OPNAV INSTRUCTION 5100.29

From: Chief of Naval Operations

Subj: NAVY INSTALLATION AUTOMATED EXTERNAL DEFIBRILLATION PROGRAM

Ref: (a) SECNAVINST 5100.17
(b) 74 FR 41133-41139
(c) OPNAVINST 11320.27
(d) CNIC M-11320.1, Installation Emergency Medical Services Program Manual, March 2008 (NOTAL)
(e) OPNAVINST 5100.23G
(f) BUMEDINST 6320.94
(g) OPNAVINST 1000.16K
(h) DoD Instruction 1015.15 of 31 October 2007
(i) Public Law 106-505, Public Health Improvement Act (Cardiac Arrest Survival Act of 2000), 13 November 2000
(j) DoD Instruction 6055.06 of December 2006

Encl: (1) Navy Installation Automated External Defibrillator Program

1. Purpose. To provide policy and guidance in order to develop, implement, and maintain an installation automated external defibrillation (AED) program on Navy installations per references (a) and (b). A uniform approach to the deployment of AEDs will ensure they are placed at strategic locations, staff members are trained in their use, and appropriate inspections and maintenance are performed on the devices. An AED program will provide personnel on Navy installations with rapid access to an AED in the event of a sudden cardiac arrest (SCA).

2. Background

a. Communities that have implemented AED programs ensuring widespread public access, combined with appropriate training, maintenance, and coordination with local emergency medical services (EMS) systems, have dramatically improved the survival
rates of individuals suffering from SCA. The American Heart Association research indicates cardiopulmonary resuscitation (CPR) and defibrillation within the first 3 to 5 minutes after onset of SCA, plus early access to EMS, can result in a greater than 50 percent long-term survival rate for patients.

b. AEDs enable laypersons to deliver early defibrillation to victims in the first critical moments after an SCA. AEDs are not intended to replace the care provided by first responders, but provide a lifesaving bridge for patients experiencing SCA until EMS arrives.

c. Reference (a) provides the overarching Navy policy and guidance in order to develop, implement, and maintain a Navy installation AED program.

3. Applicability

a. This instruction applies to Navy military personnel, civilian employees, contractors, facilities, and non-Navy organizations physically located on Navy installations.

b. Installations that will be closed or realigned (joint bases and regions) until their closure or realignment date as a result of base realignment and closure (BRAC) commission recommendations.

c. AED programs should be consistent with State, local and or other Service (or host nation) plans to the greatest extent possible.

d. AED programs shall not substitute for, or replace, any component of the installation fire and emergency services (F&ES) or EMS program.

4. Exceptions

a. This instruction does not apply to combat operations or combat support operations (e.g., Navy ships, aircraft and vessels).

b. This instruction does not apply to AEDs utilized by F&ES, or located in medical treatment facilities (MTFs) for patient care.
5. **Definitions.** See appendix A to enclosure (1).

6. **Policy**

   a. The primary objective of the installation AED program is to deploy AEDs utilizing a risk-based strategy in an effort to increase the long-term survival rate for persons experiencing SCA. Program and resource requirements will be established using the methodology contained in reference (b).

   b. Commanding officers (COs) shall implement the program and resource requirements per this instruction.

   c. COs shall establish and maintain an installation AED program. Installation emergency response operational guidelines to include dispatch, fire and EMS shall incorporate the use of AEDs.

   d. COs shall consider references (a) through (j) when planning to carry out the requirements set forth in this instruction.

7. **Roles and Responsibilities**

   a. The Director, Shore Readiness Division (OPNAV (N46)) is the resource sponsor for the installation AED program requirements for Navy installations.

   b. Commander, Navy Installations Command (Total Force) (CNIC (N1)), the manpower budget submitting office, shall provide analysis and determination of work force requirements for Navy installations generated by the installation AED program.

   c. CNIC (Operations Forces) (CNIC (N3)) shall provide overarching policy and strategic oversight of the installation AED programs, and will routinely assess the effectiveness of the current policies and standards.

   d. CNIC (F&ES Program) (CNIC (N30)) shall have overall responsibility for the implementation, organization, and administration of installation AED programs aboard Navy installations.
e. Regional and installation F&ES chiefs shall assign an AED coordinator who will be responsible for the implementation and sustainment of the installation AED program.

f. COs (via the F&ES) shall establish and maintain installation AED program capabilities per this instruction. Required AED capabilities will not be deemed to exist until they are properly organized, equipped, trained, and maintained.

g. Chief, Bureau of Medicine (BUMED) shall program for and provide re-stock and re-supply of medical consumables to support the installation AED program. Medical consumables for the purpose of this program are defined in appendix A of enclosure (1) of this instruction. BUMED shall assist installation F&ES with annual CPR and AED training.

h. BUMED medical directors shall provide medical oversight and serve as the prescribing physician for the Navy installation AED program per references (c), (d) and (e). Medical directors providing medical oversight shall:

   (1) Provide medical leadership and expertise, and identify and review AED regulations.

   (2) Conduct post incident quality improvement (QI) reviews for each medical intervention involving an AED with the personnel involved in its operation. This will include lessons learned, and mandating additional training and or remediation QI if appropriate.

   (3) Review and approve CPR, AED and medical treatment standard operational procedures.

i. The AED coordinator will serve as the point of contact for all matters concerning AED use and directly oversee and manage the installation AED program. Installation AED coordinators assigned by the fire chief shall:

   (1) Have oversight, administration, and responsibility over the installation AED program.

   (2) Serve as the point of coordination and guidance for the acquisition of AEDs and storage cabinets for the installation AED program.
(3) Be a member of F&ES credentialed at a minimum, in both CPR and AED use.

(4) Coordinate and or conduct initial and recurring CPR and AED classes for staff in facilities and locations where AEDs are located.

(5) Maintain a current AED inventory to include location, number, AED type, AED warden (if applicable) and the most recent inspection and or update.

(6) Ensure AED maintenance and testing is conducted per manufacturer’s recommendations.

(7) Maintain a sufficient inventory of batteries and pads specific to the types of AEDs on the installation.

(8) Ensure the medical director is notified of all AED uses, and copies of the EMS Patient Care Report (PCR) are forwarded for quality assurance purposes.

(9) Assist with downloading electronic records from the AED and returning the unit to service when utilized during an SCA event.

(10) Orient the AED program with local or state programs to ensure continuity in patient care.

(11) Ensure AEDs purchased by the installation or tenant are compatible with existing F&ES AEDs.

j. Installation commands, tenant commands, and or building managers for facilities with AEDs shall:

(1) Appoint a facility AED warden who will be responsible for the periodic AED inspections per manufacturer’s recommendations, and communicate the need for AED maintenance and replenishment of supplies to the AED coordinator.

(2) Maintain an inventory of all AEDs and AED locations within their area of responsibility (AOR) utilizing the CNIC (N3) approved tracking system.
(3) Make available initial and refresher CPR and AED training per reference (e) for employees and occupants in areas where AEDs are located.

(4) Fund replacement equipment (e.g., AEDs, pads, batteries, etc.), AED maintenance and or repairs for AEDs that are not centrally funded within the scope of the priority placement list in enclosure (1).

8. Action. COs, in coordination with their respective regional or installation F&ES, shall develop an installation AED program plan including timelines for implementation.

9. Records Management. Records created as a result of this instruction, regardless of media and format, shall be managed per Secretary of the Navy (SECNAV) Manual-5210.1 of January 2012.

10. Forms and Reports Control
   a. The following forms are available for download:
      (2) OPNAV 5522/2 Periodic Automatic External Defibrillator (AED) Record is available from Naval Forms OnLine at https://navalforms.daps.dla.mil/web/public/home.
   b. The reporting requirements contained on Form FDA 3500 are assigned OMB 0910-0219.

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NAVY INSTALLATION

AUTOMATED EXTERNAL DEFIBRILLATOR PROGRAM

Enclosure (1)
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0100. **GENERAL**

a. Each year, there are over 255,000 cases of SCA in the United States. According to the American Heart Association, the combination of CPR, defibrillation delivered by an AED within the first 3 to 5 minutes, and the early activation of EMS can result in a greater than 50 percent survival rate in patients who suffer from SCA.

b. SECNAV and Navy installation AED program instructions provide guidelines concerning key elements of development, implementation and maintenance for an AED program. These guidelines are intended to provide a foundation upon which an AED program should be implemented and maintained, based on the specific requirements of each installation.

c. Regional and installation commanders have the authority and responsibility to protect personnel, equipment, and facilities subject to their control. Nothing in the installation AED program shall detract from, or conflict with, the inherent and specified authorities and responsibilities of regional and installation commanders.

d. A uniform approach to the deployment of AEDs is needed to ensure they are placed at strategic locations, staff members are trained in their use, and appropriate inspections and maintenance are performed on the devices.

e. The installation AED program establishes policy and guidance for the deployment and maintenance of AEDs on Navy installations. It is the responsibility of the installation F&ES to implement the AED program.

0101. **STANDARDS.** Standards outlined in this instruction were developed by a multidisciplinary committee and were based on existing Federal statutes, the various state rules and regulations governing EMS, and recommendations of nationally recognized organizations and agencies involved with EMS.
0102. **EXISTING AEDs.** Any existing AEDs at the time of program implementation shall be inventoried and inspected by the installation AED coordinator prior to being incorporated into the installation AED program. This is to ensure standardization and compatibility of AED devices for training, operation and maintenance purposes. Over time, as the existing AEDs require replacement, they should be replaced with AEDs of the same manufacturer and or type used by the installation’s F&ES EMS program.

0103. **AED ACQUISITION.** All new AEDs purchased shall be approved by the installation AED coordinator to ensure standardization and compatibility of AED devices for training, operation and maintenance purposes. Only commercially available AEDs that are cleared for marketing by the Food and Drug Administration (FDA) shall be considered for use on Navy installations.

0104. **AED ACQUISITION BY TENANT.** Tenants are encouraged to place AEDs within their AOR on an installation. Tenants shall contact their installation AED coordinator before purchasing a new AED. The installation AED coordinator will work with the tenant to select an AED, battery(s) and supply equipment compatible with the installation AED program. The tenant is responsible for funding the purchase of the AED, battery(s) and supply equipment. F&ES will incorporate the tenant AED unit into the AED inventory tracking system.

0105. **CONSUMABLE SUPPLIES**

   a. Every AED should be equipped with the following at all times:

      (1) 1 simplified CPR and AED instructions (pocket card)

      (2) 4 pairs non-latex gloves in varying sizes

      (3) 1 CPR facemask with some type of barrier device

      (4) 1 disposable razor

      (5) 1 blunt end scissors
(6) 1 set adult AED pads

(7) 1 set child AED pads (not necessary in areas where pediatrics are restricted)

(8) 1 biohazard bag

(9) 1 absorbent towel

b. If the AED is equipped with a carrying case and space permits, equipment shall be placed inside the carrying case. If room does not permit or there is no carrying case, then the additional equipment shall be stored in a sealed plastic bag inside the AED cabinet.

0106. MAINTENANCE

a. During a maintenance inspection, supplies shall be checked for adequate quantity, condition, and expiration date. Readiness display and status indicators should be checked to ensure the AEDs are functional. Any problems with the AED should be reported to the installation AED coordinator and dealt with as soon as possible, to prevent a failure of the AED during an emergency.

b. AED inspections shall be conducted and documented on a routine basis. An OPNAV 5522/2 Periodic Automatic External Defibrillator (AED) Record should be attached to each AED. The fields on the OPNAV 5522/2 should be completed routinely per manufacturer’s recommendations. The CNIC (N3) approved tracking system shall be used to document AED site inspections, maintenance, and testing. The tracking system records of AED inspections should be maintained for a minimum of 7 years.
0200. **GENERAL.** Regional and installation commanders, through the F&ES chief, shall establish and maintain required installation AED program capabilities. Required installation AED program capabilities will not be deemed to exist until they are properly organized, equipped, trained and maintained.

0201. **LOCATION**

a. This instruction applies to and is focused on placement of AEDs on Navy installations in public areas posing an elevated risk of a witnessed SCA. AEDs located within buildings or locations should be accessible by all occupants. AEDs shall not be located in a limited access location (i.e., behind the locked door of an office or in a limited access storage area of a commercial building.)

b. The following locations are considered the priority placement list on Navy installations for AEDs within the scope of this program and are normally funded by CNIC, morale, warfare and recreation, Navy Exchange or Department of Defense:

(1) Gymnasiums and indoor athletic facilities:

   (a) By the main desk

   (b) Consider placing additional AED courtside if location is in a high occupancy facility (i.e., stadium or arena)

(2) By the main desk at staffed fitness centers

(3) Swimming pools:

   (a) In a visible location inside of a publicly accessible lifeguard office

   (b) If there is no lifeguard office, then in a location that is out of the sun and safe from the elements

(4) By the front checkout counters of main commissaries
(5) By the front checkout counters of main exchanges

(6) Schools:
   (a) By the gymnasium
   (b) By the main office or reception desk

(7) Administrative buildings having more than 250 adults over 50 years of age present for more than 16 hours per day:
   (a) By public elevators of a central floor if the building has multiple stories
   (b) Outside of centralized restrooms if the building is single story

(8) High risk training areas. Locations to be determined by operational risk management review (i.e., high intensity physical training, high risk training activities and areas where hazardous work environments exist).

   c. Tenants and organizations not within the scope of priority locations listed above are encouraged to participate in the program.

   d. Additionally, AEDs should be placed in any high occupancy areas or other locations deemed appropriate and necessary by the AED coordinator, tenant commands, medical director and or F&ES chief.

0202. **PLACEMENT**

   a. AEDs should be placed in appropriate AED cabinets with an audible alarm that can be heard in the immediate area when opened.

   b. A Navy F&ES AED decal shall be placed on each AED cabinet with the installation’s emergency and non-emergency F&ES phone numbers clearly printed on it (see appendix B).

   c. A three-dimensional AED sign should be hung on the wall directly above the AED cabinet and be visible from all directions of travel (see appendix C). In buildings where AEDs
are placed, a sign should be posted in the main entrances and heavy traffic areas (i.e., main lobbies, main corridors, cafeterias, elevator corridors, etc.) to signify there is an AED in the building and briefly describe how to locate the device (see appendix D).

0203. **TRAINING**

  a. Installation F&ES, BUMED and tenants shall be responsible for offering or identifying CPR and AED training to personnel in locations identified for AED placement. Since CPR and AED training are not a one-time event, F&ES and BUMED shall also be responsible for offering or identifying refresher courses. Any nationally recognized CPR and AED course may be used to train personnel (i.e., American Red Cross, American Heart Association, etc).

  b. Personnel working onboard an installation should direct all questions concerning the installation AED program to the installation AED coordinator. The emergency and non-emergency number for installation F&ES should be given out at all CPR and AED training courses.

0204. **AED USE**

  a. For every AED activation reported to an emergency call center and subsequent AED EMS response, a completed EMS PCR for the incident shall be submitted by EMS personnel to the installation AED coordinator, regardless of whether or not shocks were delivered. The PCR for the incident shall be submitted to the installation AED coordinator within 24 hours of AED activation. The digital files (if available) from the AED should be attached to the PCR and retained for a minimum of 7 years. The installation AED coordinator and the medical director should conduct a post incident review of all AED activations to include but not limited to lessons learned.

  b. In the unlikely occurrence an AED malfunctions during use, Federal Law requires the Form FDA 3500 MedWatch may be voluntarily filed. Any AED malfunctions should be reported to the installation AED coordinator and the coordinator shall complete and send the Form FDA 3500.
0205. **PUTTING AED BACK IN SERVICE AFTER EMERGENCY.** Installation F&ES may be responsible for returning an AED and associated equipment to a "ready for use" status following any emergency involving an AED. This should take place as soon as possible following the emergency. All equipment should be inventoried and any missing or used equipment shall be restocked.
Automated External Defibrillator (AED). An FDA approved device that recognizes the presence or absence of ventricular fibrillation and or tachycardia and without operator intervention determines if defibrillation should be performed. If determined that defibrillation should be performed the device automatically charges and prompts the operator to deliver the electrical shock.

Cardiopulmonary Resuscitation (CPR). A set of skills that includes noninvasive airway management, chest compressions and other skills defined by the American Heart Association or other organizations.

Consumables. Any medical supplies that are single use patient care items such as pocket masks, towels, disposable razors, etc.

Defibrillation. A process in which an electronic device gives an electric shock to the heart. This helps reestablish normal contraction rhythms in a heart having dangerous arrhythmia or in cardiac arrest.

Emergency Medical Services (EMS). A system of trained, certified, and properly equipped personnel that provide triage, treatment, and transportation of the sick and injured to MTFs for definitive medical care.

Equipment. Any supply used as part of the installation AED program that could be used on multiple patients and or is specific to the type of device.

Installation. May refer to a single installation or multiple facilities under a single CO.

Layperson. An individual who uses an AED as part of the installation AED program and is not a healthcare provider.

Medical Director. A physician who will oversee an AED program for the purposes of providing medical direction and oversight which includes the provision of medical authorization for purchase and the review of incidents where AEDs are utilized.
Sudden Cardiac Arrest (SCA). An electrical chaos within the heart that causes the heart to maintain a non life sustaining rhythm.

LIST OF ACRONYMS

AED  automated external defibrillator
AOR  area of responsibility
BRAC base realignment and closure
BUMED Bureau of Medicine
CNIC Commander Navy Installations Command
CO commanding officer
CPR cardiopulmonary resuscitation
DoD Department of Defense
EMS emergency medical services
FDA Food and Drug Administration
F&ES fire and emergency services
MTF medical treatment facility
OPNAV Office of the Chief of Naval Operations
PCR Patient Care Report
QI quality improvement
SCA sudden cardiac arrest
SECNAV Secretary of the Navy
APPENDIX B
AED DECAL

In Case of Emergency Call:

This AED is maintained by Navy Fire & Emergency Services.
If an audible alarm is activated, or for other questions or assistance, call:
APPENDIX C
SAMPLE DIMENSIONAL AED SIGN
APPENDIX D
SAMPLE AED BUILDING SIGN

THIS BUILDING IS EQUIPPED WITH AN AUTOMATED EXTERNAL DEFIBRILLATOR

AED
LOCATION

(EXAMPLE) 1st Floor Hallway Outside of the Main Office