ADULT VENTRICULAR FIBRILLATION
PULSELESS VENTRICULAR TACHYCARDIA

HPI	Signs & Symptoms	Possible Causes	
• Witnessed vs unwitnessed • Last known well • PTA AED use • Bystander CPR • Suspected etiology • PMH	• Pulseless • Apneic • No signs of rigor or lividity • No findings of signs incompatible with life	• Hypovolemia • Hypoxia • Acidosis • Hyper/o-kalemia • Hypothermia • Hypoglycemia	• Toxins/OD •Cardiac tamponade • Acute coronary syndrome • Pulmonary embolism • Tension Pneumo

UNIVERSAL EMERGENCY CARDIAC CARE	**EMR**	**EMT**	**PM**
1. Assess responsiveness, pulse and breathing for no more then 10 seconds.	●	●	●
2. If no pulse and not breathing/gasping - begin CPR 30:2 compressions to ventilations for a 2 min. cycle	●	●	●
3. Place monitor/defibrillator immediately as staffing allows.	●	●	●
4. Analyze rhythm and defibrillate incrementally as chart indicates below. Continue CPR 2 min.			●
5. Obtain vascular access IV/IO			●
6. Consider advanced airway: ETT			●
or i-Gel. Monitor placement with Capnography. Deliver 1 breath/6 sec.		●	●

PERSISTENT V.FIB/PULSELESS V.TACH			
7. Analyze rhythm and defibrillate incrementally as chart indicates below. Continue CPR 2 min.			●
8. **EPINEPHRINE** 1 mg/10mL**:** 1 mg IVP/IO, repeat 3-5min., no max.			●
9. **NORMAL SALINE** in 500mL increments			●
10. Analyze rhythm and defibrillate incrementally as chart indicates below. Continue CPR 2 min.			●
11. **AMIODARONE**: 300 mg IVP/IO			●
12. Dialysis patients ONLY: **SODIUM BICARBONATE**: 50mEq IVP/IO			●
13. Analyze rhythm and defibrillate incrementally as chart indicates below. Continue CPR 2 min.			●
14. **AMIODARONE**: 150 mg IVP/IO			●
15. Analyze rhythm. If persistant shockable Vfib/P-Vtach, perform vector change defibrillation: **–** ADD second set of pads in the anterior-posterior position. Defibrillate at maximum joulses per chart.			●
15. If return of spontaneous circulation see ROSC	●	●	●

NOTE:

1. If rhythm appears to be Torsades de Pointes (polymorphic ventricular tachycardia), contact **OLMC** to consider **MAGNESIUM SULFATE** 2gm diluted in 100mL D5W IVPB, over 5 minutes. **NOT to be given to renal failure or dialysis patients.

2. Patients with Automatic Implantable Cardiac Defibrillators should be

defibrillated at the maximum joules per manufacturer's recommendations.

3. Utilize High Performance CPR for best patient outcome.

4. Patient movement during cardiac arrest resuscitation should only occur under the following circumstances:
    - ROSC
    - environmental/provider safety concerns
    - extenuating circumstances (pediatric)

    Contact **OLMC** for request to transport in any other situation.

PEARLS:

1. All attempts should be made to prevent avoidable interruptions in chest compressions, such as pre-charging the defibrillator and hovering over the chest during defibrillation.
2. The airway management strategy should not interrupt compressions.
3. Hyperventilation should be avoided because it decreases preload, cardiac output, coronary perfusion, and cerebral blood flow.

DEFIBRILATOR DOSING CHART:

Per manufacturer's recommendation, defibrillation dosages should be incrementally increased, starting from the lowest joules and increasing as the patient remains in a shockable rhythm.

Zoll	LifePak	Phillips
120J	200J	150J
150J	300J	150J
200J	360J	150J