



Instructor/TCF Renewal Information - 2015

Update Information: Instructors who need an update this year, those whose instructor card(s) expire December 31, 2015, may be updated through the newsletter again this year.

To update you must have:

1. Taught a minimum of four classes over a two-year period(1/1/2014-12/31/2015)for each discipline you teach.
2. Must pass the written exam and be checked off on skills competency (within the 2-year period); (Check off date, test score and listing with dates of classes taught, must be included on your renewal form.)

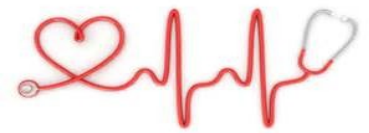
If you would like to receive a Provider Card also, please indicate on the renewal form. Costs for the card are listed on the renewal form. Your training site will have the test for your renewal and also provide you with times for skills check offs. Tests and skills check off forms are maintained at the Training Site. Renewal form along with your check, for the cost of your card(s), must be returned to Mid-Carolina AHEC, Inc. no later than December 31, 2015.

If your employer pays for your instructor card(s), give the update form with completed information to your Education Director and he/she will forward to us by the deadline.

Renewal forms will not be accepted if postmarked after December 31, 2015.

Written test and/or skills check offs may be performed at Mid-Carolina AHEC by appointment at the cost of **\$20/person**. To schedule an appointment, please call (803) 286-4121 or email:

Julie Ghent
jughent@comporium.net
or
Imogene Grubbs
igrubbs@comporium.net



2015 Guidelines Update

2015 AHA Guidelines for CPR & Emergency Cardiovascular Care

The latest American Heart Association Guidelines Update for CPR and ECC, published in the October 2015 issue of *Circulation: Journal of the American Heart Association*, highlight how quick action, proper training, use of technology and coordinated efforts can increase survival from cardiac arrest.

The guidelines recommend more training to develop a better System of Care. Everyone from bystanders to advanced healthcare providers should know what to do at every step of a cardiovascular emergency. The guidelines emphasize creating a culture of action that benefits the entire community in which it operates, inside and outside the hospital setting. The 2015 update confirms known CPR recommendations from 2010, with several quality

enhancements to help save even more lives, including a range for the rate and depth of chest compressions during CPR.

This year's update marks transition from periodic review and publication of new science-based recommendations to a more continuous process of evidence evaluation designed to more rapidly translate new science into resuscitation practice that will save more lives.

To further make the guidelines practical and adaptable to many audiences, the AHA is providing the guidelines in three forms: the 2015 Guidelines Update in *Circulation*, a Guidelines Highlights document summarizing key points, and a mobile-friendly, searchable website compendium of the 2015 and 2010 guidelines. Learn more and access the guidelines at:

2015ECCguidelines.heart.org

AHA Instructors:

We're currently working to develop your official AHA Instructor Guidelines Update, which will prepare you to incorporate 2015 guidelines into your current courses until new courses are released beginning in early 2016.

We will be presenting two unique in-person events in the US, where Instructors can learn directly from AHA science experts, volunteers and staff what the new guidelines mean for teaching lifesaving CPR and ECC courses. Learn more at 2015ECCguidelines.heart.org

Guidelines Instructor Updates Information from AHA:

In-person Guidelines Update Events: AHA Instructor Update at Citizen CPR's ECCU, December 8th, San Diego, CA

Guidelines Update Online Course: Available soon on the AHA Instructor Network, along with many tools for instructors.

Check the AHA Instructor Network periodically for release date.

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Renew only if your Instructor/TCF Card(s) Expire in 2015. The Renewal Checklist form is included in this newsletter. Please complete form and return with your check for the cost of your instructor/TCF card(s) before December 31, 2015.



Adult BLS Significant New and Updated Recommendations:

- In adult victims of cardiac arrest, it is reasonable for rescuers to perform chest compressions at a rate of 100 to 120/min.
- During manual CPR, rescuers should perform chest compressions at a depth of at least 2 inches or 5 cm for an average adult, while avoiding excessive chest compression depths (greater than 2.4 inches [6 cm]).
- In adult cardiac arrest, total preshock and postshock pauses in chest compressions should be as short as possible because shorter pauses can be associated with greater shock success, ROSC, and, in some studies, higher survival to hospital discharge.
- In adult cardiac arrest with an unprotected airway, it may be reasonable to perform CPR with the goal of a chest compression fraction as high as possible, with a target of at least 60%. The addition of this target compression fraction to the 2015 Guidelines Update is intended to limit interruptions in compressions and to maximize coronary perfusion and blood flow during CPR.
- For patients with known or suspected opioid addiction who have a definite

pulse but no normal breathing or only gasping (ie, a respiratory arrest), in addition to providing standard BLS care, it is reasonable for appropriately trained BLS providers to administer intramuscular or intranasal naloxone.

- For witnessed OHCA with a shockable rhythm, it may be reasonable for emergency medical service (EMS) systems with priority-based, multi-tiered response to delay positive-pressure ventilation by using a strategy of up to 3 cycles of 200 continuous compressions with passive oxygen insufflation and airway adjuncts.
- We do not recommend the routine use of passive ventilation techniques during conventional CPR for adults, because the usefulness/effectiveness of these techniques is unknown.
- We recommend that dispatchers should provide chest compression-only CPR instructions to callers for adults with suspected OHCA.
- It is reasonable for healthcare providers to provide chest compressions and ventilation for all adult patients in cardiac arrest, from either a cardiac or a noncardiac cause. When the victim has an advanced airway in place during CPR, rescuers no longer deliver cycles of 30 compressions and 2 breaths (ie, they no longer interrupt compressions to deliver 2 breaths).

Instead, it may be reasonable for the provider to deliver 1 breath every 6 seconds (10 breaths per minute) while continuous chest compressions are being performed. This simple rate, rather than a range of breaths per minute, should be easier to learn, remember, and perform.

- Manual chest compressions remain the standard of care for the treatment of cardiac arrest, but mechanical chest compression devices may be a reasonable alternative for use by properly trained personnel. The use of the mechanical chest compression devices may be considered in specific settings where the delivery of high-quality manual compressions may be challenging or dangerous for the provider (eg, prolonged CPR during hypothermic cardiac arrest, CPR in a moving ambulance, CPR in the angiography suite, CPR during preparation for ECPR), provided that rescuers strictly limit interruptions in CPR during deployment and removal of the device.



Preliminary Release Dates: 2015-16 AHA Guidelines for CPR & ECC Tools & Products; as of 10/1/2015

Below are the preliminary product release dates. Please note the production timeline is dependent on many factors. This schedule is subject to change at any time.

October 15, 2015

- *ILCOR Consensus on Science* (will be accessible online in journals *Resuscitation* and *Circulation*)
- *2015 AHA Guidelines Update for CPR and ECC* (will be accessible at 2015ECCguidelines.heart.org, launching October 15, and online in journal *Circulation*)
- *AHA and Red Cross Guidelines for First Aid* (FirstAidguidelines.heart.org, launching October 15)
- AHA Integrated Guidelines Website ECCguidelines.heart.org, launching October 15.

2015 November/December

- AHA Guidelines Science In-Service (online)
- Reprint of *2015 AHA Guidelines Update for CPR and ECC* (print and eBook)
- *Handbook of ECC for Healthcare Providers* (print and eBook)
- AHA Guidelines Instructor Update (online and in-person events in US and internationally)

2016 January/February

- Blended Basic Life Support (BLS)

2016 March/April

- BLS Classroom
- Blended Heartsaver® First Aid CPR AED
- Heartsaver® First Aid CPR AED Classroom
- Blended Heartsaver® Pediatric First Aid CPR AED

- Advanced Cardiovascular Life Support (ACLS) Classroom
- HeartCode® ACLS
- CPR Anytime® Adult/Child
- Infant CPR Anytime®
- CPR in Schools Training Kit™

2016 April/May

- Heartsaver® Pediatric First Aid CPR AED
- Heartsaver® Bloodborne Pathogens
- Family & Friends® CPR

2016 July/August

- Pediatric Advanced Life Support (PALS) Classroom
- HeartCode® PALS
- Pediatric Emergency Assessment, Recognition and Stabilization (PEARS)



ACLS Significant New and Updated Recommendations

- Based on new data, the recommendation for use of the maximal feasible inspired oxygen during CPR was strengthened. This recommendation applies only while CPR is ongoing and does not apply to care after ROSC.
- Continuous waveform capnography remained a Class I recommendation for confirming placement of an endotracheal tube. Ultrasound was added as an additional method for confirmation of endotracheal tube placement.
- The defibrillation strategies addressed by the 2015 ILCOR review resulted in minimal changes in defibrillation recommendations.
- The Class of Recommendation for use of standard dose epinephrine (1 mg every 3 to 5 minutes) was unchanged but reinforced by a single new prospective randomized clinical trial demonstrating improved ROSC and survival to hospital admission that was inadequately powered to measure impact on long-term outcomes.
- Vasopressin was removed from the ACLS Cardiac Arrest Algorithm as a vasopressor therapy in recognition of equivalence of effect with other available interventions (eg, epinephrine). This modification valued the simplicity of approach toward cardiac arrest when 2 therapies were found to be equivalent.
- The recommendations for timing of epinephrine administration were updated and stratified based on the initial presenting rhythm, recognizing the potential difference in pathophysiologic disease. For those with a non-shockable rhythm, it may be reasonable to administer epinephrine as soon as feasible. For those with a shockable rhythm, there is insufficient evidence to make a recommendation about the optimal timing of epinephrine administration, because defibrillation is a major focus of resuscitation.
- The use of steroids in cardiac arrest is controversial. The combination of intra-arrest vasopressin, epinephrine, methylprednisolone and post-arrest hydrocortisone as described by Mentzelopoulos et al may be considered; however, further studies are needed before the routine use of this therapeutic strategy can be recommended.
- Prognostication during CPR was also a very active topic. There were reasonably good data indicating that low partial pressure of end-tidal carbon dioxide (PETCO₂) in intubated patients after 20 minutes of CPR is strongly associated with failure of resuscitation. Importantly, this parameter should not be used in isolation and should not be used in nonintubated patients.
- ECPR, also known as venoarterial extracorporeal membrane oxygenation, may be considered as an alternative to conventional CPR for select patients with refractory cardiac arrest when the suspected etiology of the cardiac arrest is potentially reversible during a limited period of mechanical cardiorespiratory support.

PBLS Guidelines Update

Pediatric BLS Significant New and Updated Recommendations

- The 3 major CPR process characteristics that were evaluated included C-A-B (Compressions, Airway, Breathing) versus A-B-C (Airway, Breathing, Compressions), compression-only CPR, and compression depth and rate. No major changes were made for the 2015 Guidelines Update; however, new concepts in CPR delivery were examined for children.
- Compression rate was not reviewed because of insufficient evidence, and we recommend that rescuers use the adult rate of 100 to 120/min (Updated).

PALS Update

PALS Significant New and Updated Recommendations

- There is new evidence that when treating pediatric septic shock in specific settings, the use of restricted volume of isotonic crystalloid leads to improved survival, contrasting with the long-standing belief that all patients benefit from aggressive volume resuscitation. New guidelines suggest a cautious approach to fluid resuscitation, with frequent patient reassessment, to better tailor fluid therapy and supportive care to children with febrile illness.
- New literature suggests limited survival benefit to the routine use of atropine as a premedication for emergency tracheal intubation of non-neonates, and that any benefit in preventing arrhythmias is controversial.
- Recent literature also provides new evidence suggesting there is no minimum dose required for atropine use.
- New evidence suggests that either amiodarone or lidocaine is acceptable for treatment of shock-refractory pediatric ventricular fibrillation and pulseless ventricular tachycardia.
- Recent literature supports the need to avoid fever when caring for children remaining unconscious after OHCA.
- The writing group reviewed a newly published multicenter clinical trial of targeted temperature management that demonstrated that a period of either 2 days of moderate therapeutic hypothermia (32° to 34° C) or the strict maintenance of normothermia (36° to 37.5° C) were equally beneficial.
- As a result, the writing group feels either of these approaches is appropriate for infants and children remaining comatose after OCHA.
- Hemodynamic instability after cardiac arrest should be treated actively with fluids and/or inotropes/vasopressors to maintain systolic blood pressure greater than the fifth percentile for age. Continuous arterial pressure monitoring should be used when the appropriate resources are available.



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Post-Cardiac Arrest Care Significant New and Updated Recommendations

- One of the most common causes of cardiac arrest outside of the hospital is acute coronary occlusion. Quickly identifying and treating this cause is associated with better survival and better functional recovery. Therefore, coronary angiography should be performed emergently (rather than later in the hospital stay or not at all) for OHCA patients with suspected cardiac etiology of arrest and ST elevation on ECG. Emergency coronary angiography is reasonable for select (eg, electrically or hemodynamically unstable) adults who are without ST elevation on ECG but are comatose after OHCA of suspected cardiac origin. Emergency coronary angiography is also reasonable for post-cardiac arrest patients for whom coronary angiography is indicated, regardless of whether the patient is comatose or awake.
- A high-quality randomized controlled trial did not identify any superiority of targeted temperature management at 36°C compared with management at 33°C. Excellent outcomes are possible when patients are actively managed at either temperature. All comatose (ie, lack of meaningful response to verbal commands) adult patients with ROSC after cardiac arrest should have targeted temperature management, with providers selecting and maintaining a constant temperature between 32°C and 36°C for at least 24 hours after achieving target temperature. It is also reasonable to actively prevent fever in comatose patients after targeted temperature management.
- Multiple randomized controlled trials tested prehospital infusion of cold intravenous fluids to initiate hypothermia after OHCA. The absence of any benefit and the presence of some complications in these trials led to a recommendation against the routine prehospital cooling of patients after ROSC by using rapid infusion of cold saline. However, this recommendation does not preclude the use of cold intravenous fluids in more controlled or more selected settings and did not address other methods of inducing hypothermia.
- Specific management of patients during post-resuscitation intensive care includes avoiding and immediately correcting hypotension and hypoxemia. It is reasonable to use the highest available oxygen concentration until the arterial oxyhemoglobin saturation or the partial pressure of arterial oxygen can be measured. However, the benefits of any specific target ranges for blood pressure, ventilator management, or glucose management are uncertain.
- Multiple studies examined methods to determine prognosis in patients after cardiac arrest, and the use of multiple modalities of testing is recommended. The earliest time to prognosticate a poor neurologic outcome by using clinical examination in patients *not* treated with targeted temperature management is 72 hours after ROSC, but this time can be even longer after cardiac arrest if the residual effect of sedation or paralysis is suspected to confound the clinical examination. In patients treated *with* targeted temperature management, where sedation or paralysis could confound clinical examination, it is reasonable to wait until 72 hours after return to normothermia.
- Useful clinical findings that are associated with poor neurologic outcome include:
 - The absence of pupillary reflex to light at ≥ 72 hours after cardiac arrest
 - The presence of status myoclonus during the first 72 hours after cardiac arrest
 - The absence of the N20 somatosensory evoked potential cortical wave 24 to 72 hours after cardiac arrest or after rewarming
 - The presence of a marked reduction of the gray-white ratio on brain computed tomography obtained within 2 hours after cardiac arrest
 - Extensive restriction of diffusion on brain magnetic resonance imaging at 2 to 6 days after cardiac arrest
 - Persistent absence of electroencephalographic reactivity to external stimuli at 72 hours after cardiac arrest
 - Persistent burst suppression or intracetable status epilepticus on electroencephalogram after rewarming
 - **Note:** Absent motor movements, extensor posturing or myoclonus should not be used alone for predicting outcome.
- All patients who are resuscitated from cardiac arrest but who subsequently progress to death or brain death should be evaluated as potential organ donors. Patients who do not have ROSC after resuscitation efforts also may be considered candidates as kidney or liver donors in settings where programs exist.

Training Center Faculty Information

When teaching Instructor Courses, you should submit a Candidate Information Form to us. The students must register with the AHA Instructor Network prior to the class so they can complete the required Instructor Essentials On-Line Course. This course is required prior to entering the classroom portion of the Instructor Course. For Mid-Carolina AHEC to be able to approve the candidate on the Instructor Network, we need their names. Currently, we receive notices to approve candidates and do not know who they are, therefore we have been unable to approve them. It is the Training Center Faculty's obligation to send that information to us.

Also, when new instructors complete the course and want to align with our Training Center, we find their files are incomplete.

Following is a checklist of the information required in the new instructor's file.

This form is now included in the instructor packet.

Required in Instructor File Check Sheet

For new instructors, these forms will be submitted by the **Training Center Faculty or the Regional Faculty** teaching the class.

- Instructor Candidate Application Form (Prior to Class)
- Instructor Candidate Provider Card (for discipline of Instructor Class)
- Instructor Essentials Certificate
- Instructor Monitoring Form

Provided by Training Center Faculty or By New Instructor

- Training Center Instructor Agreement Form

(with proof of Liability Insurance Information as noted on form - instructors will not be accepted in the Training Center without proof of Insurance)

- Instructor Information Form
- Instructor Responsibilities Form
- Instructor Card Copy
- Use Current AHA Materials
- Quality Assurance Form
- Manikin Decontamination Form
- Provide Instructor Number assigned by AHA

Incomplete packets will be returned for completion.

Instructor/TCF Renewal Checklist — Renew only if your card expires in 2015

**American Heart Association Emergency Cardiovascular Care Program
Instructor/TCF Renewal Checklist**

Instructions: This checklist may be used to document successful completion of Instructor/TCF renewal requirements and contact information. The completed form is kept in the Instructor's file at the Training Center.

Instructor/TCF Contact Information (Please Print Legibly)

Name: _____ Instructor ID #: _____

Address: _____

Phone: _____ Fax: _____ E-Mail: _____

Other contact information: _____

Discipline: ___ BLS ___ ACLS ___ PALS ___ ACLS EP ___ Heartsaver ___ Heartsaver First Aid Expiration Date: _____

___ BLS TCF ___ ACLS TCF ___ PALS TCF Expiration Date: _____

Do you wish to receive a new provider card? ___ Yes ___ No ___ BLS ___ ACLS ___ PALS *****Card costs below**

If TCF and your card expires and you wish to be reappointed as TCF please indicate discipline. ___ BLS ___ ACLS ___ PALS

Primary TC: **Mid-Carolina AHEC, Inc. Training Center** Name of TC Coordinator: **Julie Ghent**

Instructor/TCF Card Costs: Consortium Members: \$15.00/discipline Non-Consortium Members: \$25.00/discipline

*****Provider Card Costs: Consortium Members: BLS \$ 3.00 ACLS/PALS: \$ 7.00*****

*****Non-Consortium Members: BLS: \$5.00 ACLS/PALS: \$12.00*****

Renewal Checklist

___ Provider skills successfully demonstrated. Date: _____ Method: _____

___ Provider/Instructor examination completed with a score of 84% or higher. Date: _____ Score: _____

___ At least 4 Provider Courses taught in past two years for each discipline you instruct. (List below)

___ Training Center Faculty (TCF) one Instructor/Instructor Renewal Course taught in past two years. (List below.)

Please note: If you requested a provider card, see card costs above. There is an additional cost for a Provider card.

Teaching Activity

Course Name	Date	Location (TC/Site)	Station/Module
1.			
2.			
3.			
4.			

Instructor/Instructor Renewal Course (For TCF Renewal)

1.			
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Additional courses may be attached or listed on the back of this form.

Training Center Use Only:

___ New Instructor Card issued. Date: _____ TCF status maintained. Date: _____

___ New Provider Card issued. Date: _____



Training Center Guidelines

As an instructor with our Training Center your responsibilities include:

- Possess a working knowledge of the current course materials.
- Provide ECC training following guidelines and curriculum of the AHA and Mid-Carolina AHEC TC.
- Be evaluated/monitored by the TC Coordinator, a designated regional Faculty Member or the MC AHEC BLS/TCF monitor.
- Attend an Update at least once every two years, when indicated by ECC.
- Participate in public training.
- Keep copies of rosters sent to MC-AHEC along with the exams.
- Notify the TC prior to each course date; 20 days for *ACLS*, *PALS* and *Instructor courses* and 10 days for *BLS* courses.
- Send course roster with appropriate fees to the TC within 14 business days after the course date. All names and addresses must be printed clearly. Completion cards will be sent to the course director/coordinator. No blank cards will be issued. All checks are to be made payable to Mid-Carolina AHEC, Inc.
- Instructors are **not** to give class participants the TC phone number. Should there be questions/concerns about rosters, classes or cards, instructors are to contact the TC.
- Instructors may teach for other Training Centers, but should send a roster to Mid-Carolina AHEC for inclusion in their teaching record.

Card Fees

Consortium Members

\$3/each: BLS, Heartsaver, First Aid, AED provider

\$7/each: ACLS, ACLS EP, PALS provider

\$15/each: Instructor & TCF

Non-Consortium Members

\$5/each: BLS, Heartsaver, First Aid, AED provider

\$12/each: ACLS, ACLS-EP, PALS provider

\$25/each: Instructor and TCF

All replacement cards: \$10

Cards on Demand: \$25 plus cost of card

Guidelines Instructor Updates Information from AHA

AHA Instructors: Complete your required 2015 Guidelines Update!

In-person Guidelines Update Events: AHA Instructor Update at Citizen CPR's ECCU, December 8th, San Diego, CA
Guidelines Update Online Course: Available soon on the AHA Instructor Network, along with many tools for instructors.
Check the AHA Instructor Network periodically for release date.

Remember: Renew only if your card expires in 2015.

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Training Center
1824 Hwy 9 By-Pass West
PO Box 2049
Lancaster SC 29721
803-286-4121
Fax. 803-286-4165
www.midcarolinaahec.org

Mail all rosters to PO Box Only



**Our Training Center is
a success because of
our great instructors!**

Thank You!!