PEDIATRIC MEDICAL CARDIAC ARREST

DRAFT

See appendix A below for medications, electrical dosages, and special notes

Assess patient by history and exam

Neonate (defined as < 28 days)?
Adult (defined as onset of puberty)?

YES → **Neonatal Resuscitation** / **Adult Medical Cardiac Arrest**

NO

Start High Quality CPR (15:2)
- BVM ventilations with high flow oxygen and appropriate BLS airway adjunct
- Apply AED/Defibrillator

Rhythm Shockable?

YES → **VF/pVT**

Resume CPR for 2 minutes
- Start IV/IO
- Consider advanced airway with capnography

Rhythm Shockable?

NO → **Go to 1**

2 YES

Resume CPR for 2 minutes
- **Epinephrine** q 3-5 minutes
- Treat reversible causes

Rhythm Shockable?

NO → **Go to 1**

YES

Resume CPR for 2 minutes
- **Amiodarone**
- Treat reversible causes

NO → **Asystole/PEA**

Give Epinephrine ASAP

1 **Resume CPR for 2 minutes**
- Start IV/IO
- **Epinephrine** q 3-5 minutes
- Consider advanced airway with capnography

Rhythm Shockable?

YES → **Go to 2**

NO

CPR for 2 minutes
Treat reversible causes

NO

Rhythm Shockable?

YES → **Go to 2**

NO → **Go to 1**

At any point during resuscitation efforts, patient regains pulses → **Adult and Pediatric ROSC** → Transport to Critical Pediatric Center **(5000.1)**

For discontinuing resuscitation efforts (see **Policy 4049**)

Adapted from 2025 AHA Pediatric Advanced Life Support

APPENDIX A

High Quality CPR

- Push hard (≥1/3 diameter of chest depth)
- Push fast: 100-120/min
- Allow full chest recoil
- Minimize interruptions in compresions
- Change compressor every 2 min, sooner if fatigued
- If no advance airway compression-ventilation ratio: 15:2 for 2 rescuers, 30-2 for 1 rescuer
- If advanced airway, provide continuous compressions and give a breath every 2-3 seconds and monitor EtCO2

Medications & Shock Energy Selection

- **Epinephrine**
- **Amiodarone**
- **Lidocaine** (only to be used in the event of Amiodarone shortage)
- 1st shock 2 J/kj
- 2nd shock 4 J/kj
- 3rd shock 6 J/kj
- 4th shock 8 J/kj
- 5th shock 10 J/kj

Reversible causes

Hypovolemia: Give **Normal Saline** bolus. If secondary to blood loss, early transport
Hypoxia: BVM with high flow oxygen
Hydrogen Ion: Adequate ventilation to blow off CO2
Hypoglycemia: Check blood glucose and treat (**Altered Mental Status)**
Hypothermia: Re-warm
Hyperkalemia: Give **Calcium Chloride.** Consider **Sodium Bicarbonate** after Calcium Chloride**.** Consider **Albuterol** via BVM
Tamponade (cardiac) or Thrombosis, pulmonary or cardiac: Early transport
Tension Pneumothorax: Needle Thoracotomy
Torsades de Pointes: After defibrillation give **Magnesium Sulfate**
Toxins:
-- TCA OD (widening QRS)**: Sodium Bicarbonate**
-- Calcium channel OD: Calcium Chloride
-- Opioid OD: give **Naloxone**

Policy references

- **Policy 4049 Discontinuing Resuscitative Efforts**
- **Policy 4050 Death Pronouncement**
- **Policy 4051 Do Not Resuscitate & Physician Orders for Life-Sustaining Treatment**