

## **VENTRICULAR DYSRHYTHMIAS: VENTRICULAR FIBRILLATION/ VENTRICULAR TACHYCARDIA WITHOUT A PULSE**

### **ACTION/TREATMENT:**

- ABCs/monitor cardiac rhythm.
- Perform 2 minutes of CPR.
  - If arrest is witnessed by EMS responders, immediately defibrillate.
- Defibrillate x 1 using maximum energy or as per manufacturer's recommendation.
  - Continue CPR while defibrillator is charging.
  - Resume CPR for 2 minutes immediately after shock, starting with compressions.
- Rhythm check. Pulse check only if organized rhythm. Should take no more than 10 seconds.
- Continue CPR in 2 minute blocks, always starting with compressions.
  - Change person doing compressions every 2 minutes.
  - Perform rhythm check and pulse check (if indicated) during change over.
- Defibrillate PRN for continued ventricular fibrillation; use maximum energy level or as recommended by manufacturer.
- IV access when able, rate titrated to perfusion. **Do not interrupt CPR to establish IV.**
  - When IV is available, and as indicated by rhythm check, administer medications during CPR.
    - Epinephrine:
      - 1 mg 1:10,000 IVP every 3-5 minutes.
      - ET: Epinephrine 1:1000 10 mg once.
    - Lidocaine: Initial dose:
      - 1 or 1.5 mg/kg IVP.Subsequent doses (given at 3 to 5 minute intervals):
      - 0.5 or 0.75 mg/kg IVP (half of the initial dose).Limit of 150 mg / IVP dose.  
Maximum total dose: 3 mg/kg.
- Establish ALS airway when able. **Minimize interruptions to CPR to establish airway.**

### **Pediatric:**

- Defibrillation energy: 2 J/Kg–4 J/Kg–4 J/Kg.
- Epinephrine: 0.01 mg/kg 1:10,000 IVP every 3-5 minutes.
- Lidocaine: 1 mg/kg IVP.

### **NOTES:**

- CPR ratio of 30 compressions:2 ventilations (15:2 for peds). After ALS airway is placed, ventilate adult at 8-10 breaths per minute and peds at 12-20 breaths per minute. Deliver each breath over 1 second; do not pause chest compressions to deliver breaths.
- Document the Joules administered for defibrillation.

**Boxed text indicates BH order**

Unboxed text indicates standing order

Approved: 

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