POLICY: 554.00
TITLE: General Protocols

EFFECTIVE: 2/1/2025
REVIEW: 2/2027
SUPERCEDES:

APPROVAL SIGNATURES ON FILE IN EMS OFFICE

GENERAL PROTOCOLS

I. AUTHORITY
Health & Safety Code, Division 2.5, California Code of Regulations, Title 22, Division 9

II. PURPOSE
To serve as the treatment standard for Emergency Medical Responders (EMRs), Emergency Medical Technicians (EMTs), and Paramedics in treating patients.

III. PROTOCOL

A. These are the treatment protocol standards for the Mountain Counties Emergency Medical Services Region. This document is divided into three major sections:

1. **General Procedures**
   a. Contains individual treatment procedures that can be found throughout MCEMSA protocols.
   b. **ALS** or Advanced Life Support procedures are procedures performed by a MCEMSA accredited Paramedic.
   c. **BLS** or Basic Life Support procedures are procedures performed by an individual providing care for an MCEMSA approved or recognized provider. We do not certify all individuals providing BLS care in our system.

2. **Treatment Protocols**
   a. **Adult** – Patient's age 15 and older
   b. **Pediatric** –Patient's age 14 and younger

3. **Field Specific Policies**
   a. Medication Index
   b. Procedure Index

MEDICAL CONTROL

I. STANDING ORDERS

A. **Standing Orders** are "treatments a licensed and accredited ALS, and/or certified EMT, and/or certified EMR provider can perform without Base Hospital permission".

B. The following are considered **Standing Orders:**

1. All BLS skills and treatment

2. All ALS skills and treatment **EXCEPT** those limited to **Base Physician Orders**

II. BASE PHYSICIAN ORDERS

A. **Base Physician Orders** are treatment procedures that require a direct order from a Base Hospital Physician. The Base Hospital Physician may order any medications or procedures within the local paramedic scope of practice regardless of the treatment protocol. Verbal orders **MUST** be signed by the Base Physician and maintained in the patient medical record. The paramedic must call the base hospital to which they are transporting the patient. The physician's name must be documented in the Pre-Hospital Patient Care Report.

B. An MICN may **RELAY** a verbal "**Base Physician Order**" from the Base Physician in accordance with any of the approved protocols.

III. ALS WITHOUT BASE HOSPITAL CONTACT FORM

A. If a paramedic cannot make Base Hospital Physician Contact, a paramedic can perform treatments listed under **"Base Physician Order".**

B. Documentation on an **"ALS without Base Hospital Contact Form"** must be completed listing any **"Base Physician Order"** treatments performed. The form must be forwarded to the Mountain Counties EMS Agency within 24 hours of the call's occurrence.

VASCULAR ACCESS

A. Pre-Vascular Access Device (PVAD) – (e.g., arteriovenous shunt, tunneled catheters, and Peripherally Inserted Central Catheters (PICC lines)

1. A PVAD should only be used when a **life-threatening condition requires immediate fluid therapy or IV medications and no other access is accessible.**

2. A Base Hospital MICN or Physician should be consulted if the paramedic is unfamiliar with the type of indwelling catheter.

3. Aseptic technique **MUST** be followed.

4. Attempt to withdraw and discard 5 mL of blood from the device prior to infusion. If **unable** to withdraw, do not proceed with the infusion.

5. Use a Huber-type non-coring needle, whenever possible.

6. Follow manufacturer recommended settings and insertion techniques.

TRANSPORT

I. TRANSPORT

A. Crew judgement based on clinical presentation, weather and roadway conditions

II. Patient Destination:

A. All patients who wish to be transported by ambulance to the hospital should be transported.

B. Patients should be transported to the closest hospital appropriate for their medical needs within a reasonable transport time or as specified in the patient treatment protocols.

C. During a declared MCI– patient destination will be at the direction of the Medical Group Supervisor, in conjunction with the Disaster Control Facility (DCF) based on location and availability of services.

D. Patients, not meeting specialty care criteria, i.e. Stroke, STEMI and/or Trauma will be transported to the hospital of their preference within a reasonable request. It is recommended the crew consult with their on-duty supervisor to confirm transports to facilities outside of the county that are not a routine destination.

E. If there are multiple patients in one ambulance, all patients will be transported to the same receiving facility.

RESPIRATORY GUIDELINES

A. Endotracheal Intubation:

1. Oral endotracheal intubation, stomal endotracheal intubation, and placement of a King-Tube (perilaryngeal airway) or I-Gel (Supraglottic airway) as a rescue airway are standing orders in patients who require advanced airway management. The I-Gel rescue airway, an approved Supraglottic airway device, may be inserted in any patient that fits on to a length-based tape designed to estimate weight and/or medication doses (ie: Broselow) only if unable to adequately ventilate with BVM using the jaw thrust method and BLS airway adjuncts. **Endotracheal intubation shall not be performed on any patient that fits on a length-based tape designed to estimate weight and/or medication doses (ie: Broselow).**

2. Paramedics must not attempt any form of tracheal intubation more than three (3) times per patient. An attempt to intubate is defined as placement of the laryngoscope blade in a patient's mouth **with the intent to intubate**. A Bougie shall be used as an adjunct to intubation at any time during the intubation procedure. If a total of three attempts are unsuccessful, paramedics will insert an alternative airway (in adults) or use BLS airway techniques (in adults or pediatrics).

3. When appropriate, pediatric patients shall have the appropriate sized I-Gel (Supraglottic airway) inserted following the manufacturers procedure for placing and using the device.

4. Correct tube placement must be confirmed and documented by at least three of the following indicators: Visualize ET tube passing through vocal cords, ET tube fogs with ventilations, equal breath sounds, absent epigastric sounds, and chest rise and fall. All patients must be assessed immediately after intubation with an end-tidal CO_2 detector, colorimetric or continuous waveform. The number of centimeters at which the tube is secured, confirmatory indicators, and color change or waveform reading must be documented on the Prehospital Care Report. All intubated patients must be continuously assessed using ETCO2 waveform capnography. Any significant movement, emesis or change in clinical condition should be reassessed using waveform capnography and physical examination. If, at any time, capnography indicates that the tube is not in communication with the trachea, the airway must be immediately removed and re-intubation attempted.

5. All ET tubes and rescue airways should be secured using a commercially available device designed to secure ET tubes. Rescue airways should be secured according to manufacturer recommendations.

MECHANICAL CHEST COMPRESSION DEVICE

I. If available, the approved mechanical chest compression device shall be deployed by an EMT level or higher on any patient that meets the indications listed in this policy when the device is available, and the approved training has been completed.

II. **Indications**:

A. Patients 15 years of age or older

B. Medical and/or Traumatic cardiac arrest where manual CPR is indicated

III. **Contraindications:**

A. Patients 14 years of age or younger

B. If unable to correctly position the device due to size of the patient's chest.

IV. **Procedure:**

A. Initiate resuscitative measures according to "Cardiac Arrest Algorithms" 554.11

B. DO NOT attempt placement of the mechanical chest compression device until the third (3^{rd}) cycle of manual compressions and at least three (3) rescuers are available to limit interruptions in chest compressions. DO NOT delay any interventions such as: Defibrillation, Intravenous or Intraosseous access, and medication administration for placement of the mechanical chest compression device.

C. Limit interruption in chest compressions to 10 seconds or less

D. Remove all clothing from the front and back of patient's torso.

E. Follow all manufacturer recommendations for application and use of the mechanical compression device.

F. Defibrillation can be performed with the mechanical chest compression device in place. There is no need to stop the device for the purpose of defibrillation.

G. In the event of disruption or malfunction of the mechanical chest compression device, immediately revert to manual CPR.

H. If a cardiac arrest patient is transported, the mechanical chest compression device shall remain in place to continue or resume CPR as necessary.

I. Personnel that deploy a mechanical chest compression device shall ensure

that a person trained and qualified to use the device accompanies the patient to the hospital, even if they are not the primary patient caregiver.

J. All mechanical compression devices will be set at a rate of 100-120 compressions per minute. Changes will only be made with approval of the MCEMSA Medical Director.

K. Any device purchased prior to September 1, 2018, follow manufacturer recommendations for operation.

V. **Mechanical Chest Compression Device Maintenance:**

A. The periodic preventative maintenance of all devices shall meet or exceed the criteria recommended by the manufacturer.

B. Providers shall immediately remove from service any device suspected of malfunctioning. Any malfunctioning device shall not be placed back into service until properly serviced or repaired by the manufacturer's authorized service program.

C. Device maintenance records shall be subject to review and inspected by MCEMSA upon request.

VI. **Quality Improvement:**

A. Documentation and data related to the use of the mechanical chest compression device shall be provided to MCEMSA.

B. All patient contacts involving the use of the mechanical chest compression device shall undergo chart review by the provider QI personnel. Chart review shall include evaluation for appropriate clinical use and adherence to MCEMSA policies and treatment protocols.

C. Any concerns or issues involving the use of the mechanical chest compression device shall be reported to MCEMSA as soon as possible.