



ALL patients > than 24 hours receive HP-CPR

# Medical Cardiac Resuscitation

Continuous compressions (with minimal interruptions) AND early defibrillation is the key to achieve a perfusing rhythm

Start

## HP-CPR (Manual)

## Commit to Resuscitation

## Pronouncement of Death in the Field



Totality of efforts is measured "in" 2 Minute Cycles

Priming the pump, maintaining continuous flow & defibrillation identification opportunities matter

- Rate 100-120 and **MUST** have Full Recoil  
Compression Depth: < 1 year old 1-1/2" ... >1 year old 2"
- Count **THE Cycles** (not minutes)  
Rhythm/Pulse ✓ after every 2 Minutes
- Pauses in compressions must be kept to less than 10 seconds!
- Charge defibrillator prior to pulse  
**Defibrillation** (if indicated) with **ongoing** Mechanical Compressions

Numbers depict cycles

Continue resuscitation on scene  
or  
May package and load for transport

Beginning After the 3rd Epi

- Before initiating pt. movement ensure:**
1. Discuss and communicate **objectives** to ALL providers.
  2. Facilitate continuous compressions (mechanical CPR)
  3. Functional & effective airway management
  4. Pre-plan opportunities for pt. pulse checks & defibrillation.

- MUST TRANSPORT**
1. Secondary to Hypothermia
  2. Pregnant
  3. <18

TOR may be considered in rare circumstances. Consult with a pediatric base station: Johns Hopkins Children's Center or Children's National Medical Center (DC)

- Note & document resuscitation efforts:**
1. Movement - fasciculations, posturing or gag reflex
  2. EtCO2 - document and consider changes
  3. Pupils - fixed and dilated ?

- Backstory:**
1. Witnessed arrest?
  2. CPR initiated by: layperson, LEO or EMS.
  3. Initial CPR quality: effective or suboptimal

**Electrical Phase**

- 1 Initiate HP-CPR **manual**
- 2 Apply backplate

**Circulatory Phase**

- 3 IV/IO #1 Epi
- 4 Start Mechanical CPR
- 5 #2 Epi

**Metabolic Phase**

- 6
- 7 #3Epi
- 8
- 9 #4 Epi
- 10
- 11 #5 Epi
- 12
- 13 #6 Epi
- 14
- 15 #7 Epi

SUSPECTED: Hyperkalemia or Hypocalcemia  
Calcium Chloride 0.5 - 1.0 grams slow

CONSIDER Sodium Bicarbonate 1 mEq/kg  
MUST consult

Consider longer Epinephrine intervals in this phase

16 Continue cycles until: ROSC is achieved or TOR protocol is met

**V-fib / V-tach**

200

Amiodarone 300 mg

300

Amiodarone 150 mg (Persistent)

360

Continue as indicated

If ROSC (with a pulse) VF/VT (prevent refractory) 150 mg mixed with 50-100ml Administer over 10 minutes

Consider for persistent VF/VT

Minimum of 15 cycles completed To Consider TOR Termination of Resuscitation

**PDOA** Presume Dead on Arrival

1. Rigor Mortis
2. Decomposition
3. Dependent Lividity

Documentation or metal emblem  
MOLST A1 - Max care including intubation, No CPR  
MOLST A2 - Max care NO intubation, No CPR  
MOLST B - Limited care, No CPR  
OTHER: old MD and other state DNR forms

**DNR** Do Not Resuscitate

Verbal EMS/DNR order  
Onsite: MD physician or Nurse practitioner  
EMRC: MD physician

If NO resuscitate with longer medication intervals

If hypothermia is suspected ARE: Injuries incompatible with life? Does the pt. meet PDOA (includes frozen stiff)?

If discovered pt. meets PDOA, **discontinue** efforts at anytime

**Polymorphic V-tach**

Mag sulfate 1-2g over 2 mins

## Documentation of Death

- Exact :**
- Time
  - Location
  - Events leading to
  - Primary provider

**ROSC** Return of Spontaneous Circulation

**Mechanical CPR Device:** lift the plunger off the pt's chest & obtain 12 lead EKG. Frequently reassess for the presence of a pulse, if any doubt reinitiate HP-CPR.

- Medical etiology ONLY
- 18 years & ↑
- Comatose

Initiate Neuroprotective hypothermia

- Apply cold packs to:
1. Neck (bilaterally)
  2. Axilla
  3. Femoral groin

Asystole

or

V-fib / PEA / V-tach (Pulseless) AND EtCO2 ↓ 15 mmHg