Sierra – Sacramento Valley EMS Agency Program Policy			
Mechanical Chest Compression Devices			
	Effective: 06/01/2020	Next Review: 05/2023	**1106**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: Victoria Pinette – Executive Director		SIGNATURE ON FILE

PURPOSE:

To define the approval process for utilization of mechanical chest compression devices, identify the mechanical chest compression devices approved for use, and establish criteria for EMS personnel training and utilization of approved mechanical chest compression devices in the S-SV EMS region.

AUTHORITY:

A. HSC, Division 2.5.

B. CCR, Title 22, Division 9.

POLICY:

A. EMS provider agencies shall obtain S-SV EMS approval prior to utilizing a mechanical chest compression device in the S-SV EMS region. The request for approval shall include the following minimum information:

1. A letter of request for approval to utilize the device(s) from a chief officer.

2. The proposed number and type of devices to be utilized, and the device(s) funding source.

3. The geographical location(s) where the device(s) will be utilized.

4. The anticipated annual number of incidents when the device(s) will be utilized.

5. A description of the proposed initial/ongoing training program, including the anticipated number of personnel to be trained on the use of the device(s).

6. A plan for notifying allied agencies and hospitals of the device(s) use prior to implementation.

7. A description of the provider's QA/QI monitoring of the use of the mechanical chest compression device(s).

B. S-SV EMS shall have sole discretion on device(s) approval. Approval considerations will be based on the following criteria:

   1. Geographical location, including EMS response and transport times.

   2. Manpower.

   3. Anticipated utilization.

   4. Device funding source.

   5. Personnel maintenance of skills and QI.

C. The following mechanical chest compression devices have been approved for use in the S-SV EMS region:

   1. Defibtech Lifeline ARM

   2. Physio Control LUCAS 2 Chest Compression System.

   3. Zoll AutoPulse.

D. EMS personnel may utilize an approved mechanical chest compression device under the following conditions:

   1. They are employed/on-duty with an EMS provider agency approved by S-SV EMS to utilize the device, and have received appropriate training on device use.

   2. They follow the indications, contraindications and device application procedure indicated in applicable S-SV EMS treatment protocols.

   3. They accompany any patient who the device is utilized on to the hospital (if transported), even if they are not the primary patient care provider.

E. Mechanical chest compression device maintenance:

   1. All mechanical chest compression device approved providers shall have a maintenance program for the device.

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

   3. Individuals performing scheduled maintenance or repair shall possess the necessary credentials recommended by the manufacturer.

4. Providers shall immediately remove from service any device suspected of malfunctioning, and manual CPR shall be resumed if necessary. Any malfunctioning device shall not be placed back into service until properly serviced or repaired by the manufacturer or manufacturer's authorized service program.

5. Any device suspected of malfunctioning, that may have adversely affected patient care shall:

    - Be immediately reported to an on-duty provider agency supervisor.
    - Be immediately reported to the RN or physician staff at the receiving facility if the malfunctioning device impacted or has a potential to impact patient health and well-being.
    - Be reported to S-SV EMS by the end of the next business day. The report shall include the provider's name, date of incident, device type/model/serial number, patient's name, incident number, description of the incident, effect on patient care, all actions taken at the time of reporting, and current location of device.
    - Be reported to the manufacturer by the end of the next business day.

6. Maintenance records are subject to review/inspection by S-SV EMS upon request.

F. Allied agency/hospital notification:

Prior to implementation of the device, approved providers shall notify appropriate allied agencies and local receiving hospitals of the use of the device.

G. Records/Data Collection:

1. A patient care report, which includes all of the standard cardiac arrest patient details, shall be completed for each patient on whom the device is applied. The following additional details shall be documented in the patient care report:

    - Total time of manual CPR prior to device application.
    - Time of device application and total time of device use.

2. Documentation and data related to the use of the mechanical chest compression device(s) shall be made available to S-SV EMS upon request.

H. Quality Assurance/Quality Improvement:

1. All patient contacts involving the use of the mechanical chest compression device shall be reviewed by provider QI personnel. This review shall include evaluation for appropriate use, and adherence to S-SV EMS policies/protocols.

2. Any concerns/issues involving the use of the mechanical chest compression device shall be reported to S-SV EMS as soon as possible.