AED Program

What makes a complete AED Program?

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by
Kelly Podsiedlik

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Importance of Well Designed AED Programs

- Who is Altra Medical?
- What makes a good AED Program?
- AED site assessment
- Choosing an AED for your program
- How to keep your AED program current



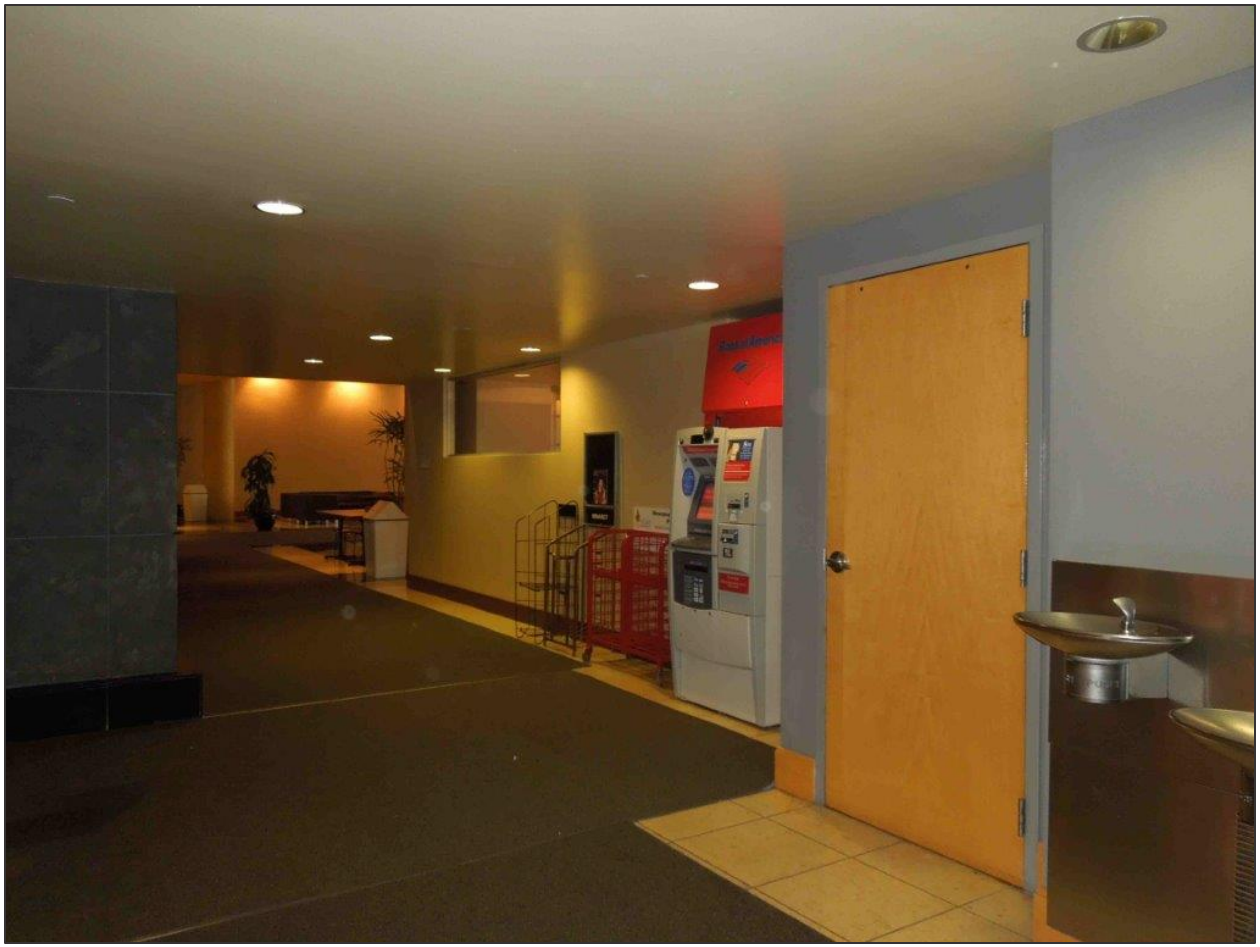

Altra Medical

- Since 2000, 63 lives have been saved by Altra Medical AEDs!
- 2,600 customers nationwide and counting!
- Provide complete AED programs, sell AEDs, medical equipment, manikins www.altramedical.com
- Our customers are Law Enforcement, Colleges, Corporate, Legal....
- AED maintenance programs, training & free reminders

What makes a good AED program?

- AED Coordinator responsible for program
- Accessibility – properly located AED (s)
- A response plan that is communicated, understood, and practiced
- Trained Staff for normal business hours
- AEDs need to be ready for use 24 /7
- Review with & notify EMS of placement
- Physician/Medical Oversight when needed

Why is site assessment important? Where's the AED in this picture?



Not Good!

- Hidden
- No signage
- Not centrally located
- Too high
- Dean didn't want to call attention to them ☹

AED Site Assessment

- Accessibility, clearly visible with signage and accessible during your normal business hours.
- Response time 2 to 3 minutes
- Public access vs. dedicated responders
- Remote areas need special attention, consider SmartLink monitoring

Choosing an AED for your program

- Who will be using the AED?
- The population being served
- Where will the AED be located?
- Ease of Use and Maintenance
- Upfront cost vs. cost of ownership
- Manufacturer Warnings
- Additional Considerations
- AED Manufactures and models

Who will be using the AED?

- Lay responders, professional responders, EMS, public access, trained or un-trained

Population being served

- Adults and/or Children less than 8 years of age consider pediatric pads/ key, English speaking or multi-lingual?

Where will the AED be kept?

- Inside, outside, in a vehicle, duffle bag, rain, temperature considerations, determine durability requirements & IP rating

Ease of Use and Maintenance

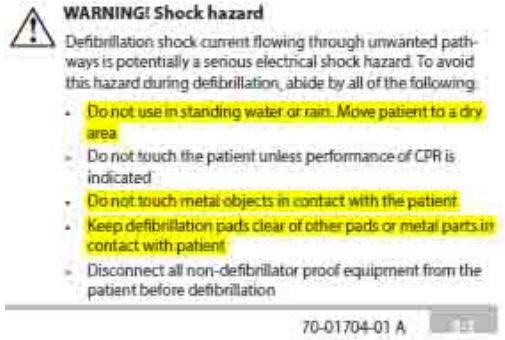
- CPR Coaching
- Check active status indicator, frequency varies by model, how AED is deployed.
- Pads and Batteries, how often to replace and how easy to change
- Familiarize yourself with the steps required to test, frequency of self-tests, if device chirps
- AED in good condition, no rust on connections, not damaged
- Fast response kit, scissors, razor, gloves, Pocket mask are present
- Keep Records!

Upfront Cost vs. Cost of Ownership

- Initial purchase price
- Ongoing pad and battery replacement cost
- AED Warranty
- AED life expectancy

Check Manufacturer Warnings

- Some have susceptibility to radio frequency interference from cell phones / radios
- Some warn against use in Wet Environments and on Metal Surfaces
- Some have Temperature rating limitations



WARNING! Shock hazard

Defibrillation shock current flowing through unwanted pathways is potentially a serious electrical shock hazard. To avoid this hazard during defibrillation, abide by all of the following:

- Do not use in standing water or rain. Move patient to a dry area
- Do not touch the patient unless performance of CPR is indicated
- Do not touch metal objects in contact with the patient
- Keep defibrillation pads clear of other pads or metal parts in contact with patient
- Disconnect all non-defibrillator proof equipment from the patient before defibrillation

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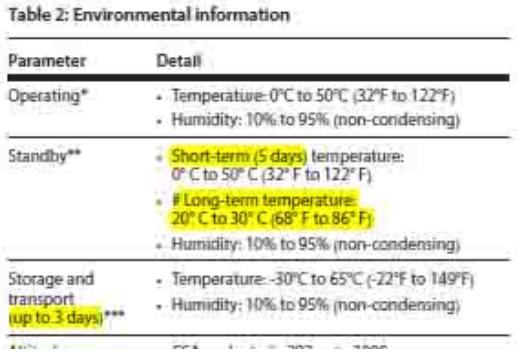
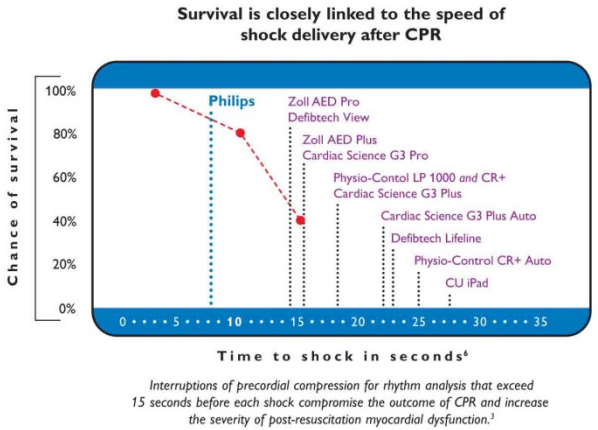


Table 2: Environmental information

Parameter	Detail
Operating*	• Temperature: 0°C to 50°C (32°F to 122°F) • Humidity: 10% to 95% (non-condensing)
Standby**	• Short-term (5 days) temperature: 0° C to 50° C (32° F to 122° F) • # Long-term temperature: 20° C to 30° C (68° F to 86° F) • Humidity: 10% to 95% (non-condensing)
Storage and transport (up to 3 days)***	• Temperature: -30°C to 65°C (-22°F to 149°F) • Humidity: 10% to 95% (non-condensing)

Other Considerations

- Durability/IP Ratings
- Size and weight
- Compatibility to EMS
- Time to shock



Interruptions of precordial compression for rhythm analysis that exceed 15 seconds before each shock compromise the outcome of CPR and increase the severity of post-resuscitation myocardial dysfunction.[3]

AED Manufacturers >30 Models

- Philips HeartStart AEDs
  - OnSite
  - FRx
  - FR3
- Cardiac Science Powerheart
  - G3
  - G5
  - G3 Pro
- Defibtech
  - Lifeline
  - Lifeline View
  - Reviver (Cintas)
  - Lifeline Pro
- Physio Control (formerly Medtronic) LIFEPAK AEDs
  - LP500
  - CR Plus
  - LP1000
- Zoll
  - AED Plus
  - AED Pro
- HeartSine – being acquired by Physio
  - Samaritan PAD 350P
  - Samaritan PAD 450P

Note Welch Allyn/MRL are no longer supported

Philips HeartStart AEDs

- World leader for AEDs with over 1.3 Million worldwide
- Designed for every skill level and environment
- Manufactured in the U.S.
- Extensive user testing for ease of use
- Commands paced to your actions
- Performs over 90 self-tests, daily, weekly and monthly

Cardiac Science Powerheart

- Powerheart G3 Plus, G5, G3 Pro
- Owned by Opto Circuits, headquartered and manufactured in India
- Third in market share with approximately 650,000 deployed

Physio Control AEDs

- Physio was founded in 1955 producing EMS & Hospital defibrillators
- Strength is Fire & EMS
- Recently acquired HeartSine #6 in sales
- Lifepak 500, CR Plus, 1000
- Currently 4th in AEDs, world leader in ACLS
- Lifepak 500 reaching EOL

Zoll

- Zoll was founded initially on pacing technology and offers ACLS monitors in addition to AEDs.
- Purchased by Asahi Kasei (Japan in 2013)
- # 2 or #3 worldwide in AED sales, about 700,000
- Use Z pad to give CPR feedback for adult patients

Keep your AED Program Current

- AED Coordinator
- Check/Maintain AED per manufacturer recommendation
- Track supplies, pads and batteries
- AED/CPR Training every 2 years
- Schedule periodic drills
- AHA Guideline/Software updates 11/2015
- Medical Direction
- Risks associated with AEDs not ready for use

Provide CPR/AED training

Train, Practice, Drill

- Train the trainers
- Train officers and staff Adult, Infant & Child CPR/AED use
- Recognize Saves!

Courtesy of St. Petersburg Police Dept. – who train 540 sworn & 250 civilian employees every two years

To Autoshock or Not?

Pros

- Easy
- Manufacturers claim people fear pushing the shock button

Cons

- No control over situation
- Slows down time to deliver shock by over 10 seconds
- Potential liability if bystander touches the patient
- $ 0 to $100 more expensive
- Don't comply w/AHA 10 second guidelines for doing CPR

CPR Feedback Tools

- Most AEDs give CPR coaching
- Some are providing feedback on speed and quality of compressions:
  - Zoll Z Pad for lay and professionals
  - Philips QCPR on FR3 for professionals
  - Samaritan PAD 450
- Caution not to over-load a lay responder and making it more intimidating

AEDs are valuable life saving devises

- Chose a good location
- Buy a quality AED
- Establish an emergency response program
- Train staff and review, keep top of mind
- Maintain the AED
- Ensure everything will execute perfectly when needed

American Heart Association

AHA Guidelines 2015

- American Heart will release new guidelines in October
- Scientific Sessions will be discussed in Orlando November 7-11
- Instructor Update Conference is Nov. 6, 2015
- Contact Us www.altramedical.com if you would like to receive the implications of the updates to your training program or AEDs.