

## CPR & Emergency Cardiovascular Care

As of August 15, 2017

### **RATE**

As recommended by the *2015 AHA Guidelines Update for CPR and ECC*, quality feedback is critical to understanding and delivering high-quality CPR. When healthcare providers and others trained in CPR are practicing chest compressions, they need to have adequate visual feedback to indicate when they are compressing at a rate of 100 to 120 compressions per minute.

*Examples of adequate visual feedback devices:*

- *Manikin or device placed on manikin chest that uses light display to give real-time feedback that rate of compression is or is not meeting AHA recommendations*
- *Device with screen display that detects rate of actual compressions and indicates visually whether to push faster or to push slower in real time to meet AHA recommendations*

### **DEPTH AND RECOIL**

Depth of compression and chest recoil are critical skills as well. When compressions are performed at the recommended depth, along with adequate chest recoil, audible feedback from the device should be produced to let students know they are on target. Visual and audible reinforcement in real-time of high-quality CPR technique, is critical in the Chain of Survival.

*Examples of adequate auditory feedback devices:*

- *Manikin with mechanism that produces a clear audible indication, such as a click, tone, or prompt in real time when depth of compression meets AHA recommendations*
- *Device placed on manikin chest that has screen display and sound capability giving audio and visual prompts in real time to push harder if depth of compression is inadequate, or to push softer if depth of compression is too deep in order to meet AHA recommendations*

**HAND PLACEMENT** (*while the AHA requirement does not include hand placement, this also is a critical element of high-quality CPR*)

Feedback devices must assist in proper hand placement for delivery of high-quality CPR. This may be accomplished either by landmark instruction or illustration on the device.

### **Standard Specifics for Feedback Device Compliance with AHA Requirement**

- Minimum standard: Instrumented, auditory, and visual feedback for rate and depth of compression.
- Optimum standard: Meets the minimum standard and includes auditory/visual feedback for recoil and didactic(s) for proper hand placement.