Replaces BLS # 501 Medical Cardiac Arrest and ALS# 610 Adult Pulseless Arrest

PULSELESS CARDIAC ARREST (ATRAUMATIC)

ADULT	PEDIATRIC (≤34 kg)
BLS	

• Universal Protocol #601
• High Performance CPR (HPCPR) (10:1) per Procedure #712
  ○ Continuous compressions with 1 short breath every 10
• AED application (if shock advised, administer 30 compressions prior to shocking)
	• Same as Adult (except for neonate)
	• Neonate (< 1 month) follow AHA guidelines
	• CPR compression to ventilation ratio
	  ○ Newborn – CPR 3:1
	  ○ 1 day to 1 month – CPR 15:2
	  ○ > 1 month – HPCPR 10:1
	• AED – pediatric patient > 1 year
	• Use Broselow tape or equivalent if available

BLS Optional	
Pulse Oximetry – O_2 administered per Airway Management Protocol #602	
ALS Standing Orders	

• **Rhythm analysis and shocks** – At 200 compressions begin charging the monitor – continue CPR while monitor is charging. Once fully charged, stop CPR for rhythm analysis:
  ○ V-fib/Pulseless V-tach – shock at 120J
  ○ Subsequent shock at 150J then 200J
  ○ Recurrent V-fib/Pulseless V-tach use last successful shock level
  ○ No shock indicated – dump the charge
• **V-fib/Pulseless V-tach** – medications
  ○ **Epinephrine 1:10,000** 1 mg IV/IO repeat every 3-5 min
  ○ **Lidocaine** 1.5 mg/kg IV/IO repeat once in 3-5 min (max total dose 3 mg/kg)
• **Non-shockable rhythm** – medications
  ○ **Epinephrine 1:10,000** 1 mg IV/IO repeat every 3-5 min
	• **Rhythm analysis and shocks** – At 200 compressions begin charging the monitor – continue CPR while monitor is charging. Once fully charged, stop CPR for rhythm analysis:
	  ○ V-fib/Pulseless V-tach **-** shock at 2J/kg
	  ○ Subsequent shock at 4J/kg
	  ○ Recurrent V-fib/Pulseless V-tach use last successful shock level
	  ○ No shock indicated – dump the charge
	• **V-fib/Pulseless V-tach** – medications
	  ○ **Epinephrine 1:10,000** 0.01 mg/kg (0.1 ml/kg) IV/IO, not to exceed 0.3mg, repeat every 3-5 min
	  ○ **Lidocaine** 1 mg/kg IV/IO repeat every 5 min (max total dose 3 mg/kg)
	• **Non-shockable rhythm** – medications
	  ○ **Epinephrine 1:10,000** 0.01 mg/kg (0.1 ml/kg) IV/IO, not to exceed 0.3mg, repeat every 3-5 min

Base Hospital Orders Only	
Contact STEMI Receiving Center (French Hospital) • **Dopamine** 5-20 mcg/kg/min if BP < 100 mmHg • V-Fib or V-Tach refractory to treatment • Request for a change in destination if patient rearrests en route • Termination orders when unresponsive to resuscitative measures • As needed **Contact appropriate Base Station per Base Station Report Policy #121 -** Atraumatic cardiac arrests due to non-cardiac origin (OD, drowning, etc.)	• As needed – Contact closest Base Hospital for additional orders

Replaces BLS # 501 Medical Cardiac Arrest and ALS# 610 Adult Pulseless Arrest

Notes

• **Use manufacturer recommended energy settings if different from listed**
• **Assess for reversible causes**
    ○ Tension PTX, hypoxia, hypovolemia, hypothermia, hyperkalemia, hypoglycemia, overdose
• **Vascular access** – IV preferred over IO – continue vascular access attempts even if IO access established
• **Oral Intubation (Adults)** – Consider only if airway is not compliant or with maintained ROSC
• **Adult ROSC** that is **maintained**:
    ○ Obtain 12-lead ECG and vital signs
    ○ Transport to the nearest STEMI Receiving Center *regardless of 12-lead ECG reading*
    ○ Maintain O_2 Sat $\geq$ 94%
    ○ Monitor $ETCO_2$
    ○ Consider oral intubation
    ○ With BP < 100 mmHg, contact SRC (French Hospital) for fluid or Dopamine orders
• **Termination for patients > 34 Kg - Contact SRC (French Hospital) for termination orders**
    ○ If the patient remains pulseless and apneic following 20 minutes of resuscitative measures
    ○ Persistent $ETCO_2$ values < 10mmHg, consider termination of resuscitation
    ○ Documentation shall include the patient's failure to respond to treatment and of a non-viable cardiac rhythm (copy of rhythm strip)
• **Pediatric patients ≤ 34 kg**
    ○ Stay on scene to establish vascular access, provide for airway management, and administer the first dose of epinephrine followed by 2 min of HPCPR.
    ○ Emphasize quality CPR rather than immediate transport
    ○ Evaluate and treat for respiratory causes
    ○ Use Broselow tape if available
    ○ Contact and transport to the nearest Base Hospital
    ○ Receiving Hospital shall provide medical direction/termination for pediatric patients