San Joaquin County
Emergency Medical Services Agency

A DIVISION OF
HEALTH CARE SERVICES
AGENCY

Thursday, May 11, 2023
0900 – 1100
Robert J. Cabral Agricultural Center
2101 E. Earhart Ave., Delta Room
Stockton, CA 95206

SJC EMS ADVISORY COMMITTEE

AGENDA

I. CALL TO ORDER/INTRODUCTIONS

II. APPROVAL OF PAST EMS ADVISORY COMMITTEE MEETING MINUTES:

a. Review and approval of February 9, 2023, EMS Advisory Committee meeting minutes

III. OLD BUSINESS:

a. APOT/APOD and Legislation SB 40/1770
b. EMS System Staffing Updates
c. Paramedic Training Program Update

IV. NEW BUSINESS:

a. Non-Emergency Ambulance Resources
b. Doctors Hospital Manteca L&D/OB
c. Training and CE Provider Update
d. EMS System Assessment and RFP 2023-2026
e. EMS Policy Review (2023-01 Rv2, 4101, 4200, 5115)
f. EMS Advisory Representation (2023–2025)

V. EMS SYSTEM REPORTS:

a. Specialty Care Oral Reports
    i. STEMI Program and CARES Data
    ii. Stroke Program
    iii. Trauma Program

VI. ANNOUNCEMENTS/GOOD OF THE ORDER:

a. EMS Week

VII. NEXT MEETING:

a. The next regularly scheduled EMS Advisory Committee meeting is scheduled for August 10, 2023.

VIII. ADJOURNMENT

Attachments:

Draft February 9, 2023 EMS Advisory Committee Meeting Minutes
Doctor's Hospital of Manteca – Public Notice
EMS Policy Memorandum No. 2023-01 Rv2, Albuterol Alternative Authorization (Revised v.2)
EMS Policy No. 4101, EMS Vehicle Medication and Equipment
EMS Policy No. 4200, Management of Controlled Substances
EMS Policy No. 5115, Cervical Spine Stabilization
CARES 2022 Data

San Joaquin County
Emergency Medical Services Agency

A DIVISION OF
HEALTH CARE SERVICES
AGENCY

EMS Advisory Committee

Thursday, February 9th, 2023 at 0900

MINUTES

Members	Membership Representing	Present	Absent
Jared Bagwell (Co-Chair)	SJCEMSA	X	
Dr. Katherine Shafer (Co-Chair)	SJCEMSA	X	
Nasir Khan	ED RN – Base Hospital - SJGH		X
Cheryl Heaney-Ordez	ED RN – Receiving Hospital – St. Joseph's Medical Center	X	
Dan Freeman	ED RN – Receiving Hospital – Kaiser Hospital Manteca	X	
Brian Hajik	EOA emergency ambulance provider – American Medical Response	X	
John Andrews	EOA emergency ambulance provider – Manteca District Ambulance		X
Bryan Carr	Representative of an ALS fire dept./district – Stockton Fire Department	X	
Ken Johnson	BLS fire departments or districts – Lodi Fire Department	X	
Vince Stroup	Paramedic Non fire-based ALS emergency ambulance providers – Manteca District Ambulance	X	
Lucas Mejia	EMT Non Fire-based ALS emergency ambulance	X	

	providers – Manteca District Ambulance		
Vanessa Herrero	SJC accredited paramedic member representing a non fire-based ALS provider		**X**
Pat Burns	EOA emergency ambulance provider – Ripon Fire	**X**	
Dennis Bitters	Fire-based emergency ambulance provider – Ripon Fire	**X**	
Richard Silva	Emergency Medical Dispatcher - VRECC	**X**	
Nicholas Taiariol	Law Enforcement – San Joaquin County Sheriff	**X**	
Alternate members			
Mary Barnes	San Joaquin General Hospital		**X**
James Trinchera	American Medical Response		**X**
George McKelvie	Manteca District Ambulance	**X**	
Jeremy Abundiz	Ripon Fire Department		**X**
Lenard Gutierrez	Stockton Fire Department		**X**
EMS Agency Staff	**Title**	**Present**	**Absent**
Don Miles	Office Technician/Coordinator	**X**	
Sophany Bodine	EMS Specialist	**X**	
Christine Tualla	EMS Specialist	**X**	
Natisha Plummer	EMS Analyst	**X**	
Marissa Matta	EMS Analyst	**X**	
Matthew Esposito	EMS Prehospital Care Coordinator	**X**	
Amanda Petroske	EMS Trauma Coordinator	**X**	
Guests			

Greg Diederich	Director of Health Care Services Agency	X	

Meeting called to order by at 0900 hours by Co-Chair EMS Director Jared Bagwell.

I. INTRODUCTIONS:

Committee member introductions.

II. APPROVAL OF PAST EMS ADVISORY COMMITTEE MEETING MINUTES:

a. M/S Ken Johnson/Brian Hajik. Minutes approved.

III. OLD BUSINESS:

a. APOT/APOD: Q3 and Q4 APOT reports displayed and reviewed for committee. 3 year APOT graph by hospital also displayed and reviewed by committee. Cheryl Heaney-Ordez and Dan Freeman both expressed that delays at St. Joseph's Medical Center and Kaiser Manteca respectively are still problematic as a result of behavioral health patients being brought directly to the emergency room resulting in ambulance clustering. Lt. Nick Taiariol also expressed that juvenile offender patients are also contributing to the problem as it is county policy to take juveniles to the ED for medical clearance. SJCEMSA will work with hospitals to communicate alternate level of service resources that are available for IFT to help throughput.
b. EMS System Staffing Updates: Brian Hajik expressed that there is still a significant shortage of paramedic applicants on a local level. AMR still using NCTI to sponsor new students. Chief Bryan Carr expressed that SFD has been actively encouraging EMTs to attend paramedic school and has 4 students enrolled in Merced's paramedic class. Chief Ken Johnson shared that 11 Lodi Fire students enrolled though Sacramento State.
c. EMS reports to review in future meetings: Co-chair Dr. Shafer suggested committee members to review ROSC reports.

IV. NEW BUSINESS:

a. Policy review and discussion:

i. Policy 3202: irrelevant and/or duplicative language removed and/or updated. Staging response for ambulance added. ALS or BLS service specified and clarified as to when lights and sirens are to be used.
ii. 3202(Appendix): Additional columns added for ambulance response and updated response to Bravo level calls/response.
iii. Policy 3410: Alert Reports vs. Standard Reports criteria clarified.
iv. Policy 3411: Expanded and modified radio call "alerts" to hospital and required licensed personnel to answer.
v. Policy 4101: I.V. Pumps removed. Stylets added. Video laryngoscopes approval by medical director.
vi. Policy 4801: SRC clarified.
vii. Policy 4811: Definition consistency.
viii. Policy 4985: Removed redundant definitions that were already in regulations. ED treatment remains prohibited on gurney but may review impact with specific procedures.
ix. Policy 5502: Added back EMR scope of practice.
x. Policy 6102: Streamlined UO process.
xi. Policy 7001: New policy describing the role and means to communicate with the duty officer.

b. Stakeholder comment period: Bagwell informed committee members that the 45-day stakeholder comment period is standard for most policy cycle feedback periods. Committee members encouraged to monitor website and ensure they are included in email distribution groups.
c. Paramedic Skills Review: Bagwell opened the discussion for input on alternate ways for offering prehospital CE in San Joaquin County. Brian Hajik and Dr. Shafer both recommended smaller training programs more frequently and to get feedback through CQI council. Prerecorded online training programs and county LMS were also suggested. SJCEMSA will look into the viability of these recommendations.
d. Paramedic Training Program: SJCEMSA requesting new FTEs for FY 23-24 to run LEMSA paramedic training in coming years. EMT training also to be expanded and currently in discussions with San Joaquin Delta College.

V. EMS SYSTEM REPORTS:

a. APOT/APOD: A brief overview of the highlights discussed earlier.

VI. ANNOUNCEMENTS / GOOD OF THE ORDER:

a. Greg Diederich discussed committee members of the Health Force Partners program in Stockton, and its benefits. Amanda Petroske offered to reach out to local school districts to help support and implement the program on a larger scope countywide.

VII. NEXT MEETING:

a. Next regularly scheduled EMS Advisory Committee meeting is scheduled for May 11, 2023**.**

VIII. ADJOURNMENT:

a. Meeting adjourned 1030.

DOCTORS HOSPITAL OF MANTECA

A COMMUNITY BUILT ON CARE

PUBLIC NOTICE

Doctors Hospital of Manteca will be discontinuing its Obstetrics Services – located at 1205 E North Street, Manteca, California, effective July 24, 2023. The current services are provided to patients who receive labor and delivery care at our facility. 20.75 full-time equivalent positions will be impacted. Other Obstetrics Services are available at Doctors Medical Center (Modesto), San Joaquin General Hospital (French Camp) and St. Joseph's Medical Center (Stockton). All three locations accept most health insurance plans. Patients will need to contact the hospitals directly to confirm payer resources. This service change will not impact any other hospital services or care offered to the community. Doctors Hospital of Manteca's parent entity is Tenet Healthcare. The hospital CEO is Eleze Armstrong. Please contact (209) 823-3111 if you have any questions

San Joaquin County
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EMS Policy Memorandum No. 2023-01 (Revised v.2)

DATE: May 8, 2023

TO: All Prehospital Personnel and Providers
Base Hospital Personnel
Emergency Department Physicians and Nurse Liaisons

FROM: Katherine Shafer, M.D., EMS Medical Director

SUBJ.: Albuterol Alternative Authorization (Revised v.2)

The purpose of this policy memorandum is to provide temporary authorization for the use of an alternate aerosolized or nebulized beta-2 specific bronchodilator medication due to the current and anticipated albuterol shortage[1]. This temporary authorization for an alternative to albuterol shall be in effect until rescinded by San Joaquin County Emergency Medical Services Agency (SJCEMSA).

In February of 2023, a major pharmaceutical company closed its manufacturing plant that produces the most commonly used concentration of albuterol[2]. In the coming months there is expected to be a shortage and many orders placed on backorder.

SJCEMSA Medical Director has approved the use of an alternate nebulized beta-2 specific bronchodilator medication limited to the following:

Levalbuterol HCl, Preservative Free 0.63 mg / 3 mL solution for use on:

SJCEMSA Policy No. 5700, ALS Treatment Protocols, ARSP-02, Bronchospasms.
SJCEMSA Policy No. 5700, ALS Treatment Protocols, PRSP-01, Pediatric Bronchospasms.
SJCEMSA Policy No. 5700, ALS Treatment Protocols, PENV-01, Pediatric Allergic Reaction/ Anaphylaxis.

Levalbuterol HCl, Preservative Free 1.26 mg / 6mL solution for use on:

SJCEMSA Policy No. 5700, ALS Treatment Protocols, AENV-01, Allergic Reaction/Anaphylaxis.

Should you have any questions please contact Matthew Esposito, Prehospital Care Coordinator at mesposito@sjgov.org or at (209)468-6818.

[1] (FDA, Drug Shortages, 2023)
[2] (ASHP Pharmacists Advancing HealthCare, Current Drug Shortages, 2023)

TITLE: **EMS RESPONSE VEHICLE MEDICATION AND EQUIPMENT** EMS Policy No. **4101**

PURPOSE:

The purpose of this policy is to standardize and establish par levels for the medication and equipment available on EMS response vehicles in San Joaquin County.

AUTHORITY:

Health and Safety Code, Division 2.5, Sections 1797.197, 1797.197a, 1797.206, 1797.220, 1798; California Code of Regulations, Title 22, Division 9, Chapter 2 Section 100063, 100063.1, 100064, and Chapter 4 Sections 100145, 100146, 100168, 100170.

DEFINITIONS:

A. "Advanced Life Support" or "ALS" means special services designed to provide definitive prehospital emergency medical care, including, but not limited to, cardiopulmonary resuscitation, cardiac monitoring, cardiac defibrillation, advanced airway management, intravenous therapy, administration of specified drugs and other medicinal preparations, and other specified techniques and procedures administered by authorized personnel under the direct supervision of a base hospital as part of the organized EMS system at the scene of an emergency, during transport to an acute care hospital, during inter-facility transfer, and while in the emergency department of an acute care hospital until responsibility is assumed by the emergency or other medical staff of that hospital.
B. "AMB" means ambulance.
C. "Basic life support" or "BLS" means emergency first aid and cardiopulmonary resuscitation procedures which, as a minimum, include recognizing respiratory and cardiac arrest and starting the proper application of cardiopulmonary resuscitation to maintain life without invasive techniques until the patient may be transported or until advanced life support is available.
D. "EMS Service Providers" means those ambulance services, fire departments, fire districts or other entities operating within the organized EMS system.
E. "EMS Response Vehicle" means all ambulances and any fire apparatus or other motor vehicle used to respond to EMS requests for service.
F. "EMT Enhanced Skills" means those items specified in EMS Policy No. 2360, EMT Scope of Practice as EMT Enhanced Skills.
G. "NA" means not authorized.
H. "NR" means not required.
I. "NT" means a non-transport EMS response vehicle.
J. "Par Level" means the minimum quantity of an item stocked at the beginning of a shift and replenished during the shift if below the par level.
K. "Organized EMS System" means those entities included in the San Joaquin

Approved: Signature on file
Medical Director

Signature on file
EMS Administrator

County EMS Agency's EMS Plan as submitted to the Emergency Medical Services Authority pursuant to Health and Safety Code § 1797.254.

L. "SJCEMSA" means the San Joaquin County Emergency Medical Services (EMS) Agency, which is the designated local emergency medical services agency for San Joaquin County.

POLICY:

It is the policy of SJCEMSA to standardize and require minimum levels of medical equipment and medications for EMS response vehicles working in the San Joaquin County EMS system.

PROCEDURE:

I. EMS Service Providers are required to develop a vehicle inspection procedure to ensure compliance with this policy at the start of each shift including a written record of each daily inspection for each EMS vehicle maintained in an auditable format. Records shall be maintained for a minimum of six months. EMS service providers shall require each attending paramedic or EMT to conduct an inspection of their assigned EMS response vehicle at the beginning of their shift.

II. The attending paramedic or EMT on each EMS response vehicle is responsible for ensuring that all medications and equipment are present at the beginning of each shift, that all equipment is functioning properly, and that all battery-powered devices are charged.

III. Medications, supplies, and equipment shall be stored in accordance with the manufacturer's recommendation unless otherwise specified in this policy. The use of expired medications and supplies is prohibited.

IV. The quantities specified are minimum quantities except for controlled substances which are maximum quantities.

V. EMS service providers shall have and maintain appropriate state and federal approvals for point of care testing including a waiver form the from the Centers for Medicare and Medicaid Services, pursuant to the Clinical Laboratory Improvement Amendments (CLIA), for laboratory devices including testing to measure lab values in the prehospital setting as follows:
   A. BLS NT and BLS AMB for finger stick glucose.
   B. ALS NT and ALS AMB for finger stick glucose, capnometry, capnography, and carbon monoxide.

VI. EMS service providers that are unable to maintain medication or equipment par levels required in this policy due to ongoing or imminent national medication and equipment shortages shall complete and submit Form 4101A Medication Shortage Mitigation and Response Strategies.

VII. EMS service providers that request a waiver from medication or equipment par levels of this policy shall complete and submit Form 4101B, Request for Waiver of Requirements.

VIII. Any substitutions or modifications of this list must be approved by the EMS Medical Director.

Table 1: ALS and BLS Common Equipment and Supplies	**Par Level**			
	BLS		**ALS**	
	NT	**AMB**	**NT**	**AMB**
Airway Management				
In ambulance oxygen source, minimum of 500 PSI with a wall mounted regulator	NR	1	NR	1
Portable oxygen - D or E size cylinders, minimum of 200 PSI, with regulator	1	1	1	1
Spare Portable oxygen - D or E size cylinders, minimum of 1800 PSI	1	1	1	1
Wall mount suction device	NR	1	NR	1
Battery powered suction unit	1	1	1	1
Suction catheters with control for each size Fr 6, 8, 10, 12, 14, 18	1	1	1	1
Connecting tubing for suction units	2	2	2	2
Yankauer Tonsil Tip Suction Catheter	2	2	2	2
Disposable bag valve device - adult, with appropriate connector masks	2	2	2	2
Disposable bag valve device – pediatric, with appropriate connector masks for child and infant	1	1	1	1
Tube of water soluble lubricating jelly (or multiple single use packets)	1	1	1	1
Oropharyngeal Airway Kit (adult, child, infant) each size 0 – 9	1	1	1	1
Tongue blade for use in inserting child and infant OPA	1	1	1	1
Nasopharyngeal Airways, each size Fr 20, 24, 28, 32, 36	1	1	1	1
Nasal Cannula, pediatric	1	1	1	2
Nasal Cannula, adult	2	2	3	3
Adult Non-rebreather oxygen mask	2	2	2	3
Pediatric Non-rebreather oxygen mask	2	1	1	2

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Medical Director

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EMS Administrator

Table 1: ALS and BLS Common Equipment and Supplies	**Par Level**			
	BLS		**ALS**	
	NT	**AMB**	**NT**	**AMB**
Adult laryngoscope handle with alkaline batteries or 2 disposable handles	NA	NA	1	1
Pediatric laryngoscope handle with alkaline batteries or 2 disposable handles	NA	NA	1	1
Spare alkaline batteries for laryngoscope handle	NA	NA	2	2
Disposable Macintosh laryngeal blades each size: #1, #2, #3, #4	NA	NA	1	1
Disposal Miller laryngeal blades each size: #0, #1, #2, #3, #4	NA	NA	1	1
Magill Forceps – Adult and Pediatric	NA	NA	1	1
Endotracheal tubes each size: 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5	NA	NA	1	2
ET tube holder	NA	NA	1	2
Disposable endotracheal tube introducers	NA	NA	2	2
Endotracheal tube stylet	NA	NA	1	2
End tidal CO2 device, adult	NA	NA	1	2
End tidal CO2 device, pediatric	NA	NA	1	2
Nebulizer mask	0	0	1	1
Saline humidifier	1	1	1	1
Breath actuated nebulizer	NA	NA	1	2
Needle and catheter for pleural decompression: 10 or 14 gauge 3.25 inch needle (with Betadine swab, tape, and 10 ml syringe)	NA	NA	4	4
Percutaneous Needle Cricothyroidotomy insertion kit, which includes: 10 ml syringe, Translaryngeal jet ventilator device with push-button and high-pressure tubing with locking device (Adult), 10 or 12 gauge needle for adult, and Betadine swab, or Enk Oxygen Flow Modulator set, (Adult), and Betadine swab or kit approved by EMS Medical Director.	NA	NA	1	1
iGel Airway each size 3.0, 4.0, 5.0	NA	NA	2	2
iGel Airway each size 1.0,1.5, 2.0, 2.5	NA	NA	2	2
Pneumatic Continuous Positive Airway Pressure (CPAP) device	NA	NA	1	NA
Zoll Z series™ ventilator with CPAP and/or BiPAP *Optional for Non- Emergent ALS interfacility transfer ambulance	NA	NA	NA	1
Adult Ventilator Circuits *Optional for Non- Emergent ALS interfacility transfer ambulance	NA	NA	NA	3

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Table 1: ALS and BLS Common Equipment and Supplies	**Par Level**			
	BLS		**ALS**	
	NT	**AMB**	**NT**	**AMB**
CPAP mask compatible with Zoll Z series™ ventilator each size large and extra large *Optional for Non- Emergent ALS interfacility transfer ambulance	NA	NA	NA	3
Inline Hepa Filter *Optional for Non- Emergent ALS interfacility transfer ambulance	NA	NA	1	2
Assessment and Treatment				
Stethoscope	1	1	1	2
Penlight	1	1	1	1
Blood pressure cuff: thigh, adult, child, infant	1 ea	1 ea	1 ea	1 ea
Patient thermometer (temporal or noncontact)	1	1	1	1
Pulse oximetry device approved by the Food and Drug Administration (FDA);	1	1	1	1
Blood glucose measuring device approved by the FDA with multiple test strips	NA	NA	1	1
Length based pediatric resuscitation tape	NR	NR	1	1
Cardiac monitor with defibrillation/pacing/12 lead capable	NA	NA	1	1
Pediatric defibrillation equipment	NA	NA	1	1
ECG electrodes all patient sizes	NA	NA	6	9
Automated External Defibrillator – Compliant with the current AHA Guidelines and capable of delivering both adult and pediatric shocks	1	1	NR	NR
AED cables and pads for sizes adult and pediatric	1	1	NR	NR
Piston style mechanical compression device	1	0	1	0
Bandage shears (heavy duty)	1	1	1	2
Rolls of tape, size 1” or 2” or 3” Hypoallergenic (Transpore/paper)	2	2	2	2
Emesis basins	NR	2	NR	2
Bed pan/fracture pan	NR	1	NR	1
Urinal	NR	1	NR	1
OB Kit, which includes: (1) pair of sterile gloves, (1) drape sheet, (2) umbilical clamps, (4) disposal towels, (2) O.B. towelettes, (1) bulb syringe, (2) alcohol preps, (1) O.B. sterile pad (1) plastic bag	1	1	1	1

Table 1: ALS and BLS Common Equipment and Supplies	**Par Level**			
	BLS		**ALS**	
	NT	**AMB**	**NT**	**AMB**
for placenta, (2) twist ties, (1) receiving blanket, (3) gauze sponges, (pk/2)				
Ring Cutter	1	1	1	1
Soft ankle/wrist restraints	0	4	0	4
Trauma				
Board for use in extrication	1	1	1	1
One or more of the following for use in patient movement on scene: collapsible litter, pole-less litter, soft or tarp litter, or stokes litter	1	1	1	1
Scoop stretcher	0	1	0	1
Kendrick Immobilization Device (KED) or similar device approved by the EMS Agency	1	1	1	1
Pediatric immobilization device	0	0	0	1
X-Collars™	4	4	4	4
Soft cervical collars – small pediatric	2	2	2	2
Adult traction splint for femur	1	1	1	1
Pediatric traction splint for femur or adult traction splint that adjusts to pediatric size	1	1	1	1
Rigid splints for splinting each extremity	1	2	1	2
Sterile burn sheets	2	2	2	4
Occlusive dressings	2	2	2	4
2 x 2 gauze pads Sterile	0	0	4	8
4 x 4 gauze pads Sterile	10	10	10	10
Hemostatic dressings: Quick Clot Combat Gauze LE; or Quick Clot, EMS Rolled Gauze, 4x4 Dressing, Trauma Pad; or Celox Gauze, Z-Fold Hemostatic Gauze; or Celox Rapid, Hemostatic Z-Fold Gauze	2	2	2	2
Trauma dressings	2	2	2	4
Gauze roll type bandages, size 2 or 4 or 6	2	2	2	4
Triangular bandages	1	1	1	2
Instant ice packs	2	2	2	8
Trauma Tourniquets: SOF Tactical Tourniquet or the Combat Application Tourniquet (CAT)	4	4	4	4
General Equipment				
San Joaquin County Map Book (current within 2 years) or GPS Equivalent	1	1	1	1

Table 1: ALS and BLS Common Equipment and Supplies	**Par Level**			
	BLS		**ALS**	
	NT	**AMB**	**NT**	**AMB**
Map book for assigned response zones or district (current within 1 year) or GPS Equivalent	1	1	1	1
Battery operated flashlight	1	1	1	1
Functional environmental controls for heat and air conditioning for the patient compartment.	NR	1	NR	1
Patient compartment door latches operable from inside and outside.	NR	1	NR	1
Patient sheets (disposable)	0	2	0	4
Patient blankets (disposable)	1	2	1	2
Patient pillows	0	2	0	2
Ambulance gurney with mattress, capable of elevating the head, feet, and adjustable to several levels.	0	1	0	1
VHF and UHF mobile radio with minimum of 45-watt power located in the driver's compartment programmed to communicate with dispatch, hospitals, and other responding units to include the following frequencies: SJC Med Net channels 1 through 8, SJC HEAR, and Cal Cord.	NR	1	1	1
UHF control head, microphone and speaker installed in each ambulance's patient compartment to communicate with the base and receiving hospitals.	NR	1	NR	1
San Joaquin County EMS Agency BLS Protocols	1	1	1	1
San Joaquin County EMS Agency ALS Protocols	NR	NR	1	1
Field Operations Guide ICS 420-1 *(FOG Manual),* current edition	1	1	1	1
START triage tags	50	20	50	50
MCI Vests - Medical Group Supervisor, Triage Unit Leader (minimum)	0	0	1	1
Infection Control				
Bottle of instant hand sanitizer (alcohol based) or box of disinfectant wipes for human use.	1	2	1	2
Biohazard bags (various sizes recommended)	2	3	3	5
Commercial Biohazard spill kit or equivalent	1	1	1	1
Covered waste container	0	1	0	1
Needle disposal system, which is OSHA compliant	1	1	1	1
Antibacterial disinfectant solution	1	1	1	1
Latex free gloves in sizes small, medium, large, extra-large.	1 box	1 box	1box	1 box
Isolation Kit including: (2) Gowns, (2) N95 or N100 respirators, (2) eye/face splash guards. Must have sizes sufficient for all staff	3	2	3	2

Approved: Signature on file
Medical Director

Signature on file
EMS Administrator

Table 1: ALS and BLS Common Equipment and Supplies	**Par Level**			
	BLS		**ALS**	
	NT	**AMB**	**NT**	**AMB**
necessary to meet OSHA requirements.				

Table 2: BLS Specific Medications, Supplies, and Equipment	**Par Level**	
	BLS NT	**BLS AMB**
Epinephrine auto-injector (adult) 0.3mg	1	1
Epinephrine auto-injector (pediatric) 0.15mg	1	1
Naloxone preload syringe	2	1
Mucosal Atomizer Device	2	1
Glucose for oral administration (tube)	1	1
Saline/Sterile Water Irrigating	2000 ml	2000 ml
Glucometer with spare batteries	1	1
Glucometer test strips and lancets	25 each	25 each
Aspirin chewable 81 mg tablets	1 bottle	1 bottle
Dial-a-Flow or equivalent	NA	1

Table 3: ALS Specific Medications, Supplies, and Equipment	**Par Level**	
	ALS NT	**ALS AMB**
Acetaminophen – liquid for oral administration	2,600 mg	2,600 mg
Adenosine for injection	30 mg	30 mg
Albuterol Aerosolized Solution 2.5 mg each	4	8
Aspirin, chewable 81 mg tablets	1 bottle	1 bottle
Atropine for injection	3 mg	6 mg
Atrovent (Ipratropium bromide HFA) 0.5 mg packets	2	3
Diphenhydramine for injection	50 mg	100 mg
Diphenhydramine – liquid for oral administration	50 mg	100 mg
Calcium Chloride for injection	0	1 gm
Dextrose 50% for injection or; Dextrose 10% solution in 250 ml bags for injection	50 gm or (3) 250 ml bags of 10% solution or combination	75 gm or (2) 250 ml bags of 10% solution or combination
Dopamine for injection	0	400 mg
Epinephrine 1:1,000 for injection	2 mg	4 mg
Epinephrine 1:10,000 for injection	4 mg	8 mg
Fentanyl for injection	300 mcg	500 mcg

Approved: Signature on file
Medical Director

Signature on file
EMS Administrator

Table 3: ALS Specific Medications, Supplies, and Equipment	**Par Level**	
	ALS NT	**ALS AMB**
Glucose for oral administration (tube)	2	2
Ibuprofen – liquid for oral administration	1,600 mg	1,600 mg
Lidocaine for injection	400 mg	400 mg
Magnesium Sulfate for injection	4 gm	8 gm
Midazolam for injection	10 mg	20 mg
Morphine Sulfate for injection	20 mg	40 mg
Naloxone for injection	2 mg	4 mg
Nitroglycerin spray (minimum of 60 metered doses) or Tablet 1/150 gr	1 bottle	2 bottles
IV Normal Saline 250ml (maintained at manufacturer's recommended temperature range)	4	4
IV Normal Saline 1000ml bags (maintained at a range of 2 degrees within normal body temperature	2	2
IV warming system capable of maintaining two 1000ml bags at a range of 2 degrees within normal body temperature	1	1
IV Normal Saline 500ml or 1000ml bags (maintained at manufacturer's recommended temperature range)	4000 ml	8000 ml
Normal saline for injection 10ml or 20 ml vials or preloads	4	4
Saline/Sterile Water 1000ml Irrigating	2	5
Ondansetron – Packet of 2 x 4mg oral disintegrating tablets	8 mg	16 mg
Ondansetron for injection	0	16 mg
Sodium Bicarbonate for injection	50 mEq	100mEq
IV start kit, which contains: – (2) Alcohol or Chlorhexidine wipes, (1) Roll tape, 3/4", (2) – 2" x 2" gauze sponge, (1) ID label, (1) Providone iodine prep, (1) Adhesive bandage, (1) Latex Free Tourniquet, (1) OpSite Dressing (or equivalent)	3	8
Disposable razors	2	2
IV catheters each size: 16ga, 18ga, 20ga, 22ga	2	5
IV catheters each size: 14ga, 24ga	2	2
Hypodermic needles each size: 20ga, 21ga, 22ga, 23ga, 25ga	2	5
Disposable syringes each size: 1ml sub-q, 3ml, 5ml/6ml, 10ml/12ml	2	3
Disposable syringes each size: 20ml/30ml	1	2
EZ-IO drill	0	1
EZ-IO Needles each size: 15mm, 25mm	0	1
Betadine solution or swabs	2	4
Solution administration set, Macrodrip	2	4
Solution administration set, Microdrip	1	2
IV extension tubing	2	4

Table 3: ALS Specific Medications, Supplies, and Equipment	**Par Level**	
	ALS NT	**ALS AMB**
Secondary IV infusion kit	2	4
Medication added labels	2	4
Saline locks	2	4
Dial-a-Flow or equivalent	1	1
1000ml Pressure infusion bag or equivalent	1	1
Mucosal Atomizer Device	2	2

Table 4 Optional Equipment	**Par Level**	
	ALS NT	**ALS AMB**
Non C Channel Video Laryngoscope with photo or video recording ability *Must be approved by medical director prior to being put into service.	1	1

TITLE: **MANAGEMENT OF CONTROLLED SUBSTANCES** EMS Policy No. **4200**

PURPOSE:

The purpose of this policy is to establish the requirements for the use, replacement, and accountability of controlled substances for Advanced Life Support (ALS) units.

AUTHORITY:

Health and Safety Code, Division 2.5, 1797.220, 1798 et seq., Code of Federal Regulations (CFR), Title 21 – Food and Drugs; California Code of Regulations, Title 22, Division 9.

POLICY:

I. The acquisition, storage and use of controlled substances for pre-hospital care in the Emergency Medical Services (EMS) system is restricted to providers that are authorized to provide Advanced Life Support (ALS) services through a current written agreement with San Joaquin County EMS Agency. Continued authorization for controlled substances and other ALS services is contingent in part on the provider's continued adherence to established medical control including this policy.

II. Controlled Substance Inventory and distribution:
   A. Inventory of controlled substances on ALS provider vehicles shall be in accordance with the Advance Life Support Standard Drug and Equipment List Policy #4102.
   B. All controlled substances shall be supplied and re-supplied by the ALS Provider's prescribing physician, who shall be a physician or surgeon licensed in the State of California, authorized by Drug Enforcement Agency (DEA) to order scheduled controlled substances.
   C. The ALS Provider's prescribing physician shall approve provider level policies and procedures, to ensure that all controlled substances are obtained, maintained, and distributed in a secure manner in accordance with federal, state, and local requirements. The ALS Provider's controlled substance policies and procedures shall be submitted to the San Joaquin County EMS Agency Medical Director for review and approval.
   D. Providers can request an alternative policy be approved by the SJCEMSA for the disposal of narcotics.

III. Security of Controlled Substances:

A. ALS personnel shall only have access to controlled substances within their scope of practice. BLS personnel may only have access to controlled substances while under the direct supervision of ALS personnel.

B. All controlled substances stored on the ALS vehicles shall be under double lock. The keys to access narcotics shall be in the custody of the ALS personnel at all times.

C. Each ALS Provider shall maintain standardized written records of the controlled substance inventory. These records shall be maintained by the ALS Provider for a minimum period of five years. Once completed, all drug inventory and administration records shall be maintained in accordance with State and Federal Law and Regulation.

1. ALS personnel assigned to an ALS unit shall be responsible for maintaining the correct daily inventory of controlled substances at all times.
2. All controlled substances shall be counted and inspected every time there is a change in the ALS on-duty staff or at a minimum, once a shift.
3. Both the oncoming ALS personnel and the off-going ALS personnel shall jointly count, date, time, and sign the standardized controlled substance inventory log.

D. Any discrepancies in the controlled substance count shall be reported to the ALS Provider supervisor/management and the issuing agent. Discrepancies that cannot be immediately resolved shall be reported to local law enforcement and to the DEA using DEA Form 106 (Appendix A) referring to the theft or loss of controlled substances. A copy of the DEA report shall be submitted to the San Joaquin County EMS Agency along with an unusual occurrence report describing the incident and the ALS Provider's actions and findings.

E. Controlled substance inventories and logs are subject to inspection by personnel of the California Board of Pharmacy, Bureau of Narcotic Enforcement Administration, Federal Drug Enforcement Administration, and the San Joaquin County EMS Agency.

IV. Patient Administration of Controlled Substances:

A. Controlled substances are to be administered in accordance with San Joaquin County EMS Agency treatment protocols.

B. Each administration of a controlled substance to a patient shall be accounted for on the controlled substance inventory log.

C. All opened controlled substance containers and residual substance shall be discarded by the ALS attendant in the presence of another on-duty,emergency medical technician, paramedic, registered nurse, or physician. Both parties shall document witnessing the discard on the patient's care record.

V. Expired Controlled Substances: Expiration dates of controlled substances shall be checked on a routine schedule established by Provider policy, at not less than a monthly basis. It is recommended that controlled substances be replaced one (1) month prior to their expiration date. Controlled substances that have expired shall not be carried on the ALS vehicles or administered to patients at any time.

SAN JOAQUIN COUNTY
EMERGENCY MEDICAL SERVICES AGENCY

TITLE: Cervical Spine Stabilization EMS Policy No. 5115

PURPOSE:

The purpose of this policy is to provide direction to prehospital personnel on the application of cervical spine stabilization ~~and to reduce the risk of negative effects caused by traditional spinal immobilization~~.

AUTHORITY:

Health and Safety Code, Division 2.5, Section 1797.220 & 1798 et seq.;

DEFINITIONS:

~~A. The Glasgow Coma Scale (GCS) Motor Response has 6 grades:~~
~~No motor response.~~
~~1. Decerebrate posturing accentuated by pain (extensor response: adduction of arm, internal rotation of shoulder, pronation of forearm and extension at elbow, flexion of wrist and fingers, leg extension, plantar flexion of foot).~~
~~1. Decorticate posturing accentuated by pain (flexor response: internal rotation of shoulder, flexion of forearm and wrist with clenched fist, leg extension, plantar flexion of foot).~~
~~1. Withdrawal from pain (absence of abnormal posturing; unable to lift hand past chin with supra-orbital pain but does pull away when nailbed is pinched).~~
~~1. Localizes to pain (purposeful movements towards painful stimuli; e.g., brings hand up beyond chin when supra-orbital pressure applied).~~
~~1. Obeys commands (the patient does simple things as asked).~~

POLICY:

~~I. The San Joaquin County EMS Agency is supporting efforts to decrease unnecessary spine stabilization in the field and reduce the risks and complications associated with traditional spinal immobilization. Studies show immobilizing trauma patients may cause more harm than good to the patient especially penetrating trauma patients (stabbings and gunshot wounds) which benefit most from rapid assessment and transport to a trauma center.~~

~~III.~~I. When applying spinal stabilization techniques, the goal is to prevent gross movement of the spine while using the simplest most effective means possible to provide for patient comfort and the delivery of patient care including airway management.

Approved: Signature on file
Medical Director

Signature on file
EMS Administrator

~~V.~~II. Prehospital personnel shall apply cervical spine stabilization techniques to patients injured from blunt force trauma in the following circumstances:

A. Conscious patients exhibiting one or more of the following signs or symptoms:

1. Posterior midline ~~cervical~~ neck or back tenderness and/or pain.
2. Distal numbness, tingling, weakness, or paresthesia.
3. Paralysis.
4. ~~Neck guarding or restricted range of motion.~~Anatomic deformity of the spine.
5. ~~4.~~Distracting circumstances (e.g. emotional distress, communication barrier), ~~or age > 65 or < 5 years of age),~~ or injury (e.g. long bone fracture, degloving or crush injuries, large burns, etcct.) ~~or any similar injury that impairs a patient's ability to contribute to a reliable history and/or examination.~~
6. Glasgcow coma scale ~~CS **motor response**~~ of less than 15 ~~as a result of~~involving ~~-~~blunt force trauma or intoxication.

~~0.~~

B. If the above criteria are not met, but there is still suspicion of spinal column or spinal cord injury due to mechanism or clinical assessment, cervical spine stabilization should occur. ~~-~~

C. There is no role for cervical spine stabilization in isolated penetrating trauma.

III. Pediatric cervical spine stabilization:

~~C. Unconscious patients or patients unable to be assessed for spinal injury suffering a blunt force mechanism of injury.~~

~~Prehospital personnel shall **not** apply spine stabilization to patients in the following circumstances:~~

~~Patients injured solely from penetrating trauma (e.g. stabbing, gunshot wound).~~

~~G. Patients in cardiac arrest.~~

~~Cervical spine stabilization shall be performed by selecting the most effective methods and tools for the specific situation with the goal to prevent gross movement of the cervical spine while allowing necessary treatment including airway management.~~

~~V. Pediatric cervical spine stabilization:~~

A. Apply cervical spine stabilization using an X-Collar™. If an X-Collar™ is not practical use a soft collar and pediatric immobilizer or Kendrick Extrication Device (KED), or any combination of blankets and pillows or other options as outlined below.

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~~M.~~B. Pediatric Patients and Car Seats:

1. Infants restrained in a rear-facing car seat may be stabilized and extricated in the car seat. The child may remain in the car seat if the stabilization is secure and his/her condition allows (no signs of respiratory distress or shock.)
2. Children restrained in a car seat (with a high back) may be stabilized and extricated in the car seat. Once extricated from the vehicle, using a car seat, cervical spine stabilization should be applied. The child may be stabilized in their car seat if applying an external standard cervical spine stabilization device causes increased agitation, gross movement, and potential further harm.

~~4.~~3. Children restrained in a booster seat (without back) should be extricated using standard techniques with cervical spine stabilization applied.

~~5.~~4. If applying cervical spine stabilization to a patient in a car seat, prehospital personnel must conduct a posterior assessment by palpation.

~~VI.~~IV. Adult cervical spine stabilization:

A. Apply cervical spine stabilization using an X-Collar™. If an X-Collar™ is not practical use any combination of equipment including pillows and blankets or other commercially available immobilization device approved by the EMS Agency to ensure comfort, airway management and spinal stabilization on the gurney.

1. X-Collar™ should be considered before all other devices.
2. For those incidents characterized by extrication challenges X-Collar™ and KED may be used.
3. Patients whose anatomy is not conducive to the use of the X-Collar™ (such as those with severe kyphosis or morbid obesity) may require alternate methods including towels, blankets and pillows.

~~VII.~~ B. Long backboards and Miller Boards may be used for extrication or movement at the scene. ~~-~~Long backboards shall not to be used to transport a patient to the hospital.

~~C. Patients shall be transported in the position of comfort EXCEPT in~~In the presence of neurological symptoms or T-, L- or S- spine

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tenderness~~, in such circumstances~~ the patient shall be transported with the head of the bed elevated no higher than 30 degrees. ~~elevated~~ Patients who do not meet this criteria may be transported in the position of comfort.

~~VIII. Movement on scene:~~
~~A. Pull sheets, other flexible devices, scoops, scoop-like devices may be used. Unpadded long backboards should have limited utilization.~~
~~B. If a longboard or scoop stretcher device is used to move patients on scene such devices should only be used as a temporary means of transporting the patient to a gurney.~~
~~C. Keeping with the goals of restricting gross movement of the cervical spine and preventing further pain and discomfort, patient self-extrication is allowable.~~

~~IX. Special Considerations:~~
~~A. Patients who are agitated or restless due to shock, hypoxia, head injury or intoxication may be impossible to stabilize adequately. It may be necessary to remove stabilization devices or modify stabilization techniques to reduce the risk of further injury.~~
~~B. Patients with severe kyphosis (malformation of the spine), morbid obesity or other anatomical or medical complications may best be stabilized using a combination of pillows, blankets or other devices.~~
~~C. Paramedics may discontinue or clear spinal stabilization initiated by BLS personnel, if in the opinion of the paramedic cervical spine stabilization is not required by policy or compromises the ability to render patient care. Paramedics are required to document on the patient care record each instance of discontinuing cervical spine stabilization and their basis for removal.~~
~~When performing spine stabilization patients should be placed in semi or standard Fowler's position to address respiratory conditions or for patient comfort.~~
~~D. Prohibited equipment and practices:~~
~~1. Hard rigid cervical collars that encircle the neck.~~
~~2. Adhesive tape applied to the patient's skin.~~

~~X. EMS Policy No. 5506 BLS Spinal Immobilization is hereby rescinded.~~

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EMS Administrator

San Joaquin County
Emergency Medical Services Agency

A DIVISION OF
HEALTH CARE SERVICES
AGENCY

DATE: May 11, 2023

TO: EMS Advisory Committee

FROM: Jeff Costa, MBA, RN
EMS Critical Care Coordinator

SUBJECT: Cardiac Arrest Registry to Enhance Survival (CARES) Report for 2022

CARES is a collaborative data collection and analysis that represents approximately fifty-one (51) percent of the United States population and consists of data from more than 2,300 EMS agencies and over 2,500 hospitals nationwide. The goal of CARES is to improve patient survival from sudden cardiac death. CARES uses Utstein style reporting which is a standardized reporting of processes and outcomes, using clear definitions and performance indicators for quality improvement and analysis.

In 2022, San Joaquin County Emergency Medical Services Agency's (SJCEMSA) EMS system experienced on average seventy-one (71) medical cardiac arrests each month. According to the CARES data, San Joaquin County's (SJC) Utstein cardiac arrest patient survival rate (patients that were witnessed by bystander and found in shockable rhythm) to hospital discharged was 40.6%. SJC outperformed both the State of California's Utstein survival rate of 28.6% and the National Utstein survival rate of 30.7%. Additionally, SJC's Utstein Bystander survival rate (which includes patients that received bystander interventions such as CPR and or AED) of 51.3% outperforms both the State of California's Utstein Bystander survival rate of 31.4% and National Utstein Bystander survival report rate of 34.3%.

This is a significant achievement considering that more patients in SJC are found with an initial cardiac rhythm of asystole (65.9%) as compared to the state (60.2%) or national (52.6%). Patients presenting with an initial rhythm of asystole have a significantly decreased chance of survival.

In summary, the larger incidence of medical cardiac patients with an initial rhythm of asystole combined with an Utstein of 40.6% and Utstein Bystander of 51.3% demonstrates that the SJCEMSA system (prehospital dispatch centers, first responders, fire departments and districts, ambulance transport providers, hospitals, and specialty care facilities) performs at a high capacity and provides superior cardiac survival outcomes.

2022 CARES Data	San Joaquin County Survivability	California Survivability	National Survivability
Utstein	**40.6%**	28.6%	30.7%
Defined by CARES to include only patients that were witnessed by bystander and found in			
Utstein Bystander	**51.3%**	31.4%	34.3%
Defined by CARES to include ONLY patients that were witnessed by bystander, found in			
Bystander CPR rates	**43.3%**	41.0%	40.0%
Public AED use	**13.6%**	9.6%	11.3%
Overall Survival	7.1%	7.8%	9.3%
Inclusion criteria: All Out-of-hospital cardiac arrest patients where resuscitation is attempted by a 911 responder.			

2022 Total Percentages of Non-Traumatic Etiology Cases			
Initial Rhythm	**San Joaquin County**	**California**	**National**
Ventricular Fibrillation / Ventricular Tachycardia	12.5%	14.9%	17.0%
Percentage of VF/VT Patients Discharged alive	**35.5%**	25.3%	26.7%
Percentage of Discharged alive with CPC 1 or 2	84.2%	86.5%	88.1%
Asystole	**65.9%**	60.2%	52.6%
Percentage of Asystole Patients Discharged alive	1.4%	2.2%	2.3%
Percentage of Discharged alive with CPC 1 or 2	**75.0%**	60.8%	59.9%
Other "ECG" Rhythm	21.7%	25.0%	30.4%
Percentage of "Other" Patients Discharged alive	8.1%	11.1%	11.9%
Percentage of Discharged alive with CPC 1 or 2	**80.0%**	71.7%	77.9%

Cerebral Perfomance Category (CPC) scores are an outcome measure for neurological outcome after cardiac arrest. CPC scores of one (1) or two (2) allow for favorable independency without limiting deficits.

Data Source: The Cardiac Arrest Registry to Enhance Survival Annual Report 2022

Created by: Jeff Costa, MBA, RN, EMS Critical Care Coordinator 5/8/2023