

MPR 1810.2
BASELINE-1

EFFECTIVE DATE: September 29, 2014
EXPIRATION DATE: September 29, 2024

MARSHALL PROCEDURAL REQUIREMENTS

AS01

AUTOMATED EXTERNAL DEFIBRILLATOR (AED) PROGRAM *With Change 1 (6/29/15)*

COMPLIANCE IS MANDATORY
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DOCUMENT HISTORY LOG

Status (Baseline/ Revision/ Change/ Revalidation/ Canceled)	Document Revision/ Change	Effective Date	Description
Baseline		9/29/14	MPR established to replace MWI 1810.1, Automated External Defibrillator (AED) Program, in order to retain Responsibilities.
Change	1	6/29/2015	On 6/29/15, at the request of the OPRD, an administrative change was made to updated link in Appendix D. Records.
Revalidation	Baseline-1	8/27/2019	Revised for five year expiration review, which included the applicable documents.

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PREFACE

P.1 PURPOSE

- a. This MPR implements the Center requirements for the Automated External Defibrillator (AED) Program to provide timely response to victims of sudden cardiac arrest as required by Public Law 106-505 and in accordance with NPR 1800.1.

- b. Coronary heart disease is the leading cause of death in the United States. The American Heart Association estimates that 650,000 Americans die each year from sudden cardiac death as a result of coronary artery disease. Sudden cardiac arrest due to ventricular fibrillation is a treatable condition and potentially survivable, when defibrillation is applied within the first minutes. The quick response of emergency medical services (EMS) personnel in a community can have a significant impact on survival rates from cardiac arrest. The use of an AED and properly performed cardiopulmonary resuscitation (CPR), early recognition, and application by trained lay rescuers can improve the outcome from cardiac arrest.

P.2 APPLICABILITY

- a. This MPR applies to Center personnel, programs, projects, and activities, including contractors and resident agencies to the extent specified in their respective contracts or agreements. (“Contractors,” for purposes of this paragraph, include contractors, grantees, Cooperative Agreement recipients, Space Act Agreement partners.)

- b. This MPR does not apply to the Michoud Assembly Facility.

- c. This MPR does not replace emergency medical services.

- d. This MPR applies the following: all mandatory actions (i.e., requirements) are denoted by statements containing the term “shall.” The terms: “may” or “can” denote discretionary privilege or permission, “should” denotes a good practice and is recommended, but not required, “will” denotes expected outcome, and “are/is” denotes descriptive material.

- e. This MPR applies the following: all document citations are assumed to be the latest version unless otherwise noted.

P.3 AUTHORITY

- a. Cardiac Arrest Survival, November 13, 2000, Public Law 106-505, Public Health Improvement Act, Title IV

- b. NPR 1800.1, NASA Occupational Health Program Procedures

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P.4 APPLICABLE DOCUMENTS AND FORMS

- a. MPR 3410.1, Training
- b. MWI 8715.5, Area/Building Manager and Organization's Safety, Health, and Environmental (SHE) Point of Contact (POC) Program
- c. MWI 8715.12, Safety, Health and Environmental-Finding Tracking System (SHEtrak)
- d. MSFC Form 4533, Automated External Defibrillator Program Basic CPR/AED Drill
- e. MSFC Form 4534, Automated External Defibrillator Program Advanced CPR/AED Drill

P.5 MEASUREMENT/VERIFICATION

None

P.6 CANCELLATION

MWI 1810.1, Baseline-1, Automated External Defibrillator (AED) Program, dated June 25, 2009.

Original signed by

Patrick E. Scheuermann
Director

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CHAPTER 1. RESPONSIBILITIES

1.1 The AED Medical Director (AED-MD):

- 1.1.1 Maintains protocols and processes for the operation of the program.
- 1.1.2 Ensures compliance with protocols, proper training and quality assurance for the program.
- 1.1.3 Assists the AED Control Team in choosing the appropriate AED for use at the Center.
- 1.1.4 Supports integration of the Center's AED program into the community Emergency Medical Services.
- 1.1.5 Reports equipment malfunction in writing to the NASA Occupational Health Officer.

1.2 The AED Coordinator (AED-C):

- 1.2.1 Coordinates activities and functions as the primary liaison between the AED MD and the daily operation of the program.
- 1.2.2 Maintains the AEDs according to the manufacturer's instructions.
- 1.2.3 Maintains an inventory of supplies.
- 1.2.4 Maintains a list of trained responders and a copy of their current CPR/AED certification card and provides re-certification training as needed.
- 1.2.5 Coordinates and publicizes training programs and drills for responders.
- 1.2.6 Ensures appropriate written documentation is performed and post incident debriefing sessions with the involved responder and the AED Control Team are completed.
- 1.2.7 Provides corrective instruction as needed to trained responders.
- 1.2.8 Takes the following actions after each emergency incident involving use of the AED:
 - 1.2.8.1 Verbally notifies members of the AED Control Team of the incident and follow up with written documentation including the event report and the case outcome.
 - 1.2.8.2 Arranges employee incident debriefing by contacting the Employee Assistance Program (EAP) counselor at 256-544-7549 or (cell) 256-698-9589. On weekends and holidays call 1-888-728-1404. The EAP obtains a description of the circumstances and background information to determine an appropriate course of action for critical incident stress debriefing.
 - 1.2.8.3 Completes an incident follow-up report as deemed necessary by the AED-MD.

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- 1.2.8.4 Restocks any reusable items, e.g., electrode pads, batteries, gloves.
- 1.2.8.5 Inspects unused supplies for any damage or expiration dates and replace accordingly.
- 1.2.8.6 Inspects the AED for dirt and contamination and clean it as needed by following the procedures listed in the AED's User's Guide.
- 1.2.8.7 Completes a comprehensive review of an event requiring the use of an AED. (See 2.2)
- 1.2.8.8 Prepares an annual evaluation of the Center AED Program. (See 2.1)
- 1.2.8.9 Informs the AED-MD of Program deficiencies identified for analysis and resolution.
- 1.2.8.10 Ensures a defective AED is removed from service until it is repaired by an authorized service representative.
- 1.2.8.11 Ensures all AEDs are in proper working condition per manufactures guidelines.
- 1.2.8.12 Performs quarterly drills at randomly selected facilities.
- 1.2.8.13 Evaluates AED responders' performance.
- 1.2.8.14 Provides the AED Control Team incident reports and inspection records for review as deemed necessary.

1.3 The AED Control Team:

- 1.3.1 Consists of the AED Medical Director, the AED Coordinator, the Chief Nurse from the Center's Medical Clinic, and the NASA Occupational Health Officer.
- 1.3.2 Meets at least annually; after an event involving use of an AED; or at the request of the AED Medical Director.
- 1.3.3 With the concurrence of the AED Medical Director, initiates revisions to this MPR, to document changes to the requirements of the AED program, as needed based on lessons learned or changes in NPR 1800.1.
- 1.3.4 Determines appropriate placement of AED units throughout the Center.

1.4 The Area/Building Manager (in accordance with MWI 8715.5):

- 1.4.1 Ensures that the monthly inspection of the AED in their assigned building is conducted and document the inspection by initialing and dating MSFC Tag 21, "Automated External Defibrillator (AED) Record Tag." Failure to perform the inspection may result in a SHEtrak finding.

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Note: AED inspection criteria are listed on MSFC Tag 21, Automated External Defibrillator (AED) Record Tag.”

1.4.2 Documents deficiencies discovered during the inspection in SHEtrak in accordance with MWI 8715.12 and notifies the AED-C at 256-544-2390.

1.5 AED responders:

It is the intent of this AED program to have trained responders (medical professionals and lay responders) assigned to each AED. While administering CPR in conjunction with the AED is most effective, lay responders (even if not trained in CPR) are encouraged to take action in the case of an emergency. AED responders are covered by applicable Good Samaritan laws.

1.5.1 Complete a nationally-recognized AED and CPR course such as American Heart Association, American Red Cross, or National Safety Council including any refreshers. CPR/AED Courses are provided by Training and Incentives Office in accordance with MPR 3410.1.

1.5.2 Notify the AED-C of any equipment problems or supplies needed.

1.5.3 Notify the AED-C of any changes in their name, location, and phone numbers.

1.5.4 Perform drills as scheduled and approved by the AED-C in accordance with American Heart Association guidelines.

1.5.5 Notify the Medical Center following AED use (electrodes applied to a patient constitutes use of the AED) by calling 256-544-2390 immediately following the event.

1.5.6 Respect the privacy of others and ensure confidentiality of the incident while advising those who need to know.

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CHAPTER 2. PROCEDURES

2.1 An annual evaluation of the Center AED Program shall be prepared by the AED-C for the AED Control Team that addresses the effectiveness of the:

2.1.1 AED training program

2.1.2. Quarterly drills and team member feedback

2.1.3. Performance and maintenance of AED equipment

2.1.4 Emergency responses

2.1.5. Identification and implementation of process improvements

2.1.6 Documentation of outcome measures for treated victims of cardiac arrest

2.2 Comprehensive Reviews of an event shall be performed by the AED-C following use of an AED and consist of, as a minimum:

2.2.1 Appropriate dispatch

2.2.2 Witnessed arrest

2.2.3 Bystander CPR

2.2.4 Response time to scene

2.2.5 Appropriate transfer of care to EMS personnel

2.2.6 Data properly transferred to AED Control Team

2.3 Deficiencies noted in the use of the AED by individual responders shall be reviewed and discussed with each responder individually by the AED MD and need for remedial training determined.

2.4 Defects and deficiencies noted in the AED unit by the AED Responders shall be reported to the AED-C through a written report.

2.5 At each public AED location “Follow Manufacturer’s Instructions for Operating this AED” shall be posted.

2.6 The AED protocol can be found in Appendix E and shall be posted beside each AED unit.

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2.6.1 Any deviation from this protocol shall be reported by the user to the AED-C in writing immediately after use of the AED.

Note: Appendix F contains a checklist of required AED accessories that are utilized in conjunction with the AED.

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APPENDIX A DEFINITIONS

AED Control Team - A group designated to monitor the AED program to ensure appropriate patient care, documentation, and medical control of the AED program.

AED Coordinator (AED-C) - The individual identified by the AED Medical Director to oversee the AED program at the Center.

AED Medical Director (AED-MD) - The physician responsible for all aspects of the AED program.

AED Protocols - Specific procedures to be followed when using an AED, based on manufacturer's instructions and medical guidelines.

AED Responder - Lay (non-medical) or medical personnel trained in CPR and in the use of the AED. AED responders are covered by applicable Good Samaritan laws.

Cardiac Arrest - Cessation of cardiac mechanical activity as confirmed by the absence of signs of circulation.

Case Reviews - A continuing education program conducted by the AED Physician Director whereby each rescue effort is reviewed and evaluated as part of a Quality Assurance Program.

CPR - An attempt to restore spontaneous circulation by performing chest compressions with or without ventilations.

Event Report - Software generated report from the AED.

Witnessed cardiac arrest - A cardiac arrest that is seen or heard by another person.

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APPENDIX B ACRONYMS

AED: Automated External Defibrillator

AED-C: AED Coordinator

CPR: Cardiopulmonary Resuscitation

EAP: Employee Assistance Program

EMS: Emergency Medical Services.

MD: Medical Director

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**APPENDIX C
(Reserved for Verification Matrix)**

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APPENDIX D RECORDS

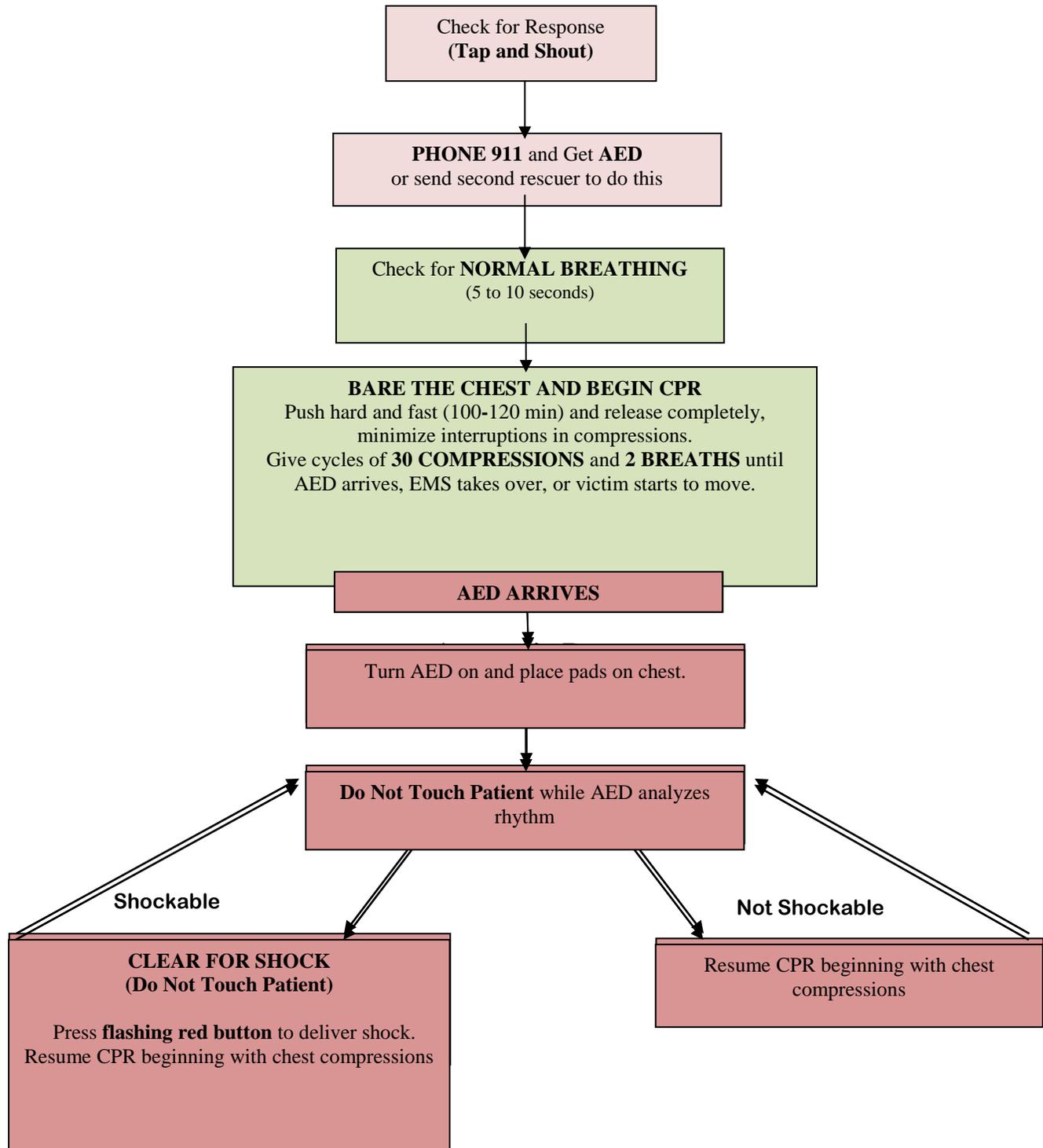
The following records will be maintained according to the “List of AS10 Occupational Health Records” located at the following link: (<https://explornet.msfc.nasa.gov/community/msfc/office-of-center-operations/as10>).

- D.1 Emergency responses.
- D.2 AED Training Roster.
- D.3 CPR/AED Certifications.
- D.4 MSFC Tag 21, Automated External Defibrillator (AED) Record Tag (current version).
- D.5 MSFC Form 4533, Automated External Defibrillator Program Basic CPR/AED Drill.
- D.6 MSFC Form 4534, Automated External Defibrillator Program Advanced CPR/AED Drill.
- D.7 Personnel training records for civil service employees.
- D.8 Personnel training records for contractor employees.

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APPENDIX E

AED 2015 Protocol Flowchart



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APPENDIX F

CHECKLIST FOR AED REQUIRED ACCESSORIES

- 2 sets defibrillation electrode pads
- 1 pocket facemask or face shield
- 1 prep razor
- 1 pair scissor
- 6 alcohol wipes
- 1 non sterile disposable towel
- 2 pair gloves