Santa Barbara County EMS County Wide Protocols

Policy 533-09b

CARDIAC ARREST
VF/VT

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
 - o 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

Defibrillation

- Defibrillate every 2 minutes (as indicated) using highest Joule setting
 - Zoll: 200
 - LifePak: 360

Perform the Following

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

Epinephrine - 0.1mg/1mL

o IV/IO - 1mg (10mL) every 3-5 min

Amiodarone

- o IV/IO − 300mg after 2nd defibrillation
 - Repeat 150mg if VT/VF persists after 3 minutes
 - Max Total Dose 450mg

Normal Saline

o IV/IO - 1000mL

Torsades de Pointes

Magnesium Sulfate

- $_{\circ}$ IV/IO 2g over 2 min (Slow IVP)
 - Repeat x 1 in 5 min

Suspected Renal Failure or Suspected Hyperkalemia Calcium Chloride

- ∘ IV/IO 1g
- Repeat x 1 in 10 min

Sodium Bicarbonate

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

Tricyclic Antidepressant Overdose

Sodium Bicarbonate

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

Defibrillation

- o **Defibrillate** every 2 minutes using escalating Joules doses
 - 2, 4, 6, 8, 10 Joules/kg (or adult dose)
 - If the patient rearrests, initial defibrillation should be at the last successful energy level, then escalate as indicated

Perform the Following

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

Epinephrine – 0.1mg/1mL

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

Amiodarone

- o IV/IO − 5mg/kg (max 300mg) after 2nd defibrillation
- If VT/VF persists, may repeat 5mg/kg (max 150mg) every 5 minutes x 2
- Max Total Dose of 15mg/kg or 450mg (whichever is lower)

Normal Saline

IV/IO − 20mL/kg

Torsades de Pointes

Magnesium Sulfate

- IV/IO 50mg/kg over 2 min (Slow IVP)
 - Max 2000mg

Suspected Renal Failure or Suspected Hyperkalemia

Calcium Chloride

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

Sodium Bicarbonate

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

Tricyclic Antidepressant Overdose

Sodium Bicarbonate

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



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Base Hospital Physician Orders Only

Consult with ED Physician for further treatment measures

Consult with ED Physician for further treatment measures

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.
- Ventricular tachycardia (VT) is a rate > 150 bpm
- EMS Personnel must perform 20 minutes of resuscitation at a minimum while on scene of a cardiac arrest except when:
 - o Patient is in persistent VF/VT, at which point, resuscitation must be ≥30 minutes;
 - Refer to Policy 533-9a: Cardiac Arrest Management
 - The scene is unsafe/unworkable;
 - o EMS is presented with an active DNR/POLST; or
 - o Base Hospital Orders have been obtained to terminate outside of the 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.

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

- Ventricular tachycardia (VT) is a rate > 150 bpm
- Naloxone and assessing BGL are not indicated for patients in cardiac arrest, but if ROSC is achieved, Naloxone and BGL may be considered.

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

Signature on File

Effective Date: April 1, 2024