

American Heart Guideline Changes 2010

Satellite Conference and Live Webcast
Thursday, March 24, 2011
8:00 – 9:30 a.m. Central Time

Produced by the Alabama Department of Public Health
Video Communications and Distance Learning Division

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Objective

- Review the major changes in CPR that are recommended by the American Heart Association

Outline

- Chain of survival
- Basic Life Support (BLS) changes for health care provider
- First aid changes
- Ethical considerations
- Lay rescuer considerations

Chain of Survival

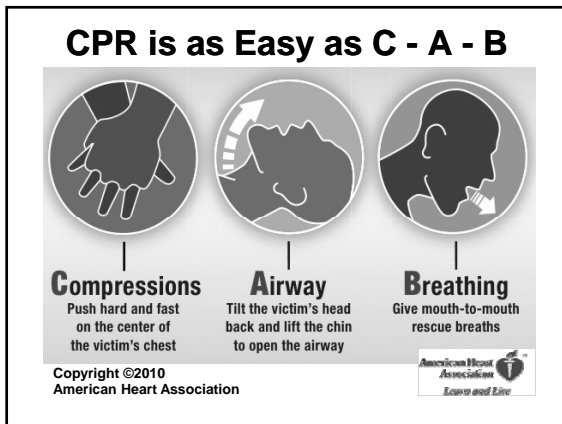


Travers, A. H. et al. Circulation 2010;122:S676-S684
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Health Care Provider Changes

- New sequence is now CAB
 - Chest compressions
 - Airway
 - Breathing



Health Care Provider Changes

- Check for unresponsiveness
- Look, listen, and feel for breathing has been removed from the algorithm
- Activate 911
- Check pulse within 10 seconds

Health Care Provider Changes

- Begin 30 compressions and then 2 breaths
- Automated External Devices (AEDs) Analyzes and delivers shock if shockable rhythm is noted

Health Care Provider Changes

- Compressions are at least 100 per minute
- Compressions at least 2 inches for adults
- Compressions at least 2 inches for children
- Compressions at least 1.5 inches for infants

Health Care Provider Changes

- Compressions/Ventilations is 30:2 exception is 2 HCP's with children and infants
- Allow chest recoil after each compression
- Cricoid pressure during ventilations has been removed from guidelines

Health Care Provider Changes

- AEDs can now be used on infants
 - Use pediatric pads if possible but we can use adult pads
- Shock first versus CPR first in cardiac arrest

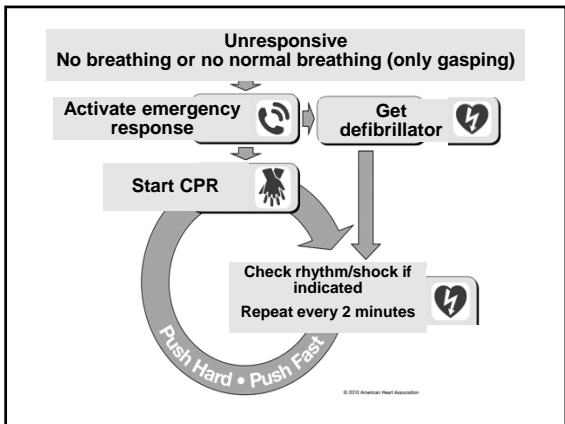
Health Care Provider Changes

- One shock protocol versus three shock for Ventricular Fib is recommended
- Use pediatric pads for ages 1 – 8
- Adult pads for age 9 and older

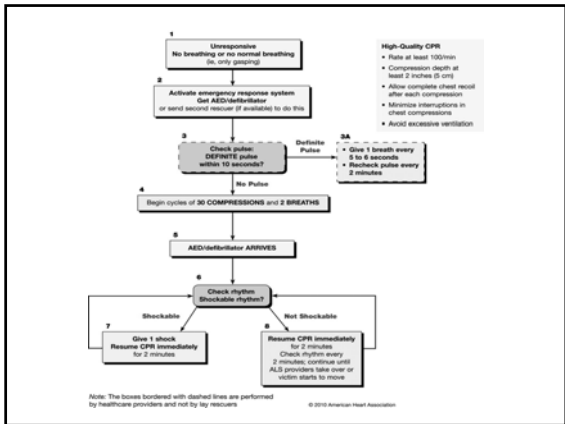
Health Care Provider Changes

- Placement of AED pads not changed
- Avoid placing pads or paddles directly over implanted devices
- To date, no commercial CPR devices have consistently been shown to be superior to the standard form of CPR
- Recovery position is no longer used

Simplified Adult BLS



BLS Health Care Provider Algorithm



BLS Video Clip 1

Comparison Chart

- Show Review Comparison chart here

First Aid Changes

- Routine administration of supplementary oxygen not recommended for shortness of breath unless O₂ saturation is 94% or below as measured by a pulse oximeter

First Aid Changes

- Call EMS with complaint of chest pain, give one adult aspirin or two baby aspirin if no history of allergies to aspirin or aspirin products or a recent gastrointestinal bleed

First Aid Changes

- Use of tourniquets to control bleeding on extremities are only indicated if pressure is not effective to stop bleeding
- Hemostatic agents to control bleeding are not recommended at this time

First Aid Changes

- Snakebites
 - Do not apply suction
 - Pressure immobilization is recommended
 - Lower extremity pressure immobilization of 55 – 70 mm Hg (Mercury)

First Aid Changes

- Immobilization bandage with a pressure of 40 – 70 mm Hg in the upper extremity

First Aid Changes

- Jellyfish stings
 - Wash with liberal amounts of vinegar (4% - 6% acetic acid solution) as soon as possible for at least 30 seconds
 - If vinegar is unavailable may use a baking soda mixture applied to the area

First Aid Changes

- Hot water immersion of at least 20 minutes covering the affected area will help with pain

First Aid Changes

- Heat emergencies
 - Place victim in cool place
 - Remove clothing
 - Spray with cool water
 - Encourage fluids, if conscious, especially carbohydrates and electrolytes

First Aid Changes

- Wounds and abrasions
 - Irrigate with a large volume of warm or room temperature water without soap
 - Cover with an antibiotic ointment or cream and apply clean occlusive dressing

First Aid Changes

- Drowning
 - Do not waste time trying to remove the water from the victim with abdominal or chest thrusts
 - Start CPR as soon as possible with 5 cycles of chest compressions and 2 ventilations before calling 911, IF alone

First Aid Changes

- **Dental injuries**
 - Clean area with saline solution or tap water
 - Stop bleeding with pressure using gauze
 - Handle tooth by crown not root
 - To transport tooth place in milk or clean water if milk is not available

First Aid Changes

- **Human and animal bites**
 - Irrigate with copious amounts of water
 - Irrigation has been shown to decrease transmission of rabies and bacterial infection

Lay Rescuer CPR Changes

- Look, listen, and feel have been removed from the algorithm
- 30 compressions, 2 breaths, use AED
- Trained lay rescuers should provide rescue breaths in addition to compressions

Lay Rescuer CPR Changes

- Lay rescuers will not check a pulse
 - Assume cardiac arrest is present
 - Proceed with activation of 911, CAB, and AED

Lay Rescuer CPR Video Clip 2

- HS sequence option 1

Untrained Lay Rescuer CPR

- Untrained lay rescuer is a person that is not trained in CPR but has witnessed a sudden collapse
- Untrained lay rescuer will do hands only
 - Emphasize “push hard and push fast”

Untrained Lay Rescuer CPR

- **Untrained lay rescuers will not check pulse**
 - Assume cardiac arrest is present
 - Proceed with activation of 911, CAB, and AED
- **Call 911**
- **Use AED if available**

Untrained Lay Rescuer CPR

- **Training to use an AED is not required**
 - Does increase performance

Ethical Issues

- **In the public health setting it is assumed that CPR will be initiated**
- **Times to consider not doing CPR are:**
 - Rescuer safety in question
 - Irreversible death-rigor mortis, decapitation, decomposition

Ethical Issues

- **A valid, signed and dated Advance Directive indicating resuscitation is not desired**

Ethical Issues

- **Healthcare professionals should consider ethical, legal, and cultural factors when caring for those in need of CPR**
 - Although healthcare providers must play a role in resuscitation decision making, they should be guided by science, individual patient or surrogate preference, local policy and legal requirements

Post Cardiac Arrest Care and Education

- **The individual links of the chain of survival are interdependent and the success of each link is dependent on the effectiveness of those that precede it**
 - The challenge is to encourage early effective CPR

Post Cardiac Arrest Care and Education

- We should think of it as a system of care to improve public health and cardiac arrest survival



Resources Available to You

- Sign in to the American Heart Association Network at:
<https://myportal.americanheart.org/ccportal/ecc>



Are you ?



Welcome to the Login page of the Instructor Network.

Experiencing Login or Registration problems?

[Click here for help.](#)

Resources Available to You

- BLS Comparison Heartsaver Chart
- Highlights and 2010 Guidelines for CPR



Resources Available to You

- PowerPoint notes
- Archived broadcast
- Interim check off sheets
- Test A and B and the answer sheets will be emailed separately to ensure security

Questions

Contact Thresa Dix
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