AGENDA

ICEMA
MEDICAL ADVISORY COMMITTEE

August 26, 2021

1300

Zoom Meeting

Purpose: Information Sharing
Meeting Facilitator: Seth Dukes
Timekeeper: Ron Holk
Record Keeper: Ron Holk

	AGENDA ITEM	PERSON(S)	DISCUSSION/ACTION
I.	Welcome/Introductions	Seth Dukes	
II.	Approval of Minutes	Seth Dukes	Discussion/Action
III.	Discussion/Action Items		
	A. Standing EMS System Updates		
	1. Trauma Program 2. STEMI Program 3. Stroke Program	1. Loreen Gutierrez 2. Loreen Gutierrez 3. Loreen Gutierrez	1. Discussion 2. Discussion 3. Discussion
	B. EMS Trends		
	Pediatric Readiness Survey	Loreen Gutierrez	Discussion
	C. HEMS Utilization Task Force	Stephen Patterson	Discussion
	D. EMS Fellow Field Response	Loreen Gutierrez/ Brian Savino	Discussion/Action
	E. Law Enforcement Restraints Update	Stephen Patterson	Discussion
	F. Air Medical Unified Scope of Practice	Atilla Uner	Discussion/Action
	G. Supraglotic Airway	Alayna Prest	Discussion/Action
	H. Protocol Review 1. 8130R3 - Assess and Refer Response Plan 2. 11010R3 - Medication Standard Orders	Loreen Gutierrez	Discussion/Action
IV.	Public Comment Period		
V.	Future Agenda Items		
VI.	Next Meeting Date: October 28, 2021		
VII.	Adjournment		
VIII.	Closed Session		
	A. Case Reviews		
	B. Loop Closure Cases		

MINUTES

ICEMA
MEDICAL ADVISORY COMMITTEE

April 22, 2021
1300

AGENDA ITEM		DISCUSSION/FOLLOW UP	RESPONSIBLE PERSON(S)
I.	Welcome/Introductions	Meeting called to order at 1304.	Seth Dukes
II.	Approval of Minutes	The February 25, 2021, minutes were reviewed. Motion to approve. MSC: Michael Neeki/Steve Patterson APPROVED Ayes: Brian Savino, Melanie Randall, Debbie Bervel, Michael Neeki, Seth Dukes, Kevin Parkes, Joy Peters, Leslie Parham, Susie Moss, Christopher Tardiff, Kenneth Fox, Troy Pennington, Stephen Patterson, Amanda Ward	Seth Dukes
III.	Discussion/Action Items		
	A. Standing EMS System Updates		
	1. Trauma Program 2. STEMI Program 3. Stroke Program	1. The next Trauma Advisory Committee meeting will be May 12, 2021. 2. The first annual State Stroke Summit will be June 8, 2021. 3. The first annual State STEMI Summit will be June 9, 2021. The meetings will be virtual, ICEMA will send registration information to all MAC members.	1. Loreen Gutierrez 2. Loreen Gutierrez 3. Loreen Gutierrez
	B. EMS Trends		
	1. COVID-19 Update 2. Pediatric Readiness Survey	1. COVID-19 numbers continue to decrease and the resource requests are trending downward. 2. The Pediatric Readiness Survey is out and all hospitals are encouraged to participate. ICEMA will use the	1. Amber Anaya 2. Amber Anaya

		results to create the HP3 Pediatric Surge Plan.	
	C. HEMS Utilization Task Force	The HEMS Committee met and reviewed data trends from 2019 - 2021. Mercy Air will now be carrying blood products on many of its helicopters.	Steve Patterson
	D. EMS Fellow Field Response	The current draft was reviewed by MAC. Small revisions were requested, the draft will be updated, and presented at the next MAC meeting.	Loreen Gutierrez
	E. Technology Implementation for ICEMA EMS Providers and Hospitals	The use of new technologies for communications and data sharing was discussed. A working group has been formed to look at options for use and when complete will provide a recommendation to MAC.	Tom Lynch
	F. Law Enforcement Restraints	The use of law enforcement restraints and the potential hindrance to patient care was discussed. Steve Patterson to review and provide a recommendation at the next meeting.	Reza Vaezazizi/ Loreen Gutierrez
	G. Narcan Administration	Ontario Fire Department provided a presentation on Fentanyl overdose with a request to change the Standard Medication Policy to include a 4 mg IN loading dose. MAC approved, and the updated policy will go to public comment on July 26, 2021.	Pam Martinez/ David Loomis
	H. Assess and Refer	The Assess and Refer Policy will be updated and go to public comment on July 26, 2021.	Reza Vaezazizi/ Loreen Gutierrez
	I. Data Quality Reports	Mark Roberts will continue to send weekly data quality reports on Sunday and Loreen Gutierrez will bring this back to the CQI leadership team for possible solutions.	Reza Vaezazizi/ Mark Roberts
	I. Protocol Review/Update		Loreen Gutierrez
	1. 7010R1 Standard Drug & Equip List - BLS/LALS/ALS	Motion to approve. MSC: Joy Peters/Kevin Parks APPROVED Ayes: Brian Savino, Melanie Randall, Debbie Bervel, Michael Neeki, Seth Dukes, Kevin Parkes, Joy Peters, Leslie Parham, Susie Moss, Christopher Tardiff, Kenneth Fox, Troy Pennington, Stephen Patterson, Amanda Ward	

	2. 11010 - Medication - Standard Orders	Motion to approve. MSC: Joy Peters/Kevin Parks APPROVED Ayes: Brian Savino, Melanie Randall, Debbie Bervel, Michael Neeki, Seth Dukes, Kevin Parkes, Joy Peters, Leslie Parham, Susie Moss, Christopher Tardiff, Kenneth Fox, Troy Pennington, Stephen Patterson, Amanda Ward	
	3. 14010 - Respiratory Emergencies - Adult	Motion to approve. MSC: Joy Peters/Kevin Parks APPROVED Ayes: Brian Savino, Melanie Randall, Debbie Bervel, Michael Neeki, Seth Dukes, Kevin Parkes, Joy Peters, Leslie Parham, Susie Moss, Christopher Tardiff, Kenneth Fox, Troy Pennington, Stephen Patterson, Amanda Ward	
	4. 14050 - Cardiac Arrest - Adult	Motion to approve. MSC: Joy Peters/Kevin Parks APPROVED Ayes: Brian Savino, Melanie Randall, Debbie Bervel, Michael Neeki, Seth Dukes, Kevin Parkes, Joy Peters, Leslie Parham, Susie Moss, Christopher Tardiff, Kenneth Fox, Troy Pennington, Stephen Patterson, Amanda Ward	
IV.	Public Comment Period		
V.	Future Agenda Items		
VI.	Next Meeting Date	June 24, 2021	
VII.	Adjournment	Meeting adjourned at 1535.	

Attendees:

NAME	MAC POSITION	EMS AGENCY STAFF	POSITION
☒ P. Brian Savino - LLUMC ☐ Brandon Woodward - ARMC	Trauma Hospital Physicians (2)	☒ Reza Vaezazizi, MD	Medical Director
☒ Melanie Randall - LLUMC	Pediatric Critical Care Physician	☒ Tom Lynch	EMS Administrator
☐ Phong Nguyen - RDCH ☒ Debbie Bervel - SARH	Non-Trauma Base Physicians (2)	☒ Loreen Gutierrez	Specialty Care Coordinator
☐ Aaron Rubin - Kaiser	Non-Base Hospital Physician	☒ Ron Holk	EMS Coordinator
☒ Michael Neeki - Rialto FD	Public Transport Medical Director	☒ Amber Anaya	EMS Specialist
☒ Seth Dukes - AMR	Private Transport Medical Director	☒ Mark Roberts	
☒ Kevin Parkes - Ontario FD	Fire Department Medical Director		
☒ Joy Peters - ARMC	EMS Nurses Representative		
☒ Leslie Parham - Chino Valley FD	EMS Officers Representative		
☐ VACANT	Public Transport Medical Representative (Paramedic/RN)		
☒ Susie Moss - AMR	Private Transport Medical Representative (Paramedic/RN)		
☒ Christopher Tardiff - AMR	Private Transport Field Paramedic		
☒ Kenneth Fox - BBFD	Public Safety Field Paramedic		
☐ Lance Brown - LLUMC	Specialty Center Medical Director		
☐ Mendy Hickey - SMMC	Specialty Center Coordinator		
☒ Troy Pennington - Mercy Air	Private Air Transport Medical Director		
☒ Stephen Patterson - Sheriff's Air Rescue	Public Air Transport Medical Director		
☐ VACANT	PSAP Medical Director		
☐ Lisa Davis - Sierra Lifeflight	Inyo County Representative		
☐ VACANT	Mono County Representative		
☒ Amanda Ward - Crafton Hills	EMT-P Training Program Representative		
☐ VACANT	ICEMA Medical Director Appointee		

ASSESS AND REFER~~: EMERGENCY~~ RESPONSE PLAN (San Bernardino County Only)

I. PURPOSE

To establish standards for the identification of patients whose condition does not require transport by 9-1-1 emergency ambulance. All 9-1-1 calls for EMS will receive an appropriate response, timely assessment, and appropriate patient care. If it is determined that the patient is stable, and does not require emergency department services EMS field personnel will assess patient and provide an appropriate alternative recommendation.

II. POLICY

- ~~This emergent policy is being implemented in accordance with the XBO COVID19 EMS Plan and will be used only in response to surge triggers defined in that plan in order to maintain continuity of EMS in San Bernardino County during a public health emergency.~~

- ~~Destination decisions will be based on patient's condition or on patient, guardian, family or law enforcement requests.~~ If the patient's condition is stable and meets assess and refer criteria EMS field personnel will provide the patient the following recommendation:

  - "It appears that you do not require immediate care in the emergency department. You should seek care with your regular healthcare provider, urgent care or clinic. If symptoms worsen seek medical help or re-contact 9-1-1."

III. GENERAL CONSIDERATIONS

- Transport all patients requiring immediate medical attention to the closest most appropriate hospital.
- EMS should not require patients that are being released from the scene to sign AMA on the Patient Care Record.
- Provide instructions that if symptoms worsen, patient should go to the emergency department, contact their healthcare provider, or re-contact 9-1-1.
- If the patient or guardian refuses the referral, the patient will be transported to the closest most appropriate hospital.

IV. PARAMEDIC ASSESS AND REFER DECISION MAKING PRINCIPLES

- Does the patient, parent, or guardian have Decision Making Capacity?
- Is EMS field personnel concerned with the patient's current medical condition?
- How likely is the patient to successfully navigate the provided referral?

V. ASSESS AND REFER CRITERIA

- The patient must meet all of the following criteria:

  - Parent or guardian is on scene if the patient is under 18 years of age (unless legally emancipated).

- Has a Glasgow Coma Scale (GSC) of 15 or GCS is at patient's baseline.
- Exhibits no clinical evidence of:
  - Altered level of consciousness
  - Alcohol or drug ingestion that impairs decision making capacity
  - Abnormal or labored breathing or shortness of breath
  - Chest pain/discomfort of any kind
  - Hypoxia as indicated by low oxygen saturation
  - Significant tachycardia
  - Serious hemorrhage
- Exhibits evidence of Decision-Making Capacity sufficient to understand the nature of the medical condition as well as the risks and potential consequences of not seeking additional medical care from the provided recommendation.
- The patient would benefit from the provided recommendation.
- The patient is likely to successfully navigate the provided recommendation.

- If there is clinical evidence of a viral illness, the patient must meet all the following criteria: ~~The COVID positive patient or person under investigation (PUI) must meet all of the following criteria~~:
  - Be stable.
  - Not under two (2) years of age, or over 65 years of age.
  - Does not have an underlying medical history.
- For the COVID positive patient or PUI, assess for a referral to stay home, self-isolate, and seek follow-up treatment with a physician.

VI. DOCUMENTATION REQUIREMENTS

- Physical exam.
- Treatment provided.
- Patient, parent, or guardian is alert, oriented, and acting appropriately for their age.
- Indications that there were no signs of significant impairment due to drugs, alcohol, organic causes, or mental illness.
- Any other observations that indicate that the patient, parent, or guardian has impaired Decision-Making Capacity.
- Recommendation/referrals shall be documented utilizing the following four (4) step process:
  - That a recommendation/referral was offered.
  - What the recommendation/referral was that EMS field personnel provided.
  - The patient's understanding of the recommendation/referral.

- The patient's plan based on the recommendation/referral of the EMS field personnel.

- The person(s), if any, who remained to look after the patient (the patient's "support system").

- The name of the interpreter utilized, if applicable.

- EMS field personnel will leave a referral card containing relevant community referral information with the patient.

NOTE: All assess and refer cases will undergo 100% CQI.

Medications listed in this protocol may be used only for the purposes referenced by the associated ICEMA Treatment Protocol.

For Nerve Agent Antidote Kit (NAAK) or medications deployed with the ChemPack see Appendix I (Page 12).

Adenosine (Adenocard) - Adult (ALS)

Stable narrow-complex SVT or Wide complex tachycardia:

Adenosine, 6 mg rapid IVP followed immediately by 20 cc NS bolus, and Adenosine, 12 mg rapid IVP followed immediately by 20 cc NS bolus if patient does not convert. May repeat one (1) time.

Reference #s 7010, 7020, 14040

Albuterol (Proventil) Aerosolized Solution - Adult (LALS, ALS)

Albuterol, 2.5 mg nebulized, may repeat two (2) times.

Reference #s 4060, 7010, 7020, 14010, 14070

Albuterol (Proventil) Metered-Dose Inhaler (MDI) - Adult (LALS, ALS - Specialty Programs Only)

Albuterol MDI, four (4) puffs every 10 minutes for continued shortness of breath and wheezing.

Reference #s 4060, 4080, 7010, 7020, 14120, 14140, 14190

Albuterol (Proventil) - Pediatric (LALS, ALS)

Albuterol, 2.5 mg nebulized, may repeat two (2) times.

Reference #s 7010, 7020, 14120, 14140, 14190

Albuterol (Proventil) Metered-Dose Inhaler (MDI) - Pediatric (LALS, ALS - Specialty Programs Only)

Albuterol MDI, four (4) puffs every 10 minutes for continued shortness of breath and wheezing.

Reference #s 4060, 4080, 7010, 7020, 14120, 14140, 14190

Aspirin, chewable (LALS, ALS)

Aspirin, 325 mg PO chewed (one (1) adult non-enteric coated aspirin) or four (4) chewable 81 mg aspirin.

Reference #s 4060, 4080, 5010, 7010, 7020, 14240

Atropine (ALS) - Adult

Atropine, 0.5 mg IV/IO. May repeat every five (5) minutes up to a maximum of 3 mg or 0.04 mg/kg.

Organophosphate poisoning:
Atropine, 2 mg IV/IO, repeat at 2 mg increments every five (5) minutes if patient remains symptomatic.

Reference #s 4060, 4080, 7010, 7020, 13010, 14030, 14260

Atropine - Pediatric (ALS)

Organophosphate poisoning - Pediatrics less than 14 years of age:
Atropine, 0.05 mg/kg IV/IO not to exceed adult dose of 2 mg, repeat at 0.1 mg/kg increments every five (5) minutes if patient remains symptomatic.

Reference #s 4060, 4080, 7010, 7020, 13010

Calcium Chloride - Adult (ALS)

*Calcium Channel Blocker Poisonings **(base hospital order only)**:*
Calcium Chloride, 1 gm (10 ml of a 10% solution) IV/IO.

Reference #s 5010, 7010, 7020, 13010

*For cardiac arrest with suspected hypocalcemia, hyperkalemia, hypermagnesemia or calcium channel blocker poisoning **(base hospital order only)**:*
Calcium Chloride, 1 gm (10 ml of a 10% solution) IV/IO.

Reference #s 7010, 7020, 14050

Calcium Chloride - Pediatric (ALS)

*Calcium Channel Blocker Poisonings **(base hospital order only)**:*
Calcium Chloride, 20 mg/kg IV/IO over five (5) minutes.

Reference #s 7010, 7020, 13010

Dextrose - Adult (LALS, ALS)

Hypoglycemia - Adult with blood glucose less than 80 mg/dL:
Dextrose 10% /250 ml (D10W 25 gm) IV/IO Bolus

Reference #s 4060, 4080, 5010, 7010, 7020, 8010, 13020, 13030, 14040, 14060

Dextrose - Pediatric (LALS, ALS)

Hypoglycemia - Neonates (0 - 4 weeks) with blood glucose less than 35 mg/dL or pediatric patients (more than 4 weeks) with glucose less than 60 mg/dL:
Dextrose 10%/250 ml (D10W 25 gm) 0.5 gm/kg (5 ml/kg) IV/IO

Reference #s 5010, 7010, 7020, 13020, 13030, 14150, 14160, 14170

Diphenhydramine - Adult (ALS)

Diphenhydramine, 25 mg IV/IO

Diphenhydramine, 50 mg IM

Reference #s 4060, 4080, 7010, 7020, 13010, 14010

Diphenhydramine - Pediatric (ALS)

Allergic reaction:

2 years to 14 years — Diphenhydramine, 1 mg/kg slow IV/IO, not to exceed adult dose of 25 mg, **or**

Diphenhydramine, 2 mg/kg IM not to exceed adult dose of 50 mg IM.

Reference #s 7010, 7020, 14140

Epinephrine (1 mg/ml) - Adult (LALS, ALS)

Severe Bronchospasm, Asthma Attack, Pending Respiratory Failure, Severe Allergic Reactions:

Epinephrine, 0.3 mg IM. May repeat after 15 minutes one (1) time if symptoms do not improve.

Reference # 14010

Epinephrine (0.1 mg/ml) - Adult (ALS)

For persistent severe anaphylactic reaction:

Epinephrine (0.1 mg/ml), 0.1 mg slow IVP/IO. May repeat every five (5) minutes as needed to total dosage of 0.5 mg.

Reference # 14010

Cardiac Arrest, Asystole, PEA:

Epinephrine (0.1 mg/ml), 1 mg IV/IO.

Reference #s 4060, 4080, 5010, 7010, 7020, 14010, 14050, 14260

Epinephrine (0.01 mg/ml) - Adult (ALS)

Post resuscitation, persistent profound nontraumatic shock and hypotension (Push Dose Epinephrine):

Prepare Epinephrine 0.01 mg/ml solution by mixing 9 ml of normal saline with 1 ml of Epinephrine 0.1 mg/ml in a 10 ml syringe. Administer 1 ml every one (1) to five (5) minutes titrated to maintain SBP more than 90 mm Hg.

Reference #s 4060, 4080, 5010, 7010, 7020, 11010, 14050, 14230

Epinephrine (1 mg/ml) - Pediatric (LALS, ALS)

Severe Bronchospasm, Asthma Attack, Pending Respiratory Failure, Severe Allergic Reactions:

Epinephrine, 0.01 mg/kg IM not to exceed adult dosage of 0.3 mg.

Reference #s 4060, 5010, 7010, 7020, 14120, 14140

Epinephrine (0.1 mg/ml) - Pediatric (ALS)

Anaphylactic reaction (no palpable radial pulse and depressed level of consciousness):

Epinephrine (0.1 mg/ml), 0.01 mg/kg IV/IO, no more than 0.1 mg per dose. May repeat to a maximum of 0.5 mg.

Cardiac Arrest:

1 day to 8 years	Epinephrine (0.1 mg/ml), 0.01 mg/kg IV/IO (do not exceed adult dosage)
9 to 14 years	Epinephrine (0.1 mg/ml), 1.0 mg IV/IO

Newborn Care:

Epinephrine (0.1 mg/ml), 0.01 mg/kg IV/IO if heart rate is less than 60 after one (1) minute after evaluating airway for hypoxia and assessing body temperature for hypothermia.

Epinephrine (0.1 mg/ml), 0.005 mg/kg IV/IO every 10 minutes for persistent hypotension as a base hospital order or in radio communication failure.

Reference # 14200

Epinephrine (0.01 mg/ml) - Pediatric (ALS)

Post resuscitation, profound shock and hypotension (Push Dose Epinephrine):

Prepare Epinephrine 0.01 mg/ml solution by mixing 9 ml of normal saline with 1 ml of Epinephrine 0.1 mg/ml in a 10 ml syringe. Administer 0.1 ml/kg (do not exceed adult dosage), every one (1) to five (5) minutes. Titrate to maintain a SBP more than 70 mm Hg.

Reference #s 5010, 7010, 7020, 11010, 14150, 14230

Fentanyl - Adult (ALS)

Chest Pain (Presumed Ischemic Origin):

Fentanyl, 50 mcg slow IV/IO over one (1) minute. May repeat every five (5) minutes titrated to pain, not to exceed 200 mcg.

Fentanyl, 100 mcg IM/IN. May repeat 50 mcg every 10 minutes titrated to pain, not to exceed 200 mcg.

Acute traumatic injuries, acute abdominal/flank pain, burn injuries, Cancer pain, Sickle Cell Crisis:

Fentanyl, 50 mcg slow IV/IO push over one (1) minute. May repeat every five (5) minutes titrated to pain, not to exceed 200 mcg IV/IO, **or**

Fentanyl, 100 mcg IM/IN. May repeat 50 mcg every 10 minutes titrated to pain, not to exceed 200 mcg.

Pacing, synchronized cardioversion:

Fentanyl, 50 mcg slow IV/IO over one (1) minute. May repeat in five (5) minutes titrated to pain, not to exceed 200 mcg.

Fentanyl, 100 mcg IN. May repeat 50 mcg every 10 minutes titrated to pain, not to exceed 200 mcg.

Reference #s 3050, 4060, 4080, 5010, 7010, 7020, 11020, 13030, 14070, 14090, 14100, 14240

Fentanyl - Pediatric (ALS)

Fentanyl, 0.5 mcg/kg slow IV/IO over one (1) minute. May repeat in five (5) minutes titrated to pain, not to exceed 100 mcg.

Fentanyl, 1 mcg/kg IM/IN, may repeat every 10 minutes titrated to pain not to exceed 200 mcg.

Reference #s 3050, 4080, 5010, 7010, 7020, 13030, 14180, 14190, 14240

Glucose - Oral - Adult (BLS, LALS, ALS)

Adult with blood glucose less than 80 mg/dL:
Glucose - Oral, one (1) tube for patients with an intact gag reflex and hypoglycemia.

Reference #s 7010, 7020, 13020, 14060, 14080, 14230

Glucose - Oral - Pediatric (BLS, LALS, ALS)

Hypoglycemia - Neonates (0 - 4 weeks) with blood glucose less than 35 mg/dL or pediatric patients (more than 4 weeks) with glucose less than 60 mg/dL:
Glucose - Oral, one (1) tube for patients with an intact gag reflex and hypoglycemia.

Reference #s 7010, 7020, 14170, 14160

Glucagon - Adult (LALS, ALS)

Glucagon, 1 mg IM/SC/IN, if unable to establish IV. May administer one (1) time only.

Beta blocker Poisoning (***base hospital order only***)*:*
Glucagon, 1 mg IV/IO

Reference #s 4060, 4080, 7010, 7020, 13010, 13030, 14060

Glucagon - Pediatric (LALS, ALS)

Hypoglycemia, if unable to establish IV:
Glucagon, 0.03 mg/kg IM/IN, if unable to start an IV. May be repeated one (1) time after 20 minutes for a combined maximum dose of 1 mg.

Reference #s 7010, 7020, 13030, 14160, 14170

Beta blocker poisoning ***(base hospital order only)****:*
Glucagon, 0.03 mg/kg IV/IO

Reference #'s 4060, 4080, 7010, 7020, 13010

Ipratropium Bromide (Atrovent) Inhalation Solution use with Albuterol Adult (ALS)

Atrovent, 0.5 mg nebulized. Administer one (1) dose only.

Reference #s 7010, 7020, 14010, 14070

Ipratropium Bromide (Atrovent) Metered-Dose Inhaler (MDI) use with Albuterol Adult (ALS - Specialty Programs Only)

When used in combination with Albuterol MDI use Albuterol MDI dosing.

Reference #s 4060, 4080, 7010, 7020, 14010, 14070

Ipratropium Bromide (Atrovent) Inhalation Solution use with Albuterol - Pediatric (ALS)

1 day to 12 months	Atrovent, 0.25 mg nebulized. Administer one (1) dose only.
1 year to 14 years	Atrovent, 0.5 mg nebulized. Administer one (1) dose only.

Reference #s 7010, 7020, 14120, 14140, 14190

Ipratropium Bromide (Atrovent) Metered-Dose Inhaler (MDI) use with Albuterol - Pediatric (ALS - Specialty Programs Only)

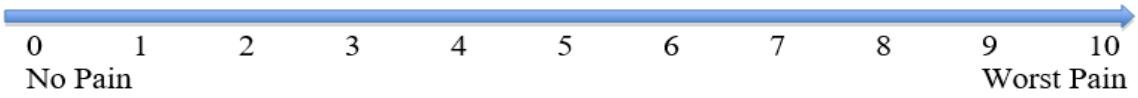
When used in combination with Albuterol MDI use Albuterol MDI dosing.

Reference #s 4060, 4080, 7010, 7020, 14120, 14140, 14190

Ketamine - Adult (ALS)

Acute traumatic injury, acute abdominal/flank pain, burn injuries, cancer related pain and sickle cell crisis:
Ketamine, 0.3 mg/kg to a max of 30 mg in a 50 - 100 ml of NS via IV over five (5) minutes. May repeat one (1) time, after 15 minutes, if pain score remains at five (5) or higher. Do not administer IVP, IO, IM, or IN.

This is the official pain scale to be used in patient assessment and documented on the PCR.



Reference #s 7010, 7020, 14100

Lidocaine - Adult (ALS)

VT (pulseless)/VF:
Initial Dose: Lidocaine, 1.5 mg/kg IV/IO

For refractory *VT (pulseless)/VF*, may administer an additional 0.75 mg/kg IV/IO, repeat one (1) time in five (5) to 10 minutes; maximum total dose of 3 mg/kg.

V-Tach, Wide Complex Tachycardia - with Pulses:
Lidocaine, 1.5 mg/kg slow IV/IO

May administer an additional 0.75 mg/kg slow IV/IO; maximum total dose of 3 mg/kg.

Reference #s 4060, 5010, 7010, 7020, 8010, 11020, 14040, 14050, 14090

Lidocaine - Pediatric (ALS)

Cardiac Arrest:

1 day to 8 years	Lidocaine, 1.0 mg/kg IV/IO
9 to 14 years	Lidocaine, 1.0 mg/kg IV/IO

May repeat Lidocaine at 0.5 mg/kg after five (5) minutes; maximum total dose of 3 mg/kg.

Reference #s 5010, 7010, 7020, 14150

Lidocaine 2% (Intravenous Solution) - Pediatric and Adult (ALS)

Pain associated with IO infusion:
Lidocaine, 0.5 mg/kg slow IO push over two (2) minutes, not to exceed 40 mg total.

Reference #s 5010, 7010, 7020, 11020

Magnesium Sulfate (ALS)

Polymorphic Ventricular Tachycardia:
Magnesium Sulfate, 2 gm IV/IO bolus over five (5) minutes for polymorphic VT if prolonged QT is observed during sinus rhythm post-cardioversion.

Eclampsia (Seizure/Tonic/Clonic Activity):
Magnesium Sulfate, 4 gm IV/IO slow IV push over three (3) to four (4) minutes.

Magnesium Sulfate, 10 mg/min IV/IO drip to prevent continued seizures.

Reference #s 5010, 7010, 7020, 8010, 14210

*Severe Asthma/Respiratory Distress (ALS) **(base hospital order only)**:*
Magnesium Sulfate, 2 gm slow IV drip over 20 minutes. Do not repeat.

Reference# 14010

Magnesium Sulfate - Pediatric (ALS)

*Severe Asthma/Respiratory Distress **(base hospital order only)**:*
Magnesium Sulfate, 50 mg/kg slow IV drip over 20 minutes. Do not exceed the adult dosage of 2 gm total. Do not repeat.

Reference # 14120

Midazolam (Versed) - Adult (ALS)

Behavioral Emergencies, with suspected excited delirium:
Midazolam, 2.5 mg IV/IO/IN. May repeat in five (5) minutes, **or**

Midazolam, 5 mg IM. May repeat in 10 minutes.

Maximum of three (3) doses using any combination of IV/IO/IM/IN may be administered. Contact base hospital for additional orders and to discuss further treatment options.

Reference # 14110

Seizure:

Midazolam, 2.5 mg IV/IO/IN. May repeat in five (5) minutes for continued seizure activity, **or**

Midazolam, 5 mg IM. May repeat in 10 minutes for continued seizure activity.

Assess patient for medication related reduced respiratory rate or hypotension.

Maximum of three (3) doses using any combination of IV/IO/IM/IN may be administered for continued seizure activity. Contact base hospital for additional orders and to discuss further treatment options.

Pacing, synchronized cardioversion:

Midazolam, 2 mg slow IV/IO push or IN

CPAP:

Midazolam, 1 mg slow IV/IO push may be administered one (1) time for anxiety related to application of CPAP. Contact base hospital for additional orders.

Reference #s 4060, 4080, 7010, 7020, 11020, 13020, 14060, 14210

Midazolam (Versed) - Pediatric (ALS)

Seizures:

Midazolam, 0.1 mg/kg IV/IO with maximum dose 2.5 mg. May repeat Midazolam in five (5) minutes, **or**

Midazolam, 0.2 mg/kg IM/IN with maximum dose of 5 mg. May repeat Midazolam in 10 minutes for continued seizure.

Assess patient for medication related reduced respiratory rate or hypotension.

Maximum of three (3) doses using any combination of IV/IO/IM/IN may be administered for continued seizure activity. Contact base hospital for additional orders and to discuss further treatment options.

Reference #s 7010, 7020, 14170

Naloxone (Narcan) - Adult (BLS)

For resolution of respiratory depression related to suspected opiate overdose:

Naloxone, 0.5 mg IM/IN, may repeat Naloxone 0.5 mg IM/IN every two (2) to three (3) minutes if needed.

For suspected Fentanyl overdose with respiratory depression:

Consider a loading dose of 4 mg IN Naloxone, if no signs of respiratory improvement; consider Naloxone 0.5 mg IM/IN as indicated above.

Do not exceed 10 mg of Naloxone total regardless of route administered.

Reference #s 7010, 7020, 8030, 14060

Naloxone (Narcan) - Adult (LALS, ALS)

For resolution of respiratory depression related to suspected opiate overdose:

Naloxone, 0.5 mg IV/IO/IM/IN, may repeat Naloxone 0.5 mg IV/IO/IM/IN every two (2) to three (3) minutes if needed.

For suspected Fentanyl overdose with respiratory depression:

Consider a loading dose of 4 mg IN Naloxone, if no signs of respiratory improvement; consider Naloxone 0.5 mg IV/IO/IM/IN as indicated above.

Do not exceed 10 mg of Naloxone total regardless of route administered.

Reference #s 4080, 7010, 7020, 14060

Naloxone (Narcan) - Pediatric (BLS)

For resolution of respiratory depression related to suspected opiate overdose:

1 day to 8 years	Naloxone, 0.1 mg/kg IM/IN (do not exceed the adult dose of 0.5 mg per administration)
9 to 14 years	Naloxone, 0.5 mg IM/IN

May repeat every two (2) to three (3) minutes if needed. Do not exceed the adult dosage of 10 mg total IM/IN.

Reference #s 7010, 7020, 8030, 14150, 14160

Naloxone (Narcan) - Pediatric (LALS, ALS)

For resolution of respiratory depression related to suspected opiate overdose:

1 day to 8 years	Naloxone, 0.1 mg/kg IV/IO/IM/IN (do not exceed the adult dose of 0.5 mg per administration)
9 to 14 years	Naloxone, 0.5 mg IV/IO/IM/IN

May repeat every two (2) to three (3) minutes if needed. Do not exceed the adult dosage of 10 mg total IV/IO/IM/IN.

Reference #s 7010, 7020, 14150, 14160

Nitroglycerin (NTG) (LALS, ALS)

Nitroglycerin, 0.4 mg sublingual/transmucosal.

One (1) every three (3) minutes as needed. May be repeated as long as patient continues to have signs of adequate tissue perfusion. **If a Right Ventricular Infarction is suspected, the use of nitrates requires base hospital contact.**

Nitroglycerin Paste, 1 inch (1 gm) transdermal, may not repeat.

Nitroglycerin sublingual is the preferred route of administration for ACS. Nitro Paste is a one (1) time dose and intended for when sublingual cannot be easily administered (i.e., CPAP).

Nitroglycerin is contraindicated if there are signs of inadequate tissue perfusion or if sexual enhancement medications have been utilized within the past 48 hours.

Reference #s 4060, 4080, 7010, 7020, 14010, 14240

Ondansetron (Zofran) - Patients four (4) years old to Adult (ALS)

Nausea/Vomiting:

Ondansetron, 4 mg slow IV/IO/ODT

All patients four (4) to eight (8) years old: May administer a total of 4 mgs of Ondansetron prior to base hospital contact.

All patients nine (9) and older: May administer Ondansetron 4 mg; may repeat two (2) times, at 10 minute intervals, for a total of 12 mgs prior to base hospital contact.

May be used as prophylactic treatment of nausea and vomiting associated with narcotic administration.

Reference #s 4080, 7010, 7020, 14090, 14180, 14220

Oxygen (non-intubated patient per appropriate delivery device)

General Administration (Hypoxia):

Titrate Oxygen at lowest rate required to maintain SPO_2 at 94%. Do not administer supplemental oxygen for SPO_2 more than 95%.

Chronic Obstructive Pulmonary Disease (COPD):

Titrate Oxygen at lowest rate required to maintain SPO_2 at 90%. Do not administer supplemental oxygen for SPO_2 more than 91%.

Reference #s 12010, 13010, 13020, 13030, 13050, 14010, 14020, 14030, 14040, 14060, 14070, 14090, 14120, 14130, 14140, 14160, 14170, 14180, 14190, 14200, 14210, 14220, 14230, 14240

Sodium Bicarbonate - Adult (ALS)

*Tricyclic Poisoning **(base hospital order only)**:*

Sodium Bicarbonate, 1 mEq/kg IV/IO

Reference #s 5010, 7010, 7020, 13010

*For cardiac arrest with suspected metabolic acidosis, hyperkalemia or tricyclic poisoning **(base hospital order only)**:*

Sodium Bicarbonate, 50 mEq IV/IO

Reference #'s 7010, 7020, 14050

Sodium Bicarbonate - Pediatric (ALS)

*Tricyclic Poisoning **(base hospital order only)**:*

Sodium Bicarbonate, 1 mEq/kg IV/IO

Reference #'s 7010, 7020, 13010

Tranexamic Acid (TXA) - Patients 15 years of age and older (ALS)

Signs of hemorrhagic shock meeting inclusion criteria:

Administer TXA 1 gm in 50 - 100 ml of NS via IV/IO over 10 minutes. Do not administer IVP as this will cause hypotension.

Reference #s 7010, 7020, 14090

APPENDIX I

Medications for self-administration or with deployment of the ChemPack.

Medications listed below may be used only for the purposes referenced by the associated ICEMA Treatment Protocol. Any other use, route or dose other than those listed, must be ordered in consultation with the Base Hospital physician.

Atropine - Pediatric (BLS, AEMT-Auto-injector only with training, ALS)

Known nerve agent/organophosphate poisoning with deployment of the ChemPack using:

Two (2) or more mild symptoms: Administer the weight-based dose listed below as soon as an exposure is known or strongly suspected. If severe symptoms develop after the first dose, two (2) additional doses should be repeated in rapid succession 10 minutes after the first dose; do not administer more than three (3) doses. If profound anticholinergic effects occur in the absence of excessive bronchial secretions, further doses of atropine should be withheld.

One (1) or more severe symptoms: Immediately administer (3) three weight-based doses listed below in rapid succession.

Weight-based dosing:

Less than 6.8 kg (less than 15 lbs):	0.25 mg, IM using multi-dose vial
6.8 to 18 kg (15 to 40 lbs):	0.5 mg, IM using AtroPen auto-injector
18 to 41 kg (40 to 90 lbs):	1 mg, IM using AtroPen auto-injector
More than 41 kg (more than 90 lbs):	2 mg, IM using multi-dose vial

Symptoms of insecticide or nerve agent poisoning, as provided by manufacturer in the AtroPen product labeling, to guide therapy:

Mild symptoms: Blurred vision, bradycardia, breathing difficulties, chest tightness, coughing, drooling, miosis, muscular twitching, nausea, runny nose, salivation increased, stomach cramps, tachycardia, teary eyes, tremor, vomiting, or wheezing.

Severe symptoms: Breathing difficulties (severe), confused/strange behavior, defecation (involuntary), muscular twitching/generalized weakness (severe), respiratory secretions (severe), seizure, unconsciousness, urination (involuntary).

NOTE: Infants may become drowsy or unconscious with muscle floppiness as opposed to muscle twitching.

Reference #s 11010, 13010, 13040

Diazepam (Valium) - Adult (ALS)

For seizures associated with nerve agent/organophosphate exposure ONLY with the deployment of the ChemPack:

Diazepam 10 mg (5 mg/ml) auto-injector IM (if IV is unavailable), **or**
Diazepam 2.5 mg IV

Reference # 13040

Diazepam (Valium) - Pediatric (ALS)

For seizures associated with nerve agent/organophosphate exposure ONLY with the deployment of the ChemPack:

Diazepam 0.05 mg/kg IV

Reference # 13040

Nerve Agent Antidote Kit (NAAK)/Mark I or DuoDote (containing Atropine/Pralidoxime Chloride for self-administration or with deployment of the ChemPack) - Adult

Nerve agent exposure with associated symptoms:

One (1) NAAK auto-injector IM into outer thigh. May repeat up to two (2) times every 10 to 15 minutes if symptoms persist.

Reference #s 7010, 7020, 13010, 13040