

SECTION: C-2a

TITLE: Adult Cardiopulmonary Arrest – BLS and AEMT Algorithms

REVISED: July 01, 2024

Box #1:
If adequate/good CPR is being performed upon arrival :

1. Confirm cardiopulmonary arrest.
2. Transition to High-Performance CPR (see *Appendix 30: High-Performance Resuscitation*) while applying AED pads
3. Move on to, “**Box 4.**”

Box #2:
Sudden, witnessed arrest in the presence of EMS:

1. Perform High-Performance CPR (see *Appendix 30: High-Performance Resuscitation*) only long enough to apply AED pads.
2. Move on to, “**Box 4.**”

Box #3:
If inadequate CPR, or no CPR at all, is being performed upon arrival:

1. Initiate/Perform High-Performance CPR (see *Appendix 30: High-Performance Resuscitation*)
2. During CPR:
 - a. Apply AED pads, Turn on AED at end of first cycle of compressions (i.e. about 200 - 220 compressions)
3. Move on to, “**Box 4,**” **after** approximately 2 minutes/200-220 compressions CPR completed

Box #4:

1. **Begin AED Analysis of Rhythm** (See *Appendix 11: Electrical Therapy*)

Shock Advised:	<u>NO</u> Shock Advised / No Pulse	<u>NO</u> Shock Advised/ has Pulse (ROSC)
<ol style="list-style-type: none"> a) Clear patient. a) Shock b) Immediately resume HP-CPR without pause for rhythm check. c) OPA/NPA and BVM as appropriate d) Advanced airway management as appropriate (AEMT) e) Vascular Access as appropriate (AEMT) 	<ol style="list-style-type: none"> a) No shock indicated. b) Immediately resume HP-CPR. c) OPA/NPA and BVM as appropriate d) Advanced airway management as appropriate (AEMT) e) Vascular Access as appropriate (AEMT) 	<ol style="list-style-type: none"> a) Provide hemodynamic support b) Evaluate for POST-arrest/TTM care c) Advanced airway management as appropriate (AEMT) d) Vascular Access as appropriate (AEMT) e) Update ALS f) Monitor closely for re-arrest

ADULT CARDIOPULMONARY ARREST – BLS/AEMT

Protocol C-02a

ADULT CARDIOPULMONARY ARREST – BLS/AEMT

Physician PEARLS:

Continue the High-Performance CPR (see *Appendix 30: High-Performance Resuscitation*) sequence until:

1. Transfer to a higher level of care occurs.
2. Patient regains a pulse
 - a. Initiate supportive care (i.e. oxygen via non-rebreather or BVM assisted breaths if necessary.)
 - b. Monitor for rearrest closely
3. Resuscitative efforts are terminated (See *Protocol G-04: Special Resuscitation Situations*)

Treat underlying causes simultaneously with High-Performance CPR (see *Appendix 30: High-Performance Resuscitation*) but do not sacrifice the quality of CPR while doing so. High-Performance CPR remains the top priority. Search for, consider, & treat possible contributing factors (as the scope of practice allows):

- Hypovolemia
- Hypoxia
- Hydrogen ion (acidosis)
- Hypo-/hyperkalemia
- Hypothermia
- Toxins
- Tamponade, cardiac
- Tension Pneumothorax
- Thrombosis (coronary or pulmonary)
- Other potential precipitating causes (i.e. Hypoglycemia, etc)
 - Obtain a BG as soon as feasible.

VASCULAR ACCESS: IV access is the preferred method of vascular access with IO as a secondary option if IV access is unsuccessful.

ENERGY SETTINGS: See *Appendix 11: Electrical Therapy Procedures and Guidelines*. Most ACCESS AEDs and Monitors have been set to deliver max energy settings (200 j), though this does not preclude the use of different devices/settings when needed.