

Ventricular Fibrillation / Pulseless Ventricular Tachycardia

If AED is applied prior to ALS arrival, perform CPR and reassess the rhythm as indicated. After each intervention resume CPR immediately and reassess the rhythm after each 2 minute or 5 cycle interval.

Biphasic devices may shock at lower energy levels following manufacturers' instructions. After the initial shock, subsequent shocks should be at the maximum energy level.

Pre-Medical Control

1. Follow the **Cardiac Arrest – General Protocol**.
2. If ALS witnessed arrest or effective CPR in progress, perform immediate defibrillation x1 and immediately resume compressions.
3. If arrest not ALS witnessed or effective CPR not in progress upon arrival, perform 2 minutes of CPR or 5 cycles then defibrillate x 1 and immediately resume compressions.
4. Repeat defibrillation every 2 minutes as indicated with immediate resumption of compressions.
5. Continue CPR for 2 minutes or 5 cycles and reassess rhythm. If rhythm changes go to appropriate protocol.
6. Establish an advanced airway. Avoid significant interruptions in CPR.
7. Start an IV/IO NS KVO. IO may be first line choice. If IV is unsuccessful after 2 attempts start an IO line per **Vascular Access Procedure**.
8. Administer Epinephrine 1 mg 1:10,000 IV/IO, (10 ml). Repeat every 3-5 minutes. May be administered before or after defibrillations.
9. Administer Vasopressin 40 units IV/IO in place of second dose of Epinephrine as approved by local medical control.
10. For persistent or recurrent Ventricular Fibrillation/Pulseless Ventricular Tachycardia administer Amiodarone 300 mg or Lidocaine 1 mg/kg IV/IO. May be administered before or after defibrillations.
11. Administer Magnesium Sulfate 2 gm IV/IO for suspected torsades de pointes.
12. In a dialysis patient hyperkalemia is likely. Administer Calcium Chloride 1gm IV/IO and Sodium Bicarbonate 1 mEq/kg IV/IO with 20 ml NS flush in between medications.
13. For persistent or recurrent Ventricular Fibrillation/Pulseless Ventricular Tachycardia, administer Amiodarone 150 mg or Lidocaine repeated at 1 mg/kg to maximum of 3 mg/kg IV/IO. May be administered before or after defibrillations.

Vasopressin

- Included
 Not Included

Medication Options:
(Choose One)

- Amiodarone
OR
 Lidocaine

Post-Medical Control

14. If possible, contact medical control prior to moving or transporting patient.
15. Continue resuscitation attempts and initiate transport, **unless** field termination is ordered by Medical Control.

**Michigan
Adult Cardiac Protocols**

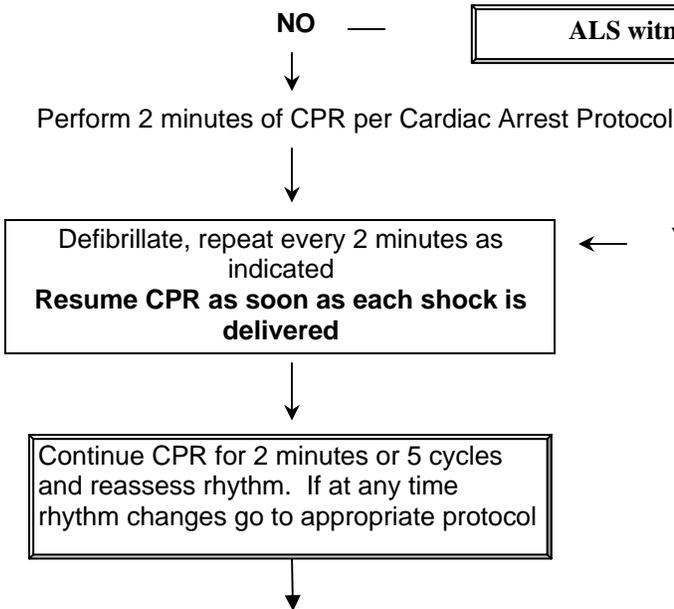
VENTRICULAR FIBRILLATION / PULSELESS VT

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Follow **Cardiac Arrest General Protocol**



ALS witnessed arrest

YES ←

- ADDITIONAL MEDICATIONS**
- For persistent or recurrent VF/ Pulseless VT Amiodarone 300 mg or Lidocaine 1 mg/kg IV/IO. May be administered before or after defibrillations.
 - Administer Magnesium sulfate 2 gm IV/IO for suspected torsades de pointes
 - In a dialysis patient hyperkalemia is likely. Administer Calcium Chloride 1gm IV/IO and Sodium Bicarbonate 1 mEq/kg IV/IO with 20 ml NS flush in between medications.
 - Repeat Amiodarone 150 mg or Lidocaine repeated at 1 mg/kg to maximum of 3 mg/kg IV/IO. May be administered before or after defibrillations.

- Establish an advanced airway. Avoid significant interruptions in CPR.
- Start an IV/IO NS KVO. IO may be first line choice. If IV is unsuccessful after 2 attempts start an IO line per **Vascular Access Procedure**.
- Epinephrine 1:10,000; 1 mg IV/IO (10 ml). Repeat every 3-5 mins. May be administered before or after defibrillations.
- Administer Vasopressin 40 units IV/IO in place of 2nd dose of Epinephrine.
- **SEE ADDITIONAL MEDICATIONS** (See Box at Right)

Vasopressin

Included

Not Included

**Medication Options:
(Choose One)**

Amiodarone
OR

Lidocaine

Contact Medical Control

If possible, contact medical control prior to moving or transporting patient. Continue resuscitation attempts and initiate transport, **unless** field termination is ordered by Medical Control.