VILLAGE OF KEY BISCAYNE

Public Access Defibrillation Program
Key Biscayne Fire Rescue PAD (Public Access Defibrillation) Program

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KEY BISCAYNE PAD PROGRAM

EXECUTIVE SUMMARY
Cardiovascular disease is the single greatest cause of death in the United States. Key Biscayne Fire Rescue responds and transports approximately 10 to 12 cardiac arrest per year. Traditionally, the rate of survival has been low due to bystanders of cardiac arrest victims waiting for firefighter paramedics to arrive. Traditionally, less than 2 victims per year receiving CPR before Fire Rescue arrives. The missing components of the chain of survival is early CPR and early defibrillation. The Village of Key Biscayne Automatic External Defibrillators (AED) Program is designed to place 20 to 30 AED in the community and train community members to perform CPR and deliver defibrillation via public access AEDs. When all parts of the Chain of Survival are implemented, the probability of restoring a heartbeat from cardiac arrest increase from 5% to upwards of 50%. The five steps below need to be implemented;

1. Early Access to 911
2. Early bystander CPR
3. Early bystander defibrillation
4. Early Advanced Cardiac Life Support provided by Fire Rescue
5. Early Transport by Fire Rescue to a hospital for Post Resuscitative Care

The implementation of the first 3 steps will help to increase the survivability upwards of 50%.

PROGRAM OVERVIEW
The Village of Key Biscayne AED PAD Program has established partnerships with several community organizations including; Key Biscayne Chamber of Commerce, Key Biscayne Community Foundation, local businesses, condominiums, civic groups and residents to accomplish implementing the AED PAD Program.
This program will have a very significant impact in our community as over 400,000 people die each year in the US from sudden cardiac arrest. Cardiac arrest usually results from some underlying form of heart disease. Most cardiac arrests are due to abnormal heart rhythms called arrhythmias. Ventricular Fibrillation (VF) is the most common arrhythmia that causes cardiac arrest. Death follows within minutes without defibrillation.

Defibrillation is the only known therapy for VF. A lifesaving pulse of electricity (defibrillation) must be delivered quickly to restore the heart’s normal rhythm and pump blood throughout the body. This technique of giving electrical shock can restore the heart’s normal rhythm if it is done within minutes of the arrest. For every minute that passes without defibrillation, a victim’s chance of survival decreases by 7-10%. After as little as 10 minutes, very few resuscitation attempts are successful. Studies and real life events have shown that when victims of sudden cardiac arrest receive the lifesaving AED shock within 3 minutes of collapsing, their chance of survival can increase to 74%.

Traditionally, the ability to defibrillate was solely in the hands of Emergency Medical Personnel. Survival depended on the Emergency Medical Services (EMS) system being contacted and arriving quickly. Unfortunately, quick EMS response isn’t always possible. Even the very best systems can experience delays from heavy traffic, secured buildings, gated communities, large building complexes and high-rises. Today new generations of defibrillators, called automatic external defibrillators (AEDs), make it possible for trained lay rescuers to deliver defibrillation. The new AEDs are safe, effective, lightweight, low maintenance, easy to use, and relatively inexpensive. Having CPR trained lay rescuers equipped with AEDs will save precious minutes and improve survival rates for cardiac arrest victims. The Key Biscayne Fire-Rescue Department has taken the initiative of establishing an AED Public Access Defibrillator Program in order to improve survival rates of those who suffer a sudden cardiac arrest.

**MISSION STATEMENT**
Key Biscayne Fire Rescue will network with local condominiums, businesses, private organizations and residents to increase survivability from Sudden Cardiac Arrest, by providing: funding, awareness, training, equipment and quality management including program management in Public Access Defibrillation.

**VISION STATEMENT**
Host the premier Public Access AED program in the country by training 1000 residents per year and making AEDs available throughout the community with more than 50 percent of cardiac arrest victims are saved.
PAD PROGRAM COORDINATOR

The PAD program coordinator will be identified as the point person, between the Fire Rescue Department and the organizations that have been equipped with an AED. His/her duties will be as follows:

ROLES AND RESPONSIBILITY

- Responsible to perform a yearly inspection of their assigned AED unit, and complete the appropriate Yearly Inspection Report.
- Coordinates and implements mock drills for their AED location.
- Coordinate and scheduling training
- When an AED has been used, insure that after the event the following occurs ASAP:
  - Replace the used AED with a temporary spare unit
  - Prepare unit that was used to go back in service
  - Complete an event summary
  - Retrieve report from AED

TRAINING / CERTIFICATION / RE-CERTIFICATION

Participants in the Key Biscayne PAD program will receive two level of training:

1) A PUSH CPR and AED operation overview 1 hour training at the time of the delivery of the device
2) A 4 hour CPR-AED certification course.
   The course is designed to train everyday people to recognize, treat and save victims of Sudden Cardiac Arrest. Participants will get a CPR certification card valid for a 2-year period. At the completion of 2 years participants are required to attend a refresher course that will re-certify them for another 2-year period.

PROGRAM PROCEDURES

DESCRIPTION

Automated External Defibrillators (AED) have proven to be beneficial in the treatment of patients that have sustained a cardiac arrest. Early defibrillation is considered the third element of the Chain of Survival. AED’s are used to effectively identify and shock life threatening cardiac arrhythmias that the patient has sustained in the pre-hospital environment.

INDICATIONS

Use on any person 1 year of age and older who is considered to be all of the following:

- A non-responsive person
- A person not breathing
- A person with no signs of circulation
CONTRAINDICATIONS
Do not use on:

- Patients with a palpable pulse
- Cardiac arrest due to hypovolemia (excessive blood loss)
- Soaking wet patient or patient in contact with anything metallic

COMPLICATIONS

- If a patient is wearing a medication patch at or close to the area of AED pad placement, the medication patch must be removed and the area wiped clean prior to pad application.
- AED pads should not be placed over the site of pacemakers.

AED ACTIVATION PROCEDURE

AED PRIMARY ASSESSMENT

1) Assess safety of scene
2) Assess patient to determine if he/she is unresponsive and not breathing.
3) Start CPR if appropriate
4) Advise someone to retrieve AED from specific location and to call 911
5) Establish and maintains BSI (Body Substance Isolation).
   - Take necessary precautions to avoid contact with blood and other body fluids.
6) Assure 911 has been called
7) Turn on AED
8) Expose patient’s bare chest
9) Attach pads to patient correctly as shown in the picture on pads
10) Stop CPR and advise everybody to stand clear
11) AED will analyze patient’s rhythm
12) AED will acknowledge need for defibrillation
13) Reconfirm that everybody is clear and NO ONE is touching the patient
14) Start shock procedure by pushing shock control.
15) Resume CPR until EMS arrives
16) Follow any additional prompts that the AED provides.
AED – INSPECTIONS – GUARD GATE

INSPECTION DESCRIPTION
In order to provide optimal care when using the AED, maintenance should be performed to ensure proper function. Uncharged or insufficiently charged batteries are the most common cause of AED malfunction.

An onsite coordinator will be identified and will assure that monthly checks are completed on the AED. This can simply be done on the Phillips modes by looking for the flashing light and pushing the blue “I” button for information.

This record should be recorded with a signature and date on the tag attached to the AED case. Reminder: This is an onsite inspection completed by the day to day operators of the establishment.

BI-ANNUAL INSPECTION PROCEDURES
The PAD Coordinator or designee will perform inspections every 6 months in the following manner:

- Inspect the AED as per the inspection form
- Complete the Inspection Report as per the above dates.

ANNUAL INSPECTIONS
PAD Coordinator will make annual site visits to inspect AEDs, and perform a mock drill for evaluation.

MOCK DRILLS
These drills are designed to measure the performance of the “On-Site Condominium/Business Team” as a whole. The performance evaluations are used to create a benchmark. So that future responses can be evaluated and continually improved upon. The coordinated response of all aspects of the response team could be gauged, including but not limited to the “Team” members, operators, dispatchers, and all other pertinent components that would like to participate in these drills. These drills can be very dynamic to include a complete rescue event or they can be confined to a very specific aspect of a rescue. Some aspects of these evaluations that can be measured are:

- Time of recognition to Activation of the response “Team”
- Time to contact 911
- Time to recognize cardiac arrest
- Time to initiate CPR
- Time for AED to arrive
- Time to deliver first shock
QUALITY MANAGEMENT OF AED AFTER AN EVENT/USAGE
In the event that an AED is used, the following needs to occur ASAP:

1) Provide a temporary replacement unit if a unit cannot be placed back in service immediately.
2) Complete an event summary
3) Replace electrodes
4) PAD Coordinator along with EMS personnel will respond to the scene at which time he/she will attempt to meet and interview the rescuers that were involved with the event and answer any questions that the rescuer might have.
5) PAD Coordinator will coordinate efforts to have AED information downloaded, reviewed, and discuss the data with rescuer.
6) PAD Coordinator will coordinate efforts to service AED (new ready kit, pads, etc…) and place AED back into operation as soon as possible.

EVENT SUMMARY
The Event Summary is in place to systematically record the usage of an AED. The PAD coordinator, EMS rescuers will review information record this as part of the patient report. The form is to be completed with input from all rescuers by the PAD coordinator.
FAQs

What does AED stand for and what is it?
Automated External Defibrillator. It is a device used to administer an electric shock through the chest wall to the heart. A built-in computer assesses the patient’s heart rhythm, judges whether defibrillation is needed and then administers the shock. Audible and/or visual prompts guide the user through the process.

How does an AED work?
A microprocessor inside the defibrillator interprets the victim’s heart through adhesive electrodes. The computer analyzes the heart rhythm for Ventricular Fibrillation (VF) and advises the operator whether a shock is needed. If VF is detected an electric current is delivered through the victim’s chest wall via the adhesive electrodes.

Why are AEDs Important?
They can restore a normal rhythm in sudden cardiac arrest victims. These portable models allow more non-medical people to respond to a medical emergency where defibrillation is required.

Who can use an AED?
An AED can be used by anyone that has been properly trained and by ANYONE if the device is equipped with audible, visual, or written instructions on its use. Having more people in the community who can respond to a medical emergency will greatly improve sudden cardiac arrest survival rates.

Is an AED safe to use?
Yes. An AED is safe to use by anyone because the device assesses if a person is in a shockable rhythm. This means if a person’s heart is stable the device will not allow a shock to be delivered.

What are the legal liabilities?
Anyone that uses an AED in good faith is protected under the Good Samaritan Law. See FL Statute 768.132. The assumption is that a person in cardiac arrest is already dead, and a good faith effort is their best hope.
KEY BISCAYNE FIRE RESCUE DEPARTMENT
PAD Program Yearly Inspection Report

This reporting system is to insure that all AEDs in our program are Rescue Ready and fully equipped for use in the event of a sudden cardiac arrest. Please complete and fax to 305-365-8989

Date: ________________
Inspector: ______________________
Company: ______________________
Department: ______________________
PAD Coordinator: ______________________
AED Location: ______________________
Serial Number: ______________________ (located on back of Unit)

Please perform inspection and complete form below by circling YES or NO.
Note: If NO is circled please explain why in comment section below and please contact PAD Coordinator ASAP so that we can address any concerns.
1. Cabinet/bracket was inspected and is accessible: YES / NO / NA
2. AED sign (at or above cabinet or at window) is visible: YES / NO / NA
3. Cabinet deployment alert was activated and siren and strobe were functional: YES / NO / NA
4. PAD Program Reference Material Folder is present: YES / NO
5. AED unit shows as Rescue Ready and without any defects: YES / NO
6. Two electrode sets, one adult-one child, are present and in date (adult set is installed and attached to AED unit and the child set is sealed and stored with unit/case): YES / NO

Expiration Dates for patches (1) ________________ (2) ________________
7. AED has been activated (without tearing open Pads) and audible alerts are active. YES / NO
8. Confirm Rescue Ready Kit or CPR Kit is attached to AED and tamper proof seal is intact: YES / NO
9. Pads, Maintenance, and Battery indicator lights are all showing operational and rescue ready
YES / NO
10. Battery light blinking: YES / NO

COMMENTS:________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
If for any reason you have a question regarding your AED, please call the
PAD Coordinator @ 305-365-8989 or email at AEDKB@keybiscayne.fl.gov
KEY BISCAYNE FIRE RESCUE DEPARTMENT
AED Event Summary

This summary should be completed with input from all rescuers as soon as possible and forwarded to AED Coordinator.

Incident Details

Date of Event:_________  Beginning time of Event:_________ AED on Time:_______

Location of Event:___________________________________________________________

AED Model: AED Serial #:____________________________________________________

Number of shocks delivered:__________________________________________________

Incident Information

Alarm# ______________________

Additional Information

AED Operator:_________________________ Contact Phone #:_______________________

Others Involved:_______________________ Contact Phone #:_______________________

Transporting EMS unit # and Agency:____________________________________________

Brief Description of Event:
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
KEY BISCAYNE FIRE RESCUE DEPARTMENT
AED MAINTENANCE/EVENT CHECKLIST

Date of Inspection________________ Location____________________________________

Inspection Performed by (print)_______________________ Signature__________________

Date of Usage on patient__________________________

Name of Person (s) using AED/CPR on patient______________________________

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Completed</th>
<th>Corrective Action/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>AED Clean and disinfected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AED Model with correct serial number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signage, Placement visible unobstructed and near phone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verify battery installation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check the status/service indicator light</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note absence of visual/audible service alarm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verify self-test completed and ready for operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Download Event History</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspect exterior components and sockets for cracks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talk to user to address their concerns</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Supplies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set of AED pads in sealed package</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check expiration date on pads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check expiration date on battery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pocket mask with one-way valve</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examination Gloves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Razor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absorbent gauze or hand towels</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments:__________________________________________________________________________

__________________________________________________________________________________

__________________________________________________________________________________

Refer to manufacture’s User’s Manual for more information and proper annual maintenance procedures.
VILLAGE OF KEY BISCAYNE
GUARD GATE AED DEPLOYMENT PROCEDURES

In the event of an emergency your quick action may help someone in need. The following procedures should be followed in the event of a Medical Emergency:

CIVILIAN:

- If alone, you should seek help quickly by calling out for Help! If you are unable to reach anyone a call to 911 should be made before starting any lifesaving procedures. After contacting 911 and the person appears unconscious, you should then retrieve the AED and First Aid Kit from the closest guard gate.
- Provide exact location and explain the situation to the guard and take the AED with you.
- If someone is with you, start CPR immediately and have them contact 911 and retrieve the AED. A person trained in CPR/AED should be the one to remain with the patient when possible. If enough bystanders are available, one should call 911 and the other should retrieve the AED and First Aid kit when available.
- A bystander or someone close to the emergency and familiar with the building should be sent to wait for the arrival of EMS.
- In the case of a Cardiac Arrest, personnel trained in CPR and the use of an AED should be contacted and should assist in the event. If this is not possible an untrained person can start lifesaving procedures with the AED. Simply follow the voice commands of the AED unit. There is information attached to the unit’s handle and also stored in the wall case.
- EMS responders will take the AED and bring it to the PAD coordinator.
- The PAD Coordinator should be contacted as soon as possible after the event. He/she will assist in retrieving information from the AED and taking the information of the personnel involved. The information provided will remain confidential. Only the PAD Coordinator and the EMS responder will review the report.

THE GATE HOUSE:

- Someone comes to the gate asking for the AED
- Ask the person for the exact location and situation of the emergency
- Hand out the AED to the person
- Call 911
- Do not leave the gate unless your policy/judgment indicates the contrary.
- EMS responders will take the AED and bring it to the PAD coordinator.
- The PAD Coordinator should be contacted as soon as possible after the event. He/she will assist in retrieving information from the AED and taking the information of the personnel involved. The information provided will remain confidential. Only the PAD Coordinator and the EMS responder will review the report.
- Follow your Communities Procedures in regards to regularly inspecting the AEDs.

Your cooperation and assistance will play a vital role. It will ensure a quick and coordinated response in case of a Cardiac Emergency.

KEY BISCAYNE FIRE RESCUE DEPARTMENT PUBLIC ACCESS DEFIBRILATION PROGRAM
560 Crandon Blvd, Key Biscayne, FL, 33149 – (305) 365-8989 Email: AEDKB@keybiscayne.fl.gov
KEY BISCAYNE FIRE RESCUE DEPARTMENT
Public access Defibrillation Program
Site Location Responsibilities

• Site locations must have a PAD Program liaison to maintain and perform duties of PAD Program on site. PAD Program Coordinator must be informed of the name and phone numbers of this person(s).

• Location of an Automatic External Defibrillator (AED) must be located inside and easily accessible. There may be specific exceptions to this made by the PAD Coordinator. All personnel must be aware of AED location.

• AED unit must be visually inspected on a weekly basis and recorded at least once per month on the tag attached to the case. The PAD program coordinator will be responsible to perform a yearly inspection.

• Standard Operating Procedure (SOP) manual must be available to all personnel. So that they may have an understanding of the PAD Program at their site.

• The person designated as the On-Site PAD Liaison should coordinate training for personnel hired by or contracted by the organization. This liaison should maintain communication with the PAD program coordinator to address any questions or training needs.

• Rosters are to be updated on a yearly basis to ensure enough trained members are available at the Program site.

• Maintain communications with PAD program staff regarding all pertinent information in regard to their site program.

• Notify PAD Coordinator in the event of an AED deployment so that they can respond to the scene.

Key Biscayne Fire Rescue Department PAD Program
Office- 305-365-8989
Fax- 305-365-8933
Email: AEDKB@keybiscayne.fl.gov
Village of Key Biscayne
PUBLIC ACCESS AED GRANT REQUEST

1. ORGANIZATION/PROPERTY INFORMATION

<table>
<thead>
<tr>
<th>Applicant Name:</th>
<th>Contact Phone:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization:</td>
<td></td>
</tr>
<tr>
<td>Address:</td>
<td>email:</td>
</tr>
<tr>
<td>Date:</td>
<td>Type of Request: Full: Matching: Partial:</td>
</tr>
</tbody>
</table>

2. INSTRUCTIONS

Complete this application and be specific as possible about the proposed location including the hours of operations and ability for the general public to access the AED. Provide a description of how many people at your location or place of business that you plan to train in CPR and use of the AED. If selected, the award may to business and organizations as Full, Partial, Matching or Cost of Equipment.

3. PROPOSED LOCATION AND JUSTIFICATION OF AED

Committee Review:

Priority Level: □ High □ Moderate □ Low

Committee Comments: