



2015 CPR and First Aid Science Changes – At a Glance

Key Highlights

CPR

- Increased evidence that high quality CPR makes a difference.
- Benefits of Full CPR (compressions and breaths) over Hands-Only CPR affirmed for trained responders.
- Streamlined assessment (no opening of airway, simultaneous breathing/responsiveness check) for trained lay.
- New upper limit on compression depth (professional responder level) and rate (all levels).
- Compressions first before breaths for infants and children. Option of breaths first based on situation (e.g., drowning) at the professional responder level.
- The addition of naloxone for suspected opioid overdose.

First Aid

- Bleeding Control – Use of both tourniquets and hemostatic dressings when direct pressure fails or isn't possible.
- Glucose tablets are the preferred treatment for hypoglycemia.
- Aspirin should only be given when chest pain is due to suspected heart attack. Enteric-coated aspirin can be used and all aspirin should be chewed.

Summary of Changes

CPR			
	Professional Responders (BLS)	Trained Lay (FA/CPR/AED)	Untrained Lay
Compression/ Breath Ratio	1 Responder – 30:2 Child/Infant: 2 Responder – 15:2	30:2	Hands-Only
Compression Depth	Adult: At Least 2 Inches, No More Than 2.4 Inches Child: About 2 Inches Infant: About 1 ½ Inches	Adults: At Least 2 Inches Child: About 2 Inches Infant: About 1 ½ Inches	Push Hard
Compression Rate	100- 120	100- 120	Push Fast
Respiratory Arrest	Adult: 1 Breath Every 5-6 Sec. Child/Infant: 1 Breath Every 3 Sec. (Consider Naloxone for Suspected Opioid Overdose)	N/A	N/A
Advanced Airway in Place	Ventilate Every 6 Seconds	N/A	N/A
Compression Methods	Adult/Child: 2 Hands (1 Hand Option for Toddlers) Infants: 1 Responder – 2 Fingers 2 Responders – Encircling thumbs	Adult/Child: 2 Hands (1 Hand Option for Toddlers) Infants: 2 Fingers	Adult/Child: 2 Hands Infants: 2 Fingers
Treatment Order (Non-Drowning)	Adult: Compressions First Child/Infant: Compression First, Option Breaths First	Compressions First (New for Child/Infant)	Compressions Only
Drowning	2 Breaths Prior to CPR	N/A	N/A

*Changes to CPR treatment protocols are noted in bold.
Protocols are the same for adults, children and infants unless otherwise noted.*

First Aid	
Topic	Treatment Priorities and Key Changes
Anaphylaxis	If alone, administer epinephrine prior to calling 9-1-1. Administer a 2 nd dose if signs and symptoms persist for 5-10 minutes and EMS is delayed.
Bleeding	Direct pressure remains the standard. For severe life-threatening bleeding, use a tourniquet (extremities) or hemostatic dressing (non-extremity) when direct pressure fails or is not possible based on available resources and access to the wound.
Burns	Cool thermal burns with cool or cold potable (drinkable) water as soon as possible and for at least 10 minutes. If cool or cold water is not available, a clean cool or cold, but not freezing, compress can be useful as a substitute.
Chest Pain	If signs and symptoms of a heart attack are present, encourage the person to take aspirin if no allergies or other contraindications. Dose: 1 adult 325-mg tablet or 2 to 4 low-dose “baby aspirins” (81-mg each). Enteric-coated aspirin is now permissible. All aspirin must be chewed.
Concussion	Any person with a head injury that has resulted in a change in their level of consciousness, has progressive development of concussion signs and symptoms, or is otherwise a cause for concern should be evaluated by a healthcare provider or EMS personnel as soon as possible.
Dental Avulsion	Temporarily store an avulsed (knocked-out) tooth in the following solutions (listed in order of preference): Hank’s Balanced Salt Solution, egg white, coconut water or whole milk. If none of these are available, store in the injured person’s saliva (not in the mouth).
Exertional Dehydration	Assist or encourage individuals with exertional (exercise-induced) dehydration to orally rehydrate with a 5%-8% carbohydrate-electrolyte (CE) sports drink. Other beverages, such as coconut water and 2% milk, can be used. If none of these are available, potable (drinkable) water may be used.
Heat Stroke	If change in mental status, such a confusion, sleepiness, vision disturbances and seizures, apply rapid active cooling measures and call 9-1-1.
Hypoglycemia (mild)	If able to follow simple commands and swallow, oral glucose (15-20 gm) should be given. Glucose tablets, if available, are the preferred treatment. Alternatives: glucose or sucrose candies, jellybeans, orange juice, fructose in the form of fruit strips and whole milk. Wait at least 10-15 minutes before calling EMS or re-treating. If the person’s condition deteriorates during that time or does not improve, call EMS.
Open Chest Wounds	An occlusive (air tight) dressing should no longer be applied to an open chest wound. If bleeding, apply direct pressure with dry gauze. Remove the dressing if it becomes saturated. If bleeding is minor or non-existent, it is permissible to leave the wound exposed to air.
Recovery Positions	If unresponsive and breathing normally with no suspicion of a neck, back, hip or pelvic injury, place the person in a lateral recovery position. The H.A.IN.E.S. position is no longer indicated.
Shock	Persons with signs or symptoms of shock should continue to be laid flat. If there is no evidence of trauma or other injuries, raising the feet 6-12 inches may be considered if it does not cause pain.
Spinal Injuries	First aid providers should NOT routinely apply cervical collars to persons with a suspected spinal injury. If a spinal injury is suspected, have the person remain as still as possible while waiting for EMS to arrive. Do not physically hold the person’s head still.
Toxic Eye Injury	Rinse eyes exposed to toxic chemicals immediately with a copious amount of tap water for at least 15 minutes or until advanced medical care arrives. If tap water is not available, normal saline or another commercially available eye irrigation solution may be used. Call 9-1-1 and poison control.