

CARDIAC ARREST **ASYSTOLE / PULSELESS ELECTRICAL ACTIVITY (PEA)**

ADULT

PEDIATRIC - (14 years and under)

BLS Procedures

Perform Cardiac Arrest Management

- Initiate Compressions
- Apply AED & Defibrillate as Indicated
- Airway Management
 - o Refer to Policy 533-02: Airway Management
- Refer to Policy 533-9a: Cardiac Arrest Management

Perform Cardiac Arrest Management

- Neonatal Resuscitation (0 to 28-days-old)
 - o Refer to 533-31 Neonatal Resuscitation
- Initiate Compressions
- · Apply AED & Defibrillate as Indicated
- Airway Management
- Refer to Policy 533-02: Airway Management
 Refer to Policy 533-9a: Cardiac Arrest Management

Expanded Scope

Same as BLS

Same as BLS

ALS Prior to Base Hospital Contact

Confirmation of Asystole

- Increase cardiac monitor gain to 2.0 to rule out fine VF
 - o If Ventricular Rhythm
 - Refer to Policy 533-09b: Cardiac Arrest VF/VT

Perform the Following

- Vascular Access
- Cardiac Monitor Paddles Mode
- Airway Management
 - Maintain and ensure airway patency
 - o Refer to Policy 533-02: Airway Management

Epinephrine - 0.1mg/1mL

• IV/IO - 1mg (10mL) every 3-5 min

Normal Saline

• IV/IO - 1000mL

When One of the Following is the Suspected Cause of Arrest:

Suspected Renal Failure or Suspected Hyperkalemia Calcium Chloride

- IV/IO 1g
 - o Repeat x 1 in 10 min

Sodium Bicarbonate

- 2nd vascular access site if available
- IV/IO 1mEq/kg
 - o Repeat 0.5mEq/kg every 5 min x 2

Tricyclic Antidepressant Overdose

Sodium Bicarbonate

- IV/IO 1mEq/kg
 - o Repeat 0.5mEq/kg every 5 min

Suspected Beta-Blocker or Calcium Channel Blocker OD **Calcium Chloride**

- IV/IO 1g over 1 minute
 - o Repeat x 1 in 10 min

Glucagon

- IV/IO 2mg (May repeat x 5 if available)
 - Total Max 10mg

Effective Date: April 1, 2024

Consider Ondansetron administration (if not in arrest)

Confirmation of Asystole

- Increase cardiac monitor gain to 2.0 to rule out fine VF
 - o If Ventricular Rhythm
 - Refer to Policy 533-09b: Cardiac Arrest VF/VT

Perform the Following

- Vascular Access
- Cardiac Monitor Paddles Mode
- Airway Management
 - o Maintain and ensure airway patency
 - o Refer to Policy 533-02: Airway Management

Epinephrine - 0.1mg/1mL

• IV/IO - 0.01mg/kg (0.1mL/kg) every 3-5 min

Normal Saline

IV/IO – 20mL/kg

When One of the Following is the

Suspected Cause of Arrest:

Suspected Renal Failure or Suspected Hyperkalemia Calcium Chloride

- IV/IO 20mg/kg
 - o Repeat x 1 in 10 min

Sodium Bicarbonate

- 2nd vascular access site if available
- IV/IO 1mEq/kg
 - o Repeat 0.5mEg/kg every 5 min x 2

Tricyclic Antidepressant Overdose

Sodium Bicarbonate

- IV/IO 1mEq/kg
- o Repeat 0.5mEg/kg every 5 min

Suspected Beta-Blocker or Calcium Channel Blocker OD **Calcium Chloride**

- IV/IO 20mg/kg
- o Repeat x 1 in 10 min

Glucagon

- IV/IO 0.05mg/kg (Max of 5mg per Dose)
- o If no response within 15 mins:
 - May repeat until Max 10mg (if available)
- Consider **Ondansetron** administration (if not in arrest)

Early Base Hospital Contact for All Peds Cardiac Arrests

Last Reviewed/Revised: December 31, 2023 Next Review Date: December 31, 2025



Santa Barbara County EMS County Wide Protocols

Policy 533-09c

Base Hospital Physician Orders Only

Consult with ED Physician for further treatment measures

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Additional Information

ROSC > 30 Seconds

- Initiate Post-Arrest Resuscitation
- Refer to Policy 533-9a: Cardiac Arrest Management

Hypothermic Patients

• Refer to Policy 533-9a: Cardiac Arrest Management

Modifications for Pregnancy

Refer to Policy 533-9a: Cardiac Arrest Management

Miscellaneous

- EMS personnel must contact the BH prior to termination of resuscitation for all cardiac arrests regardless of rhythm.
- EMS Personnel must perform 20 minutes of resuscitation at minimum while on scene of a cardiac arrest except when:

 Patient is in persistent VF/VT, at which point, resuscitation
 - Patient is in persistent VF/VT, at which point, resuscitation must be ≥ 30 minutes;
 - Refer to Policy 533-9a: Cardiac Arrest Management
 - o The scene is unsafe/unworkable;

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- o EMS is presented with an active DNR/POLST; or
- Base Hospital Orders have been obtained to terminate outside of parameters mentioned above.
- After minimum resuscitation time and BH contact, EMS personnel may terminate resuscitation efforts
- Naloxone and assessing BGL are not indicated for patients in cardiac arrest, but if ROSC is achieved, Naloxone and BGL may be considered.
- For patients with non-shockable rhythms, the earlier epinephrine is given, the more likely the patient is to survive.

ROSC > 30 Seconds

- Initiate Post-Arrest Resuscitation
- Refer to Policy 533-9a: Cardiac Arrest Management
- All pediatric resuscitation patients are to be transported to the closest hospital.

Hypothermic Patients

Refer to Policy 533-9a: Cardiac Arrest Management

Modifications for Pregnancy

• Refer to Policy 533-9a: Cardiac Arrest Management

Miscellaneous

- Naloxone and assessing BGL are not indicated for patients in cardiac arrest, but if ROSC is achieved, Naloxone and BGL may be considered.
- For patients with non-shockable rhythms, the earlier epinephrine is given, the more likely the patient is to survive.

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