Healing Hearts of Central Ohio

<u>"SAVING LIVES WITH HANDS ONLY CPR"</u>





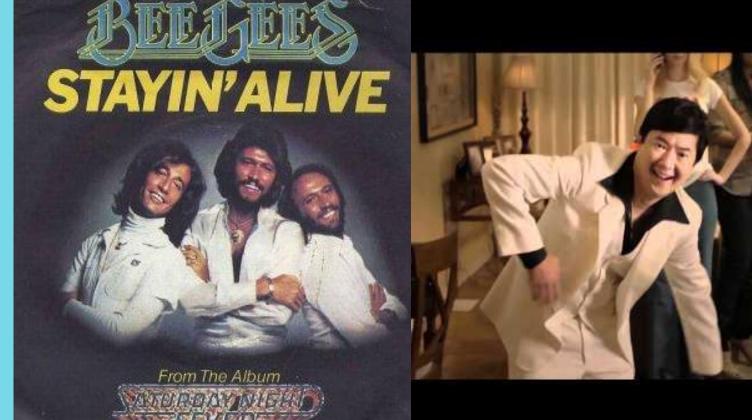


Dr. David P. Keseg MD FACEP Medical Director Columbus Division of Fire Associate Professor of Emergency Medicine at The Ohio State University

HANDS-ONLY CPR

heart.org/handsonlycpr

Push to the beat of **"Stayin' Alive"**



Heart Attack vs. Cardiac Arrest

Heart Attack:

- Blockage in coronary artery
- Person usually conscious
- Upper body discomfort or pain

Cardiac Arrest:

- Electrical issue, heart stops pumping
- Person is *unconscious*
- Often no previous symptoms

CALL 911 FOR BOTH

Current Statistics

350,000 cardiac arrests in USA each year

1 in every 90 seconds
36% <u>In-hospital</u>



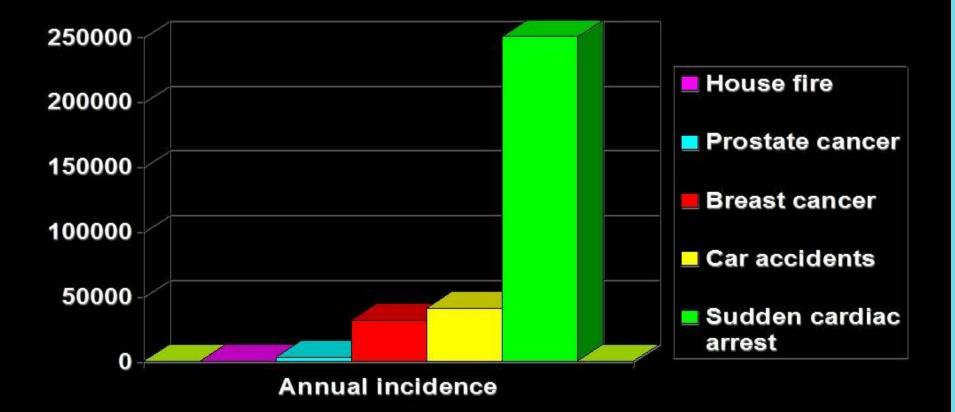
• 18% of which survive to discharge

•64% <u>out of Hospital</u>

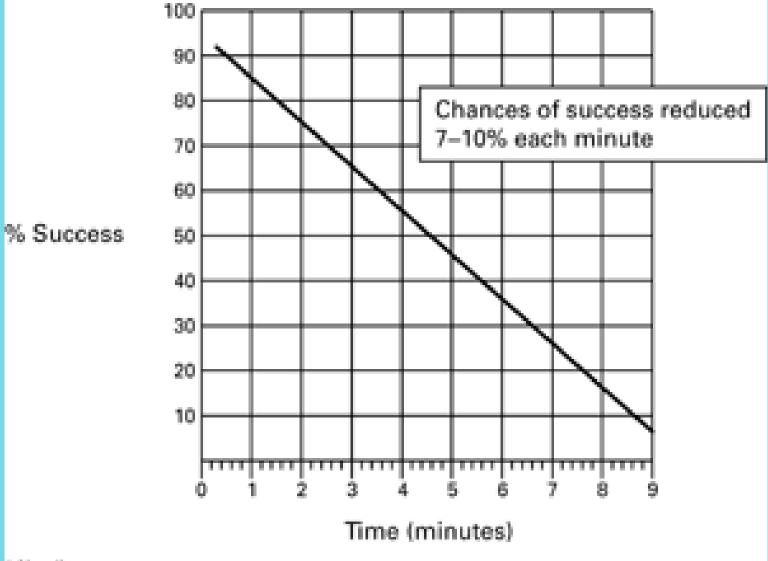
• <u>2-9%</u> of which survive to discharge



Sudden Cardiac Arrest (SCA) ...a public health crisis



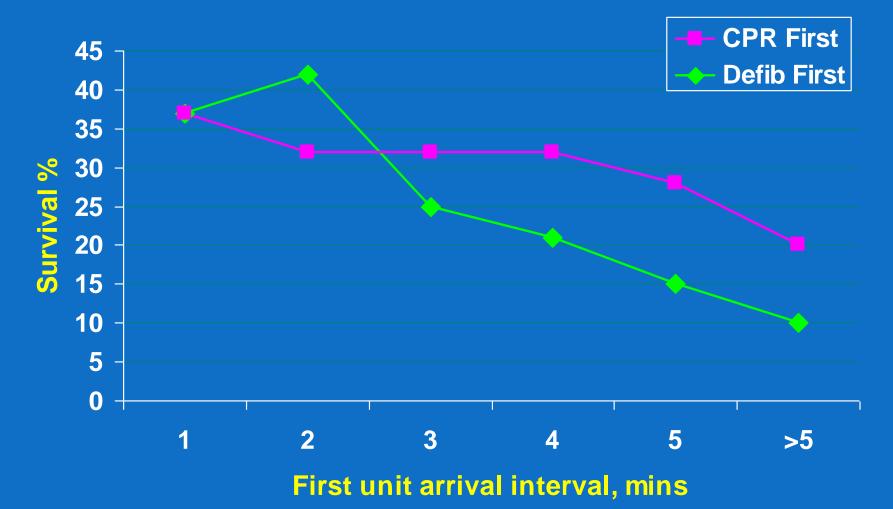
Early CPR Critical in SCA



* Non-linear

Adapted from text: Cummins RO, Annals Emerg Med. 1989, 18:1269-1275.

90 Seconds of CPR Before Defibrillation



Cobb, L.A., et al. Influence of CPR prior to defibrillation in patients with out-of-hospital VF. *JAMA* 1999; 281(13):1182-8.

911: We need to get CPR started that's not enough, OK? Um, lemme... GLENWOOD GARDENS: Yeah, we can't do CPR at this facility.

» CALL FOR HELP 911 OPERATOR SHOCKED AFTER NURSE REFUSES TO ADMINISTER CPR

Bystanders in the US only do CPR in <u>15 to 30 percent</u> of out-of-hospital cardiac arrests

- The odds of survival drop significantly after four to six minutes without CPR in witnessed arrests
 - EMS providers usually can't get to a scene under



<u>6 to 8 minutes</u>



Why People Don't Do CPR

Mouth to Mouth-YUCK!
Don't want to take a class
CPR too complex



- Hard to remember all those facts
- Don't want to hurt them!
- Might not be doing it right???







Your source for the latest research news

- Mouth-To-Mouth Ventilation's Role In CPR Questioned
- Sep. 20, 1997 :blue-ribbon panel of experts assembled by the American Heart Association has called into question the role of mouth-to-mouth ventilation as an integral part of cardiopulmonary resuscitation (CPR).
 - Mouth-to-mouth ventilation can interfere with the rescuer's efforts to perform chest compressions and cause significant adverse effects.
 - It makes CPR more difficult to teach, learn and perform, and dissuades bystanders from initiating therapy.



EPIPHANY

That moment you realise you're lunch

What is

Chest Compression Only CPR?

 New method of resuscitation developed through extensive research at The University of Arizona Sarver Heart Center for primary cardiac arrest

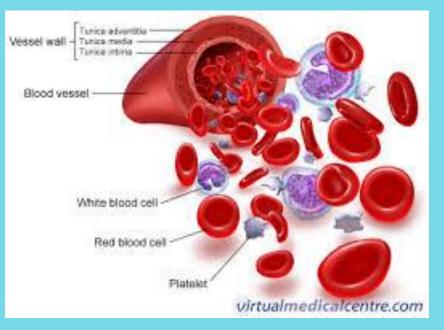


 Continuous forceful chest compressions to circulate the person's blood to their brain and heart Why isn't Rescue Breathing Necessary?

During Cardiac Arrest:

Lungs are full of air

Blood is full of oxygen

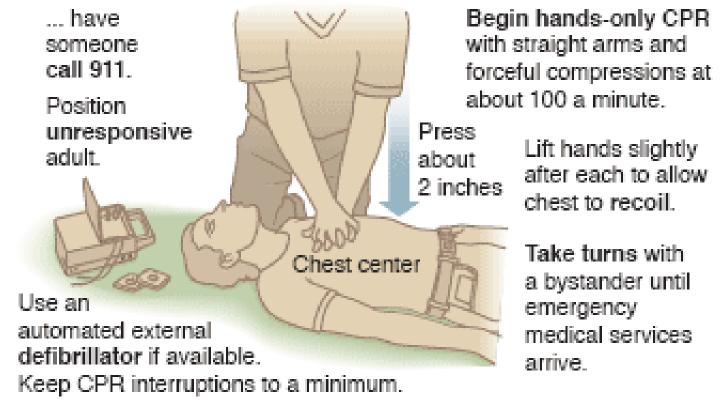


Circulating the oxygenated blood is the key

Simplifying to hands-only CPR

Experts now believe an adult who suddenly collapses due to cardiac arrest has enough air in his lungs and blood during CPR and doesn't need mouth-to-mouth breathing.

If you see someone collapse ...



Circulation

JOURNAL OF THE AMERICAN HEART ASSOCIATION



Learn and Live

Hands-Only (Compression-Only) Cardiopulmonary Resuscitation: A Call to Action for Bystander Response to Adults Who Experience Out-of-Hospital Sudden Cardiac Arrest: A Science Advisory for the Public From the American Heart Association Emergency Cardiovascular Care Committee Michael R. Sayre, Robert A. Berg, Diana M. Cave, Richard L. Page, Jerald Potts and Roger D. White Circulation 2008;117;2162-2167; originally published online Mar 31, 2008; DOI: 10.1161/CIRCULATIONAHA.107.189380 Circulation is published by the American Heart Association. 7272 Greenville Avenue, Dallas, TX 72514 Copyright © 2008 American Heart Association. All rights reserved. Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the World Wide Web at: http://circ.ahajournals.org/cgi/content/full/117/16/2162

Compression-Only CPR Improves Survival with Good Brain Function "The chances of surviving cardiac arrest with good brain function are better when bystanders focus CPR efforts on chest compression without mouth-to-mouth rescue culation breathing" ssociation

Two steps to save a life:

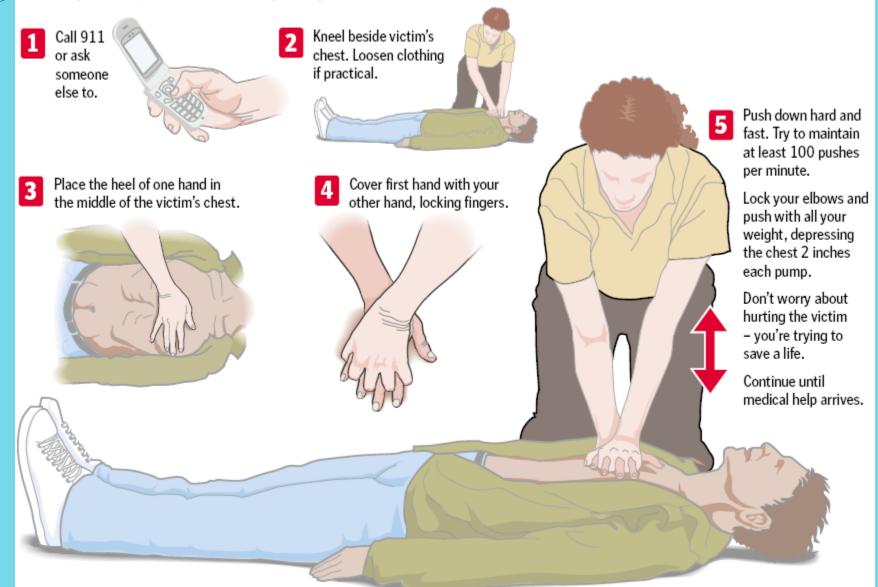


Call Right Away!

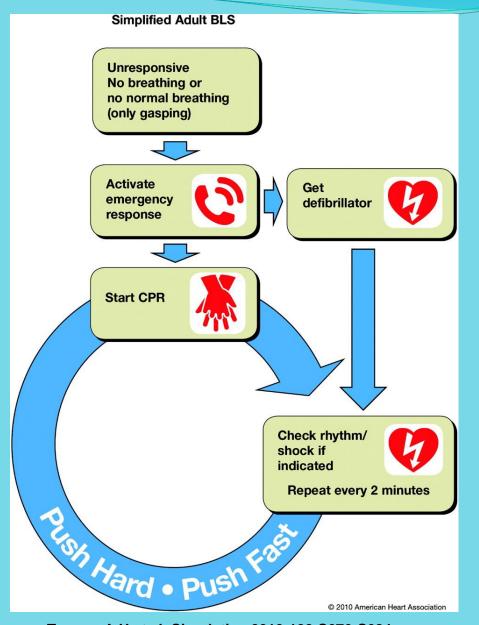
Push Hard & Fast in the Center of the Chest

Hands-only CPR

The latest research shows that chest compressions alone are the most effective way for an untrained bystander to save a life after an adult collapses from cardiac arrest. The technique shown here should not be performed on infants, children, drowning victims, or in cases involving a drug overdose. Otherwise, here's what to do.



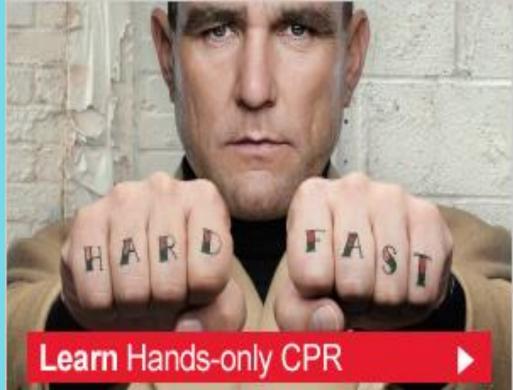
Simplified Adult BLS Algorithm.





Travers A H et al. Circulation 2010;122:S676-S684





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