KEY POINTS AND CHANGES
ADVANCED CARDIAC LIFE SUPPORT (ACLS)

- CASE 1: RESPIRATORY ARREST
  - Potential C-spine injury: use chin lift if jaw thrust fails
  - Give breaths 1 second in and 1 second out
  - Limit ventilation volume to = visible chest rise only
  - Avoid hyperventilation!
  - Do not delay CPR for advanced airway
  - BVM, ET, LMA, Combitube all effective
  - If ET placed, use ET confirmation device
  - After airway protected, asynchronous ventilations 8-10/min
  - Foreign body airway obstruction in CPR: no tongue lift or blind finger sweeps

- CASE 2: CPR & AED
  - CPR ratio is 30 compressions to 2 ventilations
  - Rotate compressor role every 2 minutes or 5 cycles
  - Push hard and fast: 100 compressions per minute
  - Allow full chest recoil
  - Apply AED or Defib patches and power up during CPR
  - One initial shock only
    - Current AED's will be re-programed by manufacturers
    - After 1st shock, resume CPR immediately.

- CASE 3: V.FIB AND PULSELES V. TACH
  - Prevent and minimize CPR interruptions
  - Identify and possible cause (use 6 H's and 5 T's)
  - Defibrillation energy settings
    - Old monophasic 360 j.
    - New biphasic 120-150-200 j. or as recommend by vendor
    - Subsequent doses same or higher
  - Medications delivered IV or IO.
    - ET administration discouraged
  - Advanced Airway insertion should not interrupt CPR
  - Medications secondary to CPR

- CASE 4: PULSELESS ELECTRICAL ACTIVITY
  - Now included in new Pulseless Arrest Algorithm
  - Identify and treat possible causes (H's and T's) no change
  - Hypoxic patients need CPR
  - Consider Atropine 1 mg for slow PEA. May repeat up to 3 mg

- CASE 5: ASYSTOLE
  - Now included in new Pulseless Arrest Algorithm
  - Pacing has failed to show benefit in Asystole in most cases
  - Consider Atropine 1 mg for Asystole, may repeat up to 3 mg (no change)

- CASE 6: ACUTE CORONARY SYNDROMES
  - New algorithm: Chest Discomfort Suggestive of Ischemia
  - Updated fibrinolytic contraindications
  - EMS dispatcher pre-arrival instructions: chew 1 aspirin 160-325 mg.
  - Patient stratification based on 12-lead EKG markers

- CASE 7: BRADYCARDIA
  - Bradycardia algorithm revised
  - Use of H's and T's to identify and treat possible causes
  - Atropine dose is 0.5 mg, with maximum total of 3 mg.
  - Pacing indicated when no response to Atropine or patient has high degree AV block
  - Dosages for epinephrine 2-10 ug/min
  - Dosages for Dopamine 2-10 ug/kg/min

- CASES 8 & 9: TACHYCARDIAS
  - Stable Tachycardia with pulse algorithm revised
  - Stratify patients by
    - Unstable or Stable
    - then by Narrow or wide QRS
    - then by regular or irregular rhythm
  - Get expert consultation when indicated on algorithm
  - 12-Lead EKG done as early as possible
  - Biphasic energy level recommendations
  - Polymorphic VF = treat as VF
  - Use H's and T's to identify causes
  - Adenosine – give 3 mg if patient taking dipyridamole or carbamazepine, with heart transplants, or if given by central venous access.

- CASE 10: STROKE
  - Stroke algorithm updated
  - Updated fibrinolytic contraindications
  - Stroke video narration updated