

Shock, Shock, Shock...
Everybody Shock
AHA 2015 Scientific Update

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EMERGENCY

CLEAN
UNDERWEAR

DIRTY
UNDERWEAR

TRIAGE NURSE

©Kage

Objectives

- Review scientific updates that will impact cardiopulmonary resuscitation and emergency cardiovascular care.
- Discuss how the changes will impact our daily practice.
- Identification of the new 2015 AHA guidelines for opioid overdose

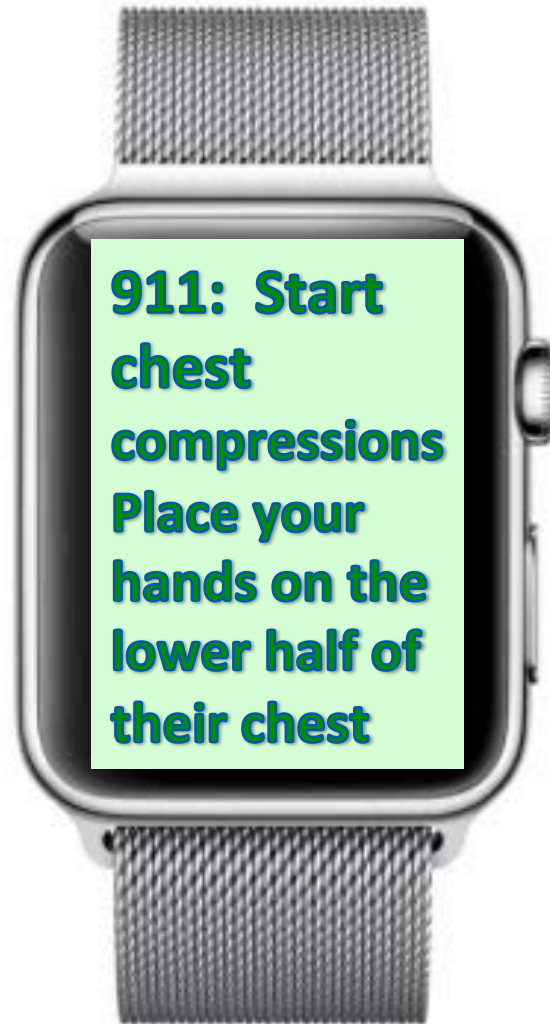
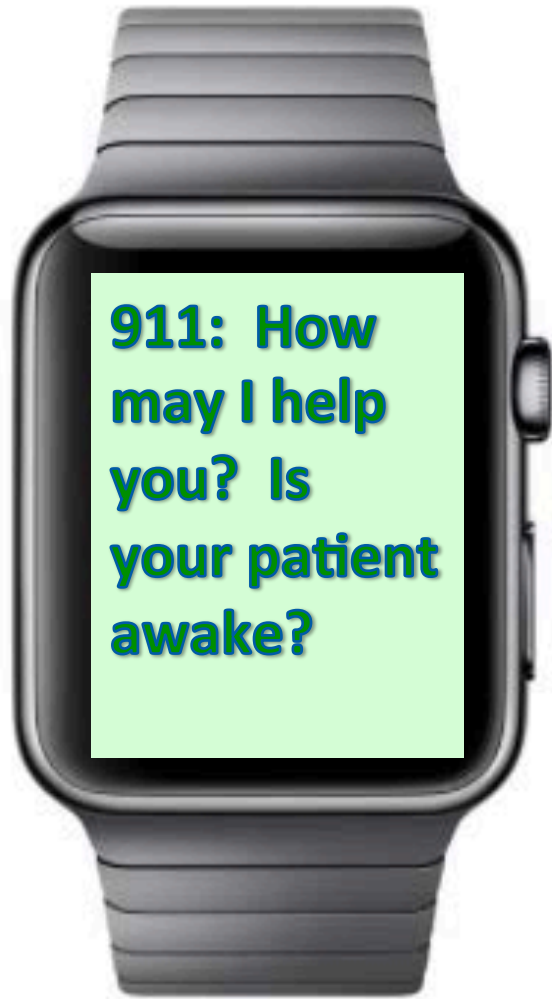
Back in the day.....

- The ACLS guidelines were first published in 1974 “squad 51”
- 1980, 1986, 1992
- 2000 Chain of Survival and AED
- 2005 30:2 & Stroke Guidelines
- 2010 CAB
- 2015

Dispatcher Recognition

- Out of Hospital Cardiac Arrest (OHCA)
- CHAIN OF SURVIVAL Activation
- Recognize unconscious with abnormal or agonal respirations
- Chest compression only CPR to callers





Compressions

- 2010...Early CPR 100 compressions/minute
- 2015.....100-120 compressions/minute
- 2010 Depth of compression of at least 2"
- 2015 Depth of compression of at least 2", while avoiding excessive depths > 2.4 "



Ancillary Devices for CPR

- Impedence Threshold Devices-→OUT
- Thumpers....Bands....Not Recommended





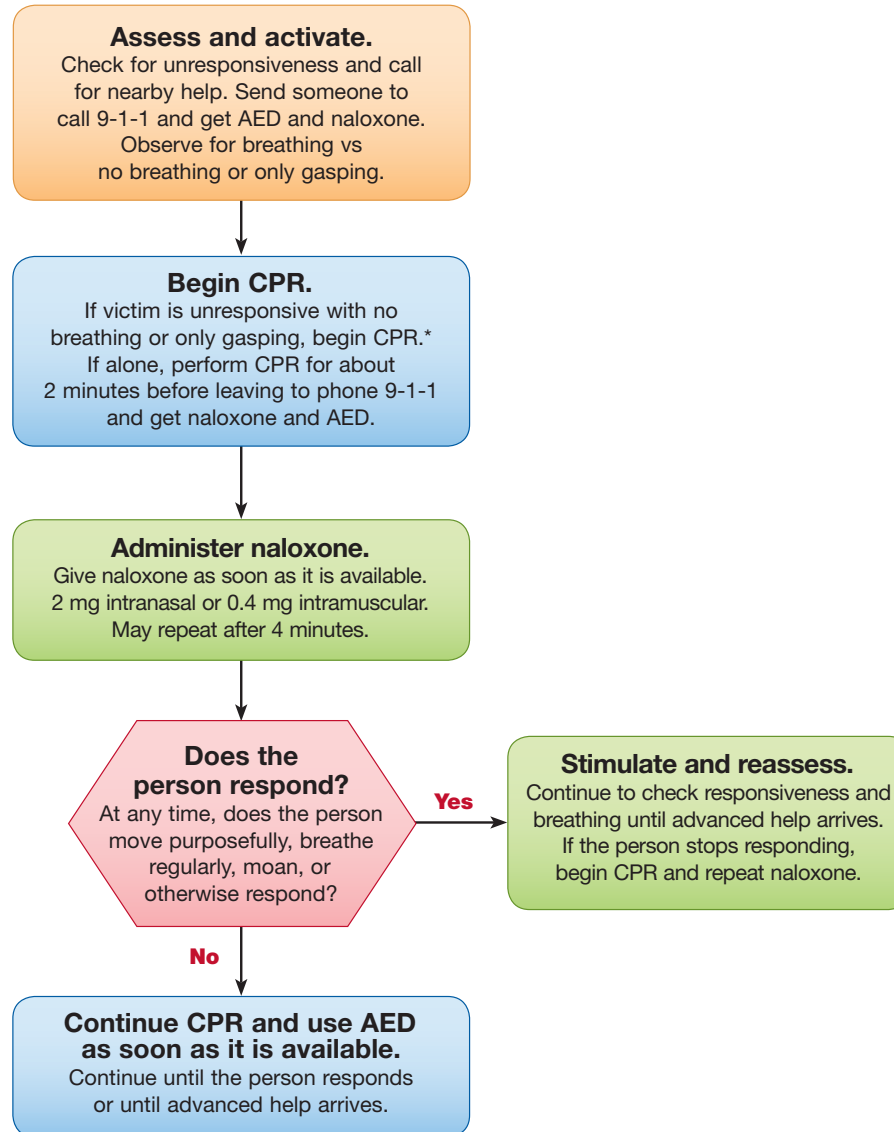
Opioid Overdose

- CAB before Narcan
- If victim responds to Narcan...still transport...
- Empiric administration of Narcan IM or IN





Opioid-Associated Life-Threatening Emergency (Adult) Algorithm—New 2015



*CPR technique based on rescuer's level of training.

Acute Coronary Syndrome

- Pre-hospital 12 lead ECG should be acquired early for patients with possible ACS
- Computer generated interpretation.....Good or bad?
- MONA...."O"
- Reperfusion...<120 minutes

Pediatrics

- RATE—same as adults
- Too much fluid may be bad
- Premedicating with atropine prior to intubation
- Amiodarone OR lidocaine acceptable for VF/
VT

Cardiac Arrest in Pregnancy: Provision of CPR

A faint, grey silhouette of a pregnant woman is centered in the background of the slide. She is shown in profile, facing left, with her hands resting on her hips. The silhouette is semi-transparent, allowing the text to be read over it.

2015 (Updated): Priorities for the pregnant woman in cardiac arrest are provision of high-quality CPR and relief of aortocaval compression. If the fundus height is at or above the level of the umbilicus, manual left uterine displacement can be beneficial in relieving aortocaval compression during chest compressions.

2010 (Old): To relieve aortocaval compression during chest compressions and optimize the quality of CPR, it is reasonable to perform manual left uterine displacement in the supine position first. If this technique is unsuccessful, and an appropriate wedge is readily available, then providers may consider placing the patient in a left lateral tilt of 27° to 30°, using a firm wedge to support the pelvis and thorax.

Why: Recognition of the critical importance of high-quality CPR and the incompatibility of the lateral tilt with high-quality CPR has prompted the elimination of the recommendation for using the lateral tilt and the strengthening of the recommendation for lateral uterine displacement.

Summary

- <https://eccguidelines.heart.org/index.php/circulation/cpr-ecc-guidelines-2/>
- **NEW Web-Based Integrated Guidelines**
- Continuously updated instead of every 5 years
- Renewal maybe more frequent than every 2 years
- **FasterDeeper.....SAVES LIVES**

References

- <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1485990/>
- http://circ.ahajournals.org/content/102/suppl_1/I-1.full
- <http://www.aafp.org/afp/2006/0501/p1644.html>
- <https://eccguidelines.heart.org/index.php/circulation/cpr-ecc-guidelines-2/>