American Heart Association (AHA) Requirement on Use of Feedback Devices in Adult CPR Training

CPR & Emergency Cardiovascular Care

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By January 31, 2019, the AHA will require the use of an instrumented directive feedback device or manikin in all AHA courses that teach the skills of adult CPR. Specifically, an instrumented directive feedback device or manikin is one that, at a minimum, provides audio or visual (or both) feedback on the rate and depth of compressions during CPR training. This requirement will impact AHA Basic Life Support (BLS), Advanced Cardiovascular Life Support (ACLS), ACLS for Experienced Providers, and Heartsaver® courses taught in the US and internationally.

In the future, as more devices become available for child and infant CPR, the AHA will also require the use of feedback devices in courses that teach the skills of child and infant CPR.

Science Supporting this Requirement*
The *2015 AHA Guidelines Update for CPR and ECC* highlighted research showing the benefit of feedback devices that provide learners with real-time, audio-visual corrective feedback on aspects such as chest compression rate, depth, and recoil.

As stated in the *2015 AHA Guidelines for CPR and ECC*, "Unfortunately, inadequate performance of CPR is common yet challenging for providers and instructors to detect, thereby making it difficult to appropriately focus feedback and improve future performance. Technology could theoretically help address this problem by assessing CPR performance and providing feedback."

Studies have also shown that feedback devices help students achieve mastery of critical CPR skills and shorten the time to demonstration of competence.

Additional information on the science can be found in "*Part 14: Education, CPR Feedback/Prompt Devices in Training*" of the *2015 AHA Guidelines Update for CPR and ECC*.

Definition & Descriptions: Instrumented Directive Feedback Devices**
An instrumented directive feedback device measures compression rate, depth, hand position, recoil, and chest compression fraction and provides real-time audio or visual feedback (or both) on these critical CPR skills. A feedback device can be integrated into a manikin or serve as an accessory to a manikin. To meet the AHA's requirement, at a minimum, the device must measure and provide real-time audio feedback or visual feedback (or both) on compression rate and depth. This audio or visual information allows students to self-correct their skills in real time.

There are many types of instrumented directive feedback devices available for AHA Training Centers to meet this requirement, including

- Those that can be added to and used with existing manikins;
- Those that are part of manikins;
- Monitors or defibrillators used with manikins; or
- High-fidelity manikins

Please note: The AHA cannot review or recommend specific equipment. AHA Training Centers should contact equipment manufacturers for any questions regarding the capability of equipment to meet requirement criteria.

**Bhanji F, Donoghue AJ, Wolff MS, et al. Part 14: education: 2015 American Heart Association Guidelines Update for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. Circulation. 2015;132(18 suppl 2): S561-S573.*

***For additional information, please review the document, "Feedback Device Specifics for CPR Instruction," FAQs, and the bibliography of studies on use of feedback devices posted on the AHA Instructor Network and CPRverify.*