ACLS Helpful Hints are Courtesy of Key Medical Resources, Inc. www.cprclassroom.com

ACLS Helpful Hints 2015 Guidelines – Revised November 2016

Mandatory precourse assessment at least 70% pass. Bring proof of completion to class.

The ACLS exam is 50 questions. Passing score is 84% or you may miss 8 questions. All AHA exams are now open resource so you may use you book and/or handouts. For those persons taking ACLS for the first time or renewing with a current card, exam remediation is permitted should you miss more than 8 questions on the exam. Viewing the ACLS book ahead of time with the online resources is very helpful. The American Heart Association link is www.heart.org/eccstudent has a pre-course self-assessment, supplementary written materials and videos. **The code for these online resources is in the ACLS Provider manual page ii**. The code is ACLS15. Basic Dysrhythmia knowledge is required. The exam has at least 9 strips to interpret. **The course is a series of video segments then skills. The course materials well prepare you for the exam.**

Basic Dysrhythmias knowledge is required in relation to asystole, ventricular fibrillation, tachycardias in general and bradycardias in general. You do not need to know the ins and outs of each and every one. Tachycardias need to differentiate wide complex (ventricular tachycardia) and narrow complex (supraventricular tachycardia or SVT).

BLS Overview - CAB

Push Hard and Fast-Repeat every 2 minutes
*If person unresponsive next step is to check breathing and pulse. Pulse check no more than 5-10 seconds.
Anytime there is no pulse or unsure - COMPRESSIONS

Elements of good CPR

- Compressions
  - Rate-at least 100 - 120
  - Compression depth at least 2 inches, not more than 2.4 inches or 6 cm
  - Switch compressors every 2 min or 5 cycles
  - Recoil
  - Minimize interruptions (less 10 secs)
- *Ventilation
  - With perfusing rhythm squeeze the bag once every 5 to 6 seconds
  - Excessive ventilation decreases cardiac output
- Fatal mistake to interrupt compressions – can compress while charging.

Stroke

- Cincinnati Pre-Hospital Stroke Scale
- Facial Droop, Arm Drift, Abnormal Speech
- *Non-contrast CT scan of the head
- *Start fibrinolytic therapy as soon as possible
- *Alerting the hospital will expedite patient's care on arrival.

Acute Coronary Syndromes, STEMI

*STEMI door-to-balloon within 90 minutes
*12 Lead for CP, epigastric pain, or rhythm change
Recommended dose of aspirin is 160 – 325 mg
Right ventricular MI - caution with NTG

*Cardiac Rhythm Strips to Interpret

- ✓ Ventricular Tachycardia
  - Stable
  - Unstable
  - Monomorphic
- ✓ Supraventricular tachycardia, unstable
- ✓ Heart Blocks
  - Second-degree atrioventricular Type I
  - Second-degree atrioventricular Type II
  - Third degree atrioventricular
- ✓ Ventricular Fibrillation
- ✓ PEA, Pulseless Electrical Activity

Bradycardia

Need to assess stable versus unstable. If stable, monitor, observe, and obtain expert consultation.

If unstable…

•Atropine 0.5mg IV. Can repeat Q 3-5 minutes to 3 mg
Maximum dose is 3mg (Including heart blocks)
• If Atropine ineffective
-Dopamine infusion (2-20 mcg/kg/min)
-Epinephrine infusion (2-10 mcg/min)
-Transcutaneous pacing

Tachycardia with a pulse

•If unstable (wide or narrow)-go straight to synchronized cardioversion (sedate first)
•If stable narrow complex
-obtain 12 lead
-vagal maneuvers
*-adenosine 6mg RAPID IVP, followed by 12mg

Note: See current ACLS 2015 guidelines textbook as your PRIMARY Source. Posted November 2016

ACLS Helpful Hints are Courtesy of Key Medical Resources, Inc. www.cprclassroom.com

Pulseless Rhythms - Cardiac Arrest - CPR

Oxygen, monitor, IV, Fluids, Glucose Check
*Agonal gasps are a likely indicator

- ♥ 2 minute cycles of compressions, shocks (if VF/VT), and rhythm checks.
- ♥ *Epinephrine 1 mg first every 3-5 minutes (preferred method peripheral IV)

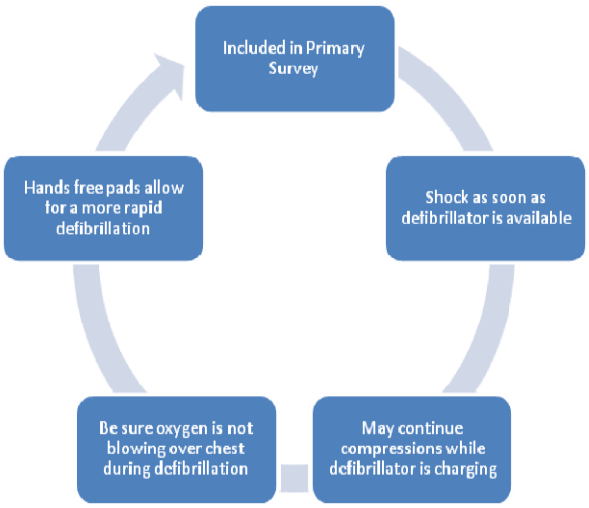
Shockable rhythms

***Defibrillation**
-Ventricular Fibrillation (VF)
-Ventricular Tachycardia (VT) without pulse
Biphasic: 120-200J Monophasic: 360J
*Refractory – Amiodarone 300 mg, then 150 mg
*After defibrillation resume CPR, starting with chest compressions

***Synchronized Cardioversion**
Unstable VT, unstable SVT

Non-Shockable Rhythms

-PEA -Asystole

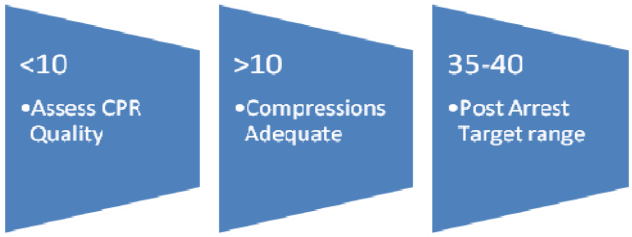


*Waveform Capnography in ACLS (PETC02)

- Allows for accurate monitoring of CPR
- *Most method to confirm and monitor ETT placement

*Team Dynamics

- Closed Loop – repeat orders
- Incorrect order? – address immediately
- Task out of scope? – ask for new task or role
- Clearly delegate tasks



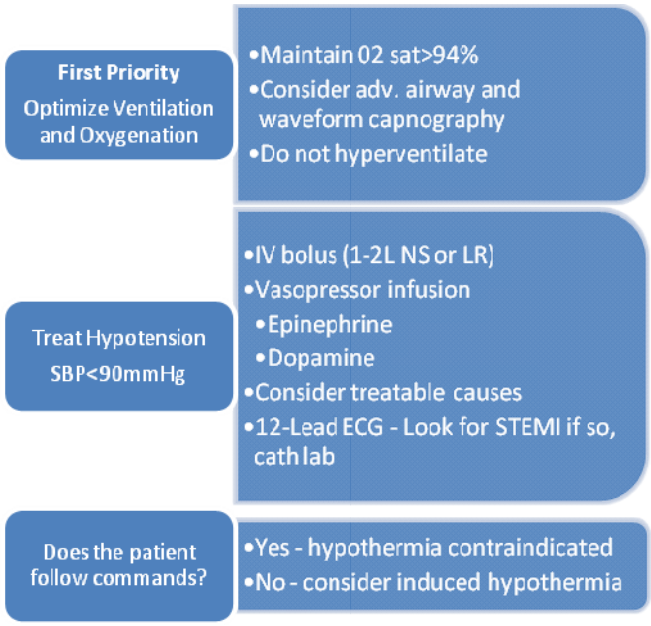
Treat reversible causes (H's and T's)

Hypoxia or ventilation problems
Hypovolemia **T**amponade, Cardiac
Hypothermia **T**ension pneumothorax
Hypo /hyper kalemia **T**oxins – poisons, drugs
Hydrogen ion **(acidosis)**
Thrombosis – coronary (AMI) – pulmonary (PE)

Return of Spontaneous Circulation (ROSC)

Post Resuscitation Care

- ✓ 12 Lead
- ✓ *Coronary reperfusion-capable center is the most appropriate EMS destination.
- ✓ *Hypothermia if DOES NOT follow verbal commands (**target temperature, at least 24 hours**, 32 to 36 degrees C)



Points to Ponder

- *Medical Emergency Teams (MET)/ Rapid Response Teams (RRT) can improve outcome by identifying and treating early clinical deterioration.
- *OPA – measure from corner of mouth to angle of the mandible
- *Minimal systolic blood pressure is 90
- Don't suction for more than 10 seconds
- *Pulse oximeter reading low, give oxygen

Note: See current ACLS 2015 guidelines textbook as your PRIMARY Source. Posted November 2016