VENTRICULAR FIBRILLATION/PULSELESS VENTRICULAR TACHYCARDIA

ALWAYS USE STANDARD PRECAUTIONS

START CPR
- Give O2
- Attach monitor/defibrillator
- ALS RMC

Rhythm Shockable?

Yes

VF/pVT

CPR 2 min
- IO/IV access

Rhythm Shockable?

No

CPR 2 min
- Epinephrine every 3-5 min
- Consider advanced airway

Rhythm Shockable?

No

CPR 2 min
- Amiodarone
- Treat reversible causes

Yes

Go to Policy –
- Asystole/PEA
- ROSC

Critical Information:
- Witnessed vs Unwitnessed
- Consider pre-cordial thump if witnessed and defibrillator not immediately available
- Compress at 110 bpm. Use metronome or similar device
- Mechanical CPR is mandatory during transportation
- Change compressors every 2 minutes
- Minimize interruptions
- If hypothermic <95F, delay compressions for 3 minutes; focus on ventilations and active rewarming
- Defibrillate per manufacturer’s recommendations.
- Do not stop compressions while defibrillator is charging
- Resume compressions immediately after shock

BLS Airway Management:
- BLS airway is preferred during the first 5 minutes
- Use two-person BLS airway management whenever possible
- Avoid excessive ventilation
- 30:2 compression/ventilation ratio

ALS Airway Management:
- King Airway / Video Laryngoscopy (VL)
- Laryngoscopy for ETT must occur with CPR in progress. Do not interrupt CPR for >10 seconds for tube placement
- Use continuous ETCO2 to monitor CPR effectiveness and advanced airway placement.
- Maintain O2 sat 94-99%
- 1 breath every 6 seconds

Drug Therapy:
- Epinephrine 1mg (0.1mg/ml concentration) IV/IO q 3-5 minutes
- Amiodarone first dose: 300mg IV/IO; second dose 150mg IV/IO in 3-5 minutes. If rhythm converts to ROSC after Amiodarone, consider infusion of Amiodarone drip (150mg in 100ml NS, 1mg/min = 40 gtt/min with 60 gtt/ml tubing)

Reversible Causes:
- Hypovolemia
- Hypoxia
- Hydrogen Ion (Acidosis)
- Hypo-/Hyperkalemia
- Hyperthermia
- Tension Pneumothorax
- Tamponade (cardiac)
- Toxins
- Thrombosis, pulmonary
- Thrombosis, coronary

For refractory Vfib (3 unsuccessful shocks), transport to nearest available STEMI Receiving Center