EMERGENCY MEDICAL CARE COMMITTEE MEETING AGENDA

Thursday, March 21st, 2023, at 8:30 A.M.
2995 McMillan Ave, Ste #178, San Luis Obispo

MEMBERS
CHAIR Jonathan Stornetta, *Public Providers, 2020-2024*
VICE – CHAIR Dr. Brad Knox, *Physicians*, *2022-2026*
Bob Neumann, *Consumers*, *2022-2026*
Matt Bronson, *City Government, 2020-2024*
Alexandra Kohler, *Consumers, 2020-2024*
Chris Javine, *Pre-hospital Transport Providers, 2022-2026*
Michael Talmadge, *EMS Field Personnel, 2020-2024*
Jay Wells, *Sheriff's Department, 2020-2024*
Julia Fogelson, *Hospitals*, *2022-2024*
Diane Burkey, *MICNs*, *2022-2026*
Dr. Rachel May, *Emergency Physicians*, 2022-2026

EX OFFICIO
VACANT, *EMS Division Director*
Dr. Bill Mulkerin**,** *EMS Medical Director*

STAFF
Denise Yi, PHEP Program Manager
Rachel Oakley, *EMS Coordinator*
VACANT, *EMS Coordinator*
Ryan Rosander, *EMS Coordinator*
Alyssa Vardas, *Administrative Assistant*

AGENDA	ITEM	LEAD
Call To Order	Introductions Public Comment	J. Stornetta
Action/Discussion	Approval of minutes: November 11th, 2023 Minutes (*attached)*	J. Stornetta
Action/Discussion	• Addition of Ketamine to approved drug formulary & relevant policies and procedures: Pain Management Protocol #603, EMS Equipment and Supply List Policy #205 Attachment A.	R. Rosander
Staff Reports	• Health Officer • EMS Agency Director Report • EMS Medical Director Report • PHEP Staff Report	P. Borenstein P. Borenstein B. Mulkerin M. Craig-Lauer
Committee Members Announcements or Reports	Opportunity for Board members to make announcements, provide brief reports on their EMS-related activities, ask questions for clarification on items not on the agenda, or request consideration of an item for a future agenda (Gov. Code Sec. 54954.2[a][2])	Committee Members
Adjourn	**Next Meeting: *Thursday, May 16th, 2024 at 8:30am***	

Emergency Medical Care Committee
Meeting Minutes
Thursday November 30th, 2023
2995 McMillan Ave, Ste 178, San Luis Obispo

Members
- ☒ CHAIR Jonathan Stornetta, Public Providers
- ☒ VICE CHAIR Dr. Brad Knox, *Physicians*
- ☒ Bob Neumann, *Consumers*
- ☐ Alexandra Kohler, *Consumers*
- ☒ Matt Bronson, *City Government*
- ☒ Chris Javine, *Pre-Hospital Transport Providers*
- ☒ Michael Talmadge, *EMS Field Personnel*
- ☒ Dr. Rachel May, *Emergency Physicians*
- ☐ Jay Wells, *Sheriff's Department*
- ☐ Julia Fogelson, *Hospitals*
- ☒ Diane Burkey, *MICNs*

Ex Officio
- ☒ Vince Pierucci, *EMS Division Director*
- ☒ Dr. Bill Mulkerin, *LEMSA Medical Director*

Staff
- ☒ Rachel Oakley, EMS Coordinator
- ☒ David Goss, EMS Coordinator
- ☒ Ryan Rosander, EMS Coordinator
- ☐ Denise Yi, *PHEP Program Manager*
- ☒ Alyssa Vardas, Administrative Assistant

Guests – Rob Jenkins, CALFire; Pete Gaviitz, CHP, Doug Weeda CHP

AGENDA ITEM / DISCUSSION	ACTION
CALL TO ORDER	The meeting called to order at 08:35 AM
Introductions	
Public Comment	No comments
Approval of Meeting Minutes –	No quorum
Staff Report for revisions to policy #343, Field Training Officer (FTO) Program: • The EMS Agency felt it was time to update the FTO policy due to an increase in call volume and the need to increase the available number of FTOs. • Policy #343 was brought to the Operations Subcommittee with the recommended revisions implemented to enhance the overall success of the Field Training Officer program within the county. The Operations Subcommittee recommended it be brought to the Emergency Medical Care Committee for review. • The proposed revisions are as follows: • Establishing an FTO I and an FTO II • FTO I and FTO II duties and requirements • FTO liaison duties • Process/requirements for application/reapplication for all FTOs. • Continuing requirements for FTO I & II. **Discussion:** M. Talmadge – Those minimum qualifications apply to all FTOs correct? R. Rosander – FTO liaison is the main point of contact with the EMS Agency. B. Knox – Is there a reason the score is 80%? Shouldn't it be higher? R. Rosander – Current is higher, and we can put it higher. B. Knox – How about 90%? R. Rosander – not many get 90%. D. Burkey – How many questions? R. Oakley – 90, around 40 get randomly selected. C. Javine – What about Grandfathered FTOs? R. Rosander - The first two years are catching up to speed and having them take a test to move into the FTO II spot. M. Bronson – Is there a fiscal impact to this?	R. Rosander

V. Pierucci – The only fiscal impact is to pay the FTOs. B. Neumann – How many FTOs are we currently running? R. Rosander – Not many. B. Knox – Would training fall into the FTO category? C. Javine – No. V, Pierucci – No. C. Javine – Should we change it to the national standard course? J. Stornetta – Could we utilize track changes in the future? Motion to approve with changes.	Motion to approve: J. Stornetta, B. Knox Second. All in favor.
The staff report for the addition of Amiodarone: • Amiodarone was found to be an improvement for out-of-hospital cardiac arrest patients and patients experiencing Ventricular Tachycardia Pulse. • Amiodarone was brought to the Clinical Advisory Subcommittee and the Operations Subcommittee to follow ACLS and Other LEMSAs. • Amiodarone is ready to be implemented following the recommendation of the EMCC. • **Discussion:** M. Talmadge – Are we still going to be stocking Lidocaine if this is going to be implemented? B. Knox – Neither Amiodarone nor Lidocaine has been shown to have a clear impact on survival with good neurologic outcomes. Having said that, though, I am in support of this change to maintain consistency with ACLS. R. May – There is no proof that Amiodarone supports continuous life after discharge, I think it could help and that there are benefits but there are other things out there. D. Burkey – Are there other counties doing the dual sequential defibrillation and vector change defibrillation? V. Pierucci – Kern County. R. May – I want to request that we hold up the Amiodarone change so we can add language to the cardiac arrest protocol to address these. B. Knox – I think the consensus is that we don't want to hold up this change for an entirely different discussion that is best had through standard channels at the Clinical Advisory Committee and then brought to EMCC. V. Pierucci – We can move forward with Amiodarone before talking about others later. Motion for approval.	D. Goss Motion to Approve: B. Knox, second: C. Javine.
EMSA Director Report: **EMS Medical Director Report:** I am getting up and running in this new position and please feel free to reach out. We are still seeing medication shortages. **PHEP Staff Report:** Nothing to report.	V. Pierucci B. Mulkerin D. Yi
Announcements: None	
Future Agenda Items: None	Adjourn at 9:53 AM.
Next Regular Meeting The next meeting is tentatively set for Thursday, January 18th, 2024, at 08:30 AM at the EMS Agency.	

COUNTY OF SAN LUIS OBISPO HEALTH AGENCY
PUBLIC HEALTH DEPARTMENT
Penny Borenstein, MD, MPH *Health Officer/Public Health Director*

MEETING DATE	March 21st, 2024
STAFF CONTACT	Ryan Rosander, EMS Coordinator 805.788.2513 rrosander@co.slo.ca.us
SUBJECT	Addition of Ketamine
SUMMARY	In the effort to expand our current toolbox of pain medications for our county's patients, efforts were made to investigate and develop a LOSOP for Ketamine in San Luis Obispo County. Due to the emergence of COVID-19, these efforts were paused. With the State of California recently adding Ketamine to the ALS basic scope of practice, SLOEMSA is wanting to renew efforts to add Ketamine to SLOEMSA's protocols and formulary. Ketamine would be added to the following: • Pain Management Protocol #603 • EMS Equipment and Supply List Policy #205 Attachment A. • Ketamine Formulary Ketamine has successfully passed in both the Operations and Clinical Advisory Committees. Following a recommendation in EMCC, Ketamine would be implemented after training during the 2024 SLOEMSA Update Class.
REVIEWED BY	Dr. William Mulkerin, SLOEMSA Staff, Operations Subcommittee, Clinical Advisory Committee
RECOMMENDED ACTION(S)	Recommended Ketamine for adoption by EMCC.
ATTACHMENT(S)	Ketamine Formulary Draft, Pain Management Protocol #603 Draft, EMS Equipment and Supply List Policy #205 Attachment A Draft.

Ketamine Hydrochloride (Ketalar®)

Classification: Nonopioid Analgesic (sub-dissociative doses)

Actions: In sub-dissociative doses, provides analgesia by non-competitively blocking NMDA receptors to reduce glutamate release and by binding to sigma-opioid receptors.

Indications: **Moderate to Severe pain due to:**

1. Multisystem trauma with head, thoracic, or abdominal injuries.
2. Significant extremity trauma, dislocations, or burns:
    a. Refractory to fentanyl
    b. When fentanyl is contraindicated (see notes)
3. Pain management substitute for patients with an opioid tolerance.

Contraindications:

1. Conditions in which an increase in blood pressure would be hazardous (see notes)
2. Hypersensitivity
3. Known history of schizophrenia
4. Acute Coronary Syndrome

Precautions:

1. **History of severe Coronary Artery Disease**

Adverse Effects:

>10%
Cardiovascular: Tachycardia, hypertension, increase in cardiac output
Neurological: Dizziness, Tonic-Clonic Movement (non-seizure)

1-10%
Cardiovascular: Bradycardia, hypotension
Neurologic: Dysphoria, partial dissociation, nystagmus

<1%
Anaphylaxis, arrhythmia, hypersalivation, hypertonia, laryngospasm*, respiratory depression/apnea, dysuria

Administration:

ADULT DOSE
Pain Management
1. 0.3 mg/kg (max of 30mg) in 100ml Normal Saline, administer over 10 minutes one time dose.

PEDIATRIC DOSE

*****Ketamine usage is not allowed for pediatric patients (<34kg)*****

Onset: IV onset 30-60 seconds, peak in less than 5 minutes.

Duration: Distribution half-life: 15 minutes
Duration of analgesia: 20-45 minutes

Notes:

- Risk of adverse neurological events is decreased with sub-dissociative doses and SLOW rate of administration.
- Mix adult dose of ketamine in 100ml bags of normal saline.
- Ketamine may cause a slight increase in blood pressure and shall be avoided in hypertensive emergencies, dissecting aneurysms, hypertensive heart failure, and acute coronary syndrome.
- Ketamine should be considered as first line analgesic agent when fentanyl is contraindicated due to hypotension, pathology or injury inhibiting respiration, evidence of hypovolemic/hemorrhagic shock, or multisystem trauma with high potential for internal hemorrhage.
- Ketamine may be considered as preferable to fentanyl for patients that may have opioid tolerance due to habituation or addiction, and in patients where fentanyl use has other significant precautions.
- Ketamine is a potent anesthetic and dissociative agent in higher doses and is associated with higher incidents of significant adverse effects. This is **NOT** an approved use for prehospital care in the County of San Luis Obispo.

PAIN MANAGEMENT

ADULT	PEDIATRIC (≤34 kg)
BLS	

• Universal Protocol #601
• **Pulse Oximetry**
  ○ O_2 administration per Airway Management Protocol #602
• **Medical** (non-cardiac)
  ○ Position of comfort
  ○ Nothing by mouth
• **Cardiac chest pain –** Chest Pain/Acute Coronary Syndrome Protocol #640
• **Trauma –** General Trauma Protocol #660
  ○ Splint, ice, elevate as indicated
	• Universal Protocol #601
	• **All causes of pain -** consider age/situation appropriate distraction techniques.
	  ○ Video Viewing
	  ○ Calm environment
	  ○ Caregiver support
	• **Medical**
	  ○ Position of comfort
	  ○ Nothing by mouth
	• Otherwise, same as adult

ALS Standing Orders	
MODERATE or SEVERE PAIN **Acute Pain –** SBP ≥ 90 mmHg, unimpaired respirations, GCS normal for baseline: • Fentanyl 50-100 mcg SLOW IV (over 1 min.), may repeat after 5 min. if needed (not to exceed 200 mcg total) OR • Ketamine 0.3mg/kg (max of 30mg) in 100ml Normal Saline, administer over 10 minutes one time dose. **IF DIFFICULTY OBTAINING IV** • Fentanyl 50-100 mcg IM/IN (use 1 mcg/kg as guideline), may repeat after 15 min. if needed (not to exceed 200 mcg total) **Acute Pain –** multisystem trauma with head/thoracic/abdominal injuries, significant extremity trauma refractory to or contraindicated to Fentanyl: • Ketamine 0.3mg/kg (max of 30mg) in 100ml Normal Saline, administer over 10 minutes one time dose.	**MODERATE or SEVERE PAIN** (Use age-appropriate indicators) **Acute Pain –** BP > age-based min., unimpaired respirations, GCS normal for age: • Fentanyl 1.5 mcg/kg IN (split between nares) • Fentanyl 1 mcg/kg 1M • (IN and 1M routes) may repeat after 15 min. if needed (not to exceed 4 doses) **IF IV ALREADY ESTABLISHED** • Fentanyl 1 mcg/kg SLOW IV (over 1 min), may repeat after 5 min. if needed (not to exceed 4 doses)
Base Hospital Orders Only	

• **Fentanyl administration with**
  ○ ALOC
  ○ SBP < 90 mmHg
	• Same as adult
	• As needed.

○ Chronic pain • Additional doses of Fentanyl • Additional dose of Ketamine • As needed	

Notes

- Consider doses of Fentanyl 25 mcg for initial dose in elderly (>65 y/o) and for maintenance doses
- Request orders, as appropriate, for obviously painful conditions not covered by standing orders.
- Use clinical judgement if a patient has difficulty using pain scale, or their reported pain is inconsistent with clinical impression.
  - Consider using FACES scale in adults with barriers to communication (below)
- Non-pharmacologic interventions should be provided concurrently or prior to medication administration.
- Do not withhold appropriate pain medication due to short transport times.
- Strongly consider initiating pain management on scene if movement is expected to be painful for patient (unless unstable condition requires rapid transport).
- Risk of adverse neurological events with Ketamine use is decreased with sub-dissociative doses and SLOW rate of administration.
- Ketamine may cause a slight increase in blood pressure and shall be avoided in hypertensive emergencies, dissecting aneurysms, hypertensive heart failure, and acute coronary syndrome.
- Ketamine is a potent anesthetic and dissociative agent in higher doses and is associated with higher incidents of significant adverse effects. This is **NOT** an approved use for prehospital care in the County of San Luis Obispo.
- Ketamine may be considered as preferable to fentanyl for patients that may have opioid tolerance due to habituation or addiction, and in patients where fentanyl use has other significant precautions.
- Ketamine should be considered as first line analgesic agent when fentanyl is contraindicated due to hypotension, pathology, or injury inhibiting respiration, evidence of hypovolemic/hemorrhagic shock, or multisystem trauma with high potential for internal hemorrhage.
- Ketamine administration to pediatric patients is **NOT** approved for use in the County of San Luis Obispo.

EMS Equipment and Supply List *DRAFT*

Description	Strength/Size	ALS Transport Minimum	ALS First Responder Minimum	ALS Special Use Medic Minimum	ALS Wildland Unit Minimum	BLS First Responder Minimum † *Elective skills as required*
MEDICATIONS						
Activated charcoal	50 gm bottle (aqueous solution)	1	1	0	0	0
Adenosine	6 mg/2 mL	5	3	3	3	0
Albuterol unit dose	2.5 mg/3 mL solution	4	2	2	2	0
Amiodarone	150mg in 3ml (50mg/ml concentration)	6	4	3	3	0
Aspirin	81 mg nonenteric coated chewable	1 bottle	1 bottle	4 tablets	4 tablets	1 bottle
Atropine	1 mg/10 mL	2	2	2	2	0
Atropine	8 mg multi-dose vial	1	1	0	0	0
Calcium Chloride 10%	1 gm/10 mL	1	1	0	0	0
Dextrose 10%	25 gm/250 mL bag	2	2	1	1	0
*Dextrose 50%	25 gm/50 mL	2	2	1	0	0
Diphenhydramine	50 mg/1 mL	2	2	2	2	0
Epinephrine	1:1,000 1 mg/1 mL	4	2	2	2	0
†Epinephrine Auto-Injector	Pediatric and Adult	0	0	0	0	†1 each
Epinephrine	1:10,000 1 mg/10 mL (10 mL preload)	8	6	3	6	0
Fentanyl	100 mcg/2 mL	2	2	2	2	0
Glucagon	1 mg/1 mL	1	1	0	0	0
Glucose gel	15 gm	2 tubes	2 tubes	2 tubes	2 tubes	2 tubes
Lidocaine 2%	100 mg/ 5 mL	2	1	1	1	0
Ketamine	100 mg/ 1mL	2	1	1	1	0
Midazolam	5 mg/1 mL	2	1	1	1	0
Naloxone	2 mg (vial or pre-load)	2	2	2	2	0
†Naloxone IN Kit	§2 mg pre-load and Atomizer	0	0	0	0	†2
Nitroglycerine	SL tablets or spray	2	1	1	1	0
Nitro Paste 2%	1 gm single dose packet	3	3	0	0	0
Ondansetron	4 mg /2 mL injectable	3	3	0	0	0
	4 mg dissolvable tablets	3	3	1	1	0
Sodium Bicarbonate	50 mEq/50 mL	2	2	0	0	0
Tranexamic Acid (TXA)	100 mg/1 mL 10 mL vial	2	1	0	1	0
Variations in the concentration of medications being stocked, due to medication supply shortages, must be approved by Medical Director						
†Elective skills equipment required for participating agencies						
Alternate Medications to be Stocked ONLY with Medical Director Approval						
§Other pre-packaged single dose intranasal naloxone delivery devices that may be used with Medical Director Approval		0	0	0	0	†2
Diazepam (alternate to be stocked by order of Med Dir **ONLY**)	10 mg	2	1	1	1	0
Morphine (alternate to be stocked by order of Med Dir **ONLY**)	10 mg	3	2	2	2	0
Lidocaine 2% (alternate to be stocked during Amiodarone shortage by order of Med Dir ONLY)	100mg / 5ml	6	4	3	3	0

EMS Equipment and Supply List *DRAFT*

Description	Strength/Size	ALS Transport Minimum	ALS First Responder Minimum	ALS Special Use Medic Minimum	ALS Wildland Unit Minimum	BLS First Responder Minimum † *Elective skills as required*
IV SOLUTIONS/EQUIPMENT						
0.9% Normal Saline	1,000 mL bag (or equivalent total volume)	6	4	2	4	0
100 mL Saline Delivery Equipment	0.9% NS 100 mL bag	4	2	1	1	0
0.9% Normal Saline	10 mL Vials/Flush	5	5	2	2	0
IV Tubing	60gtt/mL	4	2	0	0	0
IV Tubing	10-20gtt/mL	6	3	2	2	0
IV Catheters	Sizes 14, 16, 18, 20, 22, 24 gauge	2 each	2 each	2 each	2 each	0
Syringes	Assorted - 1mL, 3mL, 6mL-20mL	2 each	2 each	1 each	1 each	0
Needles Assorted	- ½", 1", 1 ½" - 18-30 gauge	2 each	2 each	2 each	2 each	0
Intraosseous (IO) single needle device	(FDA approved) adult and pediatric	1 each	1 each	1 each	1 each	0
Tourniquets (for IV start)		2	2	2	2	0
Saline locks		4	2	2	2	0
Luer-Lock adaptors	(Not required but recommended for use with STEMI patients)	2	2	0	0	0
Alcohol and betadine swabs		10 each	10 each	10 each	10 each	†10 each
TRAUMA						
Bandages and bandaging supplies:						
Bandaids	Assorted	10	10	5	5	10
Sterile bandage compresses or equivalent	4"x4"	12	10	10	10	10
Trauma dressing	10"x30" or larger universal dressing	2	2	2	2	2
Roller gauze	3" or 4"	12 rolls	8 rolls	2 rolls	2 rolls	8 rolls
Cloth adhesive tape	1, 2, or 3"	1 roll	1 roll	1 roll	1 roll	1 roll
Triangular bandages with safety pins		4	2	1	1	2
Tourniquet	See approved list for commercial devices	2	2	1	1	2
Vaseline gauze	3"x8", or 5"x9"	2	2	1	1	2
Tongue blade or bite stick		2	2	2	2	2
Burn Sheets (sterile or clean) –	may be disposable or linen (with date of sterilization indicated)	2	2	0	2	2
Cervical collars	Stiff: Sizes to fit all patients over one year old	1each	1 each	1 each	1 each	1 each
Cold packs		2	2	2	2	2
Irrigation equipment and supplies:						
Saline, sterile	250mL	4	2	1	2	2
Long spine board and light weight head immobilizer blocks	(or equivalent immobilization device)	2	1	0	0	1
Straps to secure patient to boards		2 sets	1 set	0	0	1 set

EMS Equipment and Supply List *DRAFT*

Description	Strength/Size	ALS Transport Minimum	ALS First Responder Minimum	ALS Special Use Medic Minimum	ALS Wildland Unit Minimum	BLS First Responder Minimum † *Elective skills as required*
TRAUMA CONT.						
Splints, traction	Adult and pediatric (or a single device suitable for both)	1 each	1 each	0	0	1 each
Splints, cardboard or equivalent	arm and leg splint	2 each	2 each	1 each	2 each	2 each
K.E.D. or equivalent		1	1	0	0	0
Pediatric spinal immobilization board	(or equivalent immobilization device)	1	1	0	0	0
Sheet or commercial pelvic binder		1	1	0	0	1
Infection Control						
Meet the minimum requirement per crew member as stated in the California Code of Regulations Title 8 (All Providers)						
Transportation Equipment						
Collapsible gurney cot with adjustable contour feature		1	0	0	0	0
Stair chair or equivalent device		1	0	0	0	0
Sheets, pillow, pillow case, towels, blankets (cloth or disposable)		2	0	0	0	0
Scoop stretcher with straps		1	0	0	0	0
Flat vinyl/canvas stretchers with		1	0	0	0	0
MISCELLANEOUS						
Blood pressure cuffs (portable):	Adult	1	1	1	1	1
	Large adult or thigh	1	1	0	0	1
	Pediatric	1	1	0	1	1
Obstetrical kit - sterile, prepackaged		1	1	0	0	1
Restraints - non-constricting wrist and ankle		1 set each	1 set each	0	0	1 set each
Stethoscope		1	1	1	1	1
Trash bags/receptacles		2	2	1	1	2
Blanket	Disposable	1 each	1 each	1 each	1 each	1 each
Bandage scissors (heavy duty)		1	1	1	1	1
Emesis basins or emesis bags with containers		2	2	1	1	2
Water, potable		1 liter	1 liter	0	1 liter	1 liter
Maps, entire county		1	1	0	0	1
Penlight		1	1	1	1	1
Triage tags		20	20	20	20	20
Bed pan		1	0	0	0	0
Urinal		1	0	0	0	0
†Glucometer	with ≥10 test strips, lancets, and other appropriate supplies	1	1	1	1	†1
Puncture proof sharps container	small	2	2	1	1	†1

EMS Equipment and Supply List *DRAFT*

Description	Strength/Size	ALS Transport Minimum	ALS First Responder Minimum	ALS Special Use Medic Minimum	ALS Wildland Unit Minimum	BLS First Responder Minimum † *Elective skills as required*
MISCELLANEOUS CONT.						
Thermometer		1	1	0	0	0
Automatic External Defibrillator	With AED pads	* For EMT-D Provider Agencies (1)				
AIRWAY						
Endotracheal tubes:	sizes-3.0, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0	1 each	1 each	1 each	1 each	0
Laryngoscope handles, with extra batteries		2	2	1	1	0
Laryngoscope blades:	Miller # 0, 1, 2, 3, 4 Macintosh # 1, 2, 3, 4	1 each	1 each	1 each	1 each	0
i-Gel Supraglottic Airways	Size 3 and Size 5	1 each	1 each	1 each	1 each	0
i-Gel Supraglottic Airways	Size 4	2 each	2 each	1 each	1 each	0
Magill forceps (pediatric and adult)		1 each	1 each	1 each	1 each	0
Adult stylets		2 each	1 each	1 each	1 each	0
10-20 mL syringe, sterile lubricant		2 each	1 each	1 each	1 each	0
Needle Cricothyrotomy kit with:	10 or 12 ga needle, 10-20 mL syringe, alcohol and betadine wipes and oxygen supply adapter	1	1	1	1	0
	Or other FDA approved percutaneous cricothyrotomy kit	1	1	1	1	0
Capnography Device	Qualitative or Quantitative	1	1	1	1	0
Hand held nebulizer for inhalation therapy		2	2	1	1	0
Medrafter or equivalent		1	1	0	0	0
Portable, battery powered, cardiac monitor-defibrillator with 12-lead ECG capability with the ability to perform computerized ECG readings and provide hard copy ECG tracings, with:		1	1	1	AED w.manal defib and w/EKG	0
	Patient ECG cable	1	1	1	0	0
	ECG recording chart paper	1	1	1	0	0
	Adult ECG electrodes	4 sets	4 sets	2 sets	2 sets	0
	Defibrillation pads or equivalent - Adult and Pediatric	1 set each	1 set each	1 set each	1 set each	0
	Conductive defibrillation pads,	4	4	2	2	0
	or tubes of conductive gel	2	2	1	1	0
IV catheter for pleural decompression	10 gauge/3 inch	2	2	1	1	0
Asherman chest seal or equivalent open wound dressing		1	1	1	1	1
Pulse oximeter		1	1	1	1	1
†Continuous Positive Airway Pressure (CPAP) Ventilator	portable/adjustable pressure settings, FDA Approved with an oxygen supply	1	1	0	0	†1
Nasopharyngeal airways (soft rubber)	Medium and Large adult sizes	2 each	2 each	1 each	1 each	2 each

EMS Equipment and Supply List *DRAFT*

Description	Strength/Size	ALS Transport Minimum	ALS First Responder Minimum	ALS Special Use Medic Minimum	ALS Wildland Unit Minimum	BLS First Responder Minimum † *Elective skills as required*
AIRWAY CONT.						
Lubricant, water-soluble jelly (K-Y)		2	2	2	2	2
Oropharyngeal airways	(sizes 5.5 – 12 or equivalent)	2 each	1 each	1 each	1 each	1 each
Adult non-rebreather masks		2	2	1	1	2
Pediatric/infant non-rebreather mask		2	2	1	1	2
Adult nasal cannula		4	2	1	1	2
Oxygen Cylinders	D or E size cylinder with regulator capable of delivering 2-15 LPM	1	1	1	1	1
	M, H, or K cylinder with wall outlet(s) and constant flow regulator(s)	1	0	0	0	0
Oxygen reserve:						
	D or E cylinders	1	1	0	0	1
Face masks for resuscitation (clear)		2	1	1	1	1
Bag-valve mask with O2 reservoir and supply tubing						
	Adult	1	1	1	1	1
	Pediatric	1	1	1	1	1
	Infant	1	1	1	0	1
Suction equipment and supplies:						
Rigid pharyngeal tonsil tip		2	2	0	0	2
Spare suction tubing		1	1	0	0	1
Suction apparatus (portable)		1	1	1	1	1
Suction catheters	at least 2 sizes suitable for adult and	2 each	1 each	1 each	1 each	1 each
	pediatric endotracheal suctioning					