Inland Counties Emergency Medical Agency

Serving San Bernardino, Inyo and Mono Counties

Virginia Hastings, Executive Director
Reza Vaezazizi, M.D., Medical Director

DATE: July 9, 2009

TO: EMS Providers – ALS, BLS, EMS Aircraft
Hospital CEOs, ED Directors, Nurse Managers, PLNs
EMS Training Institutions, EMS CE Providers
Inyo, Mono and San Bernardino County EMCC Members
Other Interested Parties

FROM: Reza Vaezazizi, MD, MPH
ICEMA Medical Director

Virginia Hastings
ICEMA Executive Director

SUBJECT: **REVIEW OF PROPOSED CHANGES TO PROTOCOLS FOR 45 DAY COMMENT PERIOD**

The following protocols have been revised and sent to you for public comment and recommendations. We encourage you to submit any changes you feel are needed, in writing, to ICEMA during the comment period. **Written comments will be accepted until August 24, 2009 at 5 P.M.**

Protocols containing minor changes:

Reference #4009 Oral Endotracheal Intubation-Adult
Reference #4011 Oral Endotracheal Intubation-Pediatric
Reference #4021 Insertion of Nasogastric/Orogastric Tube
Reference #4029 Nasotracheal Intubation
Reference #4033 Vagal Maneuvers
Reference #5018 Heat Related Emergencies
Reference #5019 Cold Related Emergencies
Reference #6004 Adult Tachycardias
Reference #6007 Non-Traumatic Hypertensive Crisis

The following Protocols/Policies are new or have procedural changes made:

Reference #2001 Standard Drug and Equipment List
Reference #2003 EMS Aircraft Standard Drug and Equipment List
Changes were made to reflect consistency in availability of items (ie. Bottles, tubes).
Added sizes of IO needles based on weight

Reference #4001 External Jugular Vein Access
Reference #4005 Transcutaneous Cardiac Pacing

515 North Arrowhead Avenue ▪ San Bernardino, CA. 92415-0060
(909) 388-5823 office ▪ (909) 388-5825 fax ▪ www.icema.net

Reference #4019 Synchronized Cardioversion
Request to remove base station contact for patients 9 years and older.

Reference #4026 Intraosseous Infusion
Administration of Lidocaine prior to infusion of fluids included.

Reference #4051 King Airway Device-Adult &
Reference #4052 King Airway Device- Pediatric
New protocols for review.

Reference #5009 Poisonings
ALS and BLS protocols combined.

Reference #12001 and #12001.1 MCI
New protocols for review

Comments may be sent hardcopy, faxed to (909) 388-5825 or via e-mail to ipena@cao.sbcounty.gov. If you have questions regarding these protocols, please do not hesitate to contact Iris Pena at (909) 388-5813 or ipena@cao.sbcounty.gov.

Thank you for your input.

RV/VH/IP/mae

ORAL ENDOTRACHEAL INTUBATION - ADULT

AUTHORITY

Sections 1797.107, 1797.172 and 1797.176, Health and Safety Code.

Reference: Sections 1797.90, 1797.172, 1797.202, 1797.220, 1798, 1798.2, 1798.3 and 1798.105, Health and Safety Code

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Non-responsive and apneic patients.

2. Agonal or failing respirations and/or no gag reflex present.

3. Prolonged ventilation is required and adequate ventilation cannot otherwise be achieved.

Procedure may **initially** be contraindicated with suspected ALOC per Protocol Reference #5007, Altered Level of Consciousness/Seizures.

PROCEDURE

1. Support ventilations with appropriate basic airway adjuncts. Use in-line cervical stabilization as needed for suspected neck injury.

2. Immediately prior to intubation, consider prophylactic Lidocaine 1.5mg/kg IV for suspected head/brain injury.

3. Select appropriate cuffed tube and pre-oxygenate. Cricoid pressure should be applied during intubation to protect against regurgitation of gastric contents.

    a. Visualize the epiglottis and vocal cords with the laryngoscope. Insert the endotracheal tube until the entire balloon is 2cm past the vocal cords. Placement efforts must stop after twenty (20) seconds for ventilation.

    b. Inflate the balloon with air to the point where no air leak can be heard; listen to breath sounds and resume ventilation with 100% oxygen. Secure the endotracheal tube.

    c. Monitor end-tidal CO_2 and/or pulse oximetry and suction the trachea when

necessary.

d. Document verification of tube placement.

4. If unable to place ET after a maximum of three (3) intubation attempts, and if unable to adequately ventilate the patient via BVM or ETAD, consider needle cricothyrotomy per protocol Reference #4030, Needle Cricothyrotomy.

DOCUMENTATION

In the event the receiving physician discovers the device is improperly placed, an Incident Report must be completed by the receiving hospital and forwarded to ICEMA within 24 hours of the incident. Forms are available as part of the protocol manual and on the ICEMA website.

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ORAL ENDOTRACEAL INTUBATION – PEDIATRIC
(Birth through 14 Years)

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Non-responsive and apneic patients.

2. Patients with agonal or failing respirations, and/or no gag reflex.

Procedure may **initially** be contraindicated with suspected ALOC per Protocol Reference #7007, Pediatric Altered Level of Consciousness.

PROCEDURE

1. Support ventilations with appropriate basic airway adjuncts. Use in-line cervical stabilization~~as needed for suspected head or neck injury.~~.

2. Immediately prior to intubation, consider prophylactic Lidocaine 1.5mg/kg IVP for suspected head/brain injury.

3. Select Stylet with appropriate tube size.
(uncuffed tubes should be used on patients less than eight (8) years of age)

   a. Position the patient appropriately for age and pre-oxygenate.

   b. Visualize the vocal cords with the laryngoscope. Watch as the tube passes through the vocal cords. Advance the tube until the vocal cord marker is situated beyond the vocal cords. Placement efforts must stop after twenty (20) seconds for ventilation.

   c. Listen for breath sounds, resume ventilation with 100% oxygen and secure the airway. Place all patients under the age of eight (8) years in full axial-spinal stabilization.

   d. Monitor end-tidal CO_2 and/or pulse oximetry during procedure.

   a. Document verification of tube placement.

4. After two (2) intubation attempts, Base Station contact is required. (An attempt is considered made when the tube passes the gum line.)

5. If unable to adequately ventilate patient via BVM, consider Needle Cricothyrotomy

per Protocol Reference #4030 if patient is at least two (2) years of age.

DOCUMENTATION

In the event the receiving physician discovers the device is improperly placed, an ~~i~~Incident Report must be completed by the receiving hospital and forwarded to ICEMA within 24 hours of the incident. Forms are available as part of the protocol manual and on the ICEMA website.

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INSERTION OF NASOGASTRIC/OROGASTRIC

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Any intubated patient where gastric distention may impede ABC's.

2. Oral route for patients with mid-facial trauma and all patients less than six (6) months of age.

CONTRAINDICATIONS

1. History of esophageal strictures, varices and/or other esophageal diseases.

2. Caustic ingestion.

3. Significant facial or head trauma.

4. History of bleeding disorders.

PROCEDURE

1. Explain procedure, then position patient in high fowlers unless otherwise contraindicated and select appropriate size naso/orogastric tube: adults 16-15fr, adolescents 12-14fr, children 8-10fr or infants 5-6fr.

2. Measure and mark the NG/OG tube for proper insertion length and have suction equipment readily available.

    a. Nasogastric -- Combined distance between the tip of the nose to the ear lobe to the xiphoid process.

    b. Orogastric -- Combined distance between the corner of the mouth to the ear lobe to the xiphoid process.

3. Examine both nares to determine nare with best airflow or examine oropharyngeal cavity for obstructions or secretions then:

    a. Lubricate distal third of NG tube with a water-soluble lubricant or viscous Lidocaine gel.

b. Gently pass tube posteriorly along floor of nasal cavity.

c. Instruct patient to swallow (if conscious).

d. If resistance is met while using the nasal route, remove and attempt other nostril.

e. Slowly rotate and advance tube during insertion to mark indicating desired length.

f. If resistance is met, remove tube and attempt again.

4. For those adult patients with King LTS-D in place (Refer to Protocol #4051 King Airway Device (Perilaryngeal):

a. The gastric access lumen allows the insertion of up to a 18 Fr diameter gastric tube into the esophagus and stomach.

b. Lubricate gastric tube prior to insertion.

4. Confirm proper placement by:

a. Aspiration of stomach contents.

b. Injection of 30-60ml of air into tube and auscultate for the sound of air over the epigastric region.

c. Auscultate lungs while injecting air into NG tube.

5. Secure tube to bridge of nose (nasogastric) or side of mouth (or gastric).

6. Attach NG tube to suction tubing and adjust to low suction or some other type of approved suction device.

7. If patient experiences respiratory distress at anytime during procedure, remove tube immediately.

DOCUMENTATION

In the event the receiving physician discovers the device is improperly placed, an incident Report must be completed by the receiving hospital and forwarded to ICEMA within 24 hours of the incident. Forms are available as part of the protocol manual and on the ICEMA website.

~~Upon arrival at the receiving hospital, the Advanced Skills Evaluation Form on the back of the yellow copy of the O1A Form or electronic equivalent must be filled out and signed by receiving physician. This form must then be forwarded to ICEMA within one week by either the PLN at the receiving facility if it is a Base Hospital or by the EMT-P's Agency EMS/QI Coordinator.~~

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NASOTRACHEAL INTUBATION

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Possible cervical spine injury with clenched jaw and gag reflex.

2. Trapped and inaccessible for direct laryngoscopy.

3. Severe respiratory distress per Protocol Reference #500, Shortness of Breath.

4. Patient nare able to accommodate size 7.0, 7.5 or 8.0 endotracheal tube.

RELATIVE CONTRAINDICATIONS

Base Hospital Contact Required

1. For significant facial trauma, trauma to the face or nose and/or possible basilar skull fracture.

2. For patients on anticoagulant therapy.

PROCEDURE

1. Support ventilations with appropriate basic airway adjuncts and explain the procedure to a conscious patient.

2. Immediately prior to intubation, consider prophylactic Lidocaine 1.5mg/kg IVP for suspected head/brain injury.

3. Select the nostril to be used and inspect for patency and air flow. Select the appropriate cuffed tube and pre-oxygenate patient with 100% oxygen prior to attempting procedure.

    a. If patient becomes apneic, discontinue procedure and attempt oral intubation.

    b. Lubricate the distal tip of endotracheal tube with a water soluble jelly or viscous Lidocaine.

    c. Position the patient as tolerated. Hold in-line cervical stabilization if neck injury is suspected.

d. Administer one (1) metered dose, 0.5mg of phenylephrine HCL to the selected nostril. May be repeated once prior to additional attempt.

e. With one hand, advance ET tube into the selected nostril with bevel facing out while applying cricoid pressure with the other hand. Monitor breath sounds continuously while gently guiding the tube into the trachea.

f. Inflate the balloon with air and ventilate with 100% oxygen. Secure the ET tube.

g. Verify and document tube placement.

h. Monitor end-tidal CO_2 and/or pulse oximetry during procedure.

i. Suction the trachea when necessary

4. Contact Base ~~Hospital~~ Station if unable to place ET tube after a maximum of three (3) nasotracheal intubation attempts or if unable to adequately ventilate patient via BVM.

DOCUMENTATION

~~Upon arrival at the receiving hospital, the Advanced Skills Evaluation Form on the back of the yellow copy of the O1A Form or electronic equivalent must be filled out and signed by receiving physician. This form must then be forwarded to ICEMA within one week by either the PLN at the receiving facility if it is a Base Hospital or by the EMT-P's Agency EMS/QI Coordinator.~~

~~In the event the receiving physician discovers the ET is not placed in the trachea, an Incident Report must be filed and forwarded to ICEMA within one (1) week by the EMS/QI Coordinator/PLN.~~

In the event the receiving physician discovers the device is improperly placed, an Incident Report must be completed by the receiving hospital and forwarded to ICEMA within 24 hours of the incident. Forms are available as part of the protocol manual and on the ICEMA website.

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VAGAL MANEUVERS

FIELD ASSESSMENT/TREATMENT INDICATORS

Stable Narrow Complex Tachycardias.

RELATIVE CONTRAINDICATONS

1. Hypertension.

2. Suspected acute MI.

3. Suspected head/brain injury.

PROCEDURE

1. Explain procedure to patient.

2. Have patient perform one of the following procedures:

   a. Have the patient pinch his nostrils together, close mouth and blow against a closed glottis.

   b. Have patient bear down as if having a bowel movement.

   c. Have patient submerge face in ice water or apply cold wet washcloth against face (preferred method for infants).

3. All procedures should be performed until arrhythmia is terminated or for a maximum of ten (10) seconds.

4. Reassess cardiac and hemodynamic status. Document rhythm before, during and after procedure.

5. If rhythm does not convert within ten (10) seconds, follow Protocol Reference #6004, Adult Tachycardias.

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HEAT RELATED EMERGENCIES

MINOR HEAT ILLNESS SYNDROMES

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Environmental conditions.
2. Postural hypotension.
3. Dehydration.
4. Heat cramps.

BLS INTERVENTIONS

1. Remove patient from heat source, position with legs elevated and begin cooling measures.
2. Oxygen as clinically indicated.
3. Rehydrate with small amounts of appropriate liquids as tolerated.
4. Axial-spinal stabilization if indicated.

HEAT EXHAUSTION

FIELD ASSESSMENT/ TREATMENT INDICATORS

1. Dehydration.
2. Elevated temperature, vomiting, hypotension, diaphoresis, tachycardia and tachypnea.
3. No change in LOC.

BLS INTERVENTIONS

1. Remove patient from heat source, position with feet elevated and begin cooling measures.

2. Oxygen as clinically indicated.

3. Rehydrate with small amounts of appropriate liquids as tolerated.

4. Axial-spinal stabilization if indicated.

ALS INTERVENTIONS

1. Obtain vascular access.

    a. Adult: Fluid bolus with 300cc NS. Reassess and repeat fluid bolus if BP remains less than 90mmHg.

    b. Peds less than nine (9) years of age: Initial 20cc/kg IV/IO bolus; may repeat until palpable pulse obtained.

2. Obtain blood glucose and provide treatment as clinically indicated.

3. Base ~~Hospital~~ Station may order additional medication dosages and additional fluid boluses.

HEAT STROKE

FIELD ASSESSMENT/ TREATMENT INDICATORS

1. Hyperthermia.

2. ALOC or other signs of central nervous system dysfunction.

3. Absence or presence of sweating.

4. Tachycardia, Hypotension.

BLS INTERVENTIONS

1. Remove from heat source, position with legs elevated and begin cooling measures.

2. Rapid cooling measures including cold packs placed adjacent to large superficial vessels.

3. Evaporative cooling measures. Avoid oral intake if patient has altered level of consciousness.

4. Oxygen as clinically indicated.

ALS INTERVENTIONS

1 Obtain vascular access

a. Adult: Fluid bolus with 300cc NS. Reassess and repeat fluid bolus if BP remains less than 90mmHg.

b. Peds less than nine (9) years of age: Initial 20cc/kg IV/IO bolus; may repeat until palpable pulse obtained.

2. Obtain blood glucose and provide treatment as clinically indicated.

3 Obtain rhythm strip for documentation with copy to receiving hospital.

4. Seizure precautions refer to Protocol Reference #5007, Altered Level of Consciousness/Seizures, or Protocol Reference #7010, Pediatric Seizure, if seizures occur.

5. Contact Base ~~Hospital~~ Station for destination and further treatment orders.

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COLD RELATED EMERGENCIES

SUSPECTED FROSTBITE

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Areas of skin that are cold, white, and hard to touch.

2. Pain to affected extremity.

BLS INTERVENTIONS

1. Elevate extremity.

2. Do not rub or otherwise attempt active warming.

3. Separate digits and wrap in dry sterile gauze.

ALS INTERVENTIONS

1. Obtain vascular access.

2. For c/o pain in affected extremity:

   a. Pediatric – Morphine Sulfate 0.1 mg/kg IV not to exceed 2mg increments, for a total of 5mg or Morphine Sulfate 0.2mg/kg IM, for a total of 10mg IM, titrated for pain relief.

   b. Adult – Morphine Sulfate 2mg IV not to exceed 2mg increments, for a total of 10mg or Morphine Sulfate 10mg IM may repeat IM dosage one time for pain relief.

3. Base ~~Hospital~~ Station may order additional medication doses.

4. In Radio Communication Failure, the EMT-P may administer a repeat dosage of Morphine Sulfate.

MILD HYPOTHERMIA

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Decreased core temperature.

2. Cold, pale extremities.

3. Shivering, reduction in fine motor skills.

4. Loss of judgment and/or altered level of consciousness or simple problem solving skills.

BLS INTERVENTIONS

1. Oxygen as clinically indicated.

2. Remove from cold/wet environment; remove wet clothing and dry patient.

3. Insulate and apply wrapped heat packs, if available, to groin, axilla and neck. This process should not be interrupted during transport.

ALS INTERVENTIONS

1. Obtain vascular access.

2. Cardiac Monitor.

3. Consider blood glucose determination and provide treatment as clinically indicated.

SEVERE HYPOTHERMIA

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Severe cold exposure or any prolonged exposure to ambient temperatures below 36 degrees with the following indications:

    a. Altered LOC with associated behavior changes.

    b. Unconscious.

    c. Lethargic.

2. Shivering is generally absent.

3. B/P and heart sounds may be unobtainable.

4. Minimize movement.

BLS INTERVENTIONS

1. Maintain appropriate airway with oxygen as clinically indicated (warm, humidified if possible).

2. Assess carotid pulse for a minimum of 1-2 minutes. If no pulse palpable, place AED if available, per Protocol Reference #16215. If no shock advised, begin CPR.

3. Insulate to prevent further heat loss.

4. Gently cut away wet clothing if transport time is >30 minutes.

ALS INTERVENTIONS

1. Advanced airway as clinically indicated.

2. Obtain vascular access and administer fluid bolus.

   a. Nine (9) years and older: 300ml warmed NS, may repeat.

   b. Birth to eight (8) years: 20ml/kg warmed NS, may repeat.

3. Obtain rhythm strip for documentation.

4. For documented VF, Pulseless V-Tach:

   a. Defibrillate one (1) time at 2j/kg or 200 joules.

   b. For agencies using bi-phasic technology, follow manufacture's guidelines.

5. For documented asystole:

   a. Begin CPR.

   b. May give additional fluid bolus

6. Contact Base ~~Hospital~~Station.

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ADULT TACHYCARDIAS

STABLE TACHYCARDIAS

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Heart rate greater than 150 bpm.

2. Minimal or no symptoms of poor perfusion.

BLS INTERVENTIONS

1. Recognition of heart rate greater than 150 bpm.

2. Reduce anxiety; allow patient to assume position of comfort

3. Administer oxygen as clinically indicated

4. Consider transport to closest hospital or ALS intercept

ALS INTERVENTIONS

Determine cardiac rhythm, establish vascular access (if indicated) and proceed to appropriate intervention.

Narrow Complex Tachycardias

1. Valsalva/vagal maneuvers

2. Adenosine 6mg rapid IV push, followed by 20cc NS. May repeat twice at 12mg followed by 20ml NS if no conversion.

3. Consider Verapamil 5mg slowly IV over three (3) minutes

4. If arrhythmia is unresolved, proceed to unstable interventions

V-Tach or Wide Complex Tachycardias (Intermittent or Sustained)

1. Procainamide 20mg/min IV; may repeat until arrhythmia suppressed, symptomatic hypotension, QRS widens by more than 50% or maximum dose of 17mg/kg given. If arrhythmia suppressed, begin infusion of 2mg/min.

2. If Procainamide administration is contraindicated, consider Lidocaine 1mg/kg slow IV. May repeat at 0.5mg/kg every ten (10) minutes until maximum dose of 3mg/kg given and initiate infusion of 2mg/min.

3. Magnesium 2gms in 100ml NS infuse over five (5) minutes for Torsades de Pointe.

4. Consider Adenosine administration if arrhythmia is suspected to be of supraventricular origin

5. If arrhythmia is unresolved, proceed to unstable interventions

Atrial Fib/Flutter

1. Transport to appropriate facility

2. If condition deteriorates, proceed to unstable interventions

UNSTABLE TACHYCARDIAS

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Heart rate greater than 150 bpm.

2. Signs and symptoms of poor perfusion

BLS INTERVENTIONS

1. Recognition of heart rate greater than 150 bmp.

2. Reduce anxiety; allow patient to assume position of comfort.

3. Administer oxygen as clinically indicated.

4. Consider transport to closest hospital or ALS intercept.

ALS INTERVENTIONS

1. Determine cardiac rhythm and proceed to appropriate intervention.

2. Initiate NS bolus of 300ml IV.

Narrow Complex

1. Synchronized cardioversion; refer to Protocol Reference #4019

2. Adenosine 6mg rapid IV push, followed by 20cc NS. May repeat twice at 12mg followed by 20cc NS if no conversion

3. Procainamide 20mg/min IV; may repeat until arrhythmia suppressed, symptomatic hypotension, QRS widens by greater than 50% or maximum dose of 17mg/kg given. If arrhythmia suppressed, begin infusion of 2mg/min.

4. Contact Base Hospital.

V-Tach or Wide Complex Tachycardias (sustained)

1. Precordial thump for witnessed spontaneous Ventricular Tachycardia.

2. Synchronized cardioversion; refer to Protocol Reference #4019.

3. If arrhythmia suppressed, or cardioversion unsuccessful, administer Lidocaine 1mg/kg slow IV. May repeat at 0.5mg/kg every ten (10) minutes until maximum dose of 3mg/kg is given, then initiate infusion at 2mg/min.

4. Contact Base ~~Hospital~~Station.

Atrial Fib/Flutter

1. Synchronized cardioversion; refer to Protocol Reference #4019.

2. For Narrow Complex rhythms only, give Verapamil 5mg slow IV over three (3) minutes. May repeat in fifteen (15) minutes at 10mg slow IV over three (3) minutes.

3. Procainamide 20mg/min IV. May repeat until arrhythmia suppressed, symptomatic hypotension, QRS widens by greater than 50% or maximum dose of 17mg/kg given. If arrhythmia suppressed, begin infusion of 2mg/min.

4. Contact Base Hospital

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NON-TRAUMATIC HYPERTENSIVE CRISIS

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Headache, blurred vision
2. Neurological deficit
3. Altered level of consciousness
4. Chest pain, dyspnea
5. Pulmonary edema
6. Abrupt elevation of diastolic BP

CONTRAINDICATIONS

Nitroglycerin is contraindicated for use in a hypertensive crisis of unknown etiology.

BLS INTERVENTIONS

1. Reduce anxiety; allow patient to assume position of comfort and elevate head slightly.
2. Administer oxygen as clinically indicated; prepare to support ventilations as clinically indicated.
3. Consider transport to closest hospital or ALS intercept.

ALS INTERVENTIONS

1. Maintain airway with appropriate adjuncts.
2. Obtain oxygen saturation on room air, if possible, unless detrimental to patient condition.
3. Place on cardiac monitor and obtain rhythm strip for documentation. Copy to receiving hospital.
4. Obtain vascular access -- saline lock preferred.

5. Contact ~~Base~~ Station Hospital

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STANDARD DRUG AND EQUIPMENT LIST

Each ambulance and first responder unit will be equipped with the following functional equipment and supplies. **This list represents mandatory items with minimum quantities** excluding narcotics which must be kept within the range indicated. All expiration dates must be current. All packaging of drugs or equipment must be intact. No open products or torn packaging may be used.

MEDICATIONS/SOLUTIONS

Exchanged Medications/Solutions	BLS Transport	ALS Non-Transport	ALS Transport
Activated Charcoal 25 gm		2	2
Adenosine (Adenocard) 6 mg		1	1
Adenosine (Adenocard) 12 mg		2	2
Adrenaline (Epinephrine) 1:1000 1 mg		2	2
Adrenaline (Epinephrine) 1:10,000 1 mg preload		3	3
Albuterol Aerosolized Solution (Proventil) - unit dose 2.5mg		4 doses	4 doses
Aspirin, chewable – 81mg tablet		1 bottle	1 bottle
Atropine 1 mg preload		4	4
Calcium Chloride 1 gm preload		1	1
Dextrose 25% 2.5 gm preload		2	2
Dextrose 50% 25 gm preload		2	2
Diphenhydramine (Benadryl) 50 mg		1	1
Dopamine 400 mg		1	1
Furosemide (Lasix) 40 mg		2	2
Glucagon 1 mg		1	1
Glucose paste	1 tube	1 tube	1 tube
Ipratropium Bromide Inhalation Solution (Atrovent) unit dose .5mg		4	4
Irrigating Saline and/or Sterile Water (1000cc)	2	1	2
Lidocaine 100 mg		3	3
Lidocaine/ or 1 bag pre-mixed 1gm/250cc D5W		1	1
Lidocaine 2% (Viscous) bottle		1	1
Magnesium Sulfate 10 gm		1	1
Naloxone (Narcan) 2 mg preload (needle less)		2	2
Nitroglycerine – Spray 0.4mg metered dose		1	2
Normal Saline for Injection (10cc)		2	2
Normal Saline 100cc		1	2

Exchanged Medications/Solutions	BLS Transport	ALS Non-Transport	ALS Transport
Normal Saline 250cc		1	1
Normal Saline 1000cc		3	6
Phenylephrine HCI ~~(Neosynephrine)~~ - 0.5mg per metered dose		1 bottle	1 bottle
Procainamide 1 gm		1	2
Sodium Bicarbonate 50 mEq preload		2	2
Verapamil 5 mg		3	3

CONTROLLED SUBSTANCE MEDICATIONS

Non-Exchange – MUST BE DOUBLE LOCKED	BLS Transport	ALS Non-Transport	ALS Transport
Midazolam – vials of 10mg/2cc, 2mg/2cc, or 5mg/5cc		20-40mg	20-40mg
Morphine Sulfate – ampules of 10mg or 15mg		20-60mg	30-60mg

AIRWAY/SUCTION EQUIPMENT

Exchanged Airway/Suction Equipment	BLS Transport	ALS Non-Transport	ALS Transport
Adult non-rebreather mask	2	2	2
BAAM Device		1	2
End Title CO2 device – Pediatric and Adult (may be integrated into bag)		1	1
CPAP ~~masks~~circuits- all manufacture's available sizes	~~2 each~~	2 each	2 each
Endotracheal Tubes cuffed – 6.0 and/or 6.5, 7.0 and/or 7.5 and 8.0 and/or 8.5 with stylet		2 each	2 each
Endotracheal Tubes, uncuffed – 2.5, 3.0, 3.5		2 each	2 each
Endotracheal Tubes, uncuffed – 4.0 or 4.5, 5.0 or 5.5		2 each	2 each
ET Tube holders – pediatric and adult		1 each	2 each
Infant Simple Mask	1	2	2
Nasal cannulas – pediatric and adult	2 each	2 each	2 each
Naso/Orogastric feeding tubes - 5fr or 6fr, and 8fr		1 each	1 each
Naso/Orogastric tubes - 10fr or 12fr, 14fr, 16fr or 18fr		1 each	1 each
Nasopharyngeal Airways – (infant, child, and adult)	1 each	1 each	1 each
Needle Cricothyrotomy Device – Pediatric and adult or Needles for procedure 10ga, 12ga, 14ga, 15ga		1 each 2 each	1 each 2 each
One way flutter valve with adapter or equivalent		1	1
Oropharyngeal Airways – (infant, child, and adult)	1 each	1 each	1 each
Pediatric non-rebreather O2 mask	2	2	2
Small volume nebulizer with universal cuff adaptor		2	2
Suction Canister 1200 cc	1	1	1

Exchanged Airway/Suction Equipment	BLS Transport	ALS Non-Transport	ALS Transport
Suction catheters - 6fr, 8fr or 10fr, 12fr or 14fr	1 each	1 each	1 each
Ventilation Bags – Infant 250ml, Pediatric 500ml (or equivalent) Adult	1 each 1 each	1 each 1 each	1 each 1 each
Water soluble lubricating jelly		1	1
Yaunkers tonsil tip	1	1	1

Non - Exchange Airway/Suction Equipment	BLS Transport	ALS Non-Transport	ALS Transport
Ambulance Oxygen source –10L/min for 20 minutes	1		1
Flashlight/penlight	1	1	1
Laryngeal blades - #0, #1, #2, #3, #4 curved and/or straight		1 each	1 each
Laryngoscope handle with batteries – or 2 disposable handles		1	1
Magill Forceps – Pediatric and Adult		1 each	1 each
Portable Oxygen with regulator – 10L/min for 20 minutes	1	1	1
Portable suction device (battery operated)	1	1	1
Pulse Oximetry device		1	1
Stethoscope	1	1	1
Wall mount suction device	1		1

IV/NEEDLES/ SYRINGES/MONITORING EQUIPMENT

Exchanged IV/Needles/Syringes/Monitor Equipment	BLS Transport	ALS Non-Transport	ALS Transport
Blood Tubing (Y type)			2
Conductive medium or Pacer/Defibrillation pads		2 each	2 each
Disposable Tourniquets		2	2
EKG patches – Pediatric and Adult		3 sets each	3 sets each
Glucose monitoring device with compatible strips and OSHA approved single use lancets		1	1
IO Needles – ~~Pediatric and Adult~~Pts. 40kg or greater: 25mm, 15 gauge ~~[ip1]~~ Pts. 3-39 kg: 15mm, 15 gauge IO Needles for optional power driver 3-way stopcock with extension tubing		2 each 1 2	2 each 1 2
IV Catheters – sizes 14, 16, 18, 20, 22, 24		2 each	2 each
Microdrip Administration Set (60 drops/cc) Macrodrip Administration Set (10 drops/cc)		1 3	2 3

Exchanged IV/Needles/Syringes/Monitor Equipment	BLS Transport	ALS Non-Transport	ALS Transport
Pressure Infusion Bag (disposable)		1	1
Razors		2	2
Safety Needles – 20 or 21gauge and 23 or 25 gauge		2 each	2 each
Saline Lock Large Bore Tubing Needless		2	2
Sterile IV dressing		2	2
Syringes w/wo safety needles – 1cc, 3cc, 10cc, 20cc, 60cc catheter tip		2 each	2 each

Non-Exchange IV/Needles/Syringes/Mon Equip	BLS Transport	ALS Non-Transport	ALS Transport
12 Lead ECG Monitor		1	1
Blood pressure cuff – large adult or thigh cuff, adult, child and infant	1	1	1
Defibrillator (adult and pediatric capabilities) with TCP and printout		1	1
Needle disposal system (OSHA Approved)		1	1
Thermometer Mercury Free with covers	1	1	1

OPTIONAL EQUIPMENT/MEDICATIONS

Optional Non-Exchange Equipment/Medications	BLS Transport	ALS Non-Transport	ALS Transport
AED/defib pads	1		
Ammonia Inhalants		2	2
Approved Automatic ventilator		1	1
Backboard padding	1	1	1
Bone Injection Gun or Drill (adult and pediatric)_		2	2
Buretrol		1	1
Chemistry profile tubes		3	3
Esophageal Tracheal Airway Device (ETAD) LA Esophageal Tracheal Airway Device (ETAD) SA		2 2	2 2
Gum Elastic intubation stylet		2	2
IV infusion pump		1	1
IV warming device		1	1
Manual IV Flow Rate Control Device			
Manual powered suction device	1	1	1
Multi-lumen peripheral catheter		2	2
Needle Thoracostomy Kit (prepackaged)		2	2
Pitocin		20 units	20 units

Optional Non-Exchange Equipment/Medications	BLS Transport	ALS Non-Transport	ALS Transport
Translaryngeal Jet Ventilation Device		1	1
Vacutainer		1	1

DRESSING MATERIALS/ OTHER EQUIPMENT/SUPPLIES

Exchanged Dressing Materials/Other Equip/Supplies	BLS Transport	ALS Non-Transport	ALS Transport
Adhesive tape – 1 inch	2	2	2
Air occlusive dressing (Vaseline gauze)	1	1	1
Ankle & wrist restraints, soft ties acceptable	1	0	1
Antiseptic swabs/wipes		10	10
Bedpan or fracture pan Urinal	1 1		1 1
Cervical Collars – Rigid Pediatric & Adult or Cervical Collars – Adjustable Adult & Pediatric	2 each 2 each	2 each 2 each	2 each 2 each
Cold Packs	2	2	2
Emesis basin or disposable bags & covered waste container	1	1	1
Head immobilization device	2	2	2
OB Kit	1	1	1
Pneumatic or rigid splints capable of splinting all extremities	4	2	4
Provodine/Iodine swabs/wipes		10	10
Roller bandages – 4 inch	6	3	6
Sterile bandage compress or equivalent	6	2	6
Sterile gauze pads – 4x4 inch	4	4	4
Sterile Sheet for Burns	2	2	2
Universal Dressing 10x30 inches	2	2	2

Non-Exchange Dress Materials/Other Equip/Supplies	BLS Transport	ALS Non-Transport	ALS Transport
Ambulance gurney	1		1
Bandage Shears	1	1	1
Blood Borne Pathogen Protective Equipment - (nonporous gloves, goggles face masks & gowns meeting OSHA Standards)	2	2	2
Drinkable water in secured plastic container or equivalent	1 gallon		1 gallon
Long board with restraint straps	1	1	1
Pediatric immobilization board	1	1	1

Non-Exchange Dress Materials/Other Equip/Supplies	BLS Transport	ALS Non-Transport	ALS Transport
Pillow, pillow case, sheets & blanket	1 set		1 set
Short extrication device	1	1	1
Straps to secure patient to gurney	1 set		1 set
Traction splint	1	1	1
Triage Tags- CAL Chiefs or ICEMA approved	30	30	30

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ICEMA Medical Director Date ICEMA Executive Director Date

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Inyo County Health Officer Date Mono County Health Officer Date

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San Bernardino County Health Officer Date

EMS AIRCRAFT STANDARD DRUG AND EQUIPMENT LIST

Each Aircraft will be equipped with the following functional equipment and supplies. This list represents mandatory items with minimum quantities, to exclude narcotics, which must be kept within the range indicated. All expiration dates must be current. All packaging of drugs or equipment must be intact. No open products or torn packaging may be used.

MEDICATIONS/SOLUTIONS

Exchanged Medications/Solutions	Amount
Adenosine (Adenocard)	30mg
Adrenaline (Epinephrine) 1:1000	2mg
Adrenaline (Epinephrine) 1:10,000	3mg
Albuterol Aerosolized Solution (Proventil)-unit dose 2.5mg	2 doses
Aspirin, chewable - 81mg tablet	1bottle
Atropine	3mg
Atrovent	2 doses
Calcium Chloride	1gm
Dextrose 25%	5.0gm
Dextrose 50%	50gm
Diphenhydramine (Benadryl)	50mg
Furosemide (Lasix)	40mg
Glucagon	1mg
Intropin (Dopamine)	200mg
Ipratropium Bromide (Atrovent)***This medication may not be added to the inventory until approved***	4mg
Lidocaine	300mg
Lidocaine/ or 1 bag pre-mixed	2gm
Lidocaine 2% (Viscous)	2oz
Magnesium Sulfate	10gms
Naloxone (Narcan)	10mg
Nitroglycerine – Spray	1bottle
Normal Saline for Injection (10cc)	2
Normal Saline 250ml	1
Normal Saline 1000ml	4
Phenylephrine HCL~~I (Neosynephrine)~~ - 0.5mg per metered dose	1bottle
Procainamide	1gm
Sodium Bicarbonate	100mEq
Verapamil (Isoptin)	15mg

CONTROLLED SUBSTANCE MEDICATIONS

Non-Exchange Controlled Substance Meds – MUST BE DOUBLE LOCKED	Amount
Midazolam – vials of 10mg / 2ml	20-40mg
Morphine Sulfate – ampules of 10mg	20-60mg

AIRWAY/SUCTION EQUIPMENT

Single Use Airway/Suction Equipment	Amount
BAAM Device	1
Endotracheal tubes, uncuffed – 2.0, 2.5, 3.0, 3.5	2 each
Endotracheal Tubes, uncuffed – 4.0 or 4.5, 5.0 or 5.5	2 each
Endotracheal Tubes cuffed – 6.0, 7.0, 7.5 and 8.0	2 each
ET Tube holders – pediatric and adult	1 each
Malleable Stylet – pediatric and adult	1 each
Nasal Cannulas – infant, pediatric and adult	2 each
Naso/Orogastric tubes - 10fr or 12fr, 14fr, 16fr or 18fr	1 each
Naso/Orogastric feeding tubes - 5fr or 6fr, and 8fr	1 each
Nasopharyngeal Airways – infant, child, and adult	1 each
Needle Cricothyrotomy Device (Approved) – Pediatric and adult *or* Needles for procedure 10ga or 12ga, and 14ga, or 16ga	1 each 2 each
Non Re-Breather O_2 Mask – Pediatric and Adult	2 each
One way flutter valve with adapter or equivalent	1
Oropharyngeal Airways – infant, child, and adult	1 each
Small volume nebulizer with universal cuff adaptor	2
Suction catheters - 6fr, 8fr or 10fr, 12fr or 14fr	1 each
Ventilation Bags – Infant 250ml, Pediatric 500ml and Adult 1L	1 each
Water soluble lubricating jelly	1
Yaunkers tonsil tip	1

Durable Items Airway/Suction Equipment	Amount
Aircraft Oxygen source –10L/min for 20 minutes	1
End-title CO2 device – pediatric and adult (may be integrated into bag)	1 each
Flashlight/penlight	1
Laryngoscope handle with batteries – or 2 disposable handles	1
Laryngeal blades - #0, #1, #2, #3, #4 curved and/or straight	1 each
Magill Forceps – Pediatric and Adult	1 each
Portable Oxygen with regulator – 10L/min for 20 minutes	1

Durable Items Airway/Suction Equipment	Amount
Portable suction device (battery operated) *and/or* Wall mount suction device	1 each
Pulse Oximetry device	1
Stethoscope	1

IV/NEEDLES/SYRINGES/MONITORING EQUIPMENT

Single Use IV/Needles/Syringes/Monitoring Equipment	Amount
Blood Tubing (Y type)	1
Conductive medium *or* Adult and Pediatric Pacer/Defibrillation pads	2 each
ECG – Pediatric and Adult	3 sets each
IO Needles- -Pts. 40kg or greater: 25mm, 15 gauge Pts. 3-39 kg: 15mm, 15 gauge	2 each
3-way stopcock	1
IV extension tubing	2
IV Catheters – sizes 14, 16, 18, 20, 22, 24	2 each
Macrodrip Administration Set (10 drops/ml)	3
Microdrip Administration Set (60 drops/ml)	1
Safety Needles – 20ga or 21ga and 23ga or 25ga	2 each
Saline Lock	2
Syringes w/wo safety needles – 1ml, 3ml, 10ml, 20ml, 60ml catheter tip	2 each

Durable Items IV/Needles/Syringes/Monitoring Equipment	Amount
Blood pressure cuff – large adult or thigh cuff, adult, child and infant	1 set
Defibrillator (adult and pediatric capabilities) with TCP and printout	1
Glucose monitoring device	1
Needle disposal system (OSHA approved)	1
Pressure infusion bag	1
Thermometer	1

OPTIONAL EQUIPMENT/MEDICATIONS

Optional Equipment/Medications	Amount
Ammonia Inhalants	2
Automatic ventilator (Approved)	1
Backboard padding	1
BLS AED/defib pads	1

Optional Equipment/Medications	Amount
BLS/ALS Handheld Resuscitator (CAREvent[R)]	1
Bone Injection Gun (adult and peds) or Bone Drill (adult & Peds)	2 each 2 each
Chemistry profile tubes	3
C-PAP Unit (Approved) with Small, Medium and Large sized masks	1 3 each
D5W in bag	1
Esophageal Tracheal Airway Device (ETAD) LA Esophageal Tracheal Airway Device (ETAD) SA	2 2
IV infusion pump	1
IV warming device	1
Manual powered suction device	1
Multi-lumen peripheral catheter	2
Needle Thoracostomy Kit (prepackaged)	2
Pitocin	20 units
Translaryngeal Jet Ventilation Device	1
12 Lead ECG Monitor	1
Vacutainer	1

DRESSING MATERIALS/OTHER EQUIPMENT/SUPPLIES

Single Use Dressing Materials/Other Equipment Supplies	Amount
Adhesive tape – 1 inch	2
Air occlusive dressing (Vaseline gauze)	1
Ankle & wrist restraints, soft ties acceptable	1
Antiseptic swabs/wipes	
Cervical Collars – Rigid Pediatric & Adult *or* Cervical Collars – Adjustable Adult & Pediatric	2 each 2 each
Emesis basin or disposable bags & covered waste container	1
Head immobilization device	2
OB Kit	1
Pneumatic or rigid splints capable of splinting all extremities	4
Provodine/Iodine swabs/wipes	
Roller bandages – 4 inch	3
Sterile bandage compress or equivalent	6
Sterile gauze pads – 4x4 inch	4
Sterile Sheet for Burns	2
Universal Dressing 10x30 inches	2

Durable Use Dressing Materials/Other Equipment Supplies	Amount
Aircraft stretcher or litter system with approved FAA straps	1
Bandage Shears	1
Blanket or sheet	2
Blood Borne Pathogen Protective Equipment - (nonporous gloves, goggles face masks & gowns meeting OSHA Standards)	2
Long board with restraint straps	1
Pediatric immobilization board	1
Short extrication device	1
Traction splint	1

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ICEMA Medical Director Date ICEMA Executive Director Date

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San Bernardino County Health Officer Date

EXTERNAL JUGULAR VEIN ACCESS

AUTHORITY

Sections 1797.107, 1797.172 and 1797.176, Health and Safety Code.

Reference: Sections 1797.90, 1797.172, 1797.202, 1797.220, 1798, 1798.2, 1798.3 and 1798.105, Health and Safety Code

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Patient condition requires IV access and other peripheral IV access attempts are unsuccessful.

~~2. Patient 15 years of age and older - Base Hospital contact not required[Ip 11].~~

~~3. Patient 9 to 14 years of age - Base Hospital contact required.~~

~~4~~2. Patient 8 years of age and younger - not indicated

PROCEDURE

1. Inform patient of procedure if alert.

2. Utilize axial spinal stabilization in trauma patients. If not in axial-spinal stabilization, extend and stabilize patient's neck. Maintain axial stabilization if the need to remove C collar arises.

3. Place in trendelenburg position or apply slight pressure at base of vein for tourniquet effect.

4. Obtain external jugular vein access with appropriately sized IV catheter.

5. Securely tape catheter with occlusive dressing in place and continue to monitor for patency.

6. Recheck site frequently for signs and symptoms of infiltration.

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San Bernardino Co. Health Officer		Date	

TRANSCUTANEOUS CARDIAC PACING

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Symptomatic Bradycardia - see Protocol Reference #6011 Adult Bradycardia.

2. Witnessed asystole - see Protocol Reference #6015 Adult Cardiac Arrest.

~~3. Patient 15 years of age and older - Base Hospital contact not required.~~

~~4. Patient 9 to 14 years of age - Base Hospital order[ip1].~~

~~5~~3. Patient 8 years of age and younger - not indicated.

PROCEDURE IN SYMPTOMATIC BRADYCARDIA

1. Start at rate of 60 and adjust the output control starting at 0 milli amperes until capture is noted. Assess peripheral pulses and confirm correlation with paced rhythm.

2. Determine lowest threshold response by turning the output control down, until capture is lost, and then turn it back up slightly until capture is noted again. Maintain the output control at this level.

3. Assess peripheral pulses and confirm correlation with paced rhythm, Reassess patient for signs of adequate perfusion

4. Any movement of patient may increase the capture threshold response; the output may have to be adjusted to compensate for loss of capture.

5. With signs of inadequate tissue perfusion, increase rate **(not to exceed 100)** and contact Base ~~Hospital~~Station.

6. Consider Midazolam 1-2 mg slow IV push if patient is awake and alert.

7. Consider Morphine Sulfate titrate in 1-2mg increments up to 10mg for patient complaint of pain with signs of adequate tissue perfusion.

8. Contact Base Hospital to advise of patient condition

PROCEDURE IN ASYSTOLE

1. Start at maximum energy output on the pacing device.

2. Follow above procedures #2-4.

3. If pacing ineffective, contact Base ~~Hospital~~ Station and consider termination of resuscitative efforts.

DOCUMENTATION

In the event the receiving physician discovers the device is improperly placed, an Incident Report must be completed by the receiving hospital and forwarded to ICEMA within 24 hours of the incident. Forms are available as part of the protocol manual and on the ICEMA website.

~~Upon arrival at the receiving hospital, the Advanced Skills Evaluation Form on the back of the yellow copy of the O1A Form or electronic equivalent must be filled out and signed by receiving physician. This form must then be forwarded to ICEMA within one week by either the PLN at the receiving facility if it is a Base Hospital or by the EMT-P's Agency EMS/QI Coordinator.~~

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San Bernardino County Health Officer	Date		

SYNCHRONIZED CARDIOVERSION

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Unstable V-Tach or Wide Complex Tachycardias (sustained).

2. Unstable Narrow Complex Tachycardias.

~~3. Patient 15 years of age and older - Base Station contact not required[jp1].~~

~~4. Patient 9 to 14 years of age - Base Station order required.~~

~~5~~3. Patient 8 years of age and younger - not indicated.

PROCEDURE

1. Monitor the patient in a lead that maximizes upright R wave and minimizes T wave, and observe location of synchronized marker on the R wave.

2. Consider Midazolam 1-2 mg slow IV push for all conscious patients.

3. Consider Morphine Sulfate titrated in 1-2mg increments up to 10mg for patient complaint of pain with signs of adequate tissue perfusion.

4. Select initial energy level setting at 100 joules or a clinically equivalent biphasic energy level per manufacture guidelines.

5. Procedure may be repeated at 200, 300 & 360 joules or a clinically equivalent biphasic energy level per manufacture guidelines.

6. If cardioversion is successful, continue to monitor the patient and refer to the appropriate corresponding protocol.

7. In Radio communication failure or with Base Station order, repeated cardioversion attempts at 360 joules or a clinically equivalent biphasic energy level per manufacture guidelines may be attempted.

8. If ventricular fibrillation should occur during preparation or following cardioversion, immediately:

   a. Turn off synchronizer and check pulse.

b. Charge unit to 200 - 360 joules, or clinically equivalent biphasic energy level per manufacture guidelines.

c. Defibrillate per the appropriate corresponding protocol.

9. Document all reassessments of rhythm and pulses.

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INTRAOSSEOUS INFUSION (IO)

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Primary vascular access in cardiac arrest patients eight (8) years of age and younger.

2. ~~Patient unresponsive and~~ Any patient where venous access is unavailable by any other means.

CONTRAINDICATIONS

1. Fracture of target bone.

2. Previous IO attempt and marrow entry at target site.

PROCEDURE

1. Select and prep the following preferred sites for appropriate patient age.

   a. Eight (8) years of age and younger - Anterior medial surface of tibia, 2cm below tibial tuberosity.

   b. Nine (9) years of age and older - Lower end of tibia, 2cm above the medial malleous or proximal humerus.~~.~~

   c. Base ~~Hospital~~ Station contact - Anterior distal femur, 2cm above the patella.

2. ~~2.~~ For agencies utilizing EZIO:
   a. Select the appropriate sized IO needle. Attach the needle to the driver and while stabilizing the extremity, insert the needle through the skin at a 90-degree angle to the bone until the needle touches the bone. Depress the trigger and insert the needle into the bone. Upon entrance into the medullary cavity, remove the driver from the needle, remove stylet and attach primed extension tubing to the hub of the needle.

   For agencies u~~U~~tilizing manual devices:
   a. Select appropriate sized IO needle. Apply downward pressure in a twisting motion perpendicular to the surface of the target site. Upon entrance into medullary cavity, slightly advance needle 1-2mm.

3. Confirmation of ~~-~~placement is verified by the following:

   a. Needle stands upright without support.

   b. Aspiration of blood/marrow.

   c. Ability to infuse IV solution without s/s of extravasation.

4. Leave site uncovered and attach IV extension tubing and IV ~~extension~~ tubing ~~with stopcock directly~~ to IO needle. Hinge tape regular IV tubing to extremity to secure site.

5. To control infusion pain, use 2% Lidocaine.

   a. For pediatric patients, prime the extension tubing with .5mg/kg of 2% Lidocaine and infuse *slowly* (over 30 to 60 seconds). Allow 1 minute for anesthetic effect before infusing fluids.
   b. For adult patients, prime the extension tubing with 20-100mg of 2% Lidocaine and infuse *slowly* (over 30 to 60 seconds). Allow 1 minute for anesthetic effect before infusing fluids.

~~5.~~6. Infusion may need to be pressurized using syringe or pressure bag device.

~~6.~~7. Contact Base ~~Hospital~~ Station if patient condition indicates use of Dopamine in patients nine (9) years of age or older.

DOCUMENTATION

~~Upon arrival at the receiving hospital, the Advanced Skills Evaluation Form on the back of the yellow copy of the O1A Form or electronic equivalent must be filled out and signed by the receiving physician. This form must then be forwarded to ICEMA within one week by either the PLN at the receiving facility if it is a Base Hospital or by the EMT-P's Agency EMS/QI Coordinator.~~

In the event the receiving physician discovers the device is improperly placed, an Incident Report must be completed by the receiving hospital and forwarded to ICEMA within 24 hours of the incident. Forms are available as part of the protocol manual and on the ICEMA website.

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ICEMA Medical Director Date

ICEMA Executive Director Date

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KING AIRWAY DEVICE (PERILARYNGEAL) - ADULT

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Use of the King Airway adjunct may be performed only on those patients who meet **ALL** of the following criteria:

    a. Unresponsive and apneic (<6 per minute).

    b. No gag reflex.

    c. Anyone over four (4) feet in height

        I. 4-5 feet: Size 3 (connector color: yellow)

        II. 5-6 feet: Size 4 (connector color: red)

        III. 6 feet and over: Size 5 (connector color: purple)

ADDITIONAL CONSIDERATIONS

1. BVM management not adequate or effective.
2. Endotracheal intubation is unsuccessful after three attempts.
3. A King Airway adjunct should not be removed unless there is a malfunction.
4. Medications may **NOT** be given via the King Airway.

CONTRAINDICATIONS

1. Conscious patients with an intact gag reflex.
2. Known ingestion of caustic substances.
3. Suspected foreign body airway obstruction (FBAO).
4. Facial and/or esophageal trauma.
5. Patients with known esophageal disease (cancer, varices, surgery, etc.).

PROCEDURE

1. Using the information provided, choose the correct KING LT size based on patient height.

2. Test cuff inflation system by injecting the maximum recommended volume of air into the cuffs (size 3 –60 ml; size 4 – 80 ml; size 5 – 90 ml). Prior to insertion, disconnect Valve Actuator from Inflation Valve and remove all air from both cuffs.

3. Apply a water-based lubricant to the beveled distal tip and posterior aspect of the tube taking care to avoid introduction of lubricant in or near the ventilatory openings.

4. Have a spare KING LT ready and prepared for immediate use.

5. Pre-oxygenate.

6. Position the head. (The ideal head position for insertion of the KING LT is the "sniffing position".)

7. Hold the KING LT at the connector with dominant hand. With non-dominant hand, hold mouth open and apply chin lift.

8. With the KING LT rotated laterally 45-90°, introduce tip into mouth and advance behind base of tongue.

9. Rotate the tube back to the midline as the tip reaches the posterior wall of the pharynx.

10. Without exerting excessive force, advance KING LT until base of connector is aligned with teeth or gums.

11. Holding the KLT 900 Cuff Pressure Gauge in non-dominant hand, inflate cuffs of the KING LT to 60 cm H20. If a cuff pressure gauge is not available and a syringe is being used to inflate the KING LT, inflate cuffs with the minimum volume necessary to seal the airway at the peak ventilatory pressure employed (just seal volume).

12. Attach the breathing circuit to the 15 mm connector of the KING LT. While gently bagging the patient to assess ventilation, simultaneously withdraw the airway until ventilation is easy and free flowing (large tidal volume with minimal airway pressure).

13. Reference marks are provided at the proximal end of the KING LT which when aligned with the upper teeth give an indication of the depth of insertion.

14. Confirm proper position by auscultation, chest movement and verification of CO2 by capnography.

15. Readjust cuff inflation to 60 cm H2O (or to just seal volume).

16. Secure KING LT to patient using tape or other accepted means. A bite block can also be used if desired.

DOCUMENTATION

In the event the receiving physician discovers the device is improperly placed, an incident Report must be completed by the receiving hospital and forwarded to ICEMA within 24 hours of the incident. Forms are available as part of the protocol manual and on the ICEMA website.

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ICEMA Medical Director	Date	ICEMA Executive Director	Date
_____		_____	
Inyo County Health Officer	Date	Mono County Health Officer	Date
_____			
San Bernardino County Health Officer	Date		

KING AIRWAY DEVICE (PERILARYNGEAL) - PEDIATRICS

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Use of the King Airway adjunct may be performed only on those patients who meet **ALL** of the following criteria:

    a. Unresponsive and apneic (<6 per minute).

    b. No gag reflex.

    c. Pediatric patients meeting the following criteria:

        I. 35-45 inches or 12-25 kg: Size 2 (connector color: green)

        II. 41-51 inches or 25-35 kg: Size 2.5 (connector color: orange).

ADDITIONAL CONSIDERATIONS

1. BVM management not adequate or effective.
2. Endotracheal intubation is unsuccessful after three attempts.
3. A King Airway adjunct should not be removed unless there is a malfunction.
4. Medications may **NOT** be given via the King Airway.

CONTRAINDICATIONS

1. Conscious patients with an intact gag reflex.
2. Known ingestion of caustic substances.
3. Suspected foreign body airway obstruction (FBAO).
4. Facial and/or esophageal trauma.
5. Patients with known esophageal disease (cancer, varices, surgery, etc.).

PROCEDURE

1. Using the information provided, choose the correct KING LT size based on patient height.

2. Test cuff inflation system by injecting the maximum recommended volume of air into the cuffs (size 2: 25–35 ml; size 2.5: 30-40 ml). Prior to insertion, disconnect Valve Actuator from Inflation Valve and remove all air from both cuffs.

3. Apply a water-based lubricant to the beveled distal tip and posterior aspect of the tube taking care to avoid introduction of lubricant in or near the ventilatory openings.

4. Have a spare KING LT ready and prepared for immediate use.

5. Pre-oxygenate.

6. Position the head. (The ideal head position for insertion of the KING LT is the "sniffing position.")

7. Hold the KING LT at the connector with dominant hand. With non-dominant hand, hold mouth open and apply chin lift.

8. With the KING LT rotated laterally 45-90°, introduce tip into mouth and advance behind base of tongue.

9. Rotate the tube back to the midline as the tip reaches the posterior wall of the pharynx.

10. Without exerting excessive force, advance KING LT until base of connector is aligned with teeth or gums.

11. Holding the KLT 900 Cuff Pressure Gauge in non-dominant hand, inflate cuffs of the KING LT to 60 cm H20. If a cuff pressure gauge is not available and a syringe is being used to inflate the KING LT, inflate cuffs with the minimum volume necessary to seal the airway at the peak ventilatory pressure employed (just seal volume).

12. Attach the breathing circuit to the 15 mm connector of the KING LT. While gently bagging the patient to assess ventilation, simultaneously withdraw the airway until ventilation is easy and free flowing (large tidal volume with minimal airway pressure).

13. Reference marks are provided at the proximal end of the KING LT which when aligned with the upper teeth give an indication of the depth of insertion.

14. Confirm proper position by auscultation, chest movement and verification of CO2 by capnography.

15. Readjust cuff inflation to 60 cm H2O (or to just seal volume).

16. Secure KING LT to patient using tape or other accepted means. A bite block can also be used if desired.

DOCUMENTATION

In the event the receiving physician discovers the device is improperly placed, attached is an Incident Report that must be filled out and forwarded to ICEMA within one (1) week by the receiving hospital.

APPROVED

_____		_____	
ICEMA Medical Director	Date	ICEMA Executive Director	Date
_____		_____	
Inyo County Health Officer	Date	Mono County Health Officer	Date
_____			
San Bernardino County Health Officer	Date		

POISONINGS

Combined with 5009

PRIORITIES

1. Assure the safety of EMS personnel~~rescue personnel safety~~.
2. ~~ABC's.~~ Assure and maintain ABCs.
3. Determine degree of physiological distress.
4. Obtain vital signs, history and complete physical assessment including the substance ingested, the amount, the time substance was ingested, and the route.
5. Bring ingested substance to the hospital with patient.
6. Expeditious transport.

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Altered level of consciousness.
2. Signs and symptoms of substance ingestion, inhalation, injection or surface absorption.
3. History of substance poisoning.

DEFINITIVE CARE

1. Assure and maintain ABCs.
2. Place patient on high flow oxygen as clinically indicated. ~~Obtain an oxygen saturation level on room air prior to oxygen administration, if available~~.
3. Contact poison control.
4. Obtain accurate history of incident:
    a. Name of product or substance.
    b. Quantity ingested, and/or duration of exposure.

c. Time elapsed since exposure.

d. Pertinent medical history, chronic illness, and/or medical problems within the last 24 hours.

e. Patient medication history~~Type of medication patient may be on, if at all~~.

5. Monitor vital signs.

6. ~~6.~~ Expeditious transport.

PARAMEDIC SUPPORT PRIOR TO BASE HOSPITAL CONTACT

1. Assure and maintain ABC's.

2. Oxygen therapy as clinically indicated, obtain oxygen saturation on room air, unless detrimental to patient condition.

3. Monitor cardiac status.

4. Obtain vascular access at a TKO rate or if hypotensive administer 500cc fluid challenge to sustain a B/P>90mmHg. Pediatrics with B/P <80mmHg give 20cc/kg IVP and repeat as indicated.

5. Charcoal 50gms for adult (pediatrics 1gm/kg). Administer P.O. if alert with a gag reflex. Charcoal is contraindicated with caustic ingestions.

6. For known organophosphate poisoning, give atropine 2mg IVP, repeat at 2mg increments if patient remains symptomatic (ie: excessive salivation, lacrimation, urination, diarrhea, vomiting, constricted pupils).

BASE HOSPITAL MAY ORDER THE FOLLOWING:

*1. For phenothiazine "poisoning", administer diphenhydramine 25mg IVP or 50mg IM for ataxia and/or muscle spasms.

*2. For tricyclic poisonings, administer sodium bicarbonate 1mEq/kg IVP for tachycardia, widening QRS or ventricular arrhythmias.

*3. For calcium channel blocker poisonings, administer calcium chloride 1gm (10cc of a 10% solution), if hypotension or bradycardic arrhythmias persist.

*4. For betablocker poisonings, administer glucagon 1mg IVP.

*5. Repeat atropine in 2-4mg increments until symptoms are controlled.

*May be done during radio communication failure.

APPROVED

ICEMA Medical Director	Date	ICEMA Executive Director	Date
Inyo County Health Officer	Date	Mono County Health Officer	Date
San Bernardino County Health Officer	Date		

DRAFT 06/10/2009

MEDICAL RESPONSE TO A MULTI-CASUALTY INCIDENT

PURPOSE

- To outline and coordinate the responses by EMS system participants to Multi-Casualty Incidents (MCI).
- To standardize definitions, as outlined in the Firescope Field Operations Guide (FOG), and the responsibilities of each participating entity.

PRINCIPLES

- Field responses to MCI's will follow the procedures/guidelines consistent with the Incident Command System (ICS) as outlined in Firescope.
- Hospitals shall receive as much advanced notice as possible to prepare for arriving patients.

SCOPE

A Multi-Casualty Incident (MCI) is any incident where personnel on scene have requested additional responses to care for all victims.

- Incident requires five or more ambulances; and/or
- Incident involves ten or more patients; and/or
- Requires utilization of triage tags; and/or
- May require patient distribution to more than one hospital

PROCEDURE

General Operational Procedures:

1. First arriving resource with the appropriate communications capability shall declare an MCI, establish command, name the incident, and request hospital bed availability through Coordinated Communication Center (CCC). This resource shall remain in command until relieved by the public safety agency having jurisdictional authority.

2. All operation functions and procedures on scene will be in accordance with Firescope.

3. The Incident Commander (IC) will assign the first available resource to triage. Adults shall be triaged according to START as outlined in Firescope. Pediatric patients shall be triaged according to JumpSTART (see definitions) developed by California Emergency Medical Services for Children.

4. The IC or designee shall establish communications with the CCC on the Med Comm Talk Group for situation update and to obtain hospital bed availability.

5. The Medical Communications Coordinator (Med Comm), when initially communicating with the CCC, will provide the following information: Name of Incident type, location, and agency in charge.

6. Patients should generally be transported to the appropriate hospitals as provided to the Med Comm by the CCC.

7. The Med Comm shall notify the CCC with the following information for all patients departing the scene:

    - Transport method (air, ground, bus)
    - Transport agency and unit
    - Number of patients (adult and pediatric)
    - Classification of patients (Immediate, Delayed, Minor)
    - Destination (in accordance with CCC destination availability)

8. Transporting units shall make attempts to contact the receiving hospital en route to provide patient(s) report using the incident name to identify the patient and provide the following information:

    - Incident name
    - Transporting name and unit number
    - Age/sex
    - Mechanism of injury
    - Chief complaint and related injuries that may need specialty services, e.g. respiratory, neuro, or vascular, or decontamination
    - Glascow Coma Scale
    - ETA

9. If the destination is changed en route from that provided by the Med Comm, the transporting unit shall notify the CCC through its dispatch or directly to the hospital, and shall make attempts to contact the revised receiving hospital en route.. The CCC will notify the original destination that the transporting unit has been diverted by the base station physician or that the patient condition has deteriorated.

10. The base station has the option to inform scene personnel making initial contact to call CCC for determination of bed availability.

Special Operational Procedures- Use of Non-Emergency Vehicles:

The Patient Transportation Unit Leader (PTUL), in coordination with the IC, may utilize non-emergency vehicles to transport patients triaged as "minor." The Med Comm will work with the receiving facilities to coordinate the destinations. In such cases, the following conditions shall apply:

- Non-emergency vehicles may be requested through the CCC or by special arrangement made on scene by the PTUL; however, in the event arrangements are made on scene, the PTUL shall notify the CCC.
- If resources allow at least one ALS team (minimum of one paramedic and one EMT I) with appropriate equipment will accompany each non-emergency transport vehicle.
- Generally, the ratio of patients to ALS team should not exceed 15:1.
- In the event of deterioration of a patient en route, the non-emergency unit shall immediately call for an ALS emergency ambulance and transfer care for transport to the closest emergency department.

Responsibilities of the County Communications Center (CCC):

1. Upon field notification of an MCI, the CCC shall immediately poll hospitals via the REDDINET for bed availability.

2. The CCC shall advise other 9-1-1 dispatch centers of the MCI, including the name and location.

3. The CCC shall dispatch all air resources for the MCI.

4. The CCC shall notify the EMS Agency when five or more ambulances are requested.

5. The CCC will confirm patient departure from scene with Med Comm by providing the departure time.

6. The CCC will advise receiving hospitals of the number/categories of patients en route via REDDINET or other approved method.

7. The CCC will notify all involved hospitals when the MCI is concluded.

Responsibilities of the Receiving Hospital:

1. All hospitals shall respond immediately to the REDDINET poll.

2. A receiving facility may not change the destination of a patient.

3. A designated Trauma Hospital Base Station physician may change a patient destination only if a patient condition deteriorates.

4. Hospitals shall enter all required information into the REDDINET, including, but not limited to, names, age, and sex of patients transported from the MCI.

5. Each hospital that received patients from the MCI shall participate in after action reviews as necessary.

Medical Control:

1. EMS Personnel shall operate within ICEMA "prior to contact" protocols for both medical and trauma patient(s).

2. If base station consultation is necessary, medical control refers to a specific patient(s) and not to the incident as a whole (operational aspects).

3. Medical Control has the option of referring the agency establishing radio contact to the CCC for bed availability.

Field Documentation:

1. The Med Comm maintains responsibility to ensure the following:

    a.) Utilization of the approved ICEMA/MCI patient care report. This form will include:
        - Name and location of the Incident
        - Triage tag number for each patient and their hospital destination
        - Brief description of the Incident

    b) Completion of an individual patient care report for each deceased individual at the incident.

    c) A completed individual patient care report for all patients with a chief complaint who "refuse treatment" and desire to sign a release of liability or AMA.

2. Each transporting unit is responsible for generating a patient care report for each patient transported excluding patients transported by non-emergency vehicles. Those transported in non-emergency vehicles will be identified by triage tags. This should include patient tracking tag/number and will indicate the incident name and location.

ADDENDUM

Firescope Operations Procedures of a Multi-Casualty Incident

Operational System Description

The Multi-Casualty organizational module is designed to provide for the necessary supervision and control of essential functions required during a Multi-Casualty Incident. The primary functions will be directed by the Medical Group Supervisor, if activated (or Operations), who reports to the Multi-Casualty Branch Director, if activated, or in most cases, the Incident Commander. Resources having direct involvement with patients are supervised or coordinated by one of the functional leaders or coordinators.

The Medical Branch structure in the ICS system is designed to provide the Incident Commander with a basic, expandable modular system for managing the incident. The system is designed to be set up consistent in all incidents involving mass casualties, and has the ability to expand the incident organization as needed.

a.) Initial Response Organization: Initial response resources are managed by the Incident Commander, who will handle all Command and General Staff responsibilities. The resources will respond based on the **operational procedures** (as outlined in this protocol).

b.) Reinforced Response Organization: In addition to the initial response, the Incident Commander establishes a Triage Unit Leader, a Treatment Unit Leader, Patient Transportation Unit Leader, and Ambulance Coordinator. Also patient treatment areas are established.

c.) Multi-Group Response: All positions within the Medical Group are now filled. The Air Operations Branch may be designated to provide coordination between the Ambulance Coordinator and the Air Operations Branch. The Extrication Group is established to free entrapped victims.

d.) Multi-Branch Incident Organization: The complete incident organization shows the Multi-Casualty Branch and other Branches. The Multi-Casualty Branch now has multiple Medical Groups (geographically separate) but only one Patient Transportation Group. This is because all patient transportation must be coordinated through one point to avoid overloading hospitals.

Operational Principles

1. First arriving resource with the appropriate communications capability shall declare an MCI, establish command, name the incident, and request bed availability. This resource will remain in command until relieved by the public safety agency having jurisdictional authority.

2. The IC will assign the first available resource to triage. Victims shall be triaged according to START/JumpSTART criteria, and ICS shall be implemented according to Firescope.

3. The IC will assign the resource with the appropriate communications capability to establish communications with CCC situation update and to obtain bed availability.

4. Treatment areas are set up based upon needs and available resources according to classification of patients (immediate, delayed, and minor.) The Treatment Unit Leader will notify Patient Transportation Unit Leader when a patient is ready for transportation and of any special needs (e.g. Burns, Pediatrics, etc.)

5. Patients are transported to the appropriate facilities based upon patient condition, bed availability, and transport resources. The Patient Transportation Unit Leader and the Medical Communications Coordinator will work together to transport the patients using the appropriate methods to the most appropriate destinations.

6. The Patient Transportation Unit Leader/Medical Communications Coordinator will determine all patient destinations.

7. The Incident Commander will designate a staging area (s). Transportation personnel should stay with their vehicle to facilitate rapid transport, unless reassigned by the Incident Commander or his designee.

8. The Patient Transportation Unit Leader will then call for an ambulance or other designated transportation vehicle to respond to the loading area.

9. The Patient Transportation Unit Leader, in coordination with the Incident Commander, may put in a request through the Communications Center for busses to transport minor or uninjured patients.

10. The Patient Transportation Unit Leader will copy the information from the triage tag onto a Patient Transportation Log, and confirm destination with the ambulance crew.

11. The Patient Transportation Unit Leader will notify Medical Communications Coordinator of patient departure.

12. The transporting unit should contact the receiving facility en route with a patient report, using the Incident name to identify the patient.

_____ _____

ICEMA Medical Director Date ICEMA Executive Director Date

DRAFT 06/10/2009
MCI- DEFINITIONS/KEY ICS POSITIONS

MCI – Definitions:

NOTE: The ICS Components and Position Definitions are from Firescope Field Operations Guide (FOG).

County Communication Center (CCC): The communications center communicates with all hospitals and the on scene Medical Communications Coordinator/Incident Commander. It obtains hospital bed availability through Reddinet and relay that information back to the Medical Communications Coordinator on scene.

Decontamination (Decon): The physical and/or chemical process of removing or reducing contamination from personnel or equipment, or in some other way preventing the spread of contamination by persons and equipment.

Hazardous Material: Any solid, liquid, gas, or mixture thereof that can potentially cause harm to the human body through respiration, ingestion, skin absorption or contact and may pose a substantial threat to life, the environment, or to property.

Incident Command Post (ICP): Location at which the primary command functions are executed and usually coordinated with the incident base.

Incident Command System (ICS): A management system utilized, to rapidly and efficiently manage the scene of any type of an incident. This includes a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure with responsibility for the management of assigned resources to effectively accomplish stated objectives pertaining to an incident.

ICS Components (five major management functions):

1. **Incident Command:** Sets the incident objectives, strategies, and priorities and has overall responsibility at the incident or event.

2. **Operations Section:** Conducts tactical operations to carry out the plan. Develops tactical objectives and organization, and directs all tactical resources.

3. **Planning Section:** Prepares and documents the Incident Action Plan to accomplish the objectives, collects and evaluates information, maintains resource status, and maintains documentation for incident records.

4. **Logistics Section:** Provides support, resources, and all other services needed to meet the operational objectives.

5. **Finance/Administration Section:** Monitors costs related to the incident and provides accounting, procurement, time recording, and cost analysis.

Jump START: A pediatric MCI field triage tool developed to parallel the START triage system, which adequately addresses the unique anatomy and physiology of children.

JumpSTART Pediatric MCI Triage: An acronym for simple triage and rapid transport of patients UNDER THE AGE OF NINE (9). Initial assessment includes ambulatory status (under one year or non-ambulatory), and the following four steps:

- Evaluate breathing
- Respiratory rate
- Palpable pulse
- AVPU (Alert, Voice, Pain, Unresponsive).

Deceased: Not breathing and no palpable pulse; apneic after five (5) rescue breaths.

Immediate: No spontaneous respirations but breathing spontaneously after airway opened or after five (5) rescue breaths.

Respiratory Rate <15 or >45
No palpable pulse
AVPU "P" (Responds to Pain), or "U" (Unresponsive).

Delayed: No AVPU "A" (Alert), or "V" (Responds to Verbal Stimulus).

Minor: Patient is alert and ambulatory on scene.

Medical and Health Operational Area Coordinator (MHOAC): Responsible for all medical and health operations for the operational area. The EMS Agency Administrator or the County Health Officer is the designated MHOAC and is contacted through the County Communications Center (CCC).

MED-NET: VHF (MED NET) radio approved for Inyo & Mono Counties only.

Multiple Casualty Incident (MCI): The combination of numbers of ill/injured patients and the type of injuries going beyond the capability of an entity's normal first response.

National Incident Management System (NIMS): A comprehensive, national approach to incident management that is applicable at all jurisdictional levels and across functional disciplines. The intent of NIMS is to be applicable across a full spectrum of potential incidents and hazard scenarios, regardless of size or complexity. The management system serves to improve

coordination and cooperation between public and private entities in a variety of domestic incident management activities.

Rapid Emergency Digital Data Information Network (ReddiNet): An emergency medical communications network linking hospitals, regional EMS agencies, paramedics, dispatch centers, law enforcement, public health officials and other healthcare systems. The system provides participants with tools for managing MCIs, determining hospital bed availability, assessing available healthcare system resources, communicating, participating in syndromic surveillance, and sending the network messages.

Simple Triage and Rapid Transport (START): A triage system that provides guidelines for prehospital care personnel to rapidly classify victims so that patient treatment and transport are not delayed. Patients are triaged into the following categories:

> **Deceased**: Patients that do not have spontaneous respirations after repositioning the airway.
>
> **Immediate**: Patients that exhibit severe respiratory, circulatory, or neurological symptoms. Patients that require rapid assessment and medical intervention for survival.
>
> **Delayed**: Patients that are neither immediate nor minor but will require a gurney upon arrival at the hospital. Delayed patients are the second priority in patient treatment. These patients require aid, but injuries are less severe.
>
> **Minor**: Patients that are ambulatory, with injuries requiring simple rudimentary first-aid.

Standardized Emergency Management System (SEMS): A system required by Government Code 806 (a), for managing responses to multi-agency and multi-jurisdictional emergencies in California. SEMS consists of five organizational levels which are activated as necessary: (1) field response; (2) local government; (3) operational area; (4) regional; and (5) state.

Staging Area: The location where incident personnel and equipment are assigned on a three minute available status.

Triage: A system that provides guidelines for pre-hospital care personnel to rapidly classify victims so that patient treatment and transport are not delayed

Triage Tag: A tag used by triage personnel to identify and document the patient's triage category.

Unified Command: A team effort that allows all agencies with jurisdictional responsibility for the incident, either geographical or functional, to manage an incident by establishing a common set of incident objectives and strategies. This is accomplished without losing or abdicating agency authority, responsibility, or accountability.

Key Incident Command System Positions:

Air Ambulance Coordinator: Located on the ground, reports to the Patient Transportation Unit Leader. Essential functions include maintaining communications with the Air Operations Branch Director regarding air ambulance transportation assignments. The Air Ambulance Coordinator is to establish and maintain communications with the Medical Communications Coordinator, the Treatment Dispatch Manager and to provide air ambulances upon request from the Medical Communications Coordinator. The position is responsible to assure that necessary equipment is available in the air ambulance for patient needs during transportation. The Coordinator is responsible to maintain records as required and Unit/Activity Log (ICS Form 214).

Air Operations Branch Coordinator: Is ground based and is primarily responsible for preparing the air operations portion of the Incident Action Plan and providing logistical support to helicopters operating on the incident.

Delayed Treatment Area Manager: Responsible for the treatment and re-triage of patients assigned to the Delayed Treatment Area and requesting Medical Teams as necessary. This position assigns treatment personnel to patients received in the Delayed Treatment Area, ensures treatment of patients triaged to the Delayed Treatment Area, ensures that patients are prioritized for transportation and coordinates transportation of patients with Treatment Dispatch Manager.

Ground Ambulance Coordinator: Reports to the Patient Transportation Unit Leader with responsibility to manage the ambulance staging area(s) and to dispatch additional ambulances/transportation resources as needed. Essential duties include establishment of appropriate staging area for ambulances; identify routes of travel for ambulances; and maintain communications with the Air Operations Branch Director regarding air ambulance transportation assignments. The position is to maintain communications with the Medical Communications Coordinator and Treatment Dispatch Manager and to provide ambulances upon request. The Ground Ambulance Coordinator is to assure that necessary equipment is available in the ambulance for patient needs during transportation, provide an inventory of medical supplies available at ambulance staging area for use at the scene, and maintain records as required and Unit/Activity Log (ICS Form 214).

Immediate Treatment Area Manager: Responsible for treatment and re-triage of patients assigned to the Immediate Treatment Area. This position requests medical teams as necessary, assigns treatment personnel to patients, assures that patients are prioritized for transportation and coordinates transportation of patients with the Treatment Dispatch Manager. This position is responsible for identifying immediate patients who exhibit severe respiratory, circulatory or neurological symptoms and who meet one or more categories of Trauma Center Criteria. These patients require rapid assessment, medical intervention and transport to a 9-1-1 receiving, Trauma Center or other specialty center whenever system resources allow.

Litter Bearer: Personnel assigned by the Triage Unit Leader who are responsible for the transport of patients to the appropriate treatment areas.

Litter Bearer Manager: Position assigned by Triage Unit Leader, the Litter Bearer Manager is responsible for the management of personnel assigned to transport triaged patients to the appropriate treatment areas.

Medical Communications Coordinator (Med Com): Establishes communications with the Communications Center or designated base hospital to obtain status of available hospital beds. The Med Com assigns appropriate patient destinations based on available resources. This position receives basic patient information and condition from Treatment Dispatch Manager and provides the Comm Center or base hospital with information on the assigned patient destinations and transporting ambulance unit.

Medical Group/Division Supervisor: Supervises the Triage Unit Leader, Treatment Unit Leader, Patient Transportation Unit Leader and Medical Supply Coordinator and establishes command and control within a medical group. This position determines the amount and types of additional medical resources and supplies needed to handle the incident (medical caches, backboards, litters, and cots), ensures activation or notification of hospital alert system, local EMS/health agencies and maintains Unit/Activity Log.

Minor Treatment Area Manager: Responsible for the treatment and re-triage of patients assigned to the Minor Treatment Area and requests medical teams as necessary. This position assigns treatment personnel to patients received in the Minor Treatment Area, ensures treatment of patients triaged to the Minor Treatment Area, ensures that patients are prioritized for transportation and coordinates transportation of patients with Treatment Dispatch Manager.

Patient Transportation Group Supervisor: Supervises the Medical Communications Coordinator and the Ground Ambulance Coordinator. The Patient Transportation Group Supervisor is responsible for the coordination of patient transportation and maintenance of records relating to the patient's identification, condition, and destination. This position designates the Ambulance Staging Area(s), ensures that patient information and destination are recorded, notifies Ambulance Ground Coordinator of ambulance requests, and coordinates requests for air ambulance transportation through the Air Operations Branch Director.

Triage Personnel: Reports to the Triage Unit Leader, triage patients, tag patients, and assign them to appropriate treatment areas. Triage personnel direct the movement of patients to proper treatment areas and provide appropriate medical treatment to patients prior to movement as incident conditions allow.

Triage Unit Leader: Supervises Triage Personnel, Litter Bearers, Litter Bearer Manager and the Morgue Manager. The Triage Unit Leader assumes responsibility for providing triage management and movement of patients from the triage area. This position implements the triage process, coordinates movement of patients from the triage area to the appropriate treatment area and maintains security and control of the triage area.

Treatment Dispatch Manager: Responsible for coordinating with the Patient Transportation Unit Leader (or Group Supervisor if established) the transportation of patients out of the Treatment Areas. This position establishes communications with the Immediate, Delayed, Minor Treatment

Area Managers and the Patient Transportation Unit Leader. The position verifies that patients are prioritized for transportation and advises Medical Communications Coordinator of patient readiness and priority for transport. This position coordinates transportation of patients with Medical Communications Coordinator and coordinates ambulance loading with the Treatment Managers and ambulance personnel.

Treatment Unit Leader: Assumes responsibility for treatment, preparation for patient transport, and directs movement of patients to loading location(s). This position establishes communications and coordination with Patient Transportation Unit Leader and ensures continual triage of patients throughout Treatment Areas. This position directs movement of patients to ambulance loading area(s) and gives periodic status reports to Medical Group Supervisor.

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ICEMA Medical Director	Date	ICEMA Executive Director	Date