

HeartCode® ACLS Course Overview

Original Release Date: November 2003

Date of Last CME Review: May 2011

DESCRIPTION:

HeartCode ACLS is an official, self-directed, comprehensive eLearning program from the American Heart Association (AHA). HeartCode ACLS Part 1 uses eSimulation technology to present realistic patient scenarios. Students are presented with a team dynamics lesson (passing is 10 out of 14 or better), 10 ACLS hospital-based case scenarios (passing is 70% or better), and a written exam (passing is 84% or better). While interacting with the program, students assess each patient, formulate a treatment plan based on ACLS guidelines, and provide treatment. Successful completion of Part 1, the cognitive component, and Parts 2 and 3, skills practice and testing with an AHA ACLS Instructor or a voice-assisted manikin (VAM) system, meets the requirements for obtaining an AHA ACLS Provider course completion card.

LEARNING OBJECTIVES:

At the conclusion, participants should be able to

- Recognize and initiate early management of periarrest conditions that may result in cardiac arrest or complicate resuscitation outcome
- Demonstrate proficiency in providing BLS care, including prioritizing chest compressions and integrating automated external defibrillator (AED) use
- Recognize and manage respiratory arrest
- Recognize and manage cardiac arrest until termination of resuscitation or transfer of care, including immediate post-cardiac arrest care
- Recognize and initiate early management of acute coronary syndromes, including appropriate disposition
- Recognize and initiate early management of stroke, including appropriate disposition
- Demonstrate effective communication as a member or leader of a resuscitation team and recognize the impact of team dynamics on overall team performance

CONTINUING EDUCATION CREDIT:

ACCREDITATION TERMS:

- ACCME/AMA (Physicians) – June 30, 2011 – June 29, 2014
- ANCC (Nurses) – June 30, 2011 – June 29, 2014
- ACPE (Pharmacists) - June 30, 2011 – June 29, 2014
- CECBEMS (EMS Practitioners) – June 30, 2011 – June 29, 2014

ACCREDITATION STATEMENTS:

Continuing Medical Education Accreditation - Physicians

The American Heart Association is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The American Heart Association designates this enduring material for a maximum of 9.75 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

All faculty participating in CME/CE activities sponsored by the American Heart Association will disclose to the audience (1) significant financial relationships with the manufacturer(s) of products from the commercial supporter(s) and /or the manufacturer(s) of products or devices discussed in their presentation, and (2) unlabeled/unapproved uses of drugs or devices discussed in their presentation. Such disclosures will be made in writing in course presentation materials.

Please note that ACCME/AMA offer Physician CME only to MDs and DOs.

Continuing Medical Education Accreditation – Physician Assistants

AAPA accepts Category I credit from AOACCME, Prescribed credit from AAFP, and *AMA PRA Category 1 Credit™* from organizations accredited by ACCME.

Continuing Education Accreditation - Nurses

The American Heart Association is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

The maximum number of hours awarded for this CE activity is 9.75 contact hours.

Accredited status does not imply endorsement by the American Heart Association or the American Nurses Credentialing Center of any commercial products displayed in conjunction with an activity.



Continuing Education Accreditation – Pharmacists

The American Heart Association is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education. ACPE Credit: 10.00 Contact Hours or 1.000 CEUs. Universal Program Number: 0256-0000-11-647-H01-P.

Successful completion of this CE activity includes the following: Students are presented with a team dynamics lesson, 10 ACLS cases in hospital-based scenarios, and a written exam. While interacting with the program, students assess each patient, formulate a treatment plan based on ACLS guidelines, and provide treatment. Once successful completion has been achieved, a CME/CE certificate can be claimed immediately by clicking on the *CME/CE* link or request button. Complete the series of demographic questions including the selection of your discipline and then click on the Show or Print button to retrieve.

Continuing Education Accreditation – Emergency Medical Services

This continuing education activity is approved by the American Heart Association, an organization accredited by the Continuing Education Coordinating Board for Emergency Medical Services (CECBEMS), for 10.25 Advanced CEHs, activity number 11-AMHA-F3-0123.

DISCLOSURE FOR HEARTCODE ACLS 2011:

I. Instructions for Independent Study

Successful completion of this CE activity includes the following:

- (1) Complete the team dynamics lesson, pass the 10 medical cases, and complete the written exam.
- (2) Complete the course evaluation form.

(3) Print the certificate/statement of credit.

II. Cost

There is no additional fee for CME/CE/CEH credits for this activity.

Disclosure Statement

As a sponsor accredited by the Accreditation Council for Continuing Medical Education (ACCME), the American Nurses Credentialing Center's Commission on Accreditation (ANCC), the Accreditation Council for Pharmacy Education (ACPE), and the Continuing Education Coordinating Board for Emergency Medical Services (CECBEMS), the American Heart Association must ensure fair balance, independence, objectivity, and scientific rigor in all of its individually sponsored or jointly sponsored educational activities.

Accreditation/Disclosure Statements

Therefore, all faculty and authors participating in continuing education activities sponsored by the American Heart Association must disclose to the audience (1) any significant financial relationships with the manufacturer(s) of products from the commercial supporter(s) and/or the manufacturer(s) of products or devices discussed in the activity, and (2) unlabeled/unapproved uses of drugs or devices discussed in the activity. The intent of this disclosure is not to prevent an author with a significant financial or other relationship from contributing but rather to provide participants with information with which they can make their own judgments. It remains for the participants to determine whether the author's interests or relationships may influence the content.

I. The following authors/faculty have declared financial interest(s) and/or affiliations:

Name:

Steven Brooks, MD—Laerdal Foundation for Acute Medicine (Funded Researcher—Unrestricted, peer-reviewed research grants) and Heart and Stroke Foundation of Canada (peer-reviewed salary support award 2010-2011)

Peter Panagos, MD—Genentech, Speaker's Bureau- Occasional

II. The following authors/faculty have declared NO financial interest(s) and or affiliations:

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Sallie Young, PharmD

Unlabeled/unapproved uses of drugs or devices are included in this activity

This continuing education computer-based instruction contains recommendations from the American Heart Association Emergency Cardiovascular Care Committee, Subcommittee on Advanced Cardiovascular Life Support, as published in the American Heart Association *Advanced Cardiovascular Life Support Provider Manual*. Most of these recommendations are based on guidelines developed in an evidence evaluation consensus process for the 2010 International Consensus Conference on Cardiopulmonary Resuscitation and Emergency

Cardiovascular Care Science With Treatment Recommendations. The evidence evaluation consists of expert review, an analysis, and discussion of relevant scientific studies published in peer-reviewed journals. The drug treatments recommended in this activity are consistent with the indications, contraindications, and doses approved by the US Food and Drug Administration (FDA), with the exceptions listed here.

Alteplase, recombinant (rtPA)

For patients with acute ischemic stroke who are not candidates for intravenous thrombolysis, administration of intra-arterial thrombolysis in an experienced stroke center with immediate access to cerebral angiography and qualified interventionalists may be considered within the first few hours after onset of symptoms. Facilities are encouraged to define criteria to credential individuals who can perform intra-arterial thrombolysis (Class I, Level of Evidence C). Intra-arterial thrombolysis is reasonable in patients who have contraindications to use of intravenous thrombolysis, such as recent surgery (Class IIa, Level of Evidence C). Intra-arterial administration of tPA has not yet been approved by the FDA.

Amiodarone

This drug is FDA approved for life-threatening ventricular arrhythmias, including recurrent VF and hemodynamically unstable VT. All other use constitutes an “off-label” indication, including hemodynamically stable VT, wide-complex tachycardia of uncertain origin, AF, atrial flutter, pre-excitation arrhythmias, and arrhythmias in context of CHF. Similarly, the use of IV amiodarone for shock-refractory VF/VT would not be an off-label use if given as a 150 mg dose, but giving it as a 300 mg bolus for this approved indication could be construed as off-label.

Vasopressin

This drug is approved for diabetes insipidus, abdominal distention, and abdominal roentgenography.

Vasopressin has not been shown to differ from epinephrine (Class Indeterminate) in cardiac arrest. One dose of vasopressin may replace either the first or the second dose of epinephrine.

Note on Medication Doses

Emergency cardiovascular care is a dynamic science. Advances in treatment and drug therapies occur rapidly. Readers are advised to check for changes in recommended dose, indications, and contraindications in the following sources: future editions of the *AHA Handbook of Emergency Cardiovascular Care for Healthcare Providers* and AHA training materials, as well as the package insert product information sheet for each drug.

Clinical condition and pharmacokinetics may require drug dose or interval dosing adjustments. Specific parameters may require monitoring, for example, creatinine clearance or QT interval. Some medications mentioned in this activity may not be available in all countries, and may not be specifically approved by regulatory agencies in some countries for a particular indication.

TARGET AUDIENCES:

Primary Audience:

- Physicians
- Nurses

- Paramedics/Advanced EMTs
- Residents
- Nurse Practitioners
- Physician Assistants
- Clinical Pharmacists