimum of one mobile radio and one portable radi.
 - D. Ambulance providers will post a list of frequency channel assignments in each response unit.
 - E. A list of frequency channel assignments will be submitted to VCEMS by each ambulance provider.

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Documentation of Prehospital Care		Policy Number 1000	
APPROVED: Administration:	 Steven Carroll, Paramedic	Date: June 1, 2012	
APPROVED: Medical Director	 Angelo Salvucci, M.D.	Date: June 1, 2012	
Origination Date:	June 15, 1998	Effective Date: September 4, 2012	
Date Revised:	August 9, 2012		
Date Last Reviewed:	August 9, 2012		
Review Date:	September 4, 2014		

- I. **PURPOSE:** To define the use of standardized records to be used by Ventura County Emergency Medical Service (VCEMS) providers for documentation of pre-hospital care.
- II. **AUTHORITY:** Title 22 Section 100147.
- III. **POLICY:** Patient care provided by first responders and ambulance personnel will be documented using the appropriate method.
- IV. **PROCEDURE:**
 - A. **Provision of Access**
VCEMS will provide access to the approved Ventura County Electronic Patient Care Report (VCePCR) system and software to EMS system stakeholders required to enter, edit, or analyze data.
 - B. **Documentation**
 1. The VCEMS VCePCR will be used to document the care provided by pre-hospital personnel for every patient contact and/or incident to which a particular unit or provider is attached. An incident will be defined as any response involving Ventura County pre-hospital personnel to any event in which there is an actual victim, or the potential for a victim, regardless of whether the responding unit was cancelled enroute or not. A patient contact is defined as any encounter involving Ventura County pre-hospital personnel with any person consenting, either implied or informed, to assessment and/or treatment. Documentation shall be completed on any

person with obvious injury or significant mechanism regardless of consent. The following are exceptions:

- a. If a First Responder Advanced Life Support (FR ALS) Paramedic initiates care of the patient, the FR ALS Paramedic shall document all care provided to the patient on VCePCR.
- b. If care is turned over to another ALS agency, a VCePCR shall be completed by all pre-hospital provider agencies who delivered patient care and/or transport.
- c. The appropriate level VCePCR shall be completed to correspond to the level of care provided to the patient. If an ALS provider determines a patient to only require basic level care, a VCePCR-BLS report can be utilized. If a unit or provider is attached to an incident, but cancelled enroute, a VCePCR-Cancelled Call form shall be completed and posted.
- d. A minimum validation score of 95 shall be required for all VCePCRs prior to completion and locking of the document.
- e. Patient side documentation is encouraged and should be practiced whenever patient care would not be negatively affected.
- f. In the event of multiple patients, documentation will be accomplished as follows:
 - 1) Level 1 MCI: The care of each patient shall be documented using an VCePCR.
 - 2) Level 2 and 3 MCI: Each patient transported to a hospital shall have their care documented on a Ventura County Multi-Casualty Patient Record.
 - a) The transporting agency is responsible for completion of the multi-casualty patient record. The record is designed to be

completed by the transporting crew enroute to the receiving hospital.

- b) The transporting agency retains the original of the multi-casualty patient record. A copy shall be left with the patient at the receiving hospital. The triage tag shall be attached to this copy and is included as official documentation in the patient's medical record.
- c) The transporting agency shall distribute copies of the multi-casualty patient record to the base hospital and EMS Agency within twenty-four hours of demobilization of the incident.

C. Transfer of Care

- 1. Transfer of care between two field provider teams and between field provider and hospital shall be documented on appropriate VCePCR. The first arriving agency will post to the server and perform a coordinated electronic transfer of care whenever possible within the VCePCR system to the next incoming unit. The unit receiving the electronic transfer will download the correct corresponding report prior to completion of the ePCR. This includes intra-agency units and inter-agency units.
- 2. A VCePCR shall be completed in accordance with training administered by VCEMS, or designee.
- 3. The time that patient care is transferred to hospital staff shall be documented by the primary provider handling patient care in all circumstances where a patient is transported to a hospital.

- D. In the event the cardiac monitor is attached as required by any of the VCEMS 705 policies, a complete ECG data transfer shall be recorded and attached to the corresponding VCePCR. ECG data shall be downloaded by each provider agency involved in that incident and attached to the corresponding VCePCR. An original 12 lead ECG shall

be printed and submitted upon transfer of care to hospital staff for any patient where a 12 lead ECG was performed.

E. Submission to VCEMS

1. In the following circumstances, a complete VCePCR shall be completed and posted by any transporting unit, and by FR ALS personnel retaining care, within thirty (30) minutes of arrival at destination:
 - a. Any patient that falls into Step 1 or Step 2 (1.1 – 2.8) of the Ventura County Field Triage Decision Scheme
 - b. Any patient that is in cardiac arrest, or had a cardiac arrest with ROSC.
 - c. Any patient with a STEMI positive 12 lead ECG.
 - d. Any patient with a positive Cincinatti Stroke Screening (CSS +).
 - e. Any patient that is unable to effectively communicate information regarding present or past medical history.
 - f. An exception to this circumstance would be during times of EMS system overload where a delay in a unit returning to service could pose significant delays in response times.
2. For circumstances not listed above, in which the patient was transported to a hospital, the entire data set found on the VCePCR 'REPORT' tab shall be completed and electronically posted to the server by transporting agencies, and by FR ALS personnel retaining care, within thirty (30) minutes of arrival at destination.
 - a. An exception to this circumstance would be during times of EMS system overload where a delay in a unit returning to service could pose significant delays in response times.
3. All other reports not falling into the above criteria shall be completed and posted to the server as soon as possible and no later than the end of shift.

F. Dry Run/Against Medical Advice

Every patient contact resulting in refusal of medical attention/transport must be documented with the following information, the reason dispatched and/or chief complaint, assessment and vital signs, base hospital contact (when appropriate), patient advised to seek medical attention and completion of AMA. The AMA checklist as well as patient signatures shall be captured whenever possible by each applicable agency at the time of patient contact/refusal. If, at any point, a signature is not obtained for any reason, explanation shall be documented in the narrative section of the VCePCR.

- G. ALS Inter-facility Transfers (Acute Care Facility to Acute Care Facility)
Documentation shall be completed on all ALS Interfacility transfers only. Documentation will include, but not be limited to, baseline assessment, medications administered, reason for transfer, procedures done to the patient, vital signs and any changes from baseline assessment.
If the transferring facility sends staff to accompany the patient, the staff member(s) name(s) shall be documented on the VCePCR.
- H. The completion of any VCePCR should not delay patient transport to the hospital.
- I. Patient Medical Record
The VCePCR and Ventura County Multi-Casualty Patient Record shall be considered a legal document and part of the patient's medical record. The first responder agency, transport agency, and hospital are custodians of record. Printing should only be performed as needed, and an electronic copy of the VCePCR should be utilized and referred to whenever feasible. A print log and reason for printing shall be monitored regularly to help ensure security of protected health information within the system.

Attachment A

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

Term	Abbreviation
5% Dextrose in Water	D5W
Abdomen	Abd
Above knee amputation	AKA
Acquired Immunodeficiency Syndrome	AIDS
Ad Libitum (as desired)	Ad lib
Advanced Life Support	ALS
Against medical advise	AMA
Alcohol	ETOH
Alert and oriented	A & O
Also known as	AKA
Altered Level Of Consciousness	ALOC
Amount	Amt
Ampule	Amp
Antecubital	AC
Anterior	Ant
Anterior/Posterior	AP
Appointment	Appt
Arterial Blood Gas	ABG
Arteriosclerotic Heart Disease	ASHD
As necessary	prn
As soon as possible	ASAP
Aspirin	ASA
At	@
Atrial Fibrillation	A fib, AF
Attention Deficit Hyperactivity Disorder	ADHD
Automated external Defibrillator	AED
Automatic Implantable Cardiac Defibrillator	AICD
Bag Valve Mask	BVM
Basic Life Support	BLS
Birth Control Pill	bcp
Bowel Movement	BM
Bundle Branch Block	BBB
By Mouth	p.o.
By Order Of	per
Cancer	CA
Carbon Dioxide	CO ₂
Carbon Monoxide	CO

Term	Abbreviation
Cardio Pulmonary Resuscitation	CPR
Central Nervous System	CNS
Cerebrospinal Fluid	CSF
Cerebrovascular Accident	CVA
Cervical Spine	C-Spine
Chief Complaint	CC
Chronic Obstructive Pulmonary Disease	COPD
Circulation, Sensation, Motor	CSM
Clear	Cl
Continuous Positive Airway Pressure	CPAP
Coronary Artery Bypass Graft	CABG
Coronary Artery Disease	CAD
Date of Birth	DOB
Dead on Arrival	DOA
Defibrillated	Defib
Delirium Tremens	DTs
Diabetes Mellitus	DM
Dilation and curettage	D & C
Discontinue*	D/C*
Deformity, Contusion, Abrasion, Penetration, Burn, Tenderness, Laceration, Swelling	DCAPBTLs
Do Not Resuscitate	DNR
Doctor of Osteopathy	DO
Drops	gtts
Dyspnea On Exertion	DOE
Electrocardiogram	ECG
Electroencephalogram	EEG
Emergency Department	ED
Emergency Medical Services	EMS
Emergency Medical Technician	EMT
Endotracheal	ET
Equal	=
Estimated	Est
Estimated Time of Arrival	ETA
Etiology	Etiol.



Term	Abbreviation
Every	q
Every day*	qd*
Evening	pm
Extended Care Facility	ECF
Eye, ear, nose, throat	EENT
Fahrenheit	F
Female	F
Fetal Heart Rate	FHR
Fluid	FI
Foot	Ft
Foreign body	FB
Four times a day	QID
Fracture	Fx
Gallbladder	GB
Gastrointestinal	GI
Genitourinary	GU
Glasgow Coma Score	GCS
Grain	Gr
Gram	gm
Gravida 1,2,3, etc	G1, G2, G3
Gun Shot Wound	GSW
Gynecological	Gyn
Heart Rate	HR
Hematocrit	Hct
Hemoglobin	Hgb
Hepatitis A Virus	HAV
Hepatitis B Virus	HBV
Hepatitis C Virus	HCV
History	Hx
History and Physical	H & P
Hour of Sleep (bedtime)*	hs*
Human Immunodeficiency Virus	HIV
Hydrochlorothiazide	HCTZ
Hypertension	HTN
Immediately	STAT
Insulin Dependent Diabetes Mellitus	IDDM
Intake and Output	I & O
Intensive Care Unit	ICU
Intercostal Space	ICS
Intracranial Pressure	ICP
Intralingual	IL
Intramuscular	IM
Intraosseous	IO
Intrauterine Device	IUD
Intravenous	IV
Intravenous Push	IVP
Irregular	Irreg
Jugular venous distention	JVD
Kilogram	kg
Kilometer	Km
Labor and Delivery	L & D
Laceration	Lac
Last Menstrual Period	LMP
Lateral	Lat
Left	L
Left Eye*	OD*

Term	Abbreviation
Left Lower Extremity	LLE
Left Lower Lobe	LLL
Left Lower Quadrant	LLQ
Left Upper Extremity	LUE
Left Upper Lobe	LUL
Left Upper Quadrant	LUQ
Less Than	<
Lower Extremity	LE
Lumbar Puncture	LP
Male	M
Medical Doctor	MD
Metered Dose Inhaler	MDI
Microgram	mcg
Milliequivalent	mEq
Milligram	mg
Milliliter	ml
Millimeter	mm
Minute	Min
Morning	am
Morphine Sulphate*	MS*
Motor Vehicle Collision	MVC
Mouth	MO
Moves all Extremities	MAE
Multiple Casualty Incident	MCI
Multiple sclerosis	MS
Myocardial Infarction	MI
Nasal cannula	NC
Nausea/Vomiting	NV
Negative	neg
Night	Noc
Nitroglycerine	NTG
No Acute Distress	NAD
No Known Allergies	NKA
No Known Drug Allergies	NKDA
Non Insulin Dependent Diabetes Mellitus	NIDDM
Non Rebreather Mask	NRBM
Non Steroidal Anti-inflammatory Drugs	NSAID
Normal Saline	NS
Normal Sinus Rhythm	NSR
Not applicable	NA
Nothing by Mouth	NPO
Obstetrics	OB
Occupational Therapy	OT
Oral Dissolving Tablet	ODT
Operating Room	OR
Organic Brain Syndrome	OBS
Ounce	oz
Over the Counter	OTC
Overdose	OD
Oxygen	O2
Palpable	Palp
Para, number of pregnancies	Para 1,2,3, etc
Paramedic	PM

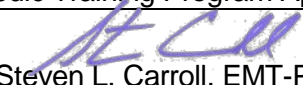

Term	Abbreviation
Paroxysmal Supraventricular Tachycardia	PSVT
Paroxysmal Nocturnal Dyspnea	PND
Past Medical History	PMH
Pediatric Advanced Life Support	PALS
Pelvic Inflammatory Disease	PID
Per Rectum	pr
Percutaneously Inserted Central Catheter	PICC
Phencyclidine	PCP
Physical Exam	PE
Positive	+, pos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

Term	Abbreviation
Shortness of Breath	SOB
Sinus Bradycardia	SB
Sinus Tachycardia	ST
Sodium Bicarbonate	NaHCO ₃
Sodium Chloride	NaCl
Streptococcus	Strep
Subcutaneous*	SQ*
Sublingual	SL
Sudden Acute Respiratory Syndrome	SARS
Sudden Infant Death Syndrome	SIDS
Supraventricular Tachycardia	SVT
Temperature	T
Temperature, Pulse, Respiration	TPR
Three Times a Day	TID
Times	X
To Keep Open	TKO
Tracheostomy	Trach
Traffic Collision	TC
Transient Ischemic Attack	TIA
Transcutaneous Pacing	TCP
Treatment	Tx
Tuberculosis	TB
Twice a day	BID
Upper Respiratory Infection	URI
Urinary Tract Infection	UTI
Ventricular Fibrillation	VF
Ventricular Tachycardia	VT
Vital Signs	VS
Volume	Vol
Water	H ₂ O
Weight	Wt
With	w/
Within Normal Limits	WNL
Without	w/o
Wolf-Parkinson-White	WPW
Year	Yr
Years Old	y/o

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

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Paramedic/MICN BH Communication Record		Policy Number 1001	
APPROVED: Administration:  Steven L. Carroll, EMT-P		Date: 12/01/07	
APPROVED: Medical Director:  Angelo Salvucci, M.D.		Date: 12/01/07	
Origination Date: July 6, 2007		Effective Date: December 1, 2007	
Date Revised: July 9, 2007			
Last Reviewed: July 12, 2012			
Review Date: July 31, 2014			

- I. PURPOSE: To define the use of the "Paramedic/MICN BH Communication Record" by approved Ventura County the Base Hospitals.
- II. PROCEDURE:
 - A. This form should be used to document communication between the paramedic and mobile intensive care nurse (MICN). All pertinent areas of the form are to be completed by the MICN to document each patient contact between the paramedic and the MICN.
 - B. Base Hospital is responsible for providing the forms and ensuring documentation compliance.
 - C. Base Hospital is responsible for maintenance of records according to hospital data requirements.
 - D. Attachment A is provided as a sample only.

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Paramedic Training Program Approval		Policy Number 1135	
APPROVED: Administration:	 Steven L. Carroll, EMT-P	Date: December 1, 2012	
APPROVED: Medical Director:	 Angelo Salvucci, M.D.	Date: December 1, 2012	
Origination Date:	October 20, 1993	Effective Date: December 1, 2012	
Date Revised:	July 12, 2012		
Date Last Reviewed:	July 12, 2012		
Next Review Date:	July, 2015		

- I. PURPOSE: To define the procedure to be followed when applying for approval for a paramedic training program in Ventura County.
- II. AUTHORITY: Health and Safety Code Sections 1797.172, 1797.178, 1797.200, 1797.202, 1797.204, 1797.208, 1797.220, 1798 and 1798.100. California Code of Regulations, Title 22 Division 9, Sections 100147, and 100153.
- III. POLICY: The purpose of a paramedic training program shall be to prepare individuals to render prehospital advanced life support within an organized EMS system. The following procedure shall be followed when applying for approval for a paramedic training program approval.
- IV. DEFINITION(S): Paramedic Approving Authority means the local EMS agency. Title 22, California Code of Regulations (CCR), Section 100137.
- V. PROCEDURE:
 - A. Paramedic training shall be offered only by approved training programs. Eligibility for program approval shall be limited to the following institutions:
 1. Accredited universities and colleges, including junior and community colleges and private post-secondary schools as approved by the State of California, Department of Consumer Affairs, Bureau of Private Postsecondary and Vocational Education.
 2. Medical training units of a branch of the Armed Forces or Coast Guard of the United States.
 3. Licensed general acute care hospitals which meet the following criteria:
 - a. Hold a special permit to operate a basic or comprehensive emergency service pursuant to the provisions of Division 5,
 - b. Provide continuing education to other health care professionals, and care accredited by the Joint Commission on the Accreditation of

Healthcare Organizations or the Healthcare Facilities Accreditation
Program of the American Osteopathic Association.

4. Agencies of government.
- B. Application for Paramedic Training Program Approval
1. Eligible training institutions shall submit a written request for paramedic training program approval to the EMS agency. A paramedic training program approving authority may deem a paramedic training program approved that has been accredited by the CAAHEP upon submission of proof of such accreditation.
 2. The following materials must be submitted to the EMS agency unless CAAHEP accredited and approved by the EMS Agency.
 - a. A statement verifying that the course content is equivalent to the U.S. Department of Transportation (DOT) Emergency Medical Technician-Paramedic National Standard Curriculum HS 808 862 March 1999..
 - b. An outline of course objectives
 - c. A detailed course outline. This outline must include all curricula outlined in 22 CCR 100159 as well as all mandatory training programs specified by the local EMS agency.
 - d. Performance objectives for each skill.
 - e. The name and qualifications and duty statement of the training program course director, program medical director, and principal instructor.
 - f. Provisions for supervised hospital clinical training.
 - 1) Training programs in non-hospital institutions shall enter into a written agreement with one or more licensed general acute care hospital(s), approved by the local EMS agency, which hold a permit to operate a Basic or Comprehensive Emergency Medical Service for the purpose of providing supervised clinical experience as well as clinical preceptors to instruct and evaluate the trainee. Final program approval will be withheld until such agreements are in place.
 - 2) The training program must not enroll any more students than the program can commit to providing a clinical internship to begin no later than thirty days after a student's completion of

- the didactic and skills instruction portion of the training program. The course director and a student may mutually agree to a later date for the clinical internship to begin in the event of special circumstances (e.g. student or preceptor illness or injury, student's military duty, etc).
- 3) The training program shall submit a sample of the clinical evaluation to be used by clinical preceptors to evaluate trainees.
 - 4) The clinical preceptor may assign the student to another health professional for selected clinical experience. No more than two students shall be assigned to one preceptor or health professional during the supervised clinical experience at any one time. Clinical experience shall be monitored by the training program staff and shall include direct patient care responsibilities, which may include the administration of any additional medications, approved by the VCEMS medical director and the director and the director of the EMS Authority to result in competency. Clinical assignments shall include, but are not to be limited to, emergency, cardiac, surgical, obstetric and pediatric patients.
- g. Provisions for supervised field internship
- 1) The training program shall enter into a written agreement with one or more Advanced Life Support providers, approved by the local EMS agency, for the purpose of providing supervised field internship experience as well as preceptors to instruct and evaluate the trainee. Preceptors shall meet criteria developed by the local EMS agency. Final program approval will be withheld until such agreements are in place.
 - 2) The training program shall not enroll any more students than the training program can commit to providing a field internship to begin no later than ninety days after a student's completion of the hospital clinical education and training portion

- 3) The training program shall utilize the performance standards and internship evaluations developed and approved by the local EMS agency.
 - h. The location at which the training program is to be offered and the proposed dates as well as the number of trainees to be accepted per class.
 - i. A time analysis and sample schedule of each training phase (didactic, clinical, and internship).
 - j. Student eligibility requirements and screening process for entrance into the program.
 - k. Samples of instructor schedule for skills practices/laboratories.
3. Following submission and approval of the above materials, the EMS agency will review the following:
- a. Samples of written and skills examinations used for periodic testing.
 - b. Final skills competency examination.
 - c. Final written examination.
 - d. Facilities, equipment, examination security, and student recordkeeping.
4. Training Program Staff Requirements
- a. Medical Director: Each program shall have an approved program medical director who shall be a physician currently licensed in the State of California, who has two years experience in prehospital care in the last five years, and who is qualified by education or experience in methods of instruction. Duties of the program medical director shall include, but not be limited to:
 - 1) Review and approve educational content of the program curriculum, including training objectives for the clinical and field instruction, to certify its ongoing appropriateness and medical accuracy.
 - 2) Review and approve the quality of medical instruction, supervision, and evaluation of the students in all areas of the program.
 - 3) Approval of provision for hospital clinical and field internship experiences.
 - 4) Approval of principal instructors.

- b. Course Director: Each program course director shall be licensed in California as a physician, a registered nurse who has a baccalaureate degree or a paramedic who has a baccalaureate degree, or shall be an individual who holds a baccalaureate degree in a related health field or in education. The course director shall be qualified by education and experience in methods, materials, and evaluation of instruction, and shall have a minimum of one year experience in an administrative or management level position and have a minimum of three years academic or clinical experience in prehospital care education within the last five years. Duties of the course director shall include, but not be limited to:
- 1) Administration, organization and supervision of the educational program.
 - 2) In coordination with the program medical director, approve the principal instructor, teaching assistants, field and hospital clinical preceptors, clinical and internship assignments, and coordinate the development of curriculum including instructional objectives, and approve all methods of evaluation
 - 3) Ensure training program compliance with this chapter and other related laws.
 - 4) Ensure that the preceptor(s) are trained according to the curriculum in VCEMS Policy 319.
- c. Principal Instructor: Each program shall have a principal instructor(s) who may also be the program medical director or course director if the qualifications in VB.2.d.1)-2) have been met who shall:
- 1) Be a physician, registered nurse, physician assistant, or paramedic, currently certified or licensed in the State of California
 - 2) Have two years experience in advanced life support prehospital care and be knowledgeable in the course content of the U.S. Department of Transportation Paramedic National Standard Curriculum HS 808 862 March 1999
and

- 3) Have six years experience in an allied health field or related technology and an associate degree or two years experience in an allied health field or related technology and a baccalaureate degree.
- 4) Be responsible for areas including but not limited to curriculum development, course coordination and instruction.
- 5) Be qualified by education and experience in methods, materials and evaluation of instruction, which shall be documented by at least forty hours of instruction in teaching methodology. Following, but not limited to, are examples of courses that meet the required instruction in teaching methodology:
 - a) California State Fire Marshall (CSFM) "Fire Instructor 1A and 1B"
 - b) National Fire Academy (NFA) "Fire Service Instructional Methodology" course, and
 - c) A course that meets the U.S. DOT/National Highway Traffic Safety Administration 2002 Guidelines for Educating EMS Instructors, such as the National Association of EMS Educators' EMS Education Course.
- d. Teaching Assistants: Each training program may have a teaching assistant(s) who shall be an individual(s) qualified by training and experience to assist with teaching of the course. A teaching assistant shall be supervised by a principal instructor, the course director and/or the program medical director.
- e. Field Preceptors: Each program shall have preceptor(s) who shall:
 - 1) Be a licensed paramedic and
 - 2) Be working in the field as a licensed paramedic for the last two years and
 - 3) Be under the supervision of a principal instructor, the course director and/or the program medical director.
 - 4) Have completed the field preceptor training approved by VCEMS (VCEMS Policy 319).

- f. Hospital Clinical Preceptor(s): Each program shall have preceptor(s) who shall:
- 1) Be a physician, registered nurse or physician assistant currently licensed in the State of California.
 - 2) Have worked in emergency medical care for the last two years.
 - 3) Be under the supervision of a principal instructor, the course director, and/or the program medical director.
 - 4) Receive instruction in evaluating paramedic students in the clinical setting and shall include how to do the following in cooperation with the paramedic training program.
 - (a) Evaluate a student's ability to safely administer medications and perform assessment.
 - (b) Document a student's performance.
 - (c) Assess student behaviors using cognitive, psychomotor, and affective domains.
 - (d) Create a positive and supportive learning environment.
 - (e) Identify appropriate student progress.
 - (f) Counsel the student who is not progressing
 - (g) Provide guidance and applicable procedures for dealing with an injured student or student who has had an exposure to illness, communicable disease or hazardous material

C. Program Approval/Disapproval

1. The materials submitted for program approval will be reviewed and evaluated by EMS agency staff, an educator with a medical/nursing background and who is not associated with the submitting agency, an RN who is not associated with the submitting agency, and an MD who is not associated with the submitting agency.
2. Program approval or disapproval shall be made in writing by the EMS agency to the requesting training program within a reasonable period of time after receipt of all required documentation. This time period shall not exceed three (3) months.

3. The EMS agency shall establish the effective date of program approval in writing upon the satisfactory documentation of compliance with all program requirements.
4. Program approval shall be for four years following the effective date of approval and may be renewed every four years subject to the procedure for program approval specified in 22 CCR.
5. All approved programs shall be subject to periodic on-site evaluation by the EMS agency.
6. Paramedic training programs approved after January 1, 2000 shall submit their application, fee and self study to the Commission of Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP) for accreditation within 12 months of the start up of classes and receive and maintain Commission of Accreditation of Allied Health (CAAHEP) accreditation no later than two years from the date of application to CoAEMSP for accreditation in order to continue to operate as an approved paramedic training program.
 - a. Paramedic training programs approved according to the provisions of this Chapter shall provide the following information to all their paramedic training program applicants prior to the applicant's enrollment in the paramedic training program:
 - 1) Date by which the program must submit their application and self study for initial accreditation or their application for accreditation renewal to CoAEMSP.
 - 2) Date by which the program must be initially accredited or have their accreditation renewal by CAAHEP.
 - 3) Failure of the paramedic training program to submit their application and self study or their accreditation renewal to CoAEMSP by the date specified will result in closure of the paramedic training program by the approving authority unless an approved plan for meeting compliance is provided.
 - 4) Failure of the program to obtain or maintain CAAHEP accreditation by the required date will result in closure of the program by the approving authority unless an approved plan for meeting compliance is provided.

- 5) Students graduating from a paramedic training program that fails to apply for accreditation with, receive accreditation from, or maintain accreditation with, CAAHEP by the dates required will not be eligible for state licensure as a paramedic.
 - b. Paramedic training programs shall submit to their respective paramedic training program approving authority all documents submitted to, and received from CoAEMSP and CAAHEP for accreditation, including but not limited to, the initial application and self study for accreditation and the documents required for maintaining accreditation.
 - c. Paramedic training programs shall submit to the approving authority the date their initial application was submitted to CoAEMSP and copies of documentation from CoAEMSP and/or CAAHEP verifying accreditation.
 - d. Approved programs shall participate in the emergency medical services system QIP.
- D. Denial or Withdrawal of Program Approval
1. Noncompliance with any criteria required for program approval, use of any unqualified teaching personnel or non compliance with any other applicable provision may result in denial, probation, suspension or revocation of program approval by the approving authority.
 - a. A training program approving authority shall notify the approved paramedic training program course director in writing, by certified mail, of the provisions with which the training program is not in compliance.
 - b. Within fifteen days of receipt of the notification of noncompliance, the approved training program shall submit in writing, by certified mail to the approving authority the following:
 - 1) Evidence of compliance or
 - 2) A plan for meeting compliance with the provision within sixty days from the day of receipt of the notification of noncompliance
 - 3) Within fifteen days of receipt of the response from the training program or within thirty days from the mailing date of

the non compliance notification if no response is received from the program, the approving authority shall notify the EMS Authority and the training program in writing, by certified mail, of the decision to accept the evidence of compliance, accept the plan for meeting compliance, place on probation, suspend or revoke the paramedic training program approval.

- 4) If the approving authority decides to suspend or revoke the training program approval, the notification shall include the beginning and ending dates of the probation or suspension and the terms and conditions for lifting the probation or suspension or the effective date of the revocation, which may not be less than sixty days from the date of the paramedic training program approving authority's letter of decision to the EMS Authority and the training program.

E. Program Expansion

Approved paramedic training programs must request approval to add additional training classes or to enlarge class size. The training program must provide written confirmation guaranteeing clinical and internship placement as outlined in sections IV.B.2.e-f of this policy.

**Paramedic Training Program
Application Checklist**

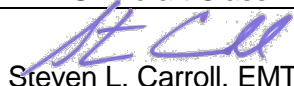

Materials to be Submitted (in the order listed)	Check One		For County Use Only
	Enclosed	To Follow	
1. Checklist for Paramedic Training Program Approval			
2. Written request to Paramedic Approving Authority requesting approval (100153)			
3. CoAEMSP/CAAHEP Accreditation (100148)			
4. Documentation of Eligibility for Program Approval (100148)			
5. Completed Application form for Program Approval (attached)			
6. Program Medical Director qualification form, and job description (10014 9(a))			
7. Program Course Director qualification form, and job description (10014 9(b))			
8. Program Principal Instructor(s) qualification form, and job description (10014 9(c))			
9. Teaching Assistant(s) (10014 9(d)) Submit Names and subjects assigned to each Teaching Assistant, qualifications, and job description. There shall be at least one teaching assistant for each six students in skills practice/laboratory settings.			
10. Field Preceptor(s) (10014 9(e)) Submit Name(s) of each field Preceptor, qualifications, and job description.			
11. Hospital Clinical Preceptor(s) (100151) Submit Name(s) of each Hospital Clinical Preceptor(s), qualifications, and job description.			
12. Copy of written agreements with (one or more) Base Hospital(s) to provide Clinical Experience (100151)			
13. Provisions for supervised hospital clinical training including student evaluation criteria, and copy of standardized forms for evaluating paramedic students			

Materials to be Submitted (in the order listed)	Check One		For County Use Only
	Enclosed	To Follow	
and monitoring of preceptors by the training program. (100151)			
14. Copy of written agreement with (one or more) paramedic service provider(s) to provide field experience. 100152			
15. Provisions for supervised field internship including student evaluation criteria, and copy of standardized forms for evaluating paramedic students and monitoring of preceptors by the training program.			
16. Course Curriculum, including:			
a. Course Outline			
b. Statement of Course Objectives			
c. At least 6 sample lesson plans			
d. Performance objectives for each skill			
e. 3 samples of written and skills exams used in periodic testing			
f. Final Skills Exam			
g. Final Written Exam			
17. Copy of Course Outline, if different than course content outlined in 100159			
18. Class Schedules, places and dates. Estimate if necessary (100153)			
19. Copy of Course Completion Record (100161)			
20. Copy of Liability Insurance on students.			
21. Copy of Fee Schedule.			
22. Description of how program provides adequate facilities, equipment, examination security, and student recordkeeping. (100153)			
23. If the course curriculum is not developed by the agency applying for program approval, submit written permission from the developer of the curriculum.			

Materials to be Submitted (in the order listed)	Check One		For County Use Only
	Enclosed	To Follow	
24. Copy of Student Eligibility Document (100157)			
24. Statement verifying use of curriculum equivalent to US DOT Paramedic (HS808 862 March 1999) National Standard curriculum (100153).			

**COUNTY OF VENTURA
EMERGENCY MEDICAL SERVICES
PARAMEDIC TRAINING PROGRAM APPROVAL APPLICATION FORM**

Training Institution/Agency	
Name	
Address	
City/ZIP	
Contact Person	
Telephone Number	
Course Hours	
Total	
Didactic and Skills Lab	
Hospital Clinical Training	
Field Internship	
Personnel: Submit form for each person named.	
Course Director	
Program Medical Director	
Principal Clinical Preceptor	
Principal Field Evaluator	
Principal Instructors	
Teaching Assistants	

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: EMS Aircraft Classification		Policy Number 1204	
APPROVED: Administration:	 Steven L. Carroll, EMT-P	Date: 12/01/07	
APPROVED: Medical Director:	 Angelo Salvucci, M.D.	Date: 12/01/07	
Origination Date:	May 1999	Effective Date: December 1, 2007	
Date Revised:	July 9, 2007		
Last Reviewed:	August 9, 2012		
Review Date:	August, 2015		

I. PURPOSE:

To determine the types of aircraft available to provide emergency air transport for a patient in Ventura County.

II. POLICY:

All EMS Aircraft shall be classified as an Air Ambulance, a Rescue Aircraft or an Auxiliary Rescue Aircraft.

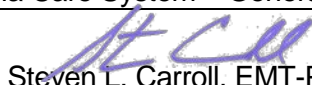

III. PROCEDURE:

A. EMS aircraft classifications shall be limited to the following categories:

1. Air Ambulance. An air ambulance is an aircraft specially constructed, modified or equipped, and used for the primary purposes of responding to emergency calls and transporting critically ill or injured patients whose medical flight crew has at a minimum two (2) attendants certified or licensed in advanced life support.
2. Rescue Aircraft. A rescue aircraft is an aircraft whose usual function is not prehospital emergency patient transport but which may be utilized, in compliance with local EMS policy, for prehospital emergency patient transport when use of an air or ground ambulance is inappropriate or unavailable. Rescue aircraft includes ALS rescue aircraft, BLS rescue aircraft and Auxiliary rescue aircraft.
 - a. Advanced Life Support Rescue Aircraft. An Advanced Life Support (ALS) rescue aircraft is a rescue aircraft whose medical flight crew has at a minimum one attendant certified or licensed in advanced life support.
 - b. Basic Life Support Rescue Aircraft. A Basic life Support Rescue aircraft is a rescue aircraft whose medical flight crew has at a minimum one attendant certified as an EMT-I, or an EMT-I with at least eight (8) hours of hospital clinical training and whose field/clinical experience specified in Section

100074 (c) of Title 22, California Code of Regulations, is in the aeromedical transport of patients.

3. Auxiliary Rescue Aircraft. Auxiliary rescue aircraft is a rescue aircraft which does not have a medical flight crew.
- B. EMS Aircraft classification shall be reviewed at 2 year intervals. Reclassification shall occur if there is a transfer of ownership or a change in the aircraft's category. A request from a designated dispatch center shall be deemed as authorization of aircraft operated by the California Highway Patrol, Department of Forestry, National Guard or the Federal Government

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Trauma Care System – General Provisions		Policy Number 1400	
APPROVED: Administration:	 Steven L. Carroll, EMT-P	Date: June 1, 2012	
APPROVED: Medical Director:	 Angelo Salvucci, M.D.	Date: June 1, 2012	
Origination Date:	July 1, 2010	Effective Date:	June 1, 2012
Date Revised:	April, 2012		
Date Last Reviewed:	April, 2012		
Review Date:	April, 2014		

- I. **PURPOSE:** To provide standards and guidelines for the Ventura County Trauma Care System. To provide all injured patients the accessibility to an organized, multi-disciplinary and inclusive system of trauma care. To ensure that all injured patients are taken to the time-closest and most appropriate medical facility.
- II. **AUTHORITY:** Health and Safety Code, §1797.160, §1797.161, and §1798, and California Code of Regulations, Title 22, §100255.
- III. **POLICY:**
 - A. **Multi-disciplinary Nature of Systematized Trauma Care**
The Ventura County EMS Agency (VCEMS) recognizes the multi-disciplinary nature of a systemized approach to trauma care. VCEMS has adopted policies, guidelines and triage criteria that provide for the coordination of all resources and ensure the accessibility to the time-closest and most appropriate medical facility for all injured patients.
 - B. **Public Information and Education**
 1. VCEMS is committed to the establishment of trauma system support and the promotion of injury prevention and safety education.
 2. VCEMS facilitates speakers to address public groups, and serves as a resource for trauma information/education.
 3. VCEMS assists community and professional groups in the development and dissemination of education to the public on such topics as injury prevention, safety education programs and access to the Trauma Care System.

4. Each designated facility must participate in the development of public awareness and education campaigns for their service area.
- C. Marketing and Advertising
1. In accordance with the Health and Safety Code, Division 2.5, no healthcare provider shall use the term "trauma facility," "trauma hospital," "trauma center," "trauma care provider," "trauma care vehicle," or similar terminology in its signs or advertisements or in printed materials and information it furnishes to the general public unless its use has been authorized by VCEMS.
 2. All marketing and promotional plans, with respect to trauma center designation shall be submitted to VCEMS for review and approval, prior to implementation. Such plans will be reviewed by VCEMS, with approval or denial issued within 10 days, based on the following guidelines:
 - a. Shall provide accurate information
 - b. Shall not include false claims
 - c. Shall not be critical of other providers
 - d. Shall not include financial inducements to any providers or third parties
- D. Service Areas for Hospitals
- Service areas for local trauma hospitals are determined by the VCEMS policy of transporting patients to the time-closest and appropriate facility.
- E. EMS Dispatching
- EMS dispatching for Ventura County is provided for and coordinated through the Ventura County Fire/EMS Communications Center, and, for Oxnard Fire, through the Oxnard PD center. The closest ALS transporting unit to an incident is dispatched, as well as BLS, and in some cases ALS, first responders.
- F. Training of EMS Personnel
1. Designated facilities will provide training to hospital staff on trauma system policies and procedures.
 2. Base Hospitals conduct periodic classes to orient prehospital providers to the local EMS system. Representatives from a designated trauma center may present the orientation to the Ventura County trauma system.
- G. Coordination and Mutual Aid between neighboring jurisdictions

1. VCEMS will establish and maintain reciprocity agreements with neighboring EMS jurisdictions that provide for the coordination of mutual aid within those jurisdictions.
2. VCEMS works cooperatively and executes agreements, as necessary, in order to ensure that patients are transported to the time-closest and appropriate facility.
3. VCEMS maintains contact with neighboring EMS agencies in order to monitor the status of trauma care systems in surrounding jurisdictions.

H. Interfacility Transfers

1. As an inclusive trauma system, all hospitals have a role in providing trauma care to injured patients.
2. Designated trauma centers are required to establish and maintain a transfer agreement with other trauma center(s) of higher designation for the transfer of patients that require a higher level of care.
3. Transferring facilities, in conjunction with the higher-level facility, shall be responsible for obtaining the appropriate level of transportation when transferring trauma patients.

I. Pediatric Trauma Care.


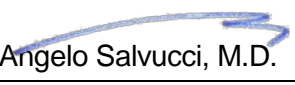
Integration of pediatric hospital (s), when applicable, into the overall trauma care system to ensure that all trauma patients receive appropriate trauma care in the most expeditious manner possible

1. Designated trauma centers are required to maintain a transfer agreement with a pediatric trauma center.
2. As with all specialties, pediatric consultation should be promptly available
3. The transferring facility, in conjunction with the higher-level facility, shall be responsible for obtaining the appropriate level of care during transport.

J. Coordinating and Integration of Trauma Care with Non-Medical Emergency Services

1. VCEMS ensures that all non-medical emergency service providers are apprised of trauma system activities, as it relates to their agency/organization.
2. Non-medical emergency service providers are included in the VCEMS committee memberships, as appropriate.

3. VCEMS disseminates information to non-medical emergency service agencies through written communication, as necessary.
- K. Trauma Center Fees
- VCEMS has developed a fee structure that covers the direct cost of the designation process and to effectively monitor and evaluate the trauma care system. Fees are based on the direct VCEMS cost of administering the trauma care system.
- L. Medical Control and Accountability
1. Each designated trauma center shall:
 - a. Provide base hospital medical control for field prehospital care providers.
 - b. Provide base hospital service in accordance with California Code of Regulations, Title 22, as outlined in the VCEMS Base Hospital Agreements.
 - c. Participate in the VCEMS data collection system as defined by VCEMS, CEMSIS-Trauma and the National Trauma Database.
 - d. Participate in the VCEMS continuous quality improvement program.

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES	
Policy Title: Guidelines for Interfacility Transfer of Patients to a Trauma Center		Policy Number 1404	
APPROVED: Administration:	 Steven L. Carroll, EMT-P	Date: October 4, 2012	
APPROVED: Medical Director:	 Angelo Salvucci, M.D.	Date: October 4, 2012	
Origination Date:	July 1, 2010	Effective Date: October 4, 2012	
Date Revised:	October 4, 2012		
Date Last Reviewed:	October 4, 2012		
Review Date:	October, 2014		

- I. PURPOSE: To establish guidelines for the transfer of a trauma patient from a hospital in Ventura County to a Level II trauma center.
- II. AUTHORITY: Health and Safety Code, §1797.160, §1797.161, and §1798, and California Code of Regulations, Title 22, §100255.
- III. DEFINITIONS:
 - A. **EMERGENT** Transfer: A process by which a patient with potential life-or-limb threatening traumatic injuries is transferred to a trauma center. The patient requires an immediate procedure at a trauma center, and a delay in transfer will result in deterioration of the patient's condition, and the treating physician requests immediate transport to a trauma center.
 1. Trauma Call Continuation: A process by which a patient with potential life-or-limb threatening traumatic injuries who has been taken to the emergency department by ALS ambulance is transferred to a trauma center. The patient requires an immediate procedure at a trauma center, the ALS ambulance is still on the premises, and the treating physician requests immediate transport to a designated trauma center.
 - B. **URGENT** Transfer: A process by which a patient with time-critical traumatic injuries is transferred to a trauma center. The patient requires a timely procedure at a trauma center, and a lengthy delay will result in deterioration of the patient's condition, and the treating physician requests prompt transport to a trauma center.
- IV POLICY: The following criteria will be used as a guideline for the transfer of a trauma patient to a trauma center.

- A. For patients who are in the emergency department at a community hospital and have one or more of the following injuries, if the referring physician requests transfer to a trauma center, the trauma center will immediately accept the patient
 - 1. Carotid or vertebral arterial injury
 - 2. Torn thoracic aorta or great vessel
 - 3. Cardiac rupture
 - 4. Bilateral pulmonary contusion with PaO₂ to FiO₂ ratio less than 200
 - 5. Major abdominal vascular injury
 - 6. Grade IV, V or VI liver injuries
 - 7. Grade III, IV or V spleen injuries
 - 8. Unstable pelvic fracture
 - 9. Fracture or dislocation with neurovascular compromise
 - 10. Penetrating injury or open fracture of the skull
 - 11. Glasgow Coma Scale score <14 or lateralizing neurologic signs
 - 12. Unstable spinal fracture or spinal cord deficit
 - 13. >2 unilateral rib fractures or bilateral rib fractures with pulmonary contusion
 - 14. Open long bone fracture
 - 15. Significant torso injury with advanced co-morbid disease (such as coronary artery disease, chronic obstructive pulmonary disease, type 1 diabetes mellitus, or immunosuppression)

- B. Ventura County Level II Trauma Centers:
 - 1. Agree to immediately accept from Ventura County community hospitals, patients with conditions included in the guidelines above.
 - 2. Will publish a point-of-contact phone number for an individual authorized to accept the transfer of a patient with a condition included in the guidelines above, or to request consultation with a trauma surgeon.
 - 3. Will establish a written interfacility transfer agreement with every hospital in Ventura County.

- C. Community Hospitals:
 - 1. Are not required to transfer patients with conditions included in the guidelines above to a trauma center when resources and capabilities for providing care exist at their facility.
 - 2. Will enter into a written interfacility transfer agreement with every trauma center in Ventura County.

D. **EMERGENT** Transfers

1. **EMERGENT** transfers are indicated for patients with life-or-limb threatening injuries in need of emergency procedures at a trauma center. Criteria **MUST** include at least one of the following:
 - a. Indications for an immediate neurosurgical procedure.
 - b. Penetrating gunshot wounds to head or torso.
 - c. Penetrating or blunt injury with shock.
 - d. Vascular injuries that cannot be stabilized and are at risk of hemorrhagic shock or loss of limb acutely (excluding fingers/toes).
 - e. Pregnancy with indications for an immediate Cesarean section.
2. For **EMERGENT** transfers, trauma centers will:
 - a. Publish a single phone number (“hotline”), that is answered 24/7, for an individual authorized to accept the transfer of patients who have a condition as described in Section D.1 of this policy.
 - b. Immediately upon initial notification by a transferring physician, accept in transfer all patients who have a condition as described in Section D.1 of this policy.
 - c. Immediately post on ReddiNet when there is no capacity to accept trauma patients.
3. For **EMERGENT** transfers, community hospitals will:
 - a. Assemble and maintain a “Emergency Transfer Pack” in the emergency department to contain all of the following:
 1. Checklist with phone numbers of Ventura County trauma centers.
 2. Patient consent/transfer forms.
 3. Treatment summary sheet.
 4. Ventura County EMS “Emergency Trauma Patient Transfer QI Form.”
 - b. Have policies, procedures, and a quality improvement system in place to track and review all **EMERGENT** transfers and Trauma Call Continuations.
 - c. Maintain an ambulance arrival to emergency department (ED) departure time of no longer than ten minutes.

- d. Establish policies and procedures to make personnel available, when needed, to accompany the patient during the transfer to the trauma center.
4. For **EMERGENT** transfers, Ventura County Fire Communications Center (FCC) will:
 - a. Respond to an **EMERGENT** transfer request by immediately dispatching the closest available ALS ambulance to the requesting hospital.
 - b. Consider Trauma Call Continuation transfers to be a follow-up to the original incident, and will link the trauma transfer fire incident number to the original 911 fire incident number.
5. For **EMERGENT** transfers, ambulance companies will:
 - a. Respond immediately upon request.
 - b. For “Trauma Call Continuation” requests, immediately transport the patient to a trauma center with the same ALS personnel and vehicle that originally transported the patient to the community hospital.
 - c. Not be required to consider **EMERGENT** transports as an “interfacility transport” as it pertains to ambulance contract compliance.
- E. **URGENT** Transfers
 1. **URGENT** transfers are indicated for patients with time-critical injuries in need of timely procedures at a trauma center.
 2. For **URGENT** transfers, trauma centers will:
 - a. Publish a single phone number, that is answered 24/7, for a community hospital physician to consult with a trauma surgeon.
 3. For **URGENT** transfers, community hospitals will:
 - a. Maintain an ambulance arrival to emergency department (ED) departure time of no longer than twenty minutes.
 4. For **URGENT** transfers, ambulance companies will:
 - a. Arrive at the requesting ED no later than thirty minutes from the time the request was received.
- V. PROCEDURE:
 - A. **EMERGENT** Transfers
 1. After discussion with the patient, the transferring hospital will:

- a. Call the trauma hotline of the closest trauma center to notify of the transfer.
 - b. Call FCC, advise they have an **EMERGENT** transfer, and request an ambulance. If the patient's clinical condition warrants, the transferring hospital will call FCC *before* calling the trauma center's hotline.
 - c. Complete transfer consent and treatment summary.
 - d. Prepare copies of the ED triage assessment form and demographic information form.
2. Upon request for an **EMERGENT** transfer, the dispatch center will dispatch the closest ALS ambulance and verbalize "MEDxxx E MERGENCY Trauma Transfer from [transferring hospital]". The trauma center will be denoted in the incident comments, which will display on the mobile data computer (MDC). If a unit does not have an operational MDC, the transferring hospital will advise the responding ambulance personnel of the destination trauma center.
 3. Upon notification, the ambulance will respond Code (lights and siren).
 4. FCC will track ambulance dispatch, enroute, on scene, en-route hospital, at hospital, and available times.
 5. The patient shall be emergently transferred without delay. Every effort will be made to limit ambulance on-scene time in the transferring hospital ED to ten minutes.
 - a. All forms should be completed prior to ambulance arrival.
 - b. Any diagnostic test or radiologic study results may either be relayed to the trauma center at a later time, or if time permits, copied and sent with the patient to the trauma center.
 - c. Intravenous drips may be discontinued or remain on the ED pump.
- B. Trauma Call Continuation
1. Upon determination of a Trauma Call Continuation, and after discussion with the patient, the community hospital will:
 - a. Direct the ambulance personnel to prepare to continue the transport to the trauma center.
 - b. Notify the designated trauma center ED of the immediate re-triage of a trauma patient, and communicate the patient's apparent injuries or

reason for the re-triage, after the call is continued and the patient is enroute to the trauma center.

2. Upon notification of Trauma Call Continuation, the ambulance personnel will notify FCC of their assignment to a Trauma Call Continuation. FCC will link the trauma transfer to the original 911 incident and continue tracking enroute hospital (departure from community hospital), at hospital (arrival at trauma center) and available times.
3. When the transferring physician determines the patient is ready and directs ambulance personnel to continue the transport, the ambulance will emergently transport the patient to the trauma center. The transporting paramedic will contact the trauma base hospital enroute and provide updated patient information.

C. URGENT Transfers

1. After discussion with the patient, the transferring hospital will:
 - a. Call the trauma hotline for the closest trauma center to consult with the trauma surgeon.
 - b. Call the transport provider to request an ambulance.
 - c. Complete transfer consent and treatment summary.
 - d. Prepare copies of the ED triage assessment form.
 - e. Limit ambulance on-scene time in the transferring hospital ED to twenty minutes.
2. Upon request for an Urgent transfer, the transport provider will dispatch an ambulance to arrive no later than thirty minutes after the request.

- D.** For all **EMERGENT** and **URGENT** transfers, the transferring hospital will submit a completed Emergency Trauma Patient Transfer QI Form to the Ventura County EMS Agency within 72 hours. The transfer will be reviewed for appropriate and timely care and to identify opportunities for improvement. Results will be reviewed and discussed at the Countywide EMS Trauma Operational Review Committee.



EMERGENT and URGENT Trauma Transfer QI Form
Form: Ventura County EMS Agency Policy 1404

(ALL FIELDS MUST BE COMPLETED)

Date: _____

Sending Hospital:

- SVH SJPVH SJRMC OVCH CMH SPH

Treating Physician: _____

Patient arrived at sending ED at _____ (time of arrival)

- Brought by EMS: Fire Incident Number _____
 Brought by POV or Walk-In

Destination Trauma Center:

- LRHMC
 VCMC
 Other: _____

Patient Transfer Process:

- EMERGENT
 Ambulance with paramedic ONLY
 Ambulance with accompanying healthcare personnel
 Trauma Call Continuation
 URGENT

If the transfer was EMERGENT, which of the following Policy 1404 criteria applies?

- Indications for an immediate neurosurgical procedure
 Penetrating gunshot wound to head or torso
 Penetrating wound by any mechanism and presents with or develops shock.
 Blunt injury and shock
 Vascular injury that cannot be stabilized and is at risk of hemorrhagic shock or loss of limb acutely (excluding fingers/toes)
 Pregnancy with indications for immediate Cesarean section

Comments:

Within 72 hours of transfer, fax or scan/email to VCEMS: Fax--(805) 981-5300 Email—katy.haddock@ventura.org

Ventura County Trauma Centers

Trauma Hotlines

LRHMC (805) 370-5901

VCMC (805) 652-6777

