## Cardiac Arrest – Asystole/Pulseless Electrical Activity (PEA)

### BLS Procedures

<table>
<thead>
<tr>
<th>ADULT</th>
<th>PEDIATRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiate Cardiac Arrest Management (CAM) Protocol</td>
<td>Airway management per VCEMS policy</td>
</tr>
</tbody>
</table>

#### ALS Standing Orders

**Adult**

<table>
<thead>
<tr>
<th>Assess for and treat underlying cause</th>
<th>IV/IO access</th>
<th>PRESTO Blood Draw</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epinephrine* 0.1 mg/ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administer ASAP goal ≤6 minutes</td>
<td>IV/IO 1 mg (10 mL) q 6 min</td>
<td></td>
</tr>
<tr>
<td>Repeat x 2, max of 3 doses during initial arrest.</td>
<td>Repeat x 1 in 10 min</td>
<td></td>
</tr>
<tr>
<td>If ROSC then re-arrest an additional 3 doses may be administered.</td>
<td>Repeat x 2, max of 3 dose during initial arrest.</td>
<td></td>
</tr>
</tbody>
</table>

**Normal Saline**

- IV/IO bolus- 1 Liter

**ALS Airway Management**

- If unable to ventilate by BLS measures, initiate appropriate advanced airway procedures in accordance with policy 710.

**When one of the following is a suspected cause of arrest:**

- **History of Renal Failure/Dialysis**
  - Calcium Chloride
    - IV/IO – 1 g
    - Repeat x 1 in 10 min
  - Sodium Bicarbonate
    - IV/IO – 1 mEq/kg
    - Repeat x 2 0.5 mEq/kg q 5 min

- **Tricyclic Antidepressant Overdose**
  - Sodium Bicarbonate
    - IV/IO – 1 mEq/kg
    - Repeat x 2 0.5 mEq/kg q 5 min

- **Beta Blocker Overdose**
  - Glucagon
    - IV/IO – 2 mg up to 10 mg when available

- **Calcium Channel Blocker Overdose**
  - Calcium Chloride
    - IV/IO – 1 g
    - Repeat x 1 in 10 min
  - Glucagon
    - IV/IO – 2 mg up to 10 mg when available

**Pediatric**

<table>
<thead>
<tr>
<th>Assess for and treat underlying cause</th>
<th>IV/IO access</th>
<th>PRESTO Blood Draw</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epinephrine* 0.1 mg/ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administer ASAP goal ≤6 minutes</td>
<td>IV/IO 0.01 mg/kg (0.1 mL/kg) q 6 min</td>
<td></td>
</tr>
<tr>
<td>Repeat x 2, max of 3 dose during initial arrest.</td>
<td>Repeat x 1 in 10 min</td>
<td></td>
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<td>If ROSC then re-arrest an additional 3 doses may be administered.</td>
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</tr>
</tbody>
</table>

**Normal Saline**

- IV/IO bolus- 20 mL/kg

**ALS Airway Management**

- If unable to ventilate by BLS measures, initiate appropriate advanced airway procedures in accordance with policy 710.

**When one of the following is a suspected cause of arrest:**

- **History of Renal Failure/Dialysis**
  - Calcium Chloride
    - IV/IO – 20 mg/kg
    - Repeat x 1 in 10 min
  - Sodium Bicarbonate
    - IV/IO – 1 mEq/kg
    - Repeat x 2 0.5 mEq/kg q 5 min

- **Tricyclic Antidepressant Overdose**
  - Sodium Bicarbonate
    - IV/IO – 1 mEq/kg
    - Repeat x 2 0.5 mEq/kg q 5 min

- **Beta Blocker Overdose**
  - Glucagon
    - IV/IO – 0.1 mg/kg up to 10 mg when available

- **Calcium Channel Blocker Overdose**
  - Calcium Chloride
    - IV/IO – 20 mg/kg
    - Repeat x 1 in 10 min
  - Glucagon
    - IV/IO – 0.1 mg/kg up to 10 mg when available

### Base Hospital Orders Only

*Consult with ED Physician for further treatment measures

**Additional Information:**

- If sustained ROSC (> 30 seconds), activate VF/VT alarm and initiate post arrest resuscitation as outlined in Policy 733: Cardiac Arrest management and Post Arrest Resuscitation.
- For termination of resuscitation, transport decisions, and use of base hospital consult reference Policy 733: Cardiac Arrest Management and Post Arrest Resuscitation.
- If patient is hypothermic – only ONE round of medication administration prior to Base Hospital contact. Field determination of death is discouraged in these patients and they should be transported to the most accessible receiving facility.

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**Effective Date:** July 1, 2020  
**Next Review Date:** May 31, 2022  
**Date Revised:** May 14, 2020  
**Last Reviewed:** May 14, 2020  
**VCEMS Medical Director**