# Cardiac Arrest – VF/VT

## ADULT

### BLS Procedures

Initiate Cardiac Arrest Management (CAM) Protocol
Airway management per VCEMS policy

### ALS Standing Orders

**Defibrillate**
- Use the biphasic energy settings that have been approved by service provider medical director
- Repeat every 2 minutes as indicated.
- If VF/VT stops then recurse use last successful Joules setting.

**IV or IO access**
- PRESTO Blood Draw

**Epinephrine**

* 0.1 mg/mL

Administer ASAP goal ≤6 minutes
- IV/IO – 1 mg (10 mL) q 6min
- Repeat x 2 for max of 3 doses during initial arrest.
- If ROSC then re-arrest an additional 3 doses may be administered.

**Amiodarone**
- IV/IO – 300 mg – after second defibrillation
- If VT/VF persists, 150 mg IV/IO in 3-5 minutes

**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 Torsades de Pointes is identified:
- Magnesium Sulfate
  - IV/IO – 2 g over 2 min
  - Repeat x 1 in 5 min

Treat underlying causes when identified:
- Renal Failure / History of Dialysis:
  - Calcium Chloride
  - IV/IO – 1g
  - Repeat x 1 in 10 min
- Sodium Bicarbonate
  - IV/IO – 1 mEq/kg
  - Repeat 0.5 mEq/kg x 2 q 5 min

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

### 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 and limit defibrillation to 6 times 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
- Ventricular tachycardia (VT) is a rate > 150 bpm

## PEDIATRIC

### Defibrillate – 2 Joules/kg

- If patient still in VF/VT at rhythm check, increase to 4 Joules/kg
- Repeat every 2 minutes as indicated
- If VF/VT stops then recurse use last successful Joules setting.

### IV or IO access

- PRESTO Blood Draw

**Epinephrine**

* 0.1 mg/mL

Administer ASAP goal ≤6 minutes
- IV/IO – 0.01 mg/kg (0.1 mL/kg) q 6 min
- Repeat x 2 for max of 3 dose during initial arrest.
- If ROSC then re-arrest and additional 3 doses may be administered.

**Amiodarone**
- IV/IO – 5 mg/kg – after second defibrillation
- If VT/VF-persists, 2.5 mg/kg IV/IO in 3-5 minutes

**Normal Saline**
- IV/IO 20 mL/kg bolus

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

When Torsades de Pointes is identified:
- Magnesium Sulfate
  - IV/IO – 40 mg/kg over 2 min
  - Repeat x 1 in 5 min

Treat underlying causes when identified:
- Renal failure / History of Dialysis:
  - Calcium Chloride
  - IV/IO – 20 mg/kg
  - Repeat x 1 in 10 min
- Sodium Bicarbonate
  - IV/IO – 1 mEq/kg
  - Repeat 0.5 mEq/kg x 2 q 5 min

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

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VCEMS Medical Director