OPNAV INSTRUCTION 5100.29A

From: Chief of Naval Operations

Subj: NAVY INSTALLATION AUTOMATED EXTERNAL DEFIBRILLATION PROGRAM

Ref: (a) SECNAVINST 5100.17A
(b) 74 FR 41133-41139
(c) OPNAVINST 5100.23G
(d) OPNAVINST 11320.27A

Encl: (1) Automated External Defibrillator Resource Management
(2) Automated External Defibrillator Procedures
(3) Definitions and Acronyms
(4) AED Placement Samples

1. **Purpose.** To provide policy and guidance in order to develop, implement, and maintain an installation automated external defibrillation (AED) program on Navy installations as required by references (a) and (b). This instruction is being reissued with a new date, updated version and signature authority to meet Chief of Naval Operations’ age requirement for Office of the Chief of Naval Operations (OPNAV) instructions.

2. **Cancellation.** OPNAVINST 5100.29.

3. **Background.** 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 sudden cardiac arrest (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. Per references (a) through (d), the AED policy prescribed in enclosures (1) and (2) provides addresses the resource management and procedures required to provide 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.

4. **Applicability.** This instruction applies to Navy military personnel, civilian employees, contractors, facilities, and non-Navy organizations physically located on Navy installations.
Additionally, this instruction applies to joint bases where the Navy is the lead Service and installations recommended for closure by the Base Realignment and Closure Commission until they become officially closed.

5. **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 fire and emergency services (F&ES), or located in medical treatment facilities for patient care.

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

   d. AED programs will not substitute for, or replace, any component of the installation F&ES or EMS program.

6. **Definitions.** AED terminology is defined in enclosure (3).

7. **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 will implement the program and resource requirements, per this instruction.

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

   d. Commanding officers will comply with references (a) through (d) when carrying out the requirements set forth in this instruction.

8. **Roles and Responsibilities**

   a. **The Director, Shore Readiness Division (OPNAV (N46)).** OPNAV (N46) is the resource and policy sponsor for the installation AED program requirements for Navy installations.
b. **Commander, Navy Installations Command (CNIC)**

   (1) Provide analysis and determination of work force requirements for Navy installations generated by the installation AED program.

   (2) Responsible for and provide oversight for the implementation, organization, and administration of installation AED programs aboard Navy installations, and will routinely assess the effectiveness of the current policies and standards.

   (3) Ensure regional and installation F&ES chiefs assign an AED coordinator who will be responsible for the implementation and sustainment of the installation AED program.

   (4) Ensure commanding officers (via the F&ES) 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.

c. **Chief, Bureau of Medicine (BUMED).** 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 enclosure (1) of this instruction. BUMED will assist installation F&ES with annual CPR and AED training.

d. **BUMED Medical Directors.** Provide medical oversight and serve as the prescribing physician for the Navy installation AED program per references (c) and (d). Medical directors providing medical oversight will:

   (1) provide medical leadership and expertise, and identify and review AED regulations;

   (2) conduct post incident quality improvement reviews for each medical intervention involving an AED with the personnel involved in its operation, which will include lessons learned and the mandate of additional training and remediation if appropriate; and

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

e. **Installation AED Coordinator.** 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 will:

   (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 credentialed member of F&ES, in both CPR and AED use;

(4) coordinate and 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 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 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; and

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

f. Installation Commands, Tenant Commands, or Building Managers for Facilities with AEDs

(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 utilizing the CNIC F&ES approved tracking system. AED sample placement figures are provided in enclosure (4).

(3) Make available initial and refresher CPR and AED training per reference (c) for employees and occupants in areas where AEDs are located.

(4) Fund replacement equipment (e.g., AEDs, pads, batteries), AED maintenance, and repairs for AEDs that are not centrally funded within the scope of the priority placement list in enclosure (1).
9. **Action.** Installation commanding officers, in coordination with their respective regional or installation F&ES, will develop and maintain an installation AED program plan.

10. **Records Management**

   a. Records created as a result of this instruction, regardless of format or media, must be maintained and dispositioned per the records disposition schedules located on the Department of the Navy/Assistant for Administration, Directives and Records Management Division portal page at [https://portal.secnav.navy.mil/orgs/DUSNM/DONAA/DRM/Records-and-Information-Management/Approved%20Record%20Schedules/Forms/AllItems.aspx](https://portal.secnav.navy.mil/orgs/DUSNM/DONAA/DRM/Records-and-Information-Management/Approved%20Record%20Schedules/Forms/AllItems.aspx).

   b. For questions concerning the management of records related to this instruction or the records disposition schedules, please contact the local records manager or the Department of the Navy/Assistant for Administration, Directives and Records Management Division program office.

11. **Review and Effective Date.** Per OPNAVINST 5215.17A, Chief of Naval Operations, Fleet Readiness and Logistics (CNO N4) will review this instruction annually on the anniversary of its issuance date to ensure applicability, currency, and consistency with Federal, Department of Defense, Secretary of the Navy, and Navy policy and statutory authority using OPNAV 5215/40 Review of Instruction. This instruction will be in effect for 10 years, unless revised or cancelled in the interim, and will be reissued by the 10-year anniversary date if it is still required, unless it meets one of the exceptions in OPNAVINST 5215.17A, paragraph 9. Otherwise, if the instruction is no longer required, it will be processed for cancellation as soon as the need for cancellation is known following the guidance in OPNAV Manual 5215.1 of May 2016.

12. **Forms and Information Management Control**

   a. The forms in subparagraphs 12a(1) and 12a(2) below are available for download.


      (2) OPNAV 5522/2 Periodic Automatic External Defibrillator (AED) Record is available on the Naval Forms Web site at [https://forms.documentservices.dla.mil/order/](https://forms.documentservices.dla.mil/order/).

   b. The reporting requirements contained on Form FDA 3500 are assigned OMB 0910-0219.

   

   D. R. SMITH
   Deputy Chief of Naval Operations
   (Fleet Readiness and Logistics)
Releasability and distribution:
This instruction is cleared for public release and is available electronically only via Department of the Navy Issuances Web site, https://www.secnav.navy.mil/doni
AUTOMATED EXTERNAL DEFIBRILLATOR RESOURCE MANAGEMENT

1. 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. The Secretary of the Navy 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 will 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.

2. 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.

3. Existing AEDs. Any existing AEDs at the time of program implementation must 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 lifecycle maintenance purposes. Over time, as the existing AEDs require replacement, they should be replaced with AEDs of the same manufacturer or type used by the installation’s F&ES EMS program.

4. AED Acquisition. All new AEDs purchased must 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) will be considered for use on Navy installations.

5. AED Acquisition by Tenant. Tenants are encouraged to place AEDs within their area of
responsibility on an installation. Tenants must 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.

6. Consumable Supplies

a. Every AED should be equipped at all times with the items listed in subparagraphs 6a(1)
through 6a(9).

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

   (2) Four pairs of non-latex gloves in varying sizes.

   (3) One CPR facemask with some type of barrier device.

   (4) One disposable razor.

   (5) One pair of blunt end scissors.

   (6) One set of adult AED pads.

   (7) One set of child AED pads (not necessary in areas where pediatrics are restricted).

   (8) One biohazard bag.

   (9) One absorbent towel.

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

7. Maintenance

a. During a maintenance inspection, supplies must 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 must 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 F&ES approved tracking system will 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.
AUTOMATED EXTERNAL DEFIBRILLATOR PROCEDURES

1. General. Regional and installation commanders, through the F&ES chief, must 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.

2. Location
   
   a. This enclosure 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 will 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 locations listed in subparagraphs 2b(1) through 2b(8) should be considered for AED priority placement 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 that have 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 that are not within the scope of priority locations 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 or an F&ES chief.

3. 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 must be placed on each AED cabinet with the installation’s emergency and non-emergency F&ES phone numbers clearly printed on it.

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. 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) to signify there is an AED in the building and briefly describe how to locate the device.

4. Training

a. Installation F&ES, BUMED, and tenants are 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 are also 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).
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.

5. AED Use

a. For every AED activation reported to an emergency call center and subsequent AED EMS response, a completed EMS patient care report for the incident must be submitted by EMS personnel to the installation AED coordinator, regardless of whether or not shocks were delivered. The patient care report for the incident must 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 patient care report 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 completion of FDA Form 3500 MedWatch. Any AED malfunctions should be reported to the installation AED coordinator and the coordinator must complete and send the Form to the FDA.

6. 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 must be restocked.
DEFINITIONS AND ACRONYMS

1. **Automated External Defibrillator (AED).** An FDA approved device that recognizes the presence or absence of ventricular fibrillation 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. (Reference (a))

2. **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. (Reference (d))

3. **Consumables.** Any medical supplies that are single use patient care items such as pocket masks, towels, disposable razors, etc. (Reference (d))

4. **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.

5. **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 medical treatment facilities for definitive medical care. (Reference (d))

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

7. **Installation.** An installation command, including bases, stations, air stations, submarine bases, support facilities, support activities, magazines, weapon stations, air facilities, fleet activities, construction battalion centers, associated special areas, and Navy led joint bases and joint regions as approved by Secretary of the Navy (via an OPNAVNOTE 5400), that hold property, a mission, and a commanding officer or officer in charge. Does not include locations with military operations other than war and contingency operations. (Reference (d))

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

9. **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. (Reference (d))

10. **Sudden Cardiac Arrest (SCA).** An electrical chaos within the heart that causes the heart to maintain a non-life sustaining rhythm. (Reference (a))
AED PLACEMENT SAMPLES

In Case of Emergency Call:

AED is maintained by
Navy Fire & Emergency Services.
If an audible alarm is activated, or for
other questions or assistance, call:

Figure 1 - Sample AED Decal

Figure 2 - Sample Dimensional AED Sign
THIS BUILDING IS EQUIPPED WITH AN AUTOMATED EXTERNAL DEFIBRILLATOR

AED

LOCATION:

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

Figure 3 - Sample AED Building Sign