

Sudden Cardiac Arrest: *Is Your Workplace Heart Safe?*

Presented by:

Mike Schlegel

Medtronic

Sudden Cardiac Arrest (SCA)

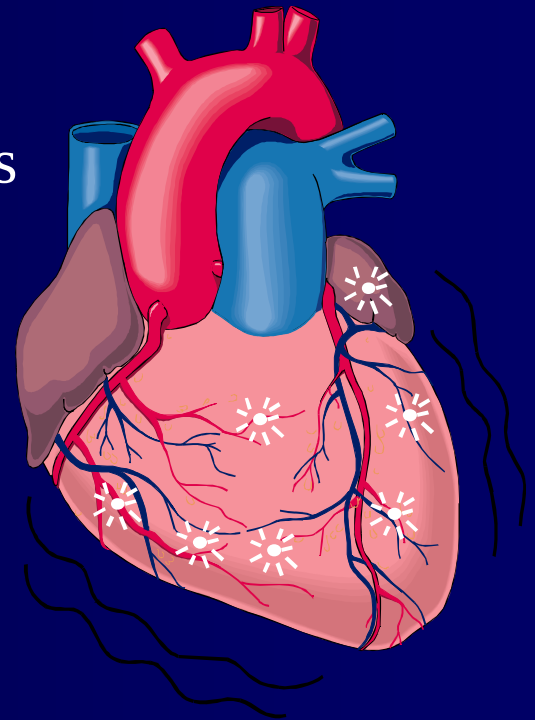
- Kills nearly 450,00 Americans each year
 - *That's one American every 70 seconds*
- Nations single leading cause of death
 - *Kills more Americans annually than breast cancer, lung cancer, and AIDS...combined*
- 13% of SCA deaths are in the workplace
 - *That's 58,500 per year*
- Is highly treatable
 - *For three to five minutes!*

Survival Statistics

- National Average is 5%
- Urban Setting is 2%
- King County, Washington 32%
- Casinos of Las Vegas
 - Under three minutes to shock 74%
 - Under five minutes to shock 49%

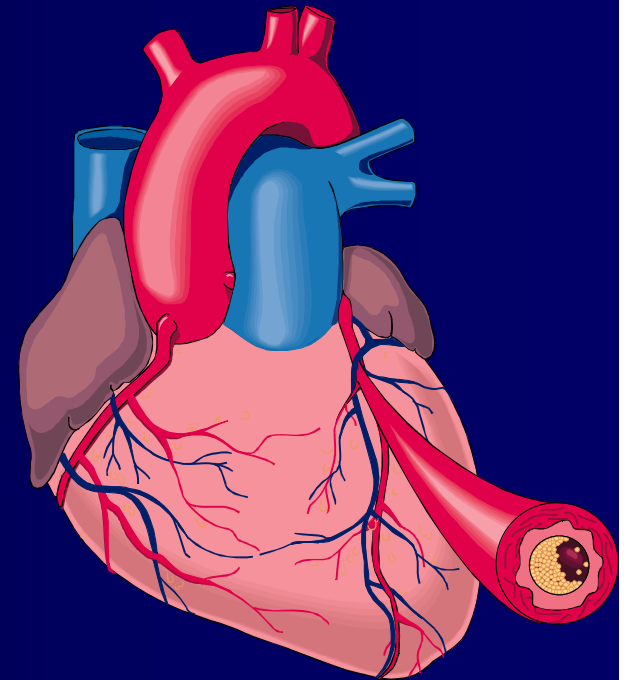
What is Sudden Cardiac Arrest?

- Electrical system in the heart malfunctions
- Heart unexpectedly and abruptly stops beating
- Usually caused by an abnormal heart rhythm called *ventricular fibrillation*



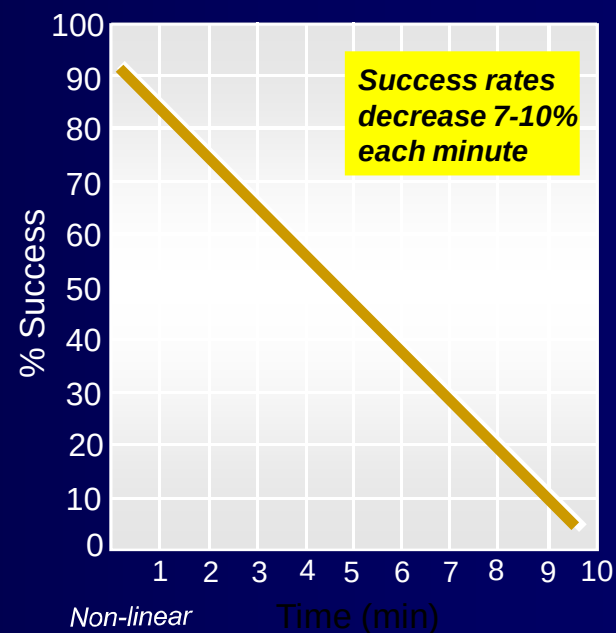
Is SCA the Same as a Heart Attack?

- No
- A heart attack is the death of heart muscle tissue caused by a blockage in an artery that supplies blood to the heart



Time is Critical

- Early defibrillation:
- The time interval from collapse to first shock is critical



Adapted from text: Cummins RO, 1998.
Annals of Emergency Medicine 18: 1269-1275.

What is an AED?

- Device that looks for shockable heart rhythms
- Delivers a defibrillation shock if needed
- Small, portable, size of a laptop computer
- Simple to use
- Highly automated
- Easily maintained



AED Demonstration

AED Legislation & Regulation

Federal

- Cardiac Arrest Survival Act
- GSA “Guidelines for Public Access Defibrillation Programs in Federal Facilities”
- OSHA Technical Bulletin (TIB 01-12-17)

State

- AED “Good Samaritan” laws passed in every state and District of Columbia

Cardiac Arrest Survival Act

- Signed into law November 2000
- Recommends that federal agencies implement PAD programs
- Directs HHS & GSA to develop guidelines for PAD programs in federal facilities
- Provides federal gap filling “Good Samaritan” protection nation-wide to both public and private entities

Guidelines for Federal PAD Programs

Recommends the following:

- Site Assessments for AED Placement
- Obtain Local Medical Direction and Oversight
- Development of an Emergency Response Plan and Protocols
- Training Certification CPR and AED
- Integration with Facility Security and Local EMS Systems
- Maintaining Hardware and Support Equipment per manufacturer recommendations
- Develop of QA and Data Management Plans

OSHA Technical Bulletin

Conclusions:

“ The sooner defibrillation is started, the more likely the victim will survive. The optimum time for defibrillation is 3 to 5 minutes after the onset of cardiac arrest. The AED is a safe, effective, easily learned method of treating victims of cardiac arrest.”

Recommendations:

“ Employers should consider use of AEDs at their worksite to reduce the time to defibrillation with the goal of improving survival”

Best Practices

- Standardized program throughout facility
- Highly visible AED locations
- Compatible with local EMS responders (ALS)
- Single emergency number to initiate a response
- Trained persons on every floor and shift
- Develop a culture of response

Implementing a Successful PAD Program

- Site Assessment to Determine AED needs
- Gain High Level Support for Program
- Review Federal & State Law
- Identify strengths / weaknesses of your organization
- Obtain Medical Director
- Training (Red Cross, NSC, ASHI, AHA)
- Purchase AED & Related Accessories
- Develop Maintenance Plan

Managing a Successful PAD Program

- Local Coordinator for each Facility
- Ensure training certification stays current
- Perform refresher training for responders
- Ensure devices are maintained properly
- Complete Documentation of Program

Outsourced Management

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Sites	Equipment																																												
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