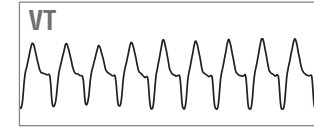
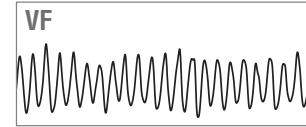


# 5 Cardiac Arrest – VF/VT



Shockable pulseless cardiac arrest

## START

- 1 **Call for help and a code cart**
  - ▶ **Ask:** “Who will be the crisis manager?”
  - ▶ **Say:** “Shock patient as soon defibrillator arrives”
- 2 **Put backboard under patient, supine position**
- 3 **Turn FiO<sub>2</sub> to 100%, turn off volatile anesthetics**
- 4 **Start CPR — defibrillation — assessment cycle**
  - ▶ **Perform CPR**
    - “Hard and fast” about 100 compressions/min
    - Ensure full chest recoil with minimal interruptions
    - 8 breaths/minute, do not overventilate
  - ▶ **Defibrillate**
    - Shock at highest setting
    - Resume CPR immediately after shock
  - ▶ **Give epinephrine**
    - Repeat epinephrine every 3–5 minutes
    - Can give vasopressin to replace 1<sup>st</sup> or 2<sup>nd</sup> dose of epinephrine
  - ▶ **Consider giving antiarrhythmics for refractory VF/VT** (amiodarone preferred, if available)
  - ▶ **Assess every 2 minutes**
    - Change CPR compression provider
    - Check ETCO<sub>2</sub>
      - If: < 10 mm Hg, evaluate CPR technique
      - If: Sudden increase to > 40 mm Hg, may indicate return of spontaneous circulation
    - Treat reversible causes, consider reading aloud Hs & Ts (see list in right column)
    - Check rhythm; if rhythm organized check pulse
      - If: VF/VT continues: Resume CPR–defibrillation–assessment cycle (restart Step 4)
      - If: Asystole/PEA: go to ▷ CHKLST 4

## DRUG DOSES and treatments

Epinephrine: 1 mg IV, repeat every 3 – 5 mins.  
 Vasopressin: 40 U IV can replace 1<sup>st</sup> or 2<sup>nd</sup> dose of epinephrine

## ANTIARRHYTHMICS

Amiodarone: • 1<sup>st</sup> dose: 300 mg/IV/IO  
 • 2<sup>nd</sup> dose: 150 mg/IV/IO  
 Magnesium: 1 to 2 g IV/IO for Torsades de Pointes

## DEFIBRILLATOR instructions

1. Place electrodes on chest.
2. Turn defibrillator ON, set to DEFIB mode, and increase ENERGY LEVEL...
  - Biphasic: Follow manufacturer recommendation; if unknown use highest setting
  - Monophasic: 360J
3. Deliver shock: press CHARGE then press SHOCK.

## Hs & Ts

- |                           |                                   |   |
|---------------------------|-----------------------------------|---|
| • Hydrogen ion (acidosis) | • Hypoxia                         | • Toxin (local anesthetic, beta blocker, calcium channel blocker) |
| • Hyperkalemia            | • Tamponade (cardiac)             |   |
| • Hypothermia             | • Tension pneumothorax            |   |
| • Hypovolemia             | • Thrombosis (coronary/pulmonary) |   |

## During CPR

**Airway:** Bag-mask sufficient (if ventilation adequate)  
**Circulation:**

- Confirm adequate IV or IO access
- Consider IV fluids wide open

**Assign roles:** Chest compressions, Airway, Vascular access, Documentation, Code cart, Time keeping