



ADVOCATE ILLINOIS MASONIC MEDICAL CENTER  
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UNIVERSITY OF CHICAGO MEDICAL CENTER

DATE: June 10, 2021  
TO: Region 11 EMS Providers  
FROM: **REGION 11 EMS MEDICAL DIRECTORS CONSORTIUM**  
SUBJECT: **PEDIATRIC AED PADS AND CARDIAC EQUIPMENT FOR PATIENT CARE**

Automated External Defibrillators (AEDs) in the prehospital setting should be used with the correct defibrillation pads for adult and pediatric patients. The Lifepak 1000 is a defibrillator that should be used with standard defibrillation pads only on adults and children who are 8 years old or more or who weigh more than 25 kg (55 lbs). The defibrillator may be used on children who are less than 8 years old or weigh less than 25 kg (55 lbs) with Infant/Child Reduced Energy Defibrillation pads. These pads reduce or attenuate the proper energy in joules to the pediatric patient.

The Lifepak 1000 can be operated in AED Mode for EMTs or the Manual and ECG Mode for Paramedics. It is the responsibility of EMTs and Paramedics to understand proper device operation and maintenance. Attached is a new Lifepak 1000 Defibrillator (LP1000) – BLS/ALS procedure for Region 11 EMTs and Paramedics that use this device.

**Patient care begins at the time of patient contact.** As per the Region 11 EMS [Initiation of Patient Care](#) policy, for every emergency response, EMTs and Paramedics should bring in the following equipment to the initial contact with the patient: quick response bag, conveyance device, AED or monitor/defibrillator, and the oxygen bag. The monitor/defibrillator should be brought in to every known cardiac or respiratory call.

Please contact your Resource Hospital with questions.

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Attached: Region 11 EMS Lifepak 1000 Defibrillator (LP1000) – BLS/ALS Procedure

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**REGION 11  
CHICAGO EMS SYSTEM  
PROCEDURE**

Title: LIFEPAK 1000 Defibrillator – BLS/ALS
Section: Cardiac Management
Approved: EMS Medical Directors Consortium
Effective: June 10, 2021

## **LIFEPAK 1000 DEFIBRILLATOR (LP1000) – BLS/ALS**

### INDICATIONS

- Unresponsive, not breathing normally, no pulse – AED Mode (BLS)
- Unresponsive, not breathing normally, no pulse – Manual Mode (ALS)
- Conscious and unconscious patients of all ages for the purpose of ECG rhythm recognition and heart rate monitoring – ECG Mode (ALS)

### CONTRAINDICATIONS

None

### EQUIPMENT

- LIFEPAK 1000 Defibrillator
- QUIK-COMBO Defibrillation pads for adults or children over 8 years old or 25 kg (55 lbs.)
- Infant/Child Reduced Energy Defibrillation pads for children less than 8 years old or 25 kg (55 lbs.)
- 3 wire monitoring cable with electrodes (for ALS)
- Razor

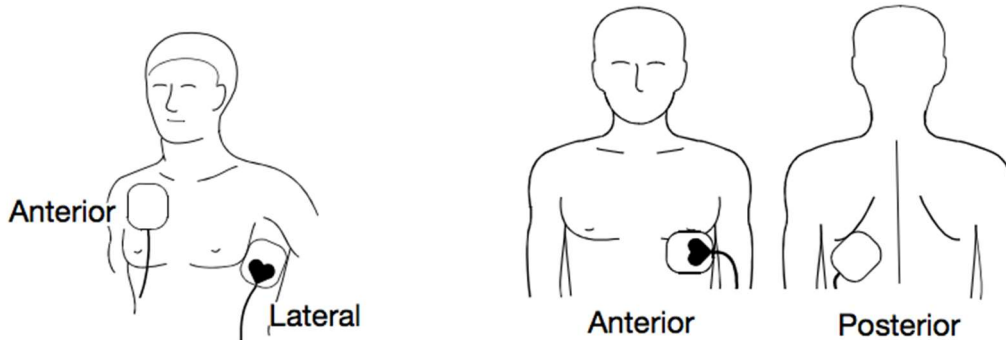
### PROCEDURE FOR BLS RESPONDERS – AED MODE

1. Apply personal protective equipment.
2. Verify patient is in cardiac arrest (unconscious, not breathing normally, no pulse).
3. Begin CPR and ICCA.
4. Turn device on and listen to voice prompts.
5. Prepare the patient for defibrillation pad placement. If necessary, clean and dry skin or remove excess chest hair with razor.
6. Select proper defibrillator pad (adult or pediatric) based on patient age and weight. Open the package and remove the protective liner from the electrodes.
7. Apply pads in the anterior-lateral placement or anterior-posterior placement and press down firmly. Pads should not be placed directly over implanted devices (cardiac defibrillators or pacemakers).



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**Figure 3-1 Anterior-Posterior Placement**

8. Connect the pads to the defibrillator.
9. Follow the screen messages and voice prompts provided by the defibrillator.
10. When the patient is connected to the defibrillator, the voice prompt will advise to stand clear of the patient during ECG analysis, which takes 6-9 seconds.
11. If the defibrillator detects a shockable rhythm, it will prepare to shock and charge to the joule setting for the shock number.
12. The voice prompt will state when charging is complete and the shock button will flash.
13. Verbalize “all clear” and visually ensure that all individuals are clear of the patient, stretcher and any equipment connected to the patient.
14. Press the shock button to discharge the defibrillator. If the shock button is not pressed within 15 seconds, the defibrillator disarms the shock button.
15. Immediately resume CPR.
16. If the defibrillator detects a nonshockable rhythm, the voice prompt will advise that no shock is advised and CPR should be resumed.
17. Continue CPR and analyze rhythm every two minutes.

**PROCEDURE FOR ALS RESPONDERS – MANUAL MODE**

1. Convert to manual mode by pressing the menu button and select “YES” to enter manual mode. The ECG tracing and Heart Rate Indicator will appear on the screen.



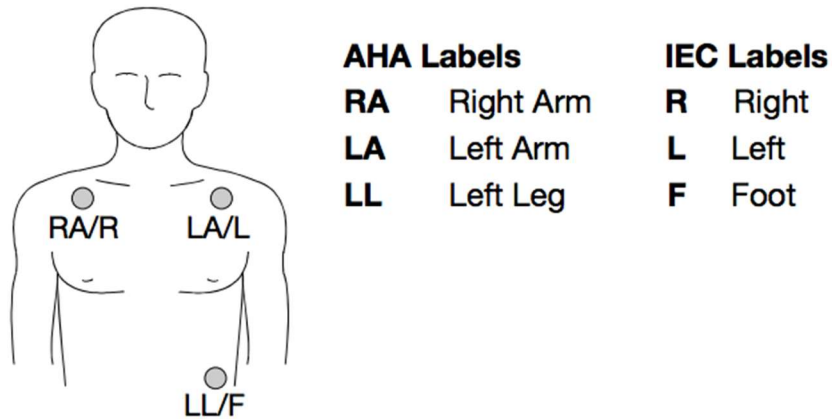
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2. If the displayed ECG rhythm appears shockable, press “CHARGE” to initiate charging of the defibrillator. The screen will indicate that the defibrillator is charging and a charge tone will sound.
3. Verbalize “all clear” and visually ensure that all individuals are clear of the patient, stretcher and any equipment connected to the patient.
4. When the charge is complete, press the flashing shock button to delivery energy to the patient.
5. After delivering a shock, the energy for each subsequent shock is automatically selected based on the energy level configurations (200J, 300J, 360J).
6. To remove an unwanted shock at any time, select “DISARM”.
7. To initiate an automatic rhythm analysis while in manual mode, select “ANALYZE”.

**PROCEDURE FOR ALS RESPONDERS – ECG MODE**

1. Connect the ECG cable.
2. Apply ECG electrodes to the patient’s chest.



**Figure 3-2** Connecting the ECG Electrodes for use with ECG cable

3. After the ECG electrodes are connected, the defibrillator displays the patient’s heart rhythm and heart rate in a lead II configuration.
4. While in ECG mode, the defibrillator’s shock capability is disabled; however, the defibrillator continues to evaluate the patient’s ECG for a potentially shockable rhythm. The patient’s status should be reassessed including presence of a pulse.



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5. If a shockable rhythm is detected, the defibrillator will prompt to connect the defibrillation pads.
6. Remove the ECG cable and connect the defibrillation pads to the defibrillator.
7. Apply the defibrillation pads to the patient's chest keeping them at least 2.5 cm (1 inch) away from the ECG electrodes. If necessary, remove the ECG electrodes.
8. Defibrillate as indicated and begin ICCA.

**MANAGING DEFIBRILLATOR DATA**

1. LIFEPAK 1000 data can be uploaded to CODE-STAT.