

Cardiac Arrest – V-Fib/Pulseless V-Tach

For non-traumatic cardiac arrest in which any resuscitation is initiated, NOT dead on arrival

History

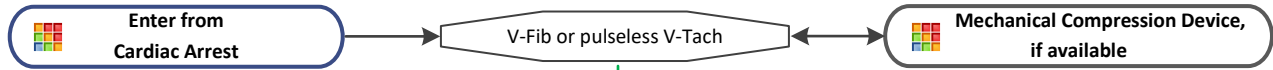
- Events leading to arrest
- Estimated downtime
- Prior resuscitation attempts
- Past medical history
- Medications
- Known terminal illness

Signs and Symptoms

- Pulseless
- Apneic

Differential

- Medical vs. trauma
- VF vs. pulseless VT
- Asystole
- PEA
- Primary cardiac event vs. respiratory arrest or drug overdose



AT ANY TIME

Return of spontaneous circulation

Go to Post Resuscitation

Change of rhythm, go to appropriate protocol

Defibrillation 200J

Resume high quality chest compressions
Change compressors every 2 minutes
(Limit changes/pulses checks < 5 seconds)

Establish IV; if unable, establish IO

Defibrillation 300J

Resume high quality chest compressions
Change compressors every 2 minutes
(Limit changes/pulses checks < 5 seconds)

Epinephrine (1:10,000)

IF ECMO CRITERIA ARE MET, INITIATE IMMEDIATE TRANSPORT TO SUH

ECMO CRITERIA:

- Non-traumatic arrest;
- Initial rhythm VF/pulseless VT;
- Scene time + transport time to SUH < 40 minutes;
- Mechanical Compression Device in use; and
- 18-75 years of age.

Declare ECMO Alert & notify SUH

ECMO ALERT RING DOWN

Contact SUH as soon as transport begins.

(650) 723-7337

Provide the following information:

- Time of arrival at scene
- Witnessed or unwitnessed arrest
- Bystander or no bystander CPR
- Downtime
- ROSC at any time
- Confirm mechanical CPR device in use
- Known co-morbidities (e.g., terminal cancer, end-stage disease)
- Estimated hospital arrival time

If V-Fib/ Pulseless V-Tach is refractory after 2 shocks

Place second set of defib pads (A/L to A/P or A/P to A/L) and use for all future defibrillations. Continue high performance CPR and give medications during compressions

Defibrillation 360J

Resume high quality chest compressions
Change compressors every 2 minutes
(Limit changes/pulses checks < 5 seconds)

Lidocaine



Notify receiving facility. Consider Base Hospital for medical direction

Adult Cardiac Arrest – Non-traumatic Treatment Protocols

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Pearls

- For defibrillation or cardioversion, follow manufacturer recommendations.
- Efforts should be directed at high quality and continuous chest compressions with minimal interruptions.
- If cardiac arrest occurs during transport and 12-Lead ECG indicated STEMI, divert to the nearest approved STEMI Receiving Center. Otherwise, transport to the closest receiving facility.
- IV access, including EJ, must be attempted. If unsuccessful, then attempt IO.
- Use pediatric BVM with EtCO₂ and ventilate at a rate of 10 ventilation per minute delivered on compression upstroke.
- Placement of an advanced airway should be deferred unless a provider is unable to ventilate the patient with a BLS airway and BVM.
- Use a metronome during chest compression to ensure proper rate.
- If not an ECMO candidate, provide resuscitative efforts on scene for 30 minutes to maximize chance of ROSC.
- If not an ECMO candidate and resuscitative efforts do not attain ROSC, consider cessation of efforts per Policy 507 – Determination of Death.
- Epinephrine in doses of greater than 3 mg has been shown to be detrimental to patient outcome.
- Do not interrupt chest compressions to place ETT.
- Consider breathing and airway management after second shock or two (2) rounds of chest compression (2 minutes each round).
- Effective chest compressions and prompt defibrillation are the keys to successful resuscitation.
- Reassess and document ETT placement and EtCO₂ frequently, after every move, and at transfer of care.
- Do not stop chest compressions to check for placement of ETT or to give medications.
- If the use of a BVM is ventilating the patient successfully, intubation should be deferred.
- In the setting of renal failure, dialysis, suspected DKA or hyperkalemia, calcium chloride followed by sodium bicarbonate shall be administered.

