

School Based CPR/AED Training Cardiac Emergency Response Plans

ECCU December 7, 2017

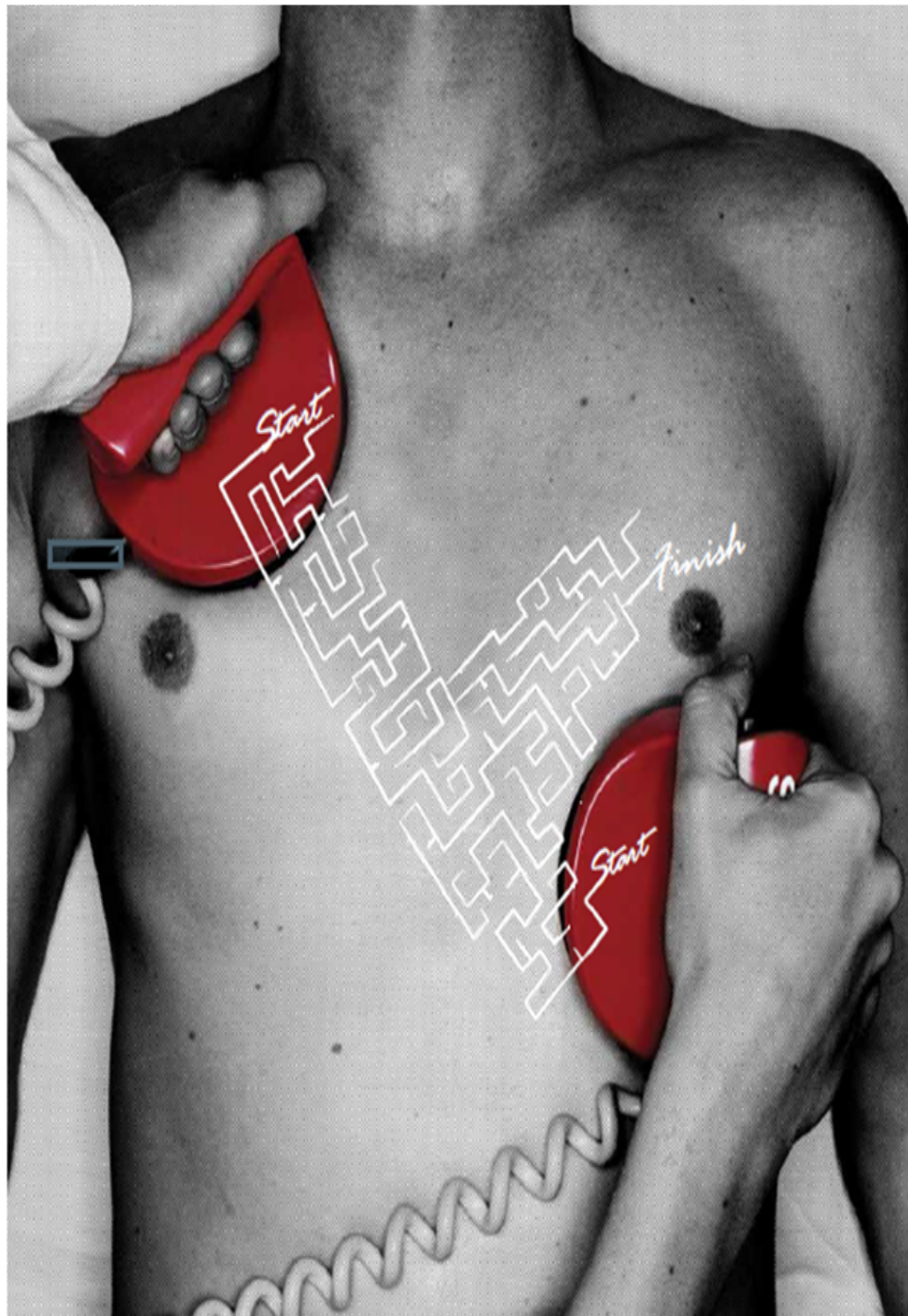
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Children's Healthcare of Atlanta

No Disclosures

Secondary Prevention

PROJECT
S.A.V.E.
LIVES
UP TO ITS
NAME



Project ADAM[®]

SAVES LIVES



UCDAVIS
CHILDREN'S HOSPITAL



CookChildren's.



University of Michigan
C.S. Mott Children's Hospital



The Children's Hospital
Philadelphia[®]

Primary Focus



Chain of Survival (AHA)

- ✓ Early Recognition and Call 911
- ✓ Early Cardiopulmonary Resuscitation (CPR)
- ✓ Early Defibrillation
- ✓ Effective Advanced Care
- ✓ Coordination of Care in the Hospital



Assume the Worst – Hope for the Best

CPR

Hands-Only CPR, No Excuses

“CPR is inherently inefficient; it provides only 10% to 30% of normal blood flow to the heart and 30% to 40% of normal blood flow to the brain even when delivered according to guidelines. This inefficiency highlights the need for trained rescuers to deliver the highest quality CPR possible.”

Circulation. 2013;128:417-435



AHA Scientific Statement

Reducing Barriers for Implementation of Bystander-Initiated Cardiopulmonary Resuscitation A Scientific Statement From the American Heart Association for Healthcare Providers, Policymakers, and Community Leaders Regarding the Effectiveness of Cardiopulmonary Resuscitation

Circulation. 2008;117:704-709

“In places where widespread first responder CPR training has been provided (e.g. as part of community lay rescuer AED programs), survival rates from witnessed SCA associated with ventricular fibrillation have been reported to be as high as 49% to 74%%.”

N Engl J Med. 2002;347:1242-1247

N Engl J Med. 2000;343:1206-1209



AED

Ryan Boslet



According to the September 12, 2004 story in the *Macon (Georgia) Telegraph*, when rising football star Ryan Boslet suffered sudden cardiac arrest(SCA) during a workout at his school gym on February 20, 2003,

the AED the school had only recently purchased wasn't used - even though it was just the length of a basketball court away in the athletic director's office - because a staff member couldn't find the adhesive electrode pads, which were tucked under a flap inside the AED.

Thinking the device was inoperable, coaches called 911, and administered CPR to the 6-foot-4, 270 pound defensive tackle, but the 17-year old died later that day.



Use and benefits of public access defibrillation in a nation-wide network

Nielsen AM, Folke F, Lipert FK, Rasmussen LS.

Resuscitation. 2013 Apr; 84(4):430-4

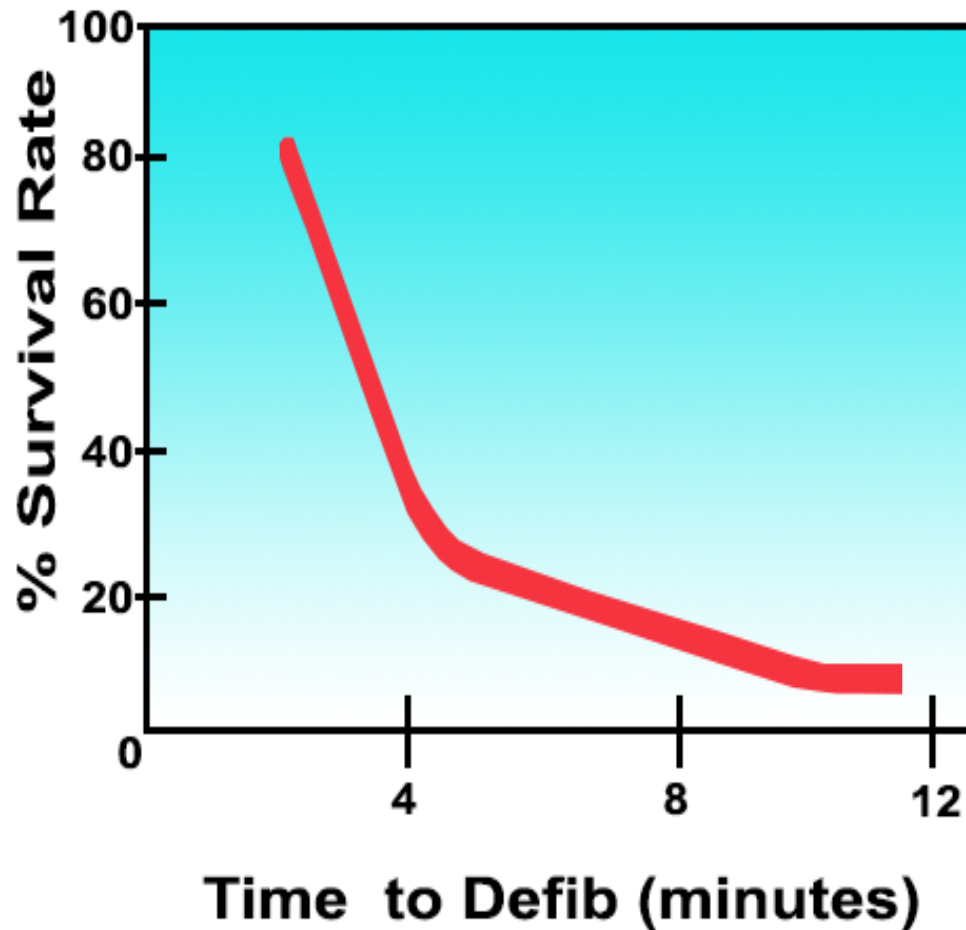
- 28 month study in Denmark
- Shockable rhythms:
 - More likely to be witnessed
 - Occur at sports facilities
 - Related to exercise
 - Have improved 30-day survival (69%)
- 65% presenting with shockable rhythm had ROSC upon EMS arrival; 26% were conscious







Early Defibrillation Impacts Survival



Each minute that passes without defib may reduce the patient's chance for survival by up to 10%

EAP

Emergency Action Plan

Jonathan Wenhold



“Back in 2004, at Sope Creek elementary school, we had an incident where a **third grade** student suddenly collapsed **during PE class** outside in a play area following a jump roping activity. No history of any health problems.

At the time: no walkies or form of quick communication, no AED, no first responders, no first responder drills. No staff knowledge of hands only CPR/emergency response procedures.

Our student was revived but never regained consciousness.”

Cobb County School Nurse, Kathy Jacoutot

Venue

Equipment

- Do you have an AED
- How many
- Accessibility
- Budget for replacement pads & batteries

Buildings

- Building Names
- Doors – keys or access codes
- Elevators or stairs

EMS Access Points

- Construction
- Locked gates

Communication



First Responder



First Responder

Training:

- AED special circumstances
- Incorporate with fire safety-HR Training
- What does a cardiac/medical emergency look like?
- Hands Only CPR/AED



People who helped in First Responder event atElementary

Sara- Nurse who administered CPR/AED

Pauly- P.E. Teacher and First Responder also administered CPR/AED

Donna- Kindergarten Teacher and First Responder who administered CPR/AED

Richard- Science Literacy Teacher/First Responder observed process and served as an alternate for CPR/AED

Mia- First Responder/transported AED/Epi-pen to field

Janell - Paraprofessional/retrieved items from office upon request (Epi-pen/AED) to handoff

Melissa - Media Specialist/Directed traffic from Ambulance/Fire Department/CCSD Police - received items from office to handoff

Stephanie - Gifted Specialist/Waited at the top of Drive directing emergency vehicles onto campus

Coach Mollie – (contracted) employee who was conducting recess and called into office for First Responder Team

Jennifer - Secretary/Bookkeeper - ran from her vehicle on her way to be fingerprinted for her new job - administered CPR

Christie - Receptionist/Made all of the calls to 911/parent/grandparent and district employees

Carla - Former Secretary/Bookkeeper (training new secretary) Made calls to district employees/maintained contact with Principal

Stacie- Assistant Principal - Facilitated coordination of events/ Obtained student's information sheet/Accompanied student to the hospital via ambulance

Equipment



Practice Drills

- Assign tasks
- Bring AED to every emergency
- Emphasize early CPR
- Debrief



Practice and Review of EAP

- What does a practice drill look like?
- Effective drills
- Post drill assessment



Practice Drill Location



Sample Checklist

School-Based AED Program AED Skill Drill Checklist



DATE: _____
TIME DRILL STARTED: _____ *TIME DRILL TERMINATED:* _____

Time victim discovered by staff member (Witness finds victim and calls office) _____

Staff member's (Witness) response: ☐ Called for help (voice/intercom/phone)
☐ Started CPR assessment, then called for help
☐ Ran for help
☐ Other _____

3. Time "Code" announcement made by Staff _____

4. Time Rescuer 1 arrived on scene _____

5. Time Rescuer 2 arrived on scene _____ How many people responded to scene? _____

6. Time CPR started _____

CPR started by Rescuer 1, first on scene?

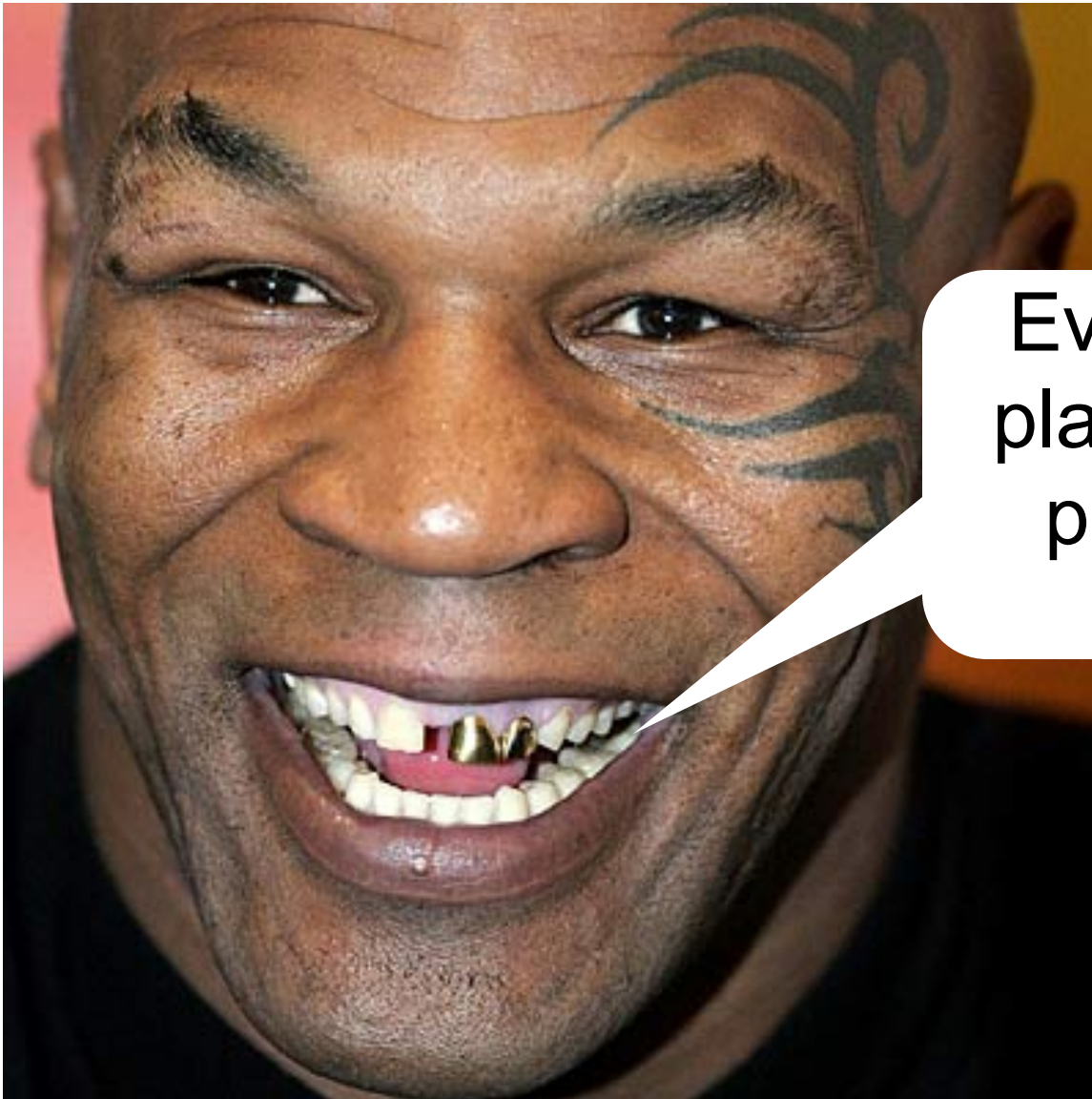
☐ Yes

☐ No, CPR performed by _____

Basic Life Support

- ✓ Identify the emergency
- ✓ Calling 911 or Internal First Responders
- ✓ Early *High Quality* CPR
- ✓ Publicly available AED
- ✓ Advance care and transport
- ✓ Post arrest care





Everybody has a plan until they get punched in the mouth.

Video

Heart Safe Recognition



How successful is Project S.A.V.E.?

Over 1200 Schools and Community
Centers

93 Lives Saved

46 Children

47 Adults

(2 School Nurses)

CPR & AEDs Work



Summary

1. This isn't rocket science
2. 2^o Prevention:
CPR, AEDs work
EAPs: venue specific
practice drills



3. Project ADAM is an excellent community resource

Questions?
