

## Inland Counties Emergency Medical Agency

1425 South D Street, San Bernardino, CA 92415-0060 • (909) 388-5823 • Fax (909) 388-5825 • www.icema.net

Serving San Bernardino, Inyo, and Mono Counties
Tom Lynch, EMS Administrator
Reza Vaezazizi, MD, Medical Director

**DATE:** May 28, 2021

TO: EMS Providers - ALS, LALS, BLS, EMS Aircraft

Hospital CEOs, ED Directors, Nurse Managers and PLNs EMS Training Institutions and Continuing Education Providers Inyo, Mono and San Bernardino County EMCC Members

Medical Advisory Committee (MAC) Members Systems Advisory Committee (SAC) Members

FROM: Tom Lynch Reza Vaezazizi, MD

EMS Administrator Medical Director

SUBJECT: IMPLEMENTATION OF POLICIES/PROTOCOLS EFFECTIVE JUNE 15, 2021

The revised policies/protocols listed below are effective June 15, 2021.

#### ICEMA Reference Number and Name

11010R2 Medication - Standard Orders14010R2 Respiratory Emergences - Adult

Please insert and replace the enclosed policies and the Table of Contents in the Policy and Protocol Manual with the updated documents. The ICEMA policies and protocols can also be found on ICEMA's website at www.ICEMA.net under the Policy and Protocol Manual section.

If you have any questions, please contact Loreen Gutierrez, RN, Specialty Care Coordinator, at (909) 388-5803 or via e-mail at loreen.gutierrez@cao.sbcounty.gov.

TL/RV/jlm

Enclosures

c: File Copy

## POLICIES/PROTOCOLS CHANGES EFFECTIVE JUNE 15, 2021

Reference #	Name	Changes
DELETIONS		
None		
NEW		
None		
CHANGES		
11010R1	Medication - Standard Orders	Additional clarification of Nitroglycerine Paste and Versed.
14010R1	Respiratory Emergences - Adult	Additional clarification of Versed for anxiety related to CPAP.

SERIES	OLD#	ADMINISTRATIVE POLICIES
1000		CREDENTIALING (EMT, AEMT, EMT-P, MICN)
1010	1100	AEMT Certification
1020	1030	EMT Certification
1030	1040	EMT-P Accreditation
1040R1	1050	MICN Authorization - Base Hospital, Administrative,
		Flight Nurse, Critical Care Transport
1050	1110	RCP Authorization
1060	1070	EMT/AEMT Incident Investigation, Determination of Action, Notification,
		and Administrative Hearing Process
1070	1090	Criminal History Background Checks (Live Scan)
1080	1120	EMT-P Student Field Internship Requirements
2000		EDUCATION
2010	3020	Continuing Education Provider Requirements
2020	3030	EMT Continuing Education Requirements
2030	3050	Public Safety First Aid Training Program Approval
2040	3060	Public Safety Optional Skills Course Approval
2050	3070	Tactical Casualty Care Training Programs and Courses
3000		GENERAL POLÍCIES
3010	5010	Licensure Changes - 911 Receiving Hospitals
3020R1	5020	Base Hospital Designation
3030	5030	Adoption of Policies and Protocols
3040R1	5040	Radio Communication
3050	7030	Controlled Substance
3060	5080	Ground Based Ambulance Rate Setting (San Bernardino County)
4000		SPECIALTY CARE PROGRAMS AND SPECIALTY SERVICE PROVIDER POLICIES
4010	6010	Paramedic Vaccination
4020	6170	ChemPack Deployment
4030	6060	Specialty and Optional Scope Program Approval
4040	6070	ST Elevation Myocardial Infarction Critical Care System Designation (San
		Bernardino County Only)
4050R1	6080	EMT-P Blood Draw for Chemical Testing at the Request of a Peace Officer
4060R1	6090	Fireline EMT-P
4070R1	6100	Stroke Critical Care System Designation (San Bernardino County Only)
4080R1	6110	Tactical Medicine for Special Operations
4090	6120	Emergency Medical Dispatch Center Requirements (San Bernardino County Only)
4100	6130	Medical Priority Dispatch Minimum Response Assignments for Emergency Medical Dispatch (EMD) Categories

SERIES	OLD#	EMS SYSTEM POLICIES
5000		DATA COLLECTION
5010	2020	ICEMA Abbreviation List
5020	2030	Minimum Documentation Requirements for Transfer of Patient Care
5030	2040	Requirements for Patient Care Reports
5040	2050	Requirements for Collection and Submission of EMS Data
6000		GENERAL OPERATIONAL POLICIES
6010	9020	Physician on Scene
6020	9030	Responsibility for Patient Management
6030	9040	Reporting Incidents of Suspected Abuse
6040	9050	Organ Donor Information
6050	9060	Local Medical Emergency
6060	9070	Patient Restraints
6070	9080	Care of Minors in the Field
6080	9090	Patient Refusal of Care - Adult
6090R1	9110	Treatment and Transportation Recommendations of Patients with
		Emerging Infectious Diseases
7000		DRUG AND EQUIPMENT LISTS
7010R2	No Change	Standard Drug and Equipment List - BLS/LALS/ALS
7020R1	No Change	Standard Drug and Equipment List - EMS Aircraft
8000		RESPONSE, TRANSPORT, TRANSFER AND DIVERSION POLICIES
8010	No Change	Interfacility Transfer Guidelines
8020	No Change	Specialty Care Transport
8030	8050	Transport of Patients (BLS)
8040R1	8140	Transport of Patients (Inyo County Only)
8050	8060	Requests for Ambulance Redirection and Hospital Diversion (San
		Bernardino County Only)
8060	15050	Hospital Emergency Response Team (HERT)
8070R1	5070	Medical Response to Hazardous Materials/Terrorism Incident
8080R1	5050	Medical Response to a Multiple Casualty Incident
8090R1	5050I	Medical Response to a Multiple Casualty Incident (Inyo and Mono
		Counties)
8100	8150	Ambulance Patient Offload Delay (APOD)
8110	New	EMS Aircraft Utilization (San Bernardino County Only)
8120R1	New	Assess and Refer (San Bernardino County Only) (DELETE)
8130R2	New	Assess and Refer: Emergency Response Plan (San Bernardino County
		Only)
9000		CONTINUATION OF CARE AND DESTINATION POLICIES
9010	8120	Continuation of Care (San Bernardino County Only)
9020R1	8090	Continuation of Trauma Care (Fort Irwin)
9030	8130	Destination
9040R1	15030	Trauma Triage Criteria

10000		PILOT PROJECTS AND TRIAL STUDIES
10010	8160	Emergency Medical Transport of Police Dogs Pilot Project (San
		Bernardino County Only)
10020	6150	Trial Study Participation
11000		STANDARD ORDERS
11010R2	7040	Medication - Standard Orders
11020R2	10190	Procedure - Standard Orders

SERIES	OLD#	PATIENT CARE PROTOCOLS
12000		GENERAL PATIENT CARE
12010R1	9010	Patient Care Guidelines
12020	15040	Glasgow Coma Scale
13000		ENVIRONMENTAL EMERGENCIES
13010	No Change	Poisonings
13020	No Change	Heat Related Emergencies
13030R1	No Change	Cold Related Emergencies
13040	No Change	Nerve Agent Antidote Kit (Training, Storage and Administration)
13050	11150	Smoke Inhalation/CO Exposure/Suspected Cyanide Toxicity
14000		TREATMENT PROTOCOLS
14010R2	11010	Respiratory Emergencies - Adult
14020R1	11020	Airway Obstruction - Adult
14030	11040	Bradycardias - Adult
14040	11050	Tachycardias - Adult
14050R1	11070	Cardiac Arrest - Adult
14060R1	11080	Altered Level of Consciousness/Seizures - Adult
14070R2	11100	Burns - Adult (15 years of age and older)
14080	11110	Stroke Treatment - Adult
14090R3	15010	Trauma - Adult (15 years of age and older)
14100	11140	Pain Management - Adult
14110	11130	Psychiatric/Behavioral Emergencies - Adult
14120	14010	Respiratory Emergencies - Pediatric (Less than 15 years of age)
14130	14020	Airway Obstruction - Pediatric (Less than 15 years of age)
14140	14030	Allergic Reactions - Pediatric (Less than 15 years of age)
14150	14040	Cardiac Arrest - Pediatric (Less than 15 years of age)
14160R1	14050	Altered Level of Consciousness - Pediatric (Less than 15 years of age)
14170	14060	Seizure - Pediatric (Less than 15 years of age)
14180R2	15020	Trauma - Pediatric (Less than 15 years of age)
14190	14070	Burns - Pediatric (Less than 15 years of age)
14200	14090	Newborn Care
14210	14080	Obstetrical Emergencies
14220	9120	Nausea and Vomiting
14230	9130	Shock (Non-Traumatic)
14240	11060	Suspected Acute Myocardial Infarction (AMI)
14250	12010	Determination of Death on Scene
14260	12020	End of Care and Decisions
14270	11120	Ventricular Assist Device (VAD)
15000		PUBLIC SAFETY FIRST AID
15010	16010	Allergic Reaction and Anaphylaxis (Authorized Public Safety Personnel)
15020	16020	Nerve Agent Exposure (Authorized Public Safety Personnel)
15030	16030	Opioid Overdose (Authorized Public Safety Personnel)
15040	16040	Respiratory Distress (Authorized Public Safety Personnel)
15050	16050	Optional Skills and Medications (Authorized Public Safety Personnel)
15060	16060	Public Safety AED Service Provider

SERIES	OLD#	APPENDIX
16000		MISCELLANEOUS
16010	New	Definitions

# INLAND COUNTIES EMERGENCY MEDICAL AGENCY POLICY AND PROTOCOL MANUAL

Reference No. 11010R2

Effective Date: 06/15/21 Supersedes: 06/01/21

Page 1 of 12

#### **MEDICATION - STANDARD ORDERS**

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

Reference No. 11010R2 Effective Date: 06/15/21 Supersedes: 06/01/21 Page 2 of 12

#### 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

Reference No. 11010R2 Effective Date: 06/15/21 Supersedes: 06/01/21 Page 3 of 12

#### 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

Reference No. 11010R2 Effective Date: 06/15/21 Supersedes: 06/01/21 Page 4 of 12

#### 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

Reference No. 11010R2 Effective Date: 06/15/21 Supersedes: 06/01/21 Page 5 of 12

#### 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

Reference No. 11010R2 Effective Date: 06/15/21 Supersedes: 06/01/21 Page 6 of 12

## 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

Reference No. 11010R2 Effective Date: 06/15/21 Supersedes: 06/01/21 Page 7 of 12

#### 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

Reference No. 11010R2 Effective Date: 06/15/21 Supersedes: 06/01/21 Page 8 of 12

#### 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.

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.

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

Reference #s 4080, 7010, 7020, 14060

Reference No. 11010R2 Effective Date: 06/15/21 Supersedes: 06/01/21 Page 9 of 12

#### 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 No. 11010R2 Effective Date: 06/15/21 Supersedes: 06/01/21 Page 10 of 12

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<sub>2</sub> at 94%. Do not administer supplemental oxygen for SPO<sub>2</sub> more than 95%.

#### Chronic Obstructive Pulmonary Disease (COPD):

Titrate Oxygen at lowest rate required to maintain SPO<sub>2</sub> at 90%. Do not administer supplemental oxygen for SPO<sub>2</sub> 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

Reference No. 11010R2 Effective Date: 06/15/21 Supersedes: 06/01/21 Page 11 of 12

#### **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):

6.8 to 18 kg (15 to 40 lbs):

18 to 41 kg (40 to 90 lbs):

More than 41 kg (more than 90 lbs):

0.25 mg, IM using multi-dose vial

0.5 mg, IM using AtroPen auto-injector

1 mg, IM using AtroPen auto-injector

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

Reference No. 11010R2 Effective Date: 06/15/21 Supersedes: 06/01/21 Page 12 of 12

#### 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



# INLAND COUNTIES EMERGENCY MEDICAL AGENCY POLICY AND PROTOCOL MANUAL

Reference No. 14010R2 Effective Date: 06/15/21

> Supersedes: 06/01/21 Page 1 of 4

RESPIRATORY EMERGENCIES - ADULT

#### **CHRONIC OBSTRUCTIVE PULMONARY DISEASE**

#### I. FIELD ASSESSMENT/TREATMENT INDICATORS

Symptoms of chronic pulmonary disease, wheezing, cough, pursed lip breathing, decreased breath sounds, accessory muscle use, anxiety, ALOC or cyanosis.

#### II. BLS INTERVENTIONS

- Reduce anxiety, allow patient to assume position of comfort.
- Administer oxygen as clinically indicated, obtain oxygen saturation on room air, or on home oxygen if possible.

#### III. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- Maintain airway with appropriate adjuncts, including advanced airway if indicated. Obtain oxygen saturation on room air or on home oxygen if possible.
- Administer Albuterol per ICEMA Reference #11010 Medication Standard Orders.

#### IV. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.
- Administer Albuterol with Atrovent per ICEMA Reference #11010 Medication Standard Orders.
- Place patient on Continuous Positive Airway Pressure (CPAP), refer to ICEMA Reference #11020 Procedure Standard Orders.

If systolic BP remains greater than 90 mm Hg, consider Midazolam per ICEMA Reference #11010 - Medication - Standard Orders for relief of anxiety related to CPAP mask.

 Consider advanced airway, refer to ICEMA Reference #11020 - Procedure - Standard Orders.

#### V. REFERENCES

<u>Number</u>	<u>Name</u>
11010	Medication - Standard Orders
11020	Procedure - Standard Orders.

#### ACUTE ASTHMA/BRONCHOSPASM/ALLERGIC REACTION/ANAPHYLAXIS

#### I. FIELD ASSESSMENT/TREATMENT INDICATORS

History of prior attacks, possible toxic inhalation or allergic reaction, associated with wheezing, diminished breath sounds or cough.

Reference No. 14010R2 Effective Date: 06/15/21 Supersedes: 06/01/21 Page 2 of 4

#### II. BLS INTERVENTIONS (For severe asthma and/or anaphylaxis only)

- Reduce anxiety, allow patient to assume position of comfort.
- Administer oxygen as clinically indicated, humidified oxygen preferred.

#### III. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- Maintain airway with appropriate adjuncts, obtain oxygen saturation on room air if possible.
- Administer Albuterol per ICEMA Reference #11010 Medication Standard Orders.
- For signs of inadequate tissue perfusion, initiate IV bolus of 300 ml NS. If signs of inadequate tissue perfusion persist may repeat fluid bolus one (1) time.
- If no response to Albuterol, administer Epinephrine (1 mg/ml) per ICEMA Reference #11010 Medication Standard Orders. Contact base hospital for patients with a history of coronary artery disease, history of hypertension or over 40 years of age prior to administration of Epinephrine.
- May repeat Epinephrine (1 mg/ml), per ICEMA Reference #11010 Medication Standard Orders, after 15 minutes one (1) time.

#### IV. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.
- Administer Albuterol, with Atrovent per ICEMA Reference #11010 Medication Standard Orders.
- For suspected allergic reaction, consider Diphenhydramine per ICEMA Reference #11010
   Medication Standard Orders.
- Place patient on Continuous Positive Airway Pressure (CPAP), refer to ICEMA Reference #11020 - Procedure - Standard Orders.

If systolic BP remains greater than 90 mm Hg, consider Midazolam per ICEMA Reference #11010 - Medication - Standard Orders for relief of anxiety related to CPAP mask.

- If no response to Albuterol, administer Epinephrine per ICEMA Reference #11010 Medication Standard Orders. Contact base hospital for patients with a history of coronary artery disease, history of hypertension or over 40 years of age prior to administration of Epinephrine.
- May repeat Epinephrine (1 mg/ml) per ICEMA Reference #11010 Medication Standard Orders after 15 minutes one (1) time.
- For persistent severe anaphylactic reaction, administer Epinephrine (0.1 mg/ml) per ICEMA Reference #11010 Medication Standard Orders.

Reference No. 14010R2 Effective Date: 06/15/21 Supersedes: 06/01/21 Page 3 of 4

 Consider advanced airway, refer to ICEMA Reference #11020 - Procedure - Standard Orders.

#### V. BASE HOSPITAL MAY ORDER THE FOLLOWING

 For severe asthma/respiratory distress that has failed to respond to the other previous treatments, administer Magnesium Sulfate per ICEMA Reference #11010 - Medication -Standard Orders.

#### VI. REFERENCES

<u>Number</u>	<u>Name</u>
11010	Medication - Standard Orders
11020	Procedure - Standard Orders

#### **ACUTE PULMONARY EDEMA/CHF**

#### I. FIELD ASSESSMENT/TREATMENT INDICATORS

History of cardiac disease, including CHF, and may present with rales, occasional wheezes, jugular venous distention and/or peripheral edema.

#### II. BLS INTERVENTIONS

- Reduce anxiety, allow patient to assume position of comfort.
- Administer oxygen as clinically indicated. For pulmonary edema with high altitude as a suspected etiology, descend to a lower altitude and administer high flow oxygen with a non re-breather mask.
- Be prepared to support ventilations as clinically indicated.

#### III. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- Maintain airway with appropriate adjuncts, obtain oxygen saturation on room air if possible.
- Administer Nitroglycerine (NTG) per ICEMA Reference #11010 Medication Standard Orders. In the presence of hypotension (SBP less than 100), the use of NTG is contraindicated.
- If symptoms do not improve after NTG administration, consider Albuterol per ICEMA Reference #11010 Medication Standard Orders.

#### IV. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.
- Place patient on Continuous Positive Airway Pressure (CPAP), refer to ICEMA Reference #11020 - Procedure - Standard Orders.

If systolic BP remains greater than 90 mm Hg, consider Midazolam per ICEMA Reference #11010 - Medication - Standard Orders for relief of anxiety related to CPAP mask.

DE001047			A D T
RESPIRA	ORYEMI	ERGENCIES	- ADUJI I

Reference No. 14010R2 Effective Date: 06/15/21 Supersedes: 06/01/21 Page 4 of 4

• Consider advanced airway, refer to ICEMA Reference #11020 - Procedure - Standard Orders.

#### V. REFERENCES

<u>Number</u>	<u>Name</u>
11010	Medication - Standard Orders
11020	Procedure - Standard Orders



# INLAND COUNTIES EMERGENCY MEDICAL AGENCY POLICY AND PROTOCOL MANUAL

Reference No. 11010<u>R</u>42

Effective Date:  $\frac{06/01/21}{06/15/21}$  Supersedes:  $\frac{03/01/20}{06/01/21}$ 

Page 1 of 12

#### **MEDICATION - STANDARD ORDERS**

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

Effective Date: 06/01/2106/15/21 Supersedes: 03/01/2006/01/21

Page 2 of 12

#### 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

Effective Date: 06/01/2106/15/21 Supersedes: 03/01/2006/01/21

Page 3 of 12

#### 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

Effective Date: 06/01/2106/15/21 Supersedes: 03/01/2006/01/21

Page 4 of 12

#### 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

Effective Date: 06/01/2106/15/21 Supersedes: 03/01/2006/01/21

Page 5 of 12

#### 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

Effective Date: 06/01/2106/15/21 Supersedes: 03/01/2006/01/21

Page 6 of 12

# 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.

0	1	2	3	4	5	6	7	8	9	10
No F	Pain								Wor	st Pain

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

Effective Date: 06/01/2106/15/21 Supersedes: 03/01/2006/01/21

Page 7 of 12

#### 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

Effective Date: 06/01/2106/15/21 Supersedes: 03/01/2006/01/21

Page 8 of 12

#### 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.

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.

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

Reference #s 4080, 7010, 7020, 14060

Effective Date: 06/01/2106/15/21 Supersedes: 03/01/2006/01/21

Page 9 of 12

#### 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.

Effective Date: 06/01/2106/15/21 Supersedes: 03/01/2006/01/21

Page 10 of 12

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<sub>2</sub> at 94%. Do not administer supplemental oxygen for SPO<sub>2</sub> more than 95%.

#### Chronic Obstructive Pulmonary Disease (COPD):

Titrate Oxygen at lowest rate required to maintain SPO<sub>2</sub> at 90%. Do not administer supplemental oxygen for SPO<sub>2</sub> 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

Effective Date: 06/01/2106/15/21 Supersedes: 03/01/2006/01/21

Page 11 of 12

#### **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):

6.8 to 18 kg (15 to 40 lbs):

18 to 41 kg (40 to 90 lbs):

More than 41 kg (more than 90 lbs):

0.25 mg, IM using multi-dose vial

0.5 mg, IM using AtroPen auto-injector

1 mg, IM using AtroPen auto-injector

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

Effective Date: 06/01/2106/15/21 Supersedes: 03/01/2006/01/21

Page 12 of 12

#### 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



# INLAND COUNTIES EMERGENCY MEDICAL AGENCY POLICY AND PROTOCOL MANUAL

Reference No. 14010R42

Effective Date: 06/01/2106/15/21 Supersedes: 03/01/2006/01/21

Page 1 of 4

RESPIRATORY EMERGENCIES - ADULT

#### **CHRONIC OBSTRUCTIVE PULMONARY DISEASE**

#### I. FIELD ASSESSMENT/TREATMENT INDICATORS

Symptoms of chronic pulmonary disease, wheezing, cough, pursed lip breathing, decreased breath sounds, accessory muscle use, anxiety, ALOC or cyanosis.

#### II. BLS INTERVENTIONS

- Reduce anxiety, allow patient to assume position of comfort.
- Administer oxygen as clinically indicated, obtain oxygen saturation on room air, or on home oxygen if possible.

#### III. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- Maintain airway with appropriate adjuncts, including advanced airway if indicated. Obtain oxygen saturation on room air or on home oxygen if possible.
- Administer Albuterol per ICEMA Reference #11010 Medication Standard Orders.

#### IV. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.
- Administer Albuterol with Atrovent per ICEMA Reference #11010 Medication Standard Orders.
- Place patient on Continuous Positive Airway Pressure (CPAP), refer to ICEMA Reference
   #11020 Procedure Standard Orders.

If systolic BP remains greater than 90 mm Hg, consider Midazolam per ICEMA Reference #11010 - Medication - Standard Orders for relief of anxiety related to CPAP mask.

 Consider advanced airway, refer to ICEMA Reference #11020 - Procedure - Standard Orders.

#### V. REFERENCES

<u>Number</u>	<u>Name</u>
11010	Medication - Standard Orders
11020	Procedure - Standard Orders.

#### ACUTE ASTHMA/BRONCHOSPASM/ALLERGIC REACTION/ANAPHYLAXIS

#### I. FIELD ASSESSMENT/TREATMENT INDICATORS

History of prior attacks, possible toxic inhalation or allergic reaction, associated with wheezing, diminished breath sounds or cough.

Reference No. 14010<u>R</u>42

Effective Date: 06/01/2106/15/21 Supersedes: 03/01/2006/01/21

Page 2 of 4

#### II. BLS INTERVENTIONS (For severe asthma and/or anaphylaxis only)

- Reduce anxiety, allow patient to assume position of comfort.
- Administer oxygen as clinically indicated, humidified oxygen preferred.

#### III. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- Maintain airway with appropriate adjuncts, obtain oxygen saturation on room air if possible.
- Administer Albuterol per ICEMA Reference #11010 Medication Standard Orders.
- For signs of inadequate tissue perfusion, initiate IV bolus of 300 ml NS. If signs of inadequate tissue perfusion persist may repeat fluid bolus one (1) time.
- If no response to Albuterol, administer Epinephrine (1 mg/ml) per ICEMA Reference #11010 Medication Standard Orders. Contact base hospital for patients with a history of coronary artery disease, history of hypertension or over 40 years of age prior to administration of Epinephrine.
- May repeat Epinephrine (1 mg/ml), per ICEMA Reference #11010 Medication Standard Orders, after 15 minutes one (1) time.

#### IV. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.
- Administer Albuterol, with Atrovent per ICEMA Reference #11010 Medication Standard Orders.
- For suspected allergic reaction, consider Diphenhydramine per ICEMA Reference #11010
   Medication Standard Orders.
- Place patient on Continuous Positive Airway Pressure (CPAP), refer to ICEMA Reference #11020 - Procedure - Standard Orders.

<u>If systolic BP remains greater than 90 mm Hg, consider Midazolam per ICEMA Reference</u> #11010 - Medication - Standard Orders for relief of anxiety related to CPAP mask.

- If no response to Albuterol, administer Epinephrine per ICEMA Reference #11010 Medication Standard Orders. Contact base hospital for patients with a history of
  coronary artery disease, history of hypertension or over 40 years of age prior to
  administration of Epinephrine.
- May repeat Epinephrine (1 mg/ml) per ICEMA Reference #11010 Medication Standard Orders after 15 minutes one (1) time.
- For persistent severe anaphylactic reaction, administer Epinephrine (0.1 mg/ml) per ICEMA Reference #11010 Medication Standard Orders.

Effective Date: 06/01/2106/15/21 Supersedes: 03/01/2006/01/21

Page 3 of 4

 Consider advanced airway, refer to ICEMA Reference #11020 - Procedure - Standard Orders.

#### V. BASE HOSPITAL MAY ORDER THE FOLLOWING

 For severe asthma/respiratory distress that has failed to respond to the other previous treatments, administer Magnesium Sulfate per ICEMA Reference #11010 - Medication -Standard Orders.

#### VI. REFERENCES

<u>Number</u>	<u>Name</u>
11010	Medication - Standard Orders
11020	Procedure - Standard Orders

#### **ACUTE PULMONARY EDEMA/CHF**

#### I. FIELD ASSESSMENT/TREATMENT INDICATORS

History of cardiac disease, including CHF, and may present with rales, occasional wheezes, jugular venous distention and/or peripheral edema.

#### II. BLS INTERVENTIONS

- Reduce anxiety, allow patient to assume position of comfort.
- Administer oxygen as clinically indicated. For pulmonary edema with high altitude as a suspected etiology, descend to a lower altitude and administer high flow oxygen with a non re-breather mask.
- Be prepared to support ventilations as clinically indicated.

#### III. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- Maintain airway with appropriate adjuncts, obtain oxygen saturation on room air if possible.
- Administer Nitroglycerine (NTG) per ICEMA Reference #11010 Medication Standard Orders. In the presence of hypotension (SBP less than 100), the use of NTG is contraindicated.
- If symptoms do not improve after NTG administration, consider Albuterol per ICEMA Reference #11010 Medication Standard Orders.

#### IV. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.
- Place patient on Continuous Positive Airway Pressure (CPAP), refer to ICEMA Reference
   #11020 Procedure Standard Orders.

If systolic BP remains greater than 90 mm Hg, consider Midazolam per ICEMA Reference #11010 - Medication - Standard Orders for relief of anxiety related to CPAP mask.

RESPIRATO	JOV EMED	CENICIES	<b>VDIIIT</b>
KESPIKAL		ロロババロシ -	AINII

Reference No. 14010<u>R</u>42

Effective Date: 06/01/2106/15/21 Supersedes: 03/01/2006/01/21

Page 4 of 4

• Consider advanced airway, refer to ICEMA Reference #11020 - Procedure - Standard Orders.

#### V. REFERENCES

<u>Number</u>	<u>Name</u>
11010	Medication - Standard Orders
11020	Procedure - Standard Orders