

CARDIAC ARREST (ATRAUMATIC)	
ADULT	PEDIATRIC (≤34 KG)
BLS Procedures	
<ul style="list-style-type: none"> • Universal Algorithm #601 • High Performance CPR (HPCPR) (10:1) per Procedure #712 <ul style="list-style-type: none"> • Continuous compressions with 1 short breath every 10 compressions • AED application (if shock advised, administer 30 compressions prior to shocking) • Pulse Oximetry <ul style="list-style-type: none"> • O₂ administration per Airway Management Protocol #602 	<ul style="list-style-type: none"> • Same as Adult • CPR compression to ventilation ratio <ul style="list-style-type: none"> • Newborn - CPR 3:1 • Neonate - 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
ALS Procedures	
<p style="text-align: center;">Rhythm analysis and shocks</p> <ul style="list-style-type: none"> • At 200 compressions begin charging the defibrillator while continuing CPR • Once fully charged, stop CPR for rhythm analysis • Defibrillate V-Fib/Pulseless V-tach – Shock at the maximum manufacturer setting and immediately resume CPR. Subsequent shocks will also be at the maximum manufacturer setting. • After 3rd shock, pt remains in refractory V-Fib or V-Tach, consider vector change defibrillation. (See notes) • No shock indicated – dump the charge and immediately resume CPR <p style="text-align: center;">V-Fib/Pulseless V-Tach and Non-shockable Rhythms</p> <ul style="list-style-type: none"> • Epinephrine 1:10,000 1mg IV/IO repeat every 3-5 min <ul style="list-style-type: none"> • Do not give epinephrine during first cycle of CPR <p style="text-align: center;">V-Fib/Pulseless V-Tach</p> <ul style="list-style-type: none"> • Amiodarone 300mg IV/IO push; if rhythm persists after 5 min, administer 150mg IV/IO push refractory dose. <p style="text-align: center;">ROSC with Persistent Hypotension</p> <ul style="list-style-type: none"> • Push-Dose Epinephrine 10 mcg/ml 1ml IV/IO every 1-3 min 	<ul style="list-style-type: none"> • <u>Emphasize resuscitation and HPCPR rather than immediate transport</u> <p style="text-align: center;">Rhythm analysis and shocks</p> <ul style="list-style-type: none"> • Coordinate compressions and charging same as adult • Defibrillate V-Fib/Pulseless V-Tach – shock at 2 J/kg and immediately resume CPR <ul style="list-style-type: none"> • Subsequent shock, after 2 mins of CPR: 4J/kg • Recurrent V-Fib/Pulseless V-tach use last successful shock level • No shock indicated – dump the charge and immediately resume CPR <p style="text-align: center;">V-Fib/Pulseless V-Tach and Non-shockable Rhythms</p> <ul style="list-style-type: none"> • Epinephrine 1:10,000 0.01 mg/kg (0.1 ml/kg) IV/IO not to exceed 0.3mg, repeat every 3-5 min <ul style="list-style-type: none"> • Do not give epinephrine during first cycle of CPR <p style="text-align: center;">V-Fib/Pulseless V-Tach</p> <ul style="list-style-type: none"> • Amiodarone 5mg/kg IV/IO push; repeat every 5 min to a max of 15mg/kg.

<ul style="list-style-type: none"> Repeat as needed titrated to SBP >90mmHg <u>See notes for mixing instructions</u> <p><u>OR</u></p> <ul style="list-style-type: none"> Epinephrine Drip start at 10 mcg/min IV/IO infusion Consider for extended transport <u>See formulary for mixing instructions</u> 	
Base Hospital Orders Only	
<p>Contact STEMI Receiving Center (French Hospital)</p> <ul style="list-style-type: none"> Refractory V-Fib or V-Tach not responsive to treatment Request for a change in destination if patient rearrests en route Termination orders when unresponsive to resuscitative measures As needed <p>Contact appropriate Base Station per Base Station Report Policy #121</p>	<p>Contact closest Base Hospital for additional orders</p> <p>ROSC with Persistent Hypotension for Age</p> <ul style="list-style-type: none"> Push-Dose Epinephrine 10 mcg/ml 1 ml IV/IO (0.1 ml/kg if <10kg) every 1-3 min <ul style="list-style-type: none"> Repeat as needed titrated to age appropriate SBP <u>See notes for mixing instructions</u> <p><u>OR</u></p> <ul style="list-style-type: none"> Epinephrine Drip start at 1 mcg/min, up to max of 10 mcg/min IV/IO infusion <ul style="list-style-type: none"> Consider for extended transport <u>See formulary for mixing instructions</u> As needed
Notes	
<ul style="list-style-type: none"> <u>Mixing Push-Dose Epinephrine 10 mcg/ml (1:100,000):</u> Mix 9 ml of Normal Saline with 1 ml of <u>Epinephrine 1:10,000</u>, mix well. 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). Consider Oral Intubation or Supraglottic Airways (Adults), provider discretion. If the provider cannot accomplish an ALS airway, they should document in the PCR why an ALS airway wasn't accomplished. Once an SGA has been placed, it should not be removed for an ETI. <u>Stay on scene</u> to establish vascular access, provide for airway management, and administer the first dose of epinephrine followed by 2 min of HPCPR. 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 O2 Sat greater than or equal to 94%.
- Monitor ETCO2
- 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, with persistent ETCO2 values < 10 mmHg, 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).
- Contact and transport to the nearest Base Hospital.
- Receiving Hospital shall provide medical direction/termination for pediatric patients.
- Lidocaine may be substituted for Amiodarone with SLOEMSA authorization (via Policy #205 Attachment C) when Amiodarone stock is unavailable. Refer to Lidocaine Formulary for dosages.
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- While treating Cardiac Arrest, only one antiarrhythmic may be given to one patient. ALS providers shall not switch between Amiodarone and Lidocaine for the treatment of Cardiac Arrest.
- **Vector change defibrillation:** The two pad placements are anterior-lateral and anterior-posterior. Vector change is the change in pad position placement from one to the other.