

# THE SHOCKING TRUTH – PAD PROGRAM LESSONS LEARNED

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VGFOA Spring Conference  
May 2012



# Sudden Cardiac Arrest

... is not the same as a heart attack.

- Sudden cardiac arrest: electrical impulses in the heart become rapid or chaotic, which causes the heart to suddenly stop beating.
- Heart attack: the blood supply to part of the heart muscle is blocked. A heart attack may cause cardiac arrest.

# Sudden Cardiac Arrest

- Cardiac arrest can happen to anyone at any time.
- There are nearly 383,000 out-of-hospital sudden cardiac arrests annually; 88% of cardiac arrests occur at home.
- Many victims appear healthy with no known heart disease or other risk factors.

# Sudden Cardiac Arrest

- Failure to act in a cardiac emergency can lead to unnecessary deaths.
- Effective bystander CPR provided immediately after sudden cardiac arrest can double or triple a victim's chance of survival, but only 32% of cardiac arrest victims get CPR from a bystander.
- Fewer than 8% of people who suffer cardiac arrest out-of-hospital survive.

# Chain of Survival

- Immediate recognition of cardiac arrest and activation of the emergency response system.
- Early cardiopulmonary resuscitation (CPR) with an emphasis on chest compressions.
- Rapid defibrillation.
- Effective advanced life support.
- Integrated post-cardiac arrest care.

# AED Defined

An automated external defibrillator (AED) is a lightweight, portable device that delivers an electric shock through the chest to the heart. The shock can stop an irregular rhythm and allow a normal rhythm to resume in a heart in sudden cardiac arrest.

# AEDs

- >  **CARDIAC science**
- >  **CU Medical**
- > **defibtech**
- >  **HeartSine**
- > **Medtronic**
- > **PHILIPS**
- > **WelchAllyn**
- > **ZOLL**

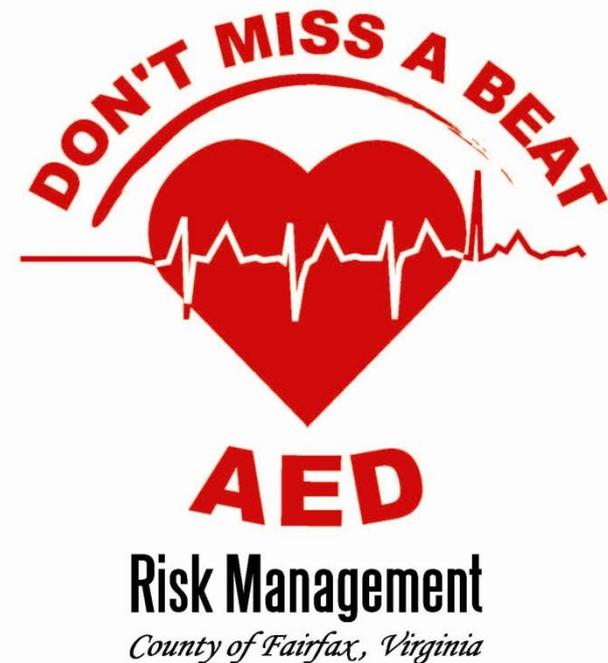


# PAD Defined

- Public Access to Defibrillation programs make AEDs available to the public.
- A person does not have to be trained to use an AED.
- In Virginia, lay rescuers who use an AED are considered Good Samaritans.

# Fairfax County PAD Program

- Entire program:
  - All of FCPS worksites
  - All of staffed FXCO worksites
  - Over 1000 AEDs total
- County program:
  - 438 AEDs
  - 253 sites
  - 472 users



# Program Costs:

- Initial start-up costs for both FXCO and FCPS:
  - Approximately \$1.3M
  - Equipment and turnkey vendor
- Annual budget, FXCO only:
  - Approximately \$80K
  - New AEDs and supplies, maintenance, program management, physician supervision

# Lesson 1: Own Your Own Data

- We track and manage data for:
  - AED location
  - AED pads expiration / replacement
  - AED battery expiration / replacement
  - Monthly inspections for every AED
  - Training
  - Annual inspections for every AED (new)
  - Service completed (new)
  - ADA compliance (new)

# Lesson 1: The Solution

- Training records went into the county's learning management system.
- We designed our own AED management on-line tool: AEDcheck.
  - Started work in 2010
  - Went live in 2011

# AEDcheck: Log-In

Fairfax County Infoweb  
Department of Finance

**AEDCheck HOME**

Log out wsimm1



## **AEDCheck**

The Online Management Tool for Fairfax County's  
Public Access to Defibrillation Program

AED training is offered continuously for employees who are lay rescuers.  
Check the Employee Center (ELC) key words AED CPR RMD or contact us  
for additional information.

## **ABOUT US**

The Risk Management Division, Department of Finance, is responsible for  
the management of all Automated External Defibrillators (AEDs) in  
Fairfax County worksites.

## **CONTACT US**

The program manager is Linda Buczek, 703-324-3108  
[linda.buczek@fairfaxcounty.gov](mailto:linda.buczek@fairfaxcounty.gov) or [AEDInfo@fairfaxcounty.gov](mailto:AEDInfo@fairfaxcounty.gov)

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- ❖ [AED Was Used](#)
- ❖ [Monthly Inspection](#)
- ❖ [Request Service](#)

# AEDcheck: AED Was Used

[Home](#) > AED Was Used

## AED WAS USED

Select the AED that was used.

	SERIAL NUMBER	SITE	ADDRESS	CITY	LOCATION
<a href="#">Select</a>	B06F-00030	Audrey Moore RECenter / Wakefield Senior Center	8116 Braddock Road, Annandale	Annandale	Aquatics Office
<a href="#">Select</a>	B06E-01468	Audrey Moore RECenter / Wakefield Senior Center	8116 Braddock Road, Annandale	Annandale	Level 2 by Gym

# AEDcheck: AED Was Used

[Home](#) > [AED Was Used](#) > AED Was Used - Form

## AED WAS USED - FORM

AED pads were removed from the pads case whether or not they were applied to a person's chest and whether or not shock was delivered.

When you submit this form, the program administrator and the program vendor will be notified. You will also be asked to fill out and submit a short report of the circumstances.

### AED Information

Serial: B06F-00030  
Site: Audrey Moore RECenter / Wakefield Senior Center  
Address: 8116 Braddock Road, Annandale  
Location: Audrey Moore RECenter / Wakefield Senior Center - Aquatics Office  
Date when AED was used:

# AEDcheck: Monthly Inspection

## AEDCheck MONTHLY INSPECTION

Log out wsimm1

[Home](#) > Monthly Inspection

### MONTHLY INSPECTION

**AED Passed** - monthly inspection report; there is a small blinking green light in the upper right corner of the case indicating the AED has self-tested and is rescue ready; (or) pad or battery has been replaced.

When you submit this form, the inspection record will automatically update. Please report inspections once a month.

Select the AED(s) that were inspected.

Date when AED was inspected:

SUBMIT

CANCEL

Select	SERIAL NUMBER	LAST INSPECTION	SITE	ADDRESS	CITY	LOCATION
<input type="checkbox"/>	B06F-00030	9/2/2011	Audrey Moore RECenter / Wakefield Senior Center	8116 Braddock Road, Annandale	Annandale	Aquatics Office
<input type="checkbox"/>	B06E-01468	9/2/2011	Audrey Moore RECenter / Wakefield Senior Center	8116 Braddock Road, Annandale	Annandale	Level 2 by Gym

# AEDcheck: Request Service

[Home](#) > [Request Service](#)

## REQUEST SERVICE

Select the AED that needs service.

	SERIAL NUMBER	SITE	ADDRESS	CITY	LOCATION
<a href="#">Select</a>	B06F-00030	Audrey Moore RECenter / Wakefield Senior Center	8116 Braddock Road, Annandale	Annandale	Aquatics Office
<a href="#">Select</a>	B06E-01468	Audrey Moore RECenter / Wakefield Senior Center	8116 Braddock Road, Annandale	Annandale	Level 2 by Gym

# AEDcheck: Request Service

## REQUEST SERVICE - FORM

Use this form to request service for the AED, the wall sign or the wall box.  
When you request service, the program administrator and the program vendor will be notified.

### AED Information

SERIAL:	B06E-01468
SITE:	Audrey Moore RECenter / Wakefield Senior Center
ADDRESS:	8116 Braddock Road, Annandale
LOCATION:	Audrey Moore RECenter / Wakefield Senior Center - Level 2 by Gym
<input type="checkbox"/> AED Pads Service	The AED is beeping; please push the blue "i" button on the AED; check this box if the AED needs pads; the AED is not inoperable but it does need attention
<input type="checkbox"/> AED Battery Service	The AED is beeping; please push the blue "i" button on the AED; check this box if the AED needs batteries; the AED is not inoperable but it does need attention
<input type="checkbox"/> Wall Box/Wall Sign Service	Please specify the problem in the comments box
<input type="checkbox"/> AED was lost/is missing	

### Comments:

SUBMIT

CANCEL

# Lesson 1: IT Costs

- We paid the IT vendor:
  - \$5000 annually for license
  - \$1400 monthly for access
  - Programming was an extra cost
- To develop AEDcheck:
  - 2370 staff hours
  - One-time cost

## Lesson 2: Comply With the ADA

- Title II of the Americans with Disabilities Act governs how far an object hung on the wall can project into a pathway.
- AED cabinets are considered an obstruction.

# Lesson 2: Solution



## Lesson 2: Compliance Costs

- \$36K to the manufacturer.
  - 1 tool (mold)
  - 400 boxes
  - 1200 stickers
- Our program vendor installs these when he conducts the annual inspection.

## Lesson 3: Learn From Others

AED Fails to Perform for Virginia Metro Station Heart Attack Patient – Friday, April 20, 2012

WASHINGTON, D.C. ([WUSA](#)) - Metro officials confirm one of their Automated External Defibrillators or AED's failed to work on Monday after a Metro rider suffered an apparent heart attack at the Pentagon Station.

# Lesson 3: Solution

1. We manage the program and the AEDs.
2. We employ the services of a vendor to assist with program management.
3. We place AEDs for a 4-minute response time.
4. We maintain a data base with the expiration dates of pads and batteries.
5. We insure the vendor replaces pads and batteries timely.
6. We track the locations of all our AEDs in AEDcheck.
7. At least one person per location is assigned to perform a monthly inspection on the AEDs at that location and record the inspection in AEDcheck.

## Lesson 3: Solution

8. Approximately monthly, the vendor visits the sites whose monthly inspections are overdue.
9. The vendor's name and 24-hour telephone number are posted on the front of the AED cabinet.
10. The vendor inspects every AED annually and records the annual inspection in AEDcheck.
11. Information about the PAD program and the AEDs is on the Risk Management web page.
12. We offer training and demos regularly.
  - 2 classes / month for all staff who are lay rescuers
  - Staff meetings
  - Demo tables at big county events

# Lesson 4: It's Worth It

- 2011
  - 3 events
    - 2 @ 1 shock each
    - 1 no shock advised
- 2012
  - 4 to date (3 in February)
    - 3 @ 2 shocks each
    - 1 not used (EMS arrived first)

# And It's Easy To Use

- If a person collapses, will not wake up when gently shaken and is not breathing normally, send someone immediately to call 911 and get the AED.
- While you are waiting, begin CPR.
- Once the AED arrives, open the AED, push the green On/Off button and follow the instructions.
- When you turn on the AED, it will guide you through each step of the rescue.

# Questions?

Linda Buczek

Risk Management Division

Department of Finance

12000 Government Center Parkway, Suite 215

Fairfax, VA 22035

703-324-3108

[Linda.Buczek@fairfaxcounty.gov](mailto:Linda.Buczek@fairfaxcounty.gov)