7.0816 MECHANICAL CPR DEVICE

EMSAC JUNE 2026

BLS

~~To establish standards for the use of a chest compression and cardiac catheterization lab-capable mechanical CPR device. In each step of application, minimizing interruptions in compressions is paramount. During use, CPR shall continue to be performed in accordance with Protocol 2.04 – Cardiac Arrest.~~

INDICATIONS

- ~~When a decision is made by Paramedics or Base Physician to Transporting~~ Cardiac arrest due to suspected medical etiology ~~patient~~ with CPR in-progress (and if available) ~~following prior initiation of CPR on scene~~
- ~~Cardiac arrest patients located in a confined space~~
- ~~Applied to Post-ROSC patients for use if pulses are lost during extrication or transport~~
- ~~Other circumstances where use has been approved by Base Physician~~

CONTRAINDICATIONS

- If it is not possible to position the device safely or correctly on the patient's chest
- ~~The~~ Patient ~~is~~ too small: device alerts with 3 fast tones when lowering the suction cup with ~~and you cannot~~ inability to enter the PAUSE mode or ACTIVE mode
- ~~The~~ Patient ~~is~~ too large: ~~you cannot lock the~~ device cannot lock to the back plate without compressing the chest
- ~~Traumatic cardiac arrest of traumatic etiology~~

EQUIPMENT

- LUCAS Chest Compression System device or equivalent

~~PROCEDURE~~ TECHNIQUE

1. Ensure the chest is exposed prior to placement
2. Power the device on (it will automatically enter ADJUST mode)
3. Place the back plate underneath the patient, immediately below the armpits
4. Maintaining manual compressions, attach the support leg nearest you to the back plate
5. Attach the second support leg to the other side of the back plate
6. Pull up once on the device to ensure parts are securely attached
7. Adjust the height of the suction cup until the pressure pad touches the patient's chest, leaving defibrillation pads in place but remove the "puck"
8. Push PAUSE to lock the device in the start position
   Note: If suction cup requires adjustment due to improper placement, push ADJUST (button on far left) to manually set the suction cup to the correct height and placement
9. Use a permanent marker to mark the upper and lower edges of the suction cup on patient's chest in the starting position
   Note: Markings will be referenced as landmarks to ensure suction cup is in appropriate position
10. Push ACTIVE (continuous) or ACTIVE (30:2) to start compressions
11. Prior to patient movement, apply the neck stabilization strap and secure the arms to the

device using the straps on the support legs

12. Verify position of suction cup after each patient movement, device manipulation or device re-engagement
13. If patient obtains ROSC during pulse/rhythm check, PAUSE to stop compressions
14. Transport ~~post~~ ROSC patient with device still attached to patient in the event of a loss of spontaneous circulation

DOCUMENTATION

1. Indicate procedure (eProcedure.03) with mechanically assisted chest compressions
2. Record date and time the mechanical device was applied
3. Include in the narrative or cardiac arrest section that mechanical compressions were initiated

~~**FOR ROSC**~~

~~1. Push PAUSE to stop compressions~~
~~2. Go to Protocol 2.05 – Adult Post-Cardiac Arrest or Return of Spontaneous Circulation~~
~~3. Transport with device still attached to patient in case of loss of spontaneous circulation~~