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Forest Service Manual 6900 – Emergency Medical Services
Chapter 20 - Needs Assessment and Emergency Medical Services Plan

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Approved by: Antoine Dixon**,** Deputy Chief, Business Operations

Date approved: January 12, 2024

Responsible Staff: Emergency Medical Services (EMS), Office of Safety and Occupational Health (OSOH)

Last Change:

Superseded Document(s): 6900_20, Amendment 6900-2020-3, June 15, 2020

Digest: Following is an explanation of the changes throughout the directive by section.

6920: Removes all National Park Service (NPS) references. Provides Forest Service specific guidelines to establishment of EMS plan at the Regional/Forest and Law Enforcement levels.

6921: Modifies Region/Station/Law Enforcement and Investigations (R/S/LEI) to include Region/Forest/Station/Law Enforcement and Investigation (R/F/S/LEI) throughout the manual.

6921.1: Establishes code, caption and sets forth direction for “Overview” of Needs Assessment Development.

6921.2: Establishes code, caption and sets forth direction for “Guidelines” of Needs Assessment Development.

6922: Removes Chapter 5 of NPS FM-51 from Forest Service direction.

6923.1: Changes section title from “Determining the Need” to “AED Determine the Need” and sets forth direction.

6923.6: Changes section title from “Post Event Considerations” to “AED Post-Event Considerations “and sets forth direction.

6924: Removes reference to FM 51 on Policy and Procedures.

6925: Establishes code, caption and sets forth direction for “EMS Program Initiation” and sets forth direction.

6926: Establishes code, caption and sets forth direction for “Forms and Signatures.”

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6920.02 - Objective

The objective of the Emergency Medical Services (EMS) Needs Assessment and Emergency Medical Services Plan are to identify current and projected EMS needs, not to justify current operating conditions.

6920.03 - Policy

The need for and appropriate level of a unit's EMS Program will be based on an evaluation of the attributes that determine what level EMS Program is appropriate. Responsibility for evaluating EMS needs ultimately lies with the Regional or Forest Supervisor.

6921 - Needs Assessment Development

The Needs Assessment process is a tool to assess the current condition of EMS within a Region/Forest/Station or Law Enforcement Investigations unit (R/F/S/LEI), and then to determine if the services being provided are consistent with contemporary standards. Shifts in locations and/or types of work conducted as well as continued improvements in emergency medical care drive the need to regularly revisit EMS programs on an individual R/F/S/LEI basis with attention to technological advances and current research.

6921.1 – Overview

The objective of the Needs Assessment is to identify current and projected needs, rather than to justify current operating conditions. Shifts in locations and/or types of work conducted, as well as continued improvements in emergency medical care, are the major reasons why the Forest Service reevaluates its EMS Program regularly on an individual R/F/S/LEI basis with attention to technological advances and current research.

A Needs Assessment identifies and evaluates the following:

1. Available internal and external resources,
2. The EMS workload,
3. Requirements for training and certification,
4. Transport capabilities and response times,
5. Location and capability of the local area's medical facilities,
6. Fiscal resources,
7. EMS communications, and

8. Special considerations (for example, mutual aid, geographic location).

6921.2 – Guidelines

This section provides an outline for completion of a Needs Assessment. Consider using the R/F/S/LEI's EMS data from no less than the previous three years to obtain an accurate representation of the EMS needs.

1. R/F/S/LEI Information:

    a. R/F/S/LEI description (how many employees, volunteers, partners; types of jobs; work environment).

    b. Self-identified EMS providers (by season if appropriate).

2. Incident Information:

    a. Total number of incidents with Forest Service employees, volunteers, partners, and cooperators by type: medical (cardiac, seizure, stroke, diabetic, etc.) and trauma (fractures, soft tissue, etc.). Note: The unit's Safety Manager can summarize what incidents are recorded for employees and volunteers in eSafety.

    b. Number of patients that received Basic Life Support (BLS) treatment.

    c. Number of patients that received Advanced Life Support (ALS); also, valuable to identify cases where ALS was not available but would have been appropriate.

    d. Number of patients treated and released at the scene due to the minor nature of their injury/illness.

    e. Total number of extended care cases (extended care is defined as 4 hours or more with the patient).

    f. Fatalities.

    g. Method of transport.

    h. Average time to patient contact by an EMS provider.

    i. Average time from BLS provider to ALS provider.

j. Average time from patient contact to arrival at hospital; may be helpful to separate remote evacuations from roadside in order to gain a meaningful average time frame of time spent with the patient in each setting.

3. EMS Resources:

An inventory of R/F/S/LEI and local community EMS resources can be compiled using the following:

a. Locations, numbers, certification levels, and availability of EMS providers (Forest Service and non-Forest Service).

b. Average response times to Forest Service employee, volunteer, partner, or cooperator EMS incidents by EMS providers from inside and/or outside the R/F/S/LEI.

c. Period of time that resources need to be available for response (hours and days of operation).

d. Inventory and location of supplies and equipment.

4. Transportation Services:

a. The total number of patients evacuated by the Forest Service, the Forest Service is authorized to treat and transport employees, partners and cooperators, and members of the public lost or injured on national forest lands, per 16 USC 554b and 16 USC 575 and then, deliver them to the appropriate response agency personnel, or in rare cases to definitive care, if patient transfer is not going to occur/or be delayed for a period of time that would jeopardize the life of the patient or risk serious medical complications.

b. Forest Service patient evacuation unit types (air/ground/vessel), numbers, and availability.
The Forest Service will not have dedicated EMS transport units. However, during certain circumstances it may be prudent to evacuate a patient from an area and deliver them to the appropriate response agency. For example, a Forest Service contract helicopter or All-Terrain Vehicle (ATV) may be used to evacuate a patient from a remote area and bring them to a location where they can be transferred to the appropriate response agency.

c. Non-Forest Service patient transport unit types (air/ground/vessel), numbers, and availability.

d. Average time it takes transport unit to arrive on-scene from time notified.

e. Average time from scene to hospital or rendezvous with other EMS transport.

5. Assistance to Primary Response Agencies:

    a. Total number of members of the public treated by Forest Service EMS providers and the average response time to the patient.

    b. Identify existing agreements (if any) and what they require.

6. Area Medical Facilities:

    Identify the local and regional medical facilities, distance from the National Forest System lands and their capabilities or (trauma center level).

7. Training Program:
    Identify the current EMS training program and the availability of internal and external training available to R/F/S/LEI EMS personnel.

8. Local EMS Medical Advisor and Base Hospital:

    a. For R/F/S/LEI operating at Level III Emergency Medical Responder or above, is there a Local EMS Medical Advisor available; is there an agreement in place with a Local EMS Medical Advisor and Base Hospital.

    b. Assess for appropriateness (EMS credentials, clinical capabilities, online communications, and so forth).

9. Communications:

    a. Determine how the EMS system is activated by employees, volunteers, partners, and cooperators, and assess for appropriateness.

    b. Factors that may exist that cause response times to be adversely affected.

    c. Communications system available.

    d. Nearest available 24/7 communications center.

    e. Determine if 911 coverage exists.

    f. Determine if employees responsible for EMS have on-scene communications (hand-held radios, and so forth).

    g. Identify “dead spots” in the radio system coverage.

h. Availability of online communications with a hospital (medical control).

i. EMS providers trained and familiar with communication procedures.

j. Identify if the R/F/S/LEI's communication center personnel (dispatchers) utilize Emergency Medical Dispatch and if they have been trained and certified in Emergency Medical Dispatch.

10. Fiscal Considerations:

a. Current EMS Program costs (training, supplies and equipment, and operations.

b. R/F/S/LEI annual EMS funding level R/F/S/LEI will be responsible for the costs of their EMS Program, including supplies, training, and certification costs.

11. Other Considerations:

a. Status of the R/F/S/LEI's current EMS plans and its relationship with other plans such as Safety Plans, Exposure Control Plans, Aviation Plans, Emergency Response Plans, Critical Incident Stress Management Plans, Mass Casualty Incident Plans, and other things.

b. EMS capabilities of LEI employees that may work on the Forest or Station.

c. Each R/F/S/LEI area has its own unique set of circumstances to consider when completing a Needs Assessment; attributes such as hazardous materials storages, aircraft landing zone locations, remote locations such as mountainous regions, large expanses of water, and so forth, and how they may affect each component of the EMS system should be considered.

12. Conclusion:

a. The collection and analysis of the EMS data will allow R/F/S/LEI leadership to assess the strengths and weaknesses of each component of their EMS Program and enable them to make informed decisions as to where improvement is needed and what level of EMS may be most appropriate for them to provide at their R/F/S/LEI. Once a level has been selected, a plan for implementation (EMS Plan) may be developed either within an existing plan (for example as the Emergency Response Plan) or as an independent document.

b. This section may also include a list of practices and actions that are working well in the EMS program and opportunities for improvement.

6922 - Emergency Medical Services Plan

The EMS plan is an administrative document and is intended to address the day-to-day operations of the R/F/S/LEI EMS Program. R/F/S/LEI that rely on non-Forest Service EMS providers may have a very brief plan, while others that provide a complex EMS Program will have a more extensive one.

Every R/F/S/LEI with an EMS Program will have an EMS Plan approved by the Forest Supervisor / Station Director. The Forest Service shall include local LEI employees in their Forest Service EMS Plan. For R/F/S/LEI that provide EMS at Level III Emergency Medical Responder and above, the plan should be reviewed and recommended by the local EMS medical advisor. The EMS Plan is the guiding document for the R/F/S/LEI specific EMS Program. This document should only be written after a Needs Assessment has been completed. The Forest Service EMS Plan will be reviewed by the designated EMS coordinator and other personnel as necessary at least once every 3 years in conjunction with the Needs Assessment and revised as necessary. All EMS Plans will be written in a manner consistent with this chapter.

6922.1 – Guidelines

Some elements to include when drafting a R/F/S/LEI EMS plan include the following:

1. Introduction (Description of the unit).
    a. Size and characteristics.
    b. How many employees, volunteers, partners, or cooperators; types of jobs; work environment.
    c. General overview of EMS.
2. Summary of Forest Service authority and policy.
3. Purpose and goals of EMS Program.
4. Program management roles:
    a. Regional or Forest Supervisor, Station Director, or Director of LEI (District Ranger).
    b. EMS Coordinator.
    c. EMS Providers.
    d. Local EMS Medical Advisor.
    e. Online Medical Control.

5. Level of care provided at the R/F/S/LEI:

    a. Defining level of care.

    b. Descriptions of the levels of care supported by the R/F/S/LEI.

    c. Who is authorized to perform ALS.

    d. Who is accountable for medications.

    e. Where the medications maintained.

    f. Proper procedures for obtaining the medications.

    g. What kind of system is in place to assure narcotics are current, secure, inventoried and exchanged.

    h. Who is responsible for inspecting medication kits.

    i. How often are kits inspected.

    j. Who needs to be present during the inspection.

    k. A checklist of supplies.

6. Overview of Needs Assessment:

    a. What was determined by the Needs Assessment.

    b. What is the workload.

    c. Special concerns (for example, remote wilderness settings).

7. Training and Continuing Education:

    Based on the level of care being provided address the training and continuing education requirements.

8. Continuous Quality Improvement (sec. 6932.11 Quality Assurance/Continuing Quality Improvement):

    a. Describe the review process for the EMS incidents in terms of who conducts the sessions, how often, and who is required to attend (feedback to providers).

    b. Describe the review and approval process for the patient care records (PCRs).

c. Describe procedures for addressing substandard performance.

d. Documentation.

e. Describe process for routing, reviewing, approving PCRs.

f. Address Freedom of Information Act and patient confidentiality issues.

9. Communications:

   Describe how the R/F/S/LEI dispatch system is designed to work for EMS incidents including the role and responsibility for each link in the system.

10. Critical Incident Stress Management:

    a. Describe the R/F/S/LEI mechanism for providing assistance to employees involved in critical incidents.

    b. Provide a list of resources, both internal and external.

11. Patient Transport:

    a. Describe the process of providing for ambulance transport. Provide a list of primary EMS response agencies on the unit. In most cases, the primary EMS response agency with jurisdiction shall be utilized to transport ill or injured patients. The Forest Service is authorized to treat and transport employees, volunteers, partners and cooperators, and members of the public lost or injured on national forest lands and then, deliver them to the appropriate response agency personnel, or in rare cases to definitive care, if patient transfer is not available or delayed for a period of time that would jeopardize the life of the patient or risk serious medical complications.

    b. Describe policies and procedures for air ambulance transports including predesignated landing zones, altitude considerations, wilderness issues, etc.

12. AED Program:

    Include AED policy and procedures. See section 6923.

13. Supplies and Equipment:

    a. Responsible person(s) for purchasing and maintaining.

    b. Procedures for replacing supplies when patient care is transferred.

    c. Supply inventory list(s) for EMS kits.

d. EMS equipment and kit locations.

e. Procedures for cleaning reusable supplies and equipment.

14. General Agreements:

Describe or include the General Agreements that are in place for the R/F/S/LEI relative to EMS or Search and Rescue.

15. Infectious diseases policies and procedures for:

a. Hepatitis B and other vaccination requirements for EMS providers (see also section 6924.2 Vaccinations and FSM 6720, Occupational Health Program).

b. Personal protective equipment.

c. Bloodborne pathogens. OSHA developed a compliance standard to protect employees who may be occupationally exposed to human blood or other potentially infectious materials. Forests/Stations/Areas are required to comply with the OSHA Occupational Exposure to Bloodborne Pathogens Standard found in Title 29, Code of Federal Regulations, Part 1910.1030. The Exposure Control Plan (ECP) is for R/F/S/LEI employees who may have an occupational exposure to human blood, blood products, and other potentially infectious materials. (FSM 6720, Occupational Health Program and 29 CFR 1910.1030).

16. Treatment Protocols.

To include reference to FSM 6900 Emergency Medical Services and US Forest Service EMS Protocols and Procedures.

17. Appendices

As required by local unit.

6923 - Automated External Defibrillators

An Automated External Defibrillator (AED) is a device designed to improve the survival rate for victims of cardiac arrest. The AED is applied to the chest to administer an electric shock to the heart. This is done to terminate lethal cardiac rhythms and allow the heart to resume normal pumping activity. AEDs are designed to be used by both medical and non-medical personnel who have been properly trained. Forest Service employees trained to provide CPR and automated external defibrillation may greatly increase sudden cardiac arrest survival rates of employees and visitors.

AED use by EMS providers is outlined in the pertinent EMS Protocols and Procedures. AED locations, and use by lay providers, is outside the scope of this directive and is referenced in CFR 29 1910.151 (Medical services and first aid) and Appendix A to § 1915.87 (First Aid Kits and Automated External Defibrillators).

6923.1 - AED Determine the Need

As part of the overall EMS Needs Assessment (Ref: sec. 6921, Needs Assessment Development) the following criteria should be considered in determining the need for an AED Program:

1. Probability for use of an AED due to cardiac arrest based on the occurrence of a cardiac arrest event amenable to AED utilization at least once in the previous 5 years.

2. Non-Forest Service EMS call-to-shock time interval of less than 5 minutes not reliably achieved when Forest Service AEDs can be brought to the cardiac arrest location within an acceptable time frame.

3. Large numbers of people frequent the area, increasing the likelihood of need.

4. The location's typical workforce and/or visitor populations exhibit factors for cardiac arrest.

5. The location itself exhibits environmental risk factors for cardiac arrest. High-risk locations include:
    a. High activity/recreation areas,
    b. Areas where people experience high levels of stress, and
    c. Areas where people spend long periods of time.

6. There is exposure to hazardous materials/conditions (for example, chlorine, electrical, and so forth) on a regular basis.

7. Physical layout of the facility presents a degree of risk, for example:
    a. Multiple floors, and
    b. Size of office space or number of rooms.

6923.2 - AED Training

Training and re-certification requirements are established by nationally established organizations listed in section FSM 6900 Emergency Medical Services, section 6908 Training and Certification R/F/S/LEI may also develop their own, more frequent, training and review schedules. Periodic scenario-based training is highly recommended as a component of an AED providers continuing education.

AED and CPR training is vital because early CPR and AED use are an integral part of providing lifesaving aid to people suffering from sudden cardiac arrest, providing victims with the greatest

opportunity for survival, it is recommended that all Forest Service employees be certified in CPR/AED use.

6923.3 - AED Placement and Number Needed

Optimal locations and numbers of AEDs are such that trained individuals can access them and reach the patient within a target response time of 3 to 5 minutes (3 minutes is optimal, 5 minutes is considered acceptable). This is defined as the time it takes a responder to go from their work area to retrieve an AED and then, walking at a rapid pace, reach the victim.

Specific considerations to be made for AED locations are:

1. An easily accessible position (for example, placed at a height reachable by all, unobstructed access, and so forth),

2. A secure location that prevents or minimizes the potential for tampering, theft, and/or misuse, and precludes access by unauthorized users,

3. A location that is well marked, publicized, and known among trained staff, and.

4. A nearby telephone or radio that can be used to call EMS.

Limited vs. Open Accessibility. Limited accessibility restricts access to the AED to a defined individual or group. This means the general public cannot easily obtain and use the AED. Access to AEDs may be limited to R/S/LEI personnel or may be expanded to include defined trained rescuers (rescuers not a part of the Forest Service unit but who are properly trained in CPR and AED.) Open accessibility is the placement of AEDs so that they are available to the general public.

Automatic Notification System. This type of system automatically notifies a responding entity when the AED is removed, or the cabinet is opened. This notification may be sent directly to the local EMS agency or to an in-house communication center that will then notify the appropriate responders. Where automatic notification of the opening of an AED storage cabinet or removal of an AED from a cabinet is not implemented, emphasis should be placed on notification procedures and equipment placement in close proximity to a telephone or radio. There may also be an audible alarm that is activated by the removal of the AED. This will alert other persons within hearing distance.

6923.4 - AED Supply Inventory

A supply inventory may include but not limited to, a razor, barrier device, disposable gloves, and two sets of electrodes are stored in the case with each device. Also consider including a biohazard bag, small towel, and a set of concise instructions for performing CPR, and pen and paper.

6923.5 - AED Maintenance

Maintenance and performance checks of all AEDs and associated equipment are to be performed per manufacturer's recommendations. Each Forest Service unit shall designate a person(s) or group responsible for this task.

Each AED should have a written checklist to assess the preparedness of the AED and supplies. This checklist may be used as a supplement to regularly scheduled, more detailed maintenance checks recommended by the manufacturer.

6923.6 - AED Post Event Considerations

The following measures are to be taken in post-event considerations:

1. Return the AED to a state of readiness as soon as possible with the replacement of the pads, pocket mask, and other peripheral supplies as necessary.

2. Provide the incident data to the local EMS Medical Advisor and EMS Coordinator.

3. Review the case with the EMS Medical Advisor, R/F/S/LEI EMS Coordinator and involved rescuers within 30 days of the incident. The information gathered from the incident review process is intended to be used to help improve the AED Program. At a minimum, the review should include protocol and procedure implementation, scene safety, and a review of the AED recorded data.

6924 - Supplies and Equipment

Each R/F/S/LEI unit will fund its own basic EMS provider supply and equipment costs. Forest Service units that provide Advanced Life Support (ALS) Programs may consider minimizing costs by arranging with assisting hospitals to issue them supply and equipment inventories such as heart monitors, intubation instruments, and medications (see FSM 6900, Emergency Medical Systems sec. 6906, Program Funding).

All Forest Service EMS Program equipment and supplies will be properly labeled, handled, cleaned, maintained, stored, and routinely inspected to ensure reliable functioning when needed for patient care and to protect Forest Service employees and visitors from unintended injury.

In cases where a hospital supplies ALS equipment to an R/F/S/LEI unit, the R/F/S/LEI EMS Coordinator will maintain records of all hospital property.

6924.1 - Prescription Medications and Controlled Substances

When necessary to provide EMS care in accordance FSM 6900 Emergency Medical Services the Local EMS Medical Advisor may authorize the R/F/S/LEI EMS Coordinator to purchase prescribed medications and controlled substances through a Prescription Drug Authorization form that can be found online through EMS vendors. Most vendors require the Prescription Drug Authorization form be submitted annually.

With the approval of the Local EMS Medical Advisor, R/F/S/LEI may use the Local EMS Medical Advisor's Controlled Substances Registration Certificate to acquire their medication inventory. A replacement and disposal policy shall be developed between the R/F/S/LEI EMS coordinator and the Local EMS Medical Advisor to accompany the purchase of medications.

The R/F/S/LEI EMS coordinator or their designee is responsible for purchasing medications, to include controlled substances. The Prescription Drug Authorization form must be filled out and kept on file with the vendor. This will be needed to purchase any medication.

Applications for registration with the Drug Enforcement Agency and online forms may be found on the Drug Enforcement Agency website.

In either of the above cases, the R/F/S/LEI EMS Coordinator shall keep current and accurate inventories of all medications and assure that proper measures are taken to ensure the security of these substances. Drug Enforcement Agency security measures may be found in 21 CFR 1301.72.

6924.2 - Vaccinations

Hepatitis B vaccinations must be offered at no cost to employees who self-identify as level III-VI providers, per 29 CFR 1910.1030 and FSH 6709.11, Health and Safety Code Handbook, section 52.3, Bloodborne Pathogens Program.

6924.3 - Military Supply Consideration

Significant savings to the Government can be accomplished by purchasing BLS and ALS supplies and equipment through military supply centers. R/F/S/LEI EMS Coordinators, through appropriate channels, can contact the medical supply officer at the nearest military installation for detailed information. The military has established procurement procedures for dealing with other government agencies.

6925 – EMS Program Initiation

Once the Needs Assessment and EMS plan have been drafted and understanding that a local EMS program requires buy-in from local stakeholders, a program initiation document is required prior to operating a local program.

Once a Program Initiation is complete, a needs assessment (sec. 6921 Needs Assessment Development) and EMS plan (sec. 6922, Emergency Medical Services Plan) can be completed.

The Program Initiation document, EMS Needs Assessment and EMS Plan shall be forwarded to the Washington Office, National EMS Program Manager, along with the request for initiation form. Sample documents can also be requested at any time by working with the Washington Office, National EMS Program Manager.

6926 – Forms and Signatures

Following are the recommended approvals on the documents discussed herein.

Local Emergency Medical Director Documents:

1. OF301a/OF301b
    a. The OF301a is a "Volunteer Service agreement" signed by all doctors that volunteer for the Forest Service EMS program.
    b. This is not applicable for any non-volunteer (for example, contract) physicians, of which there are a few in the Forest Service EMS Program.
    c. The OF301b is utilized when a group of volunteers is involved, in which case a OF301a & b is needed.

2. General Agreement and Position Description
    a. General Agreement. This is an Office of General Council-approved document that is signed by the volunteer physician (Ref. ch. 6930 Medical Oversight and Training). This document is not needed in those R/F/S/LEI where medical oversight is a contracted arrangement.
    b. Position Description. Describes the general roles & responsibilities of a LEMA (Ref. ch. 6930, Medical Oversight and Training).

Unit Documents:

1. Needs Assessment (sec. 6921, Needs Assessment Development) - Every Region, Forest, Station, and needs to complete an EMS Needs Assessment to evaluate their ability to provide care for employees, partners, and cooperators who may become injured or ill during the performance of work.

2. EMS Plan (sec. 6922, Emergency Medical Services Plan). Every unit will have an EMS Plan (ex. 01). It will be the guiding document for the unit's EMS program and will be easily accessible by all EMS providers for reference. This document will be written after a needs assessment has been completed.

3. Program Authorization (sec. 6925, EMS Program Initiation). This document serves as an agreement from unit leadership that they support the program.

6926 - Exhibit 01

Needs Assessments and EMS Plan

Recommended Signatures:

Name / Position	Personnel Location	EMS Plan	Needs Assessment	Program Authorization	LEMA OF301a/b	LEMA General Agreement
Unit Supervisor / Forest Supervisor	Local	A	A	A	-	-
Local EMS Program Coordinator	Local	A	A	A	-	-
Regional EMS Program Coordinator	Regional	Optional	Optional	-	-	-
Local Medical Advisor (LEMA) / Physician	Local	A	Optional	A	A	A
National EMS Medical Director (USFS)	National / DC	Optional	-	-	-	A
Program Office (Washington, DC)	National / DC	-	-	A	A	A
Local / regional SMEs as deemed necessary	Local / Regional	Optional	Optional	Optional	-	-

"A" = Approval (for example, Signature)