



**REGION 11
CHICAGO EMS SYSTEM
PROCEDURE**

Title: Transcutaneous Pacing - ALS

Section: Cardiac Management

Approved: EMS Medical Directors Consortium

Effective: March 6, 2025

TRANSCUTANEOUS PACING - ALS

INDICATIONS

- Bradycardia (HR < 50/min) with a pulse causing the patient to be unstable with signs of shock including hypotension (SBP < 100 mmHg) that continues after atropine administration.

CONTRAINDICATIONS

- Pulseless or asymptomatic bradycardia

EQUIPMENT

- Cardiac monitor/defibrillation
- Cardiac leads
- Therapy electrode pads
- Therapy cable

PROCEDURE

1. Apply personal protective equipment: gloves.
2. Apply cardiac monitor leads and identify bradycardia that requires transcutaneous pacing (12-lead ECG if available).
3. Identify and treat underlying causes.
4. Assess adequate oxygenation.
5. Assess pulse and blood pressure.
6. Establish IV access.
7. Consider analgesia prior to procedure per Pain Management Protocol.
8. Attach therapy pads to therapy cable and connect to the cardiac monitor/defibrillator.
9. If necessary, clean and dry skin or remove excess chest hair with razor.
10. Apply pads in the Anterior-Posterior position. First, separate CPR device (puck) from back pad. Apply the back pad to the left of the spine just below the scapula at the heart level (as shown in the picture below). Apply CPR device aligned with the sternal notch. Apply the apex/front electrode over the cardiac apex with the nipple under the adhesive area in a male. Position under breast in a female patient. For pediatric pads, attach as shown in the picture below.



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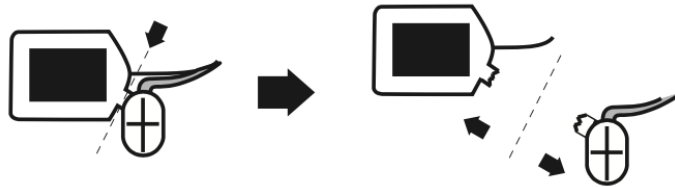
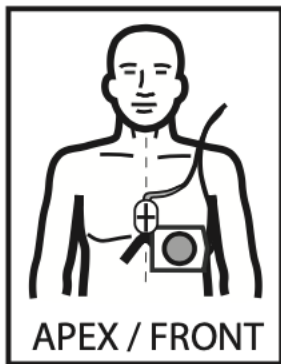
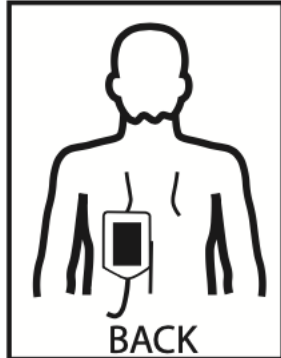
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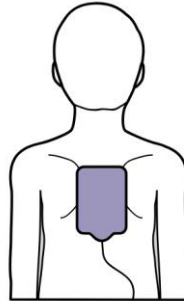
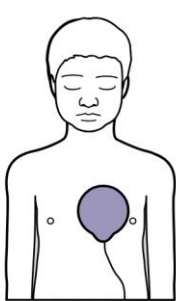
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Adult CPR Stat Padz Placement in Anterior-Posterior Position



CPR Device = puck

Pediatric OneStep Electrodes with Green Connector Placement



11. Assure safe environment – evaluate risk of sparks, combustibles, oxygen-enriched environment.
12. Activate pacer mode to “PACER”.
13. Select rate and increase to 80 beats per minute
14. Select current and increase to 50 mA.
15. Gradually increase delivered current until electrical capture is achieved. The average current needed for capture is between 50-100 mA.



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16. Electrical capture is determined by downward blue pacer spikes with a P and the presence of a widened QRS complex, the loss of any underlying intrinsic rhythm, and the appearance of an extended, and sometimes enlarged, T-wave.
17. Palpate the patient's pulse to assess for mechanical capture.
18. Reassess patient condition.
19. If pulseless, discontinue pacing and initiate Incident Command for Cardiac Arrest (ICCA) procedure.