

Medical Arrest	
ADULT	PEDIATRIC
Primary Direction	

- In the absence of factors requiring rapid transport (e.g., unsafe scene), all attempts should be made to perform resuscitative efforts on scene for a MINIMUM of 20 minutes or until ROSC is achieved.
- Transport pediatrics after 10 minutes of on-scene ALS interventions.
- Movement and transport of patients interrupts CPR and prevents adequate depth and rate of compressions.

BLS	
Compression depth 2" - 2.5"	Compression depth of at least 1/3 the diameter of the chest size

#### Operating with less than 3 EMS personnel.

## **Provide High Performance CPR**

• If Mechanical Compression Device is utilized, minimize pauses, and follow guidelines under General Protocols 554.00.

#### Automated External Defibrillator (AED)

• Follow AED prompts, shock if indicated.

#### Once compressions and AED are deployed

- Passive Oxygenation via Non-rebreather mask 15 LPM
- OPA and bilateral NPAs

## Operating with 3 or more EMS personnel \*OR\* after 8 minutes of resuscitation

- High Performance CPR
- Ventilate BVM with 100% Oxygen
- 1 ventilation every 6-8 seconds
- Establish Agency approved appropriately sized Supraglottic Airway (SGA) device.

Consider earlier ventilations for pediatrics, as most medical cardiac arrests in pediatrics are hypoxia driven.

## **ALS**

Cardiac monitor (Defibrillation Pads).

EtC02.

IV/IO Access (Humeral IO for adults is preferred over tibia IO).

Identify and treat any potential reversible causes.

## Ventricular Fibrillation (VF)/Pulseless Ventricular Tachycardia (VT)

## Manual Defibrillation on a 2-minute cycle

- Pre-charge the monitor at least 15 seconds before pulse check, continue compressions during charging.
- Minimize pause to less than 10 seconds.
- Switch compressors every 2 minutes if not using mechanical compression device.

# Defibrillate using manufacturer recommended energy dose.

- Repeat as necessary at every pulse check.
- Increase dose per manufacturer recommendation.

#### Epinephrine (1:10,000) 1 mg IV/IO

- Repeat every 3 5 minutes.
- Max dose 5 mg.

## Amiodarone 300 mg (first dose) Slow push IV/IO

- Repeat x 1 in 3 5 minutes with 150 mg.
- Flush with NS 10 mL

## Defibrillate 2 J/kg

Repeat every 2 minutes at 4 J/kg.

## Epinephrine (1:10,000) 0.01 mg/kg IV/IO

- Repeat every 3 5 minutes.
- No Max.

## Amiodarone 5 mg/kg Slow Push IV/IO

- Max single dose 300 mg.
- May repeat x 1 in 3 5 minutes.
- Flush with NS 10 mL

## Asystole/Pulseless Electrical Activity (PEA)

## Address reversible causes based on applicable protocols

#### Epinephrine (1:10,000) 1 mg IV/IO

- Repeat every 3 5 minutes.
- Up to a Max of 5 mg

#### Calcium Chloride 1 gm IV/IO

- Administer over 2 minutes.
- Only If Hyperkalemia highly suspected
- Do not use for prolonged downtime.

## Epinephrine (1:10,000) 0.01 mg/kg IV/IO

- Repeat every 3 5 minutes.
- No Max

# Airway Considerations

- BLS airway or SGA is the preferred method of airway management during cardiac arrest unless advanced airway is indicated.
- See General Protocols (554.00) for advanced airway management options.

#### **Consideration in Pregnancy Greater Than 20 Weeks Gestations**

- Place patient 25 degrees left lateral on backboard for CPR.
- IV/IO should be above the diaphragm.
- Pregnant patients are more prone to hypoxia so oxygenation and airway management should be prioritized.
- Consider early SGA or ETT.
- Do not interrupt CPR to perform procedures.
- Prepare for early transport after 4 minutes of CPR.

## **Termination of Resuscitation (TOR)**

## After a minimum of 20 minutes of resuscitation, consider TOR in the following conditions:

- Patient remains pulseless with no signs of life (unreactive pupils, EtC02 less than 10 mmHg, developing lividity).
- Persistent asystole
- PEA less than 40 BPM.

## **Special Considerations**

- Consider transport if patient has persistent narrow complex PEA greater than 100, or persistent V-Tach/V-Fib after 20 minutes of CPR.
- If resuscitative efforts are terminated, personnel shall confirm and document the patient's cardiac rhythm in 2 separate ECG Leads and document rhythm strips of at least 6 second duration.
- This policy does not apply to Mass Casualty Incidents.
- Transmit Code Report via Physio Control Monitor Required for all cardiac arrests.

## **Base Hospital Orders**

Contact Base Hospital for additional treatment or transport decisions

Effective Date: xx/xx/xxxx

Next Review Date: xx/xx/xxxx

