TREATMENT PROTOCOL: NON-TRAUMATIC CARDIAC ARREST (ADULT) *

1. Basic airway
2. If arrest not witnessed by EMS:
   CPR for 2min at a compression rate of at least 100/min, minimize interruptions to chest compressions
3. Cardiac monitor: document rhythm and attach ECG strip
4. If asystole, confirm in more than one lead
5. If fine V-Fib is suspected, treat with V-Fib/Pulseless V-Tach

A 12-lead ECG shall be acquired on patients who complain of chest pain/discomfort of suspected cardiac etiology, non-traumatic post cardiac arrest patients with a return of spontaneous circulation (ROSC) and/or patients who the paramedics suspect are experiencing an acute cardiac event.

<table>
<thead>
<tr>
<th>ASYSTOLE / PEA</th>
<th>V-FIB / PULSELESS V-TACH</th>
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<tbody>
<tr>
<td>6. If confirmed PEA, consider causes 1</td>
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<td>7. Venous access, if unable: place IO (if available)</td>
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<tr>
<td>8. <strong>Epinephrine</strong> (0.1mg/mL) 3</td>
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<td>9. Consider advanced airway 2, capnography</td>
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<td>10. If narrow complex and heart rate greater than 60bpm: <strong>Normal saline</strong> fluid challenge</td>
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<td>10ml/kg IV or IO at 250ml increments</td>
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<tr>
<td>11. CPR for 2min</td>
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<tr>
<td>12. <strong>CONTINUE SFTP or BASE CONTACT</strong></td>
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<tr>
<td>13. <strong>Epinephrine</strong> (0.1mg/mL) 3</td>
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<tr>
<td>1mg IVP or IO</td>
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<tr>
<td>14. If down time greater than 20min: <strong>Sodium bicarbonate</strong></td>
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<tr>
<td>1mEq/kg IV push</td>
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<td>15. If resuscitative efforts are successful: Perform 12-lead ECG 5</td>
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<td>16. If resuscitative efforts are unsuccessful and the patient does not meet ALL criteria for Termination of Resuscitation in Ref. No. 814, Section II.A., consult with the Base Physician 7</td>
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<td>17. Check rhythm 3, and if indicated: Defibrillate</td>
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<tr>
<td>18. <strong>Epinephrine</strong> (0.1mg/mL) 3</td>
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<td>19. CPR for 2min</td>
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<tr>
<td>20. Check rhythm, and if indicated: Defibrillate</td>
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<tr>
<td>21. <strong>Amiodarone</strong> 300mg IV or IO</td>
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<tr>
<td>22. CPR for 2min</td>
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<tr>
<td>23. Check rhythm, and if indicated: Defibrillate</td>
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<tr>
<td>24. <strong>Amiodarone</strong> 150mg IV or IO</td>
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<tr>
<td>25. If resuscitative efforts are successful: Perform 12-lead ECG 5</td>
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</tbody>
</table>

6. Defibrillate 5 6 |
   Biphasic at 120-200J (typically) |
   Monophasic at 360J |
7. CPR for 2min |
8. Venous access, if unable: place IO (if available) |
9. Check rhythm 3, and if indicated: Defibrillate |
10. Biphasic at 200J, monophasic at 360J |
11. **Epinephrine** (0.1mg/mL) 3 |
   1mg IVP or IO |
12. Consider advanced airway 2, capnography |
13. Check rhythm, and if indicated: Defibrillate |
14. **CONTINUE SFTP or BASE CONTACT** |
15. **Amiodarone** 300mg IV or IO |
16. CPR for 2min |
17. Check rhythm, and if indicated: Defibrillate |
18. **Epinephrine** (0.1mg/mL) 3 |
   1mg IVP or IO |
19. CPR for 2min |
20. Check rhythm, and if indicated: Defibrillate |
21. **Amiodarone** |
   150mg IV or IO |
   Maximum total dose 450mg |
22. CPR for 2min |
23. Check rhythm, and if indicated: Defibrillate |
24. **Amiodarone** |
   150mg IV or IO |
25. If resuscitative efforts are successful: Perform 12-lead ECG 5
26. If resuscitative efforts are unsuccessful consult with the Base Physician.

SPECIAL CONSIDERATIONS

1. Consider causes of PEA: acidosis; cardiac tamponade; drug overdose; hyperkalemia; hypothermia; hypovolemia; hypoxia; massive MI; pulmonary embolus; or tension pneumothorax

Drugs to consider for specific suspected causes:

If hypoglycemia is suspected:
- DEXTROSE 10% OR DEXTROSE 50%
  - 250ml IV or IO
  - 50mL IVP or IO

If narcotic overdose is suspected:
- NARCAN (naloxone)
  - 0.8-2mg IV or IO
  - 2mg IN or IM

If dialysis patient:
- CALCIUM CHLORIDE - BASE CONTACT REQUIRED
  - 1gm IV or IO

- SODIUM BICARBONATE – BASE CONTACT REQUIRED
  - 1mEq/kg IV or IO

If tricyclic overdose suspected:
- SODIUM BICARBONATE – BASE CONTACT REQUIRED
  - 1mEq/kg IV or IO

If calcium channel blocker overdose suspected:
- CALCIUM CHLORIDE – BASE CONTACT REQUIRED
  - 1gm IV or IO

2. Attempt to limit interruptions in CPR to no more than 10sec with advanced airway. Should utilize end tidal CO₂ monitoring for advanced airway and monitoring ROSC.

3. Pulse check if a change in ECG rhythm, take no longer than 10sec to check for a pulse. If no pulse is detected within 10sec, resume chest compressions.

4. If hypothermia is suspected, administer only one dose of epinephrine and no other medications until the patient is re-warmed.

5. Biphasic defibrillator settings may vary; refer to manufacturer’s guidelines. If unknown, use 200J for biphasic, 360J for monophasic.

6. If hypothermia is suspected, defibrillate only once until the patient is re-warmed.

7. If hypothermia is suspected, resuscitation efforts should not be abandoned until the patient is re-warmed, or the base hospital orders termination of resuscitative efforts.

8. Post cardiac arrest patients with ROSC, with or without a 12 lead ECG analysis equivalent to “Acute MI”, shall be transported to the most accessible open SRC if ground transport is 30 minutes or less regardless of service agreement rules and/or considerations.