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**(Formerly MCWP 4-11.1)**

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# **Health Service Support Operations**

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**US Marine Corps**

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ERRATUM

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HEALTH SERVICE SUPPORT OPERATIONS

1. Change all instances of MCWP 4-11.1, *Health Service Support Operations*, to MCTP 3-40A, *Health Service Support Operations*.
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DEPARTMENT OF THE NAVY  
Headquarters United States Marine Corps  
Washington, D.C. 20380-1775

10 December 2012

FOREWORD

“Corpsman Up!” echoes across battlefields and in answering this call, medical personnel assigned to Marine Corps forces must be knowledgeable and prepared point men and women of a responsive health service support (HSS) capability. Commanders and their staffs must be aware of HSS capabilities and requirements and their contributions to mission accomplishment.

Marine Corps Warfighting Publication (MCWP) 4-11.1, *Health Service Support Operations*, disseminates information on the mission, functions, structure, and concept of employment of HSS units. This publication provides overarching doctrine and establishes a practical approach to HSS from the perspective of the commander or staff officer who can apply it without any significant medical background.

This publication establishes general guidance that requires judgment in application. Lower-level tactics, techniques, and procedures for specific application will be published in Marine Corps Reference Publication 4-11.1E, *Health Service Support Field Reference Guide*. This MCWP pertains equally to senior commanders and small-unit leaders.

This publication supersedes MCWP 4-11.1, *Health Service Support Operations*, dated 10 March 1998.

Reviewed and approved this date.

BY DIRECTION OF THE COMMANDANT OF THE  
MARINE CORPS

A handwritten signature in black ink, appearing to read "R. P. Mills", with a stylized flourish at the end.

RICHARD P. MILLS  
Lieutenant General, U.S. Marine Corps  
Deputy Commandant for Combat Development and Integration

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# HEALTH SERVICE SUPPORT OPERATIONS

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# Chapter 1

## Fundamentals

Health service support (HSS) is a process that delivers on demand healthcare capabilities to the warfighter for a healthy, fit, and medically-ready force; counters the health threat to the deployed force; and provides critical care for and management of combat casualties. Aided by technological innovation and logistics, HSS is the employment of medical forces in support of the warfighter.

Health service support directly supports the National Military Strategy of forward presence and power projection. It also strengthens the warfighting commander by providing essential care in theater and rapid casualty evacuation (CASEVAC)/medical evacuation (MEDEVAC) of casualties to medical treatment facilities (MTFs) in the continental United States for definitive care without sacrificing quality of care.

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### **Mission**

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The HSS mission is to minimize the effects that wounds, injuries, and disease have on unit effectiveness, readiness, and morale. The mission is accomplished by an aggressive and proactive preventive medicine (PVNTMED) program that safeguards personnel against potential health risks and by establishing an

HSS system that provides appropriate care from the point of injury/illness to the appropriate taxonomy of care.

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### Principles

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Health service support principles are guides for planning, organizing, managing, and executing HSS. Seldom will all principles exert equal influence; usually, one or two dominate a given situation. Effective HSS identifies which principle(s) have priority. See Joint Publication (JP) 4-02, *Doctrine for Health Service Support in Joint Operations*, for more information. Each Service component must have a HSS system that encompasses—

- *Conformity*. The medical plan must integrate and comply with the commander's plan.
- *Proximity*. The medical plan must provide HSS as close to combat operations as the tactical situation permits.
- *Flexibility*. The medical plan must shift HSS resources to meet changing requirements.
- *Mobility*. The medical plan must anticipate requirements for rapid movement of HSS units to support combat forces during operations.
- *Continuity*. The medical plan must provide optimum, uninterrupted care and treatment to the wounded, injured, and sick.
- *Coordination*. The medical plan must ensure that HSS resources in short supply are efficiently employed and used effectively to support the planned operations.

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### **A Healthy and Fit Force**

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Health service support promotes wellness and quality of life in order to strengthen the human component of military forces against disease and injury. A healthy force, ready to deploy anywhere in the world and ready to withstand hardship and deprivation, assures warfighting commanders of physical and mental readiness. Wellness requires continuous attention before, during, and after deployment to sustain maximum readiness and warfighting capability. Every effort should be made to utilize all available medical specialties to ensure a healthy and fit force; however, warfare-designated medical specialists are employed to the maximum extent possible to ensure alignment with force protection and conservation of combat power initiatives.

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### **Threat to the Force**

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Health service support focuses on two forms of threat: the enemy and an individual's health. The enemy threat produces combat casualties, whereas the ever-present threat to health includes disease and nonbattle injuries (DNBI) and has been a major source of morbidity throughout military history. The enemy threat depends largely on the enemy's intent and capability to use force to inflict casualties, while the health threat depends on a complex set of environmental, physiological, and operational factors that combine to produce DNBI. Failure to counter either threat jeopardizes mission accomplishment and achievement of the operational objective.

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### Casualty Care and Management

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Health service support deploys small, mobile, and task-organized capabilities to provide care throughout the continuum of health care. The taxonomy continuum of healthcare includes the following capabilities (see fig. 1-1):

- Policy and resource acquisition.
- Prevention and protection.
- First responder.
- Forward resuscitative care.
- Theater hospitalization.
- Definitive care.
- En route care.

United States Marine Corps organic HSS assets provide capabilities through forward resuscitative capability of the continuum of health care.

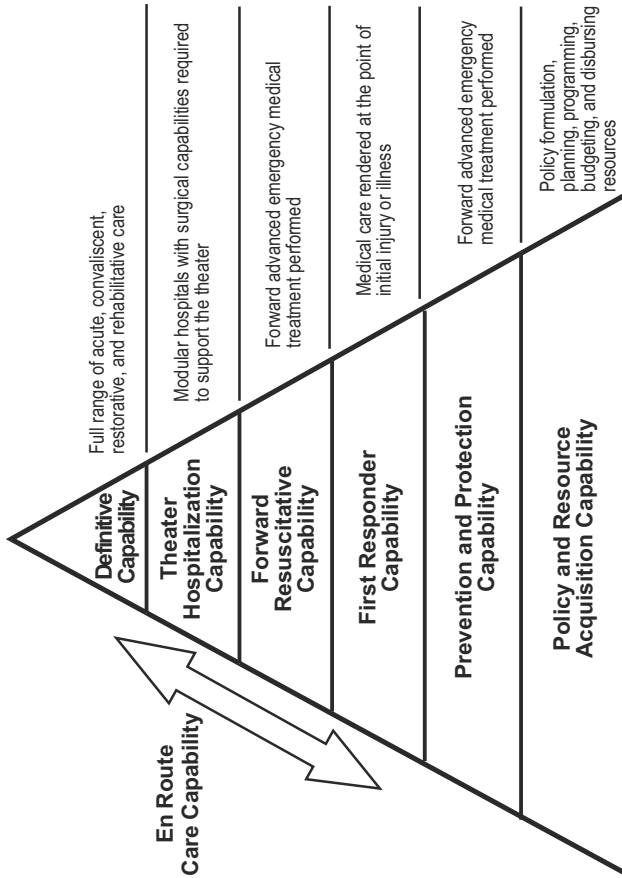
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### Functional Areas

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Medical plans must address the following functions when developing the HSS concept of operations:

- Casualty management covers from the point of injury or illness throughout triage, treatment, and transport to the next taxonomy of care outside of Marine Corps capabilities.



**Figure 1-1. Taxonomy  
Continuum of Health Care Capabilities.**



- Force health protection and prevention encompasses primary and preventive measures for treatment, protection and surveillance, detection, and environmental analysis.
- Medical logistics provides capabilities required to organize and provide the life cycle management of specialized medical products and services required to support health readiness requirements across the range of military operations.
- Medical command and control (C2) integrates both vertically and horizontally with the tactical commander's C2 functions and enhances situational awareness in providing reliable medical support in current and future operations.
- Medical stability operations are critical to the stabilization of the force and occur throughout all phases of conflict and across the range of military operations, including combat and noncombat environments.

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## **The Hague and Geneva Conventions**

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The conduct of armed hostilities on land is regulated by The Law of War, which is both written and unwritten. The law of land warfare is derived from two principal sources: customs and lawmaking treaties, such as The Hague and Geneva Conventions. Under the US Constitution, the rights and duties set forth in these conventions are part of the Supreme Law of the Land, and violation of any convention is a serious offense. Under the Conventions, the signatories established the principle of disinterested aid to all victims of war including those who, through wounds, capture, or shipwreck, are no longer enemies but are merely suffering and defenseless human beings. Additional protocols to the Geneva Conventions establish standards of conduct for medical and religious personnel assigned to aid victims. The United States is a

signatory to the Geneva Conventions of 1949 and has directed its military forces to abide by its articles; however, future asymmetrical theaters, especially nonstate actors, may not abide by the Convention accepted by nation states.

Refer to the following sources for principles of international and domestic law and the status and protection of medical personnel under both Conventions:

- Marine Corps Warfighting Publication (MCWP) 5-12.1, *The Commander's Handbook on the Law of Naval Operations*.
- Marine Corps Reference Publication (MCRP) 5-12.1A, *The Law of Land Warfare*.
- Department of the Army Pamphlet 27-1, *Treaties Governing Land Warfare*.

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## Planning

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Health service support planning occurs at all levels of command and organizations across the range of military operations. All commanders are responsible for the health and welfare of their troops. All commanders have HSS staffs that plan from the tactical level through the strategic level of war.

Chairman of the Joint Chiefs of Staff Manual (CJCSM) 3122.03C, *Joint Operation Planning and Execution System, Volume II, Planning Formats and Guidance*, sets forth administrative instructions and directives to develop operation plans (OPLANs) of combatant commands, subunified commands, joint task forces, and their subordinate component

commands. It may also be applied when significant forces of one Service are attached to forces of another Service.

Operation plans, concept plans, functional plans, and operation orders prepared by commanders to fulfill tasks assigned in the joint strategic capabilities plan or as directed by the Chairman of the Joint Chiefs of Staff conform to the guidance contained in CJCSM 3122.03. To facilitate communications on operation planning among military headquarters, commanders standardize the format and content of other appropriate plans according to CJCSM 3122.03.

Guidance for medical services is located in CJCSM 3122.03, Annex Q (Planning Guidance, Medical Services) of OPLANs, concept plans, functional plans, and operation orders. Annex Q identifies requirements and provides guidance to subordinate commanders and their HSS planners. The following are sample HSS appendices to Annex Q:

- Appendix 1, Joint Patient Movement System.
- Appendix 2, Joint Blood Program.
- Appendix 3, Hospitalization.
- Appendix 4, Returns to Duty.
- Appendix 5, Medical Logistics (Class VIII) System.
- Appendix 6, Force Health Protection.
- Appendix 7, Medical Command, Control, Communications, and Computers.
- Appendix 8, Host-Nation Medical Support.
- Appendix 9, Medical Sustainability Assessment.
- Appendix 10, Medical Intelligence Support to Military Operations.

## **Health Service Support Operations**

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- Tab A to Appendix 10, Disease Threat by Geographic Area and Country.
- Appendix 11, Medical Planning Responsibilities and Task Identification.

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## **Chapter 2**

# **Intelligence**

Accurate and timely intelligence—knowledge of the enemy and the surrounding environment that is needed to support decision-making—is a prerequisite for military success. Intelligence is a fundamental component of command and control and aids the commander in applying combat power at the decisive time and place. Intelligence activity is mission-focused. Marine air-ground task force (MAGTF) intelligence operations are determined by the commander's intelligence requirements. The resulting intelligence effort provides critical knowledge and understanding about the enemy and the environment to help the commander plan and make decisions. Medical intelligence includes more than just information on disease, operational, physiological, or other environmental hazards. Raw data must also be analyzed and properly acted upon to prevent an adverse operational impact. Medical intelligence from all sources—internal and external to the MAGTF—must be assimilated for the commander to have a complete picture of the medical threat.

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### **Internal Medical Intelligence Sources**

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#### **Preventive Medicine Section**

Most PVNTMED assets organic to the Marine expeditionary force (MEF) are found in the PVNTMED section, headquarters and service (H&S) company, medical battalion, combat logistics regiment (CLR), and Marine logistics group (MLG). This section provides general support to all MEF major subordinate

commands. General PVNTMED activities include identifying information related to actual and potential environmental health risks; conducting health threat assessments; performing occupational and environmental health surveillance (OEHS); characterizing demographics and populations at risk; assessing living conditions; ensuring adequate water quality and supply; recommending proper waste disposal methods; evaluation of food safety and food sanitation programs; management of sight and hearing conservation programs; and entomology issues such as insects, diseases, and vectors of military importance.

### **Local Command Intelligence Sections**

Additional medical intelligence may be requested through the intelligence staff officer sections of the command element, ground combat element (GCE), aviation combat element (ACE), and MLG. Additional information on intelligence support to medical operations can be found in the intelligence series of the Marine Corps warfighting publications, including MCWP 2-3, *MAGTF Intelligence Production and Analysis*.

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### **Health Service Support Element**

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Health service support element (HSSE) within the MLG is often the first to receive medical intelligence from on-site care providers due to multiple communications and information links available to sections within the MLG combat operations center (COC).

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### National Center for Medical Intelligence

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The National Center for Medical Intelligence (NCMI) is a field production activity of the Defense Intelligence Agency; it is the sole producer of finished medical intelligence in the Department of Defense (DOD). The NCMI provides all-source intelligence on—

- Worldwide infectious disease and environmental health risks.
- Foreign military and civilian health care systems and infrastructure.
- Scientific and technical developments in biotechnology and biomedical subjects of military significance.

The NCMI maintains extensive databases; monitors foreign research, development, production, and transitional flow of medical materiel for military interest; and provides intelligence liaison services to key customers. It also conducts in-house and mobile training (including a medical intelligence fellowship program), serves on numerous intelligence committees and working groups, and trains military reservists for mobilization assignments. The products produced by NCMI provide direct support to US military customers for operational planning; development of policy, doctrine, and training priorities; and medical research and development. Queries for medical intelligence support are addressed via the HSS chain of command or directly from deploying units to Defense Intelligence Agency, National Center for Medical Intelligence, Fort Detrick, Frederick, Maryland 21701-5004 or via e-mail to [afmicops@afmic.detrack.army.mil](mailto:afmicops@afmic.detrack.army.mil).



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## **Chapter 3**

# **Operations**

The Marine Corps organization for combat is based on its unique assigned force structure. Health service support is a mission area common to every MAGTF, regardless of the mission. Definitive operational planning for HSS is always an integral part of all MAGTF operations. The inherent flexibility of the MAGTF and the broad spectrum of potential MAGTF missions require flexibility in HSS mission execution. The size, type, and configuration of HSS capabilities needed to effectively support a MAGTF are determined by mission, enemy, terrain and weather, troops, and support available-time available. The following paragraphs provide an organizational framework for command and staff cognizance within which all HSS operations are executed.

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### **Marine Corps Forces**

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Marine Corps forces (MARFOR) commanders are responsible for coordinating and integrating HSS within their area of operations. The MARFOR surgeon, dental officer, medical planner, preventive medicine officer, and medical administrative officer advise the MARFOR commander on matters relating to the health of the command, medical logistics, patient movement, OEHS activities, sanitation, safety, disease surveillance, medical intelligence, health threats, and other medical personnel issues, as well as current and future HSS planning at the MARFOR level. Additional duties include serving as the liaison for the combatant commanders and other component surgeons and monitoring HSS aspects of the time-phased force and deployment data flow.

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### **Marine Expeditionary Forces**

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Marine expeditionary force commanders are responsible for coordinating and integrating HSS within their area of operations. The Marine expeditionary force surgeon, preventive medicine officer, medical planner, and hospital corpsmen are responsible for establishing HSS requirements and ensuring the HSS systems established by the MEF's major subordinate command form an integrated and responsive network of support.

The MEF surgeon and staff also advise the MEF commander on matters relating to the health of the command, medical logistics, patient movement, occupational and environmental health (OEH) activities, health threat assessments, disease surveillance, medical intelligence, personnel issues, and current and future HSS planning at the MEF level. The MARFOR deals with matters more on the operational level of war, while the MEF is more focused on the tactical level of war.

Health service support beyond the organic capabilities of the GCE and ACE are normally provided by task-organized units of the medical and dental battalions of the MLG. Additional support may be needed from designated casualty receiving and treatment ships (CRTSs), hospital ships, expeditionary medical facilities (EMF), US Army combat support hospitals, US Air Force expeditionary medical support, or MTFs of other coalition partner nations.

### **Marine Division**

The medical staff of the division headquarters has a division surgeon, medical plans officer, general psychiatrist, operational

stress control and readiness psychiatrist, environmental health officer, and hospital corpsmen. Medical staff responsibilities are similar to the MEF's, but are more specifically related to the activities of the GCE. When units smaller than divisions deploy as the GCE, the regiment or battalion surgeon(s) assumes much of the planning responsibility associated with health services in addition to their clinical responsibilities. Planning occurs on all levels, with the hospital corpsmen assisting in the planning.

### **Marine Aircraft Wing**

The medical staff of the Marine aircraft wing (MAW) headquarters has a wing flight surgeon, medical plans officer, environmental health officer, industrial hygienist, and hospital corpsmen. Medical staff responsibilities are similar to the MEF's but are more specifically related to the activities of the ACE.

A MAW is comprised of Marine aircraft groups (MAGs) and squadrons. Each group and squadron has a group flight surgeon and several hospital corpsmen. The subordinate operational squadrons within each MAG are supported by their own squadron flight surgeon and a hospital corpsman. Additionally, a Marine wing support squadron, subordinate to a MAG, has a medical staff comprised of a physician, which may be a flight surgeon, and hospital corpsmen. The flight surgeon is the commander's special staff officer that is directly responsible for the aeromedical safety and HSS for the command.

### **Marine Logistics Group**

The MLG surgeon advises the commander on the health of the command and the adequacy of organic MLG HSS. The surgeon also has cognizance over the operation of the group aid station. The health service support officer (HSSO) develops MLG HSS

plans and coordinates HSS for GCE and ACE units requiring medical and dental support that exceeds their organic capabilities. The HSSO serves as the officer in charge (OIC) of the medical section of the COC during exercises or operations. The MLG has the majority of the MEF's medical capability: a medical battalion with three surgical companies (SCs) and H&S company. The MLG's HSS structure includes a medical plans officer, hospital corpsman, and supporting staff.

### *Dental Battalion*

The dental battalion, MLG provides field dental services to the MEF and advises the commander on dental issues. By attaching task-organized dental sections and detachments to HSS units of the MAGTF, battalion personnel maintain dental readiness during exercises, deployments, operations other than war, and combat operations.

In an operational environment, the dental battalion's primary mission is to provide dental health maintenance with a focus on emergency care. Personnel from these detachments may also provide postoperative, ward, central sterilization, supply room support, and other medical support as determined to be appropriate by the medical battalion and SC commanders.

The dental battalion commander has additional special staff officer duties as the MEF and MLG dental officer. As a special staff officer, the dental officer advises the commanders on all professional, administrative, and operational matters in order to optimize use of dental assets.

### *Medical Logistics Company*

Medical supplies and equipment (Class VIII) for the MEF are managed through the medical logistics company (MEDLOGCO), supply battalion, which issues the authorized medical allowance list (AMAL) and authorized dental allowance list (ADAL) and handles resupply issues. When the MEDLOGCO or detachment does not deploy with the logistics combat element (LCE), the LCE supply detachment and/or inter-Service support agreement provides resupply support. The MEDLOGCO is a medical supply depot directly responsible to the supply battalion commanding officer supporting the medical battalion. See appendix A for AMAL and ADAL lists. The MEDLOGCO—

- Maintains medical equipment.
- Maintains centralized acquisition, storing, and stock rotation.
- Constructs medical supply sets (AMAL/ADAL).

Resupplies HSS units with AMAL/ADAL and line items based on specific mission needs.

### *Medical Battalion*

The medical battalion is a subordinate command to the MLG. It is organized to execute HSS functions in support of the MAGTF's mission. The medical battalion provides initial resuscitative HSS to the units of the MAGTF above their organic medical capability. Its primary mission is to perform those emergency medical and surgical procedures that, if not performed, could lead to loss of life, limb, or eyesight.

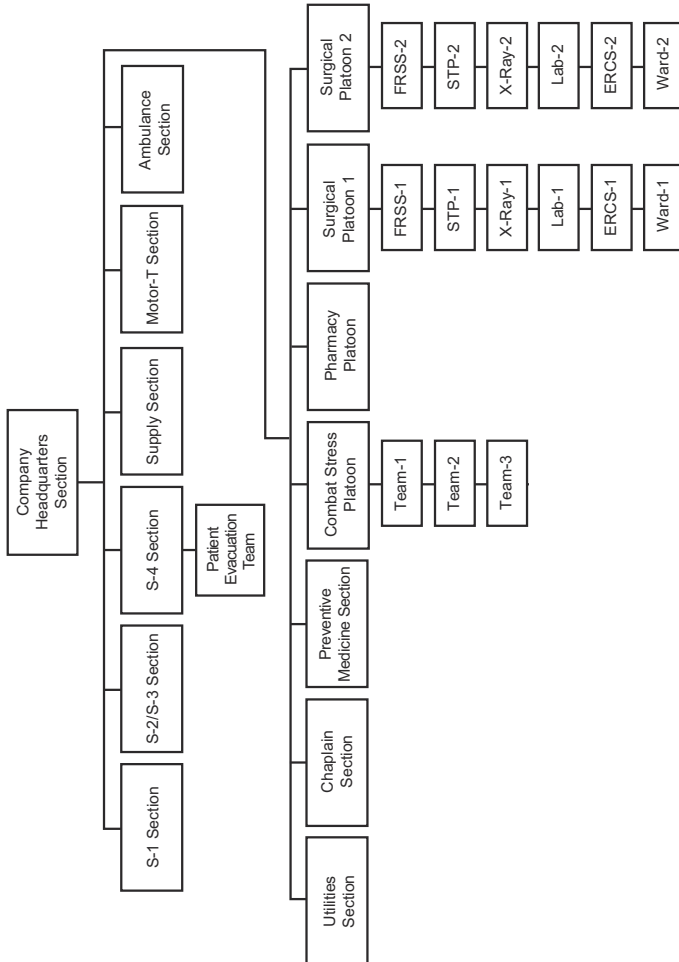
The medical battalion's SCs each contain surgical platoons with a forward resuscitative surgical system (FRSS), shock trauma platoons (STP), and ward for temporary casualty holding and en route care systems (ERCS) capable of managing patients at the STP and the ward. The headquarters company provides command and control of the battalion. Also, H&S company has an embedded SC with two surgical platoons to provide Role II care, when required.

Also resident within the medical battalion is a PVNTMED section composed of an environmental health officer, entomologists, and PVNTMED technicians. The PVNTMED unit is a significant force enabler, capable of providing the full scope of PVNTMED and OEHS activities for the purpose of ensuring a healthy, deployable force.

Note: 1st Medical Battalion has one additional surgical company.

### *Headquarters and Service Company*

Headquarters and service company has the capabilities of a FSC in order to provide surgical care as a general support capability for the MLG. Headquarters and service company consists of the battalion headquarters S-1 personnel/administration, S-2/S-3 intelligence and operations, S-4 logistics, S-6, a chaplain section, and a PVNTMED section. The headquarters company section includes a surgical company with two surgical platoons. A surgical platoon consists of 1 FRSS, 1 STP, 1 X-ray, 1 lab, 1 ward, 1 ERCS, and 1 ambulance section for 24-hour operations. The combat stress platoon has three teams. See figure 3-1.



**Figure 3-1. Headquarters and Service Company Structure.**



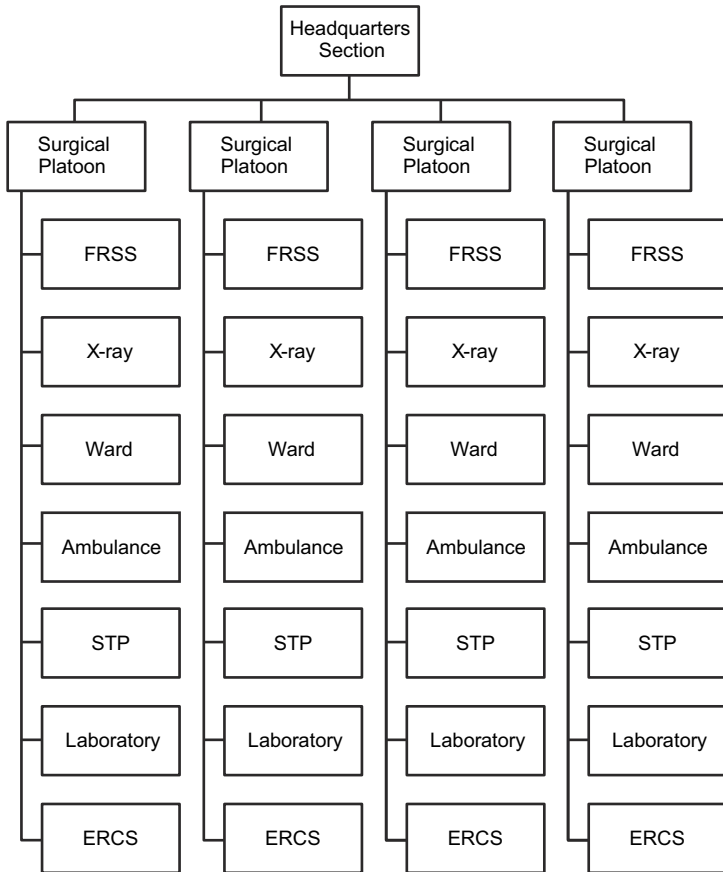
### *Shock Trauma Platoon*

The STP is the most mobile medical support platoon of the medical battalion. It can serve as a battalion evacuation station, reinforce a battalion aid station (BAS) when the casualty rate exceeds that of organic BAS staff, operate as an intermediate casualty collecting and clearing point between forward medical elements and the SC, or serve as the forward element of an FRSS/SC preparing to relocate. An STP reinforced with PVNTMED, group aid station, and dental personnel may also provide HSS to a combat logistics battalion (CLB) or Marine expeditionary unit (MEU) through a CLR.

### *Surgical Company*

The SC (see fig. 3-2) supports regimental-sized operations and receives casualties from units or individuals providing first response Role I medical treatment. The SC provides FRSSs, STPs, medical treatment, and temporary holding of casualties from supported forces. They also prepare and evacuate casualties whose medical requirements exceed the established theater evacuation policy. Base operating support is required from the assigned CLB.

The surgical company plans, coordinates, and supervises assigned functions of medical support for the battalion. It is structured to facilitate task organization for operations conducted by the battalion to support the MEF, MEB, or any combination of smaller MAGTFs. Surgical companies consist of a headquarters section and 4 surgical platoons. A surgical platoon consists of 1 FRSS, 1 STP, 1 X-ray, 1 lab, 1 ward, 1 ERCS, and 1 ambulance section (consisting of two vehicles) for 24-hour operations. An attached dental platoon provides dental support and will assist in



**Figure 3-2. Surgical Company Structure.**

the triage, care, and evacuation of casualties. Combat stress capabilities are available in the battalion and can be task organized from H&S company if given the mission.

Since the SC is a major link in the chain of evacuation, it should be located in close proximity to an airfield capable of casualty evacuation by rotary- or fixed-wing aircraft when possible.

### *Forward Resuscitative Surgical System*

The FRSS is one of the smallest possible units for provision of surgical care to combat casualties. The FRSS is the primary unit for resuscitative treatment. It is employed when the tactical situation precludes use of a surgical company ashore and when rapid casualty transport to CRTS or to land-based surgical facilities is unavailable. It is used to support one or more maneuver elements, augmented by an STP or BAS. The patient holding capability of the FRSS is no more than 4 hours. It is supported by an STP or BAS for initial triage, communications, security, and patient movement. When a stabilized patient needs evacuation, the FRSS requires en route care teams to support movement to a higher taxonomy of care. Without resupply, the core package can perform approximately 18 salvage surgical procedures or 20 trauma resuscitations over a period of 48 hours before requiring resupply and relief of personnel. The FRSS is designed to provide a significant increase in the capacity and capability of any medical unit that is present. It can be transported using available rolling stock (e.g., high mobility multipurpose wheeled vehicles with trailers or medium tactical vehicle replacement) via tactical aircraft or by surface vessels. Equipment weighs approximately 6,300 pounds, excluding personal gear and environmental control units, and has a total volume of 640 cubic feet. The following personnel comprise the FRSS:

- 2 surgeons.
- 1 anesthesiologist.
- 1 critical care nurse.

- 1 independent duty corpsman (surgery/emergency room).
- 1 field medical technician.
- 2 operating room technicians.

The team's equipment and personnel are selected to provide resuscitative trauma care and resuscitative or damage control trauma surgery. Specific capabilities for early trauma care and stabilization include, but are not limited to, airway management, fluid resuscitation, and advanced trauma life support skills that control hemorrhaging from any body cavity or from extremity wounds, control of intra-abdominal contamination, stabilization of fractures, and major wound debridement.

The composition and size of the FRSS makes it one of the lightest and most mobile of the units available for Marine Corps combat casualty care. Mobility and moderate airlift requirements allow the team to deploy and rapidly begin care of casualties after arrival onsite. The team's small size and moderate logistical support allow it to plug into nearly any type of host medical unit, ranging from a BAS to an STP; in every case, raising the available level of combat casualty care. While team members and the equipment package can function well in triage and initial resuscitation, significant support of this role reduces the team's ability to perform in its designed operating role. Because of these limitations, the team functions best in association with a unit such as an STP or BAS that can support the initial treatment and post-operative holding of casualties.

The FRSS structure and organization supports a capability-based mission profile. Its organization and staffing allows a wide spectrum of resuscitative trauma care ranging from triage/advanced trauma life support/stabilization through salvage surgical procedures; thus, the team can be appropriately employed in any situation where trauma surgical capability is

needed. The FRSS's additional capabilities include the ability to deploy and redeploy rapidly, travel with small to moderate airlift requirements, and operate in a shelter of opportunity. These additional capabilities extend trauma surgical care where it cannot be provided by other units. Examples of missions that may be appropriate for the FRSS include—

- Triage/therapy/salvage surgery no farther forward than the BAS.
- Surgical care of critically injured patients within the collecting and clearing point.
- Surge augmentation of an existing deployed SC or other facility.
- Ramp up/down phases of classic deployments.
- Civilian disasters: augmentation of existing resources.
- Special operations support.
- Surgical support for split expeditionary strike group operations.

The FRSS is easily established in the four early phases of combat casualty care—

- Triage.
- Immediate therapy/resuscitation.
- Salvage surgery.
- Post-operative care.

The team can fluidly cover any of these roles as dictated by the situation. Patients receive salvage surgery based on resources and tactical/clinical situations.

All FRSS personnel and most equipment can be transported internally in MV-22, CH-46, or CH-53 aircraft. Rolling stock

(HMMWVs and trailers) will require external lift capability. Medium tactical vehicle replacement, trailers, and high-mobility multipurpose wheeled vehicle can be utilized for ground transport. In addition, the FRSS is capable of being loaded, stowed, and disembarked on/off naval land, sea, and air transport platforms and equipment.

### *En Route Care Platoons*

The Marine Corps's ERCS is an essential follow-on for the FRSS, composed of one critical care nurse and one corpsman (8404), with three teams per SC. The ERCS is capable of providing medical care for two critically injured/ill, but stabilized, patients for 2 hours during flight. En route care systems provide a capability to support expeditionary maneuver warfare by meeting an operational requirement to evacuate patients up to 240 nautical miles using opportune lift medium lift aircraft. En route care systems are employed when the tactical situation requires prompt transport of critically injured/ill patients from forward surgical and treatment elements to the shore- or sea-based treatment facilities. Less critically injured/ill patients are transported using current protocols.

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## **Marine Expeditionary Unit**

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Each MEU element deploys with its own organic HSS capability. Health service support above this organic level is provided by a health service support detachment (HSSD) task-organized from the headquarters and general support CLR and attached to the MEU CLB. The HSSD structure falls primarily under the CLB and includes an emergency physician, physician assistant, critical care nurse, medical plans officer, independent duty corpsman,

and 8404 hospital corpsman. It may also include adjunct medical staff such as industrial hygiene and entomology officers and staff. Medical specific staff includes—

- Shock trauma platoon.
- Headquarters and service company, medical battalion elements.
- MEDLOGCO detachments.
- Dental detachments.

The tactical situation ashore dictates the size of the HSSD capability ashore. This capability may range from a beach or helicopter evacuation station staffed by a triage/evacuation section of an STP to an STP reinforced with sections of a SC. Normally the elements of an STP are of sufficient size to manage most medical situations.

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### **Phasing Support Ashore**

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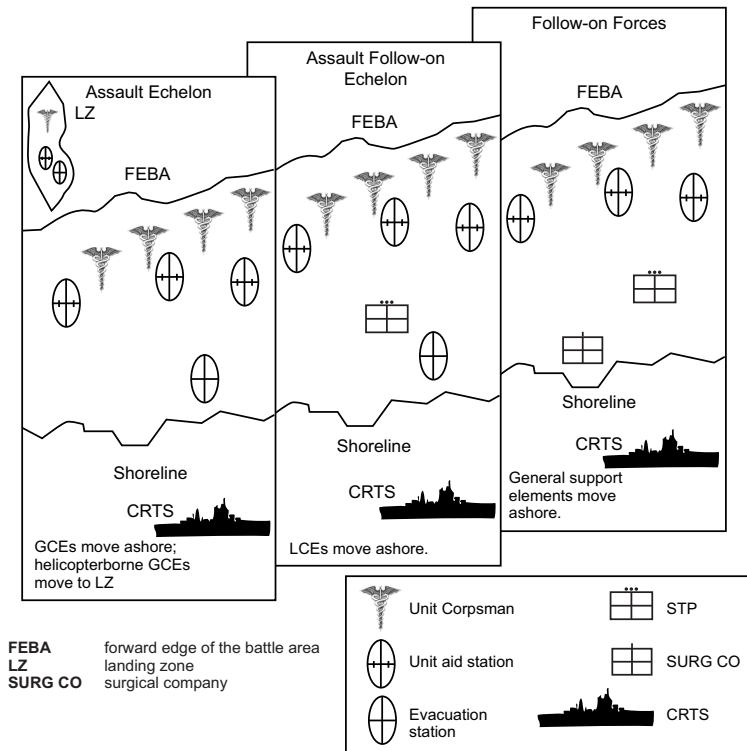
During the movement phase of amphibious operations, the commander, amphibious task force (CATF) and his principal medical advisor, the CATF surgeon, have overall responsibility for HSS services to embarked personnel.

Landing force HSS personnel aboard amphibious task force (ATF) ships augment ATF medical and dental departments by providing care to embarked landing force personnel using ship's company medical facilities and supplies. Landing force Class VIII equipment and supplies are not to be used aboard ship unless authorized by the MAGTF commander in support of an overwhelming emergency.

## Health Service Support Operations

The senior medical officer of each ATF ship is responsible to the ship's commanding officer for HSS to all personnel. If a ship does not have a medical officer, the embarked landing force medical officer provides HSS while embarked.

The stages described in the following paragraphs and shown in figure 3-3 represent only notional phasing. Other variations and combinations resulting from such factors as threat level, mission,



**Figure 3-3. Stages of Medical Support in an Amphibious Operation.**



terrain, geography, weather, force at risk, opposing forces, etc., are possible.

### **Assault Echelon**

During the assault phase, HSS ashore is limited to the capabilities of medical sections organic to combat units. First response medical care for assault forces is provided by self-aid, buddy aid, and hospital corpsmen of landed rifle platoons.

When the tactical situation permits, BASs are established and care is delivered from a healthcare provider. Battalion aid stations are normally divided into two sections, with assigned battalion nonmedical litter bearers divided between them. One section lands with the battalion combat train and provides in-close support to the assault force. The second section lands with the field train and establishes interim evacuation stations until relieved by follow-on HSSEs.

Evacuation stations are then expanded and staffed by the supporting medical battalion, drawing assets from the STPs or triage/evacuation platoons of SCs. When established with the landing force support party (LFSP), the supporting medical battalion constitutes the beach evacuation section(s) of the LFSP. The primary role of a BAS is to evacuate assault force casualties to designated CRTSs.

When evacuation stations attached to the LFSP become operational ashore, established BASs are relieved to conduct their missions in primary support of parent battalions. Following the landing of supporting evacuation stations, expansion of HSS facilities ashore begins. The HSS assets are typically established at logistic support areas or forward arming and refueling points.

### **Assault Follow-on Echelon**

While the majority of logistic support capabilities during the assault follow-on echelon continue to be sea-based, projected HSS capabilities ashore expand along with the LCE. Capabilities could be additional FRSS/STPs with mobile combat logistics companies. When progress of assault units is such that the beach-head is relatively secure, HSS is enhanced from follow-on forces.

### **Follow-on Forces**

Health service support shifts its posture to achieve shore-based health care consistent with the expected combat intensity and duration of sustained operations ashore, independent of sea-based facilities. This phasing is achieved by upgrading capabilities ashore by consolidating HSS capabilities ashore with those not yet landed.

If a sustained land campaign is envisioned, additional HSS will normally be provided by theater hospitalization (expeditionary medical facilities, hospital ships, or other Service-equivalent facilities such as combat support hospitals, expeditionary medical support).

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### **Capabilities External to the MAGTF**

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Casualty receiving and treatment ships have the largest medical capability of any amphibious ship in the ATF. A CRTS medical space includes 4 to 6 operating rooms, a 15-bed intensive care unit, a quiet room, 45 ward beds, and 6 isolation and overflow beds. Dental spaces include general dental operatories. Casualty receiving and treatment ships require augmentation by 84 Navy

medical department personnel to achieve full casualty treatment capability. Casualties are delivered via helicopter and surface craft. Amphibious task force ships suitable for use as CRTSs are the amphibious assault ship (multipurpose) (LHD) and amphibious assault ship (general purpose) (LHA). The CATF's Annex Q (Planning Guidance, Medical Services) designates platforms to serve as CRTSs. For medical support capabilities of these vessels and their potential roles as CRTSs, see MCRP 3-31B, *Amphibious Ships and Landing Craft Data Book*.

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### Expeditionary Medical Facility

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Expeditionary medical facilities are medically and surgically intensive and deployable in a variety of operational scenarios. These HSS assets can be used by combatant commanders (CCDRs), Navy and Marine Corps component commanders, and joint task force commanders. Although external support requirements exist, the EMF is task-organized and may require base operations support and transportation support. Its ability to relocate is independent of size (see Navy Tactics, Techniques, and Procedures 4-02.4, *Expeditionary Medical Facilities*).

### Hospital Ships

Hospital ships (T-AHs) are floating surgical hospitals. Their mission is to provide acute medical care in support of combat operations at sea and ashore. Support may be provided to ATFs, joint task forces, and combined forces. The T-AH is designed to receive patients primarily by helicopter, and it has limited capacity for receiving patients by surface craft.

### Augmentation

#### *Fleet Surgical Teams*

Fleet surgical teams (FSTs) are HSS augmentation teams assigned to the CCDR. Combined, the Pacific and Atlantic Fleets have nine teams that are considered the CCDR's assets in both peace and wartime. Fleet surgical teams provide surgical capability to the LHA/LHD for deployment and inter-deployment surgical requirements. Fleet surgical teams are attached to amphibious readiness groups when they deploy with a MEU. The OIC and medical regulation and control officer are part of the amphibious squadron staff while the remainder of the team is temporarily assigned to the LHA/LHD medical department. The FST provides the surgical capability of the CRTS. The OIC of the FST is the CATF surgeon and is the senior medical authority afloat for the amphibious readiness group and the principle medical advisor to the commander or CATF.

#### *Health Services Augmentation Program*

The Health Services Augmentation Program (HSAP) is the means by which medical support personnel are brought to operational units from Navy MTFs. The program's personnel are Marine Corps assets managed in peace time by the Bureau of Medicine and Surgery (BUMED), US Fleet Forces Command, and the office of the Chief of Naval Operations. The program, falls under operational control of the respective Marine Corps component commander during wartime. The HSAP personnel augmented to organic medical assets serve as the foundation for Marine Corps HSS and provide for the timely delivery of healthcare to the MARFOR. In special cases, staffing may be above authorized staffing or in addition to authorized billets when

## **MCWP 4-11.1**

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directed by the Chief of Naval Operations. Units participating in the HSAP include Fleet CRTSs, MARFOR HSS units, EMFs, and hospital ships.

## Chapter 4

# Logistics

Health service support logistics encompasses the procurement, initial issue, management, resupply, and disposition of material required to support medical and dental elements organic to the MARFOR. Requisitions for Class VIII (consumable and equipment) material follow the same channels as other classes of supply. Guidance for planning and procuring Class VIII (blood products, see app. B) is found in DOD Instruction 6480.4, *Armed Services Blood Program (ASBP) Operational Procedures*.

As with all classes of supply, careful consideration should be given to stock levels of Class VIII material. Commanders should not be burdened with moving and maintaining excess material, nor should the need for support ever be delayed because of inadequate access or lack of responsiveness. When the medical planner is developing and planning for appropriate levels of Class VIII support, the following information is crucial to ensuring that the entire HSS system is responsive to the commander:

- Concept of operation/scheme of maneuver.
- Combat intensity.
- Duration of the operation.
- Casualty estimates.

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### Allowance and Source of Logistics

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The MAGTF surgeon advises the MAGTF commander regarding medical and dental material support. Allocation of material is documented in the table of equipment, the AMALs/ADALs, and the normal replenishment supply support. The total table of equipment and AMALs/ADALs are designed to support a MEF (organic) in an estimated worst case scenario: MEF 60 days, Marine expeditionary brigade 30 days, maritime prepositioning force 30 days, and MEU 15 days of supply. The quantity of AMALs/ADALs required to support a MEF is determined by the mission requirements of that force. The AMALs/ADALs are to be allocated to support specific requirements. The authorizing commander is responsible for funding AMALs/ADALs above the level prescribed by the Marine Corps Order (MCO) 6700.5, *Medical and Dental (Class VIII) Materiel Support of the Marine Operational Forces*.

#### Table of Equipment

A unit's table of equipment includes items necessary for basic support of the organization. The following are examples of a unit's possible equipment:

- Tentage.
- Vehicles.
- Tools.
- Communications equipment.
- Chemical, biological, radiological, nuclear, and high-yield explosive gear.
- Specialized clothing.

- Personnel protective equipment.
- Office equipment.
- Other equipment and supplies, as required.

### **Authorized Medical and Authorized Dental Allowance Lists**

Authorized medical allowance lists and ADALs are specialized equipment and supply assemblages for medical and dental elements to provide combat HSS. The medical and dental elements have the capability to provide the following services:

- Trauma management.
- Resuscitative surgery.
- Expeditionary laboratory.
- X-ray.
- Dental.
- Preventive medicine.
- Chemical, biological, radiological, and nuclear (CBRN) treatment.
- Limited patient holding.
- Sick call.
- Environmental supplements.
- HSS test and repair systems.
- En route care.
- Casualty evacuation.

See appendix A for a detailed description of AMALs and ADALs.



### Normal Replenishment Supply Support

Health service support detachments deploy with their initial issue and the days of supply prescribed by the MAGTF commander. For the first 60 days of operations, Class VIII material beyond this level for the MEF is maintained by the LCE supply detachment and provided to supported units as required. For operations more than 60 days, medical resupply is generally provided to the MAGTF by the CCCR's designated theater lead agent for medical materiel (TLAMM)/single integrated medical logistics manager (SIMLM) via the respective component of the MLG. The TLAMM/SIMLM system encompasses the provision of medical supplies, medical equipment maintenance and repair, blood management, and optical fabrication to all joint forces within the theater of operations.

Health service support logistics is normally a Service responsibility; however, in joint operations, SIMLM is the organization that is authorized by the CCCR to provide central logistical support to all participating Services in the CCCR's area of responsibility. The TLAMM is the organization designated by SIMLM to accomplish the mission. As the dominant user, the US Army has been formally tasked by the DOD to perform the peacetime TLAMM/SIMLM mission in the European, Pacific, Korean, and Middle Eastern theaters. Under wartime or crisis conditions, the US Army is usually the dominant Class VIII user and must plan for the TLAMM/SIMLM mission.

In extreme mass casualty situations, HSS logistics can be provided to Navy hospital ships for common, demand-supported medical supplies in the later stages of theater development. Activation of the SIMLM mission depends on the time-phased force

## **Health Service Support Operations**

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deployment list supporting the contingency. Air delivery of emergency medical supplies can be used where and when tactically supportable. The LCE supply detachment, which may include portions of MEDLOGCO, provides Class VIII single-item resupply and limited medical repair capabilities to all HSS units of the MAGTF. Supporting LCE support detachments provide medical resupply to medical units of other MAGTF elements.

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### **Individual Health Service Support Equipment**

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Hospital corpsmen assigned to combat support units of the MAGTF are assigned a complete corpsman assault pack (CAP) as part of their field gear. The CAP may be held by the unit organic supply section and issued on an as needed basis. The corpsmen's parent unit supply section is responsible for ensuring that contents of the CAP are maintained in good condition, and that medications have not exceeded their shelf life.

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### **Routine Resupply**

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Health service support personnel needing resupply forward requisitions to their unit's supply section. The supply section, in turn, passes the requisition to the supported activities supply system management unit, or, if deployed, the supply section of the LCE. The LCE orders, receives, and distributes the required material. While HSS personnel may be of help in identifying alternate doses or approved substitutes, care is required in using alternate sources of supply other than those already approved by the

Defense Medical Materiel Program Office or Navy Medical Logistics Command. Health service support personnel may also assist in identifying the location of other US medical facilities where required items may be obtained.

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### **Combat Resupply**

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During embarkation planning, HSS planners determine the number and type of AMALs/ADALs required to support the assault phase of the operation. Additional Class VIII consumable material is positioned for deployment with the supply section of the LCE. After the consumable AMALs/ADALs are issued and expended, or when directed by a higher authority, resupply is accomplished by normal line item requisition from the supporting LCE. When stockpiles of MAGTF Class VIII are expended, Class VIII is obtained through the designated SIMLM provider.

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### **Patient Movement Items**

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Patient movement items (PMIs) are medical equipment and supplies required to support the patient during evacuation (e.g., ventilators, oxygen, vital sign monitors, blankets). Handling and return of equipment to the aeromedical evacuation system requires a reliable supporting logistic infrastructure to ensure that PMI are available and serviceable. The plan for a PMI exchange system and the return of aeromedical evacuation equipment and PMI to the originating MTF should be addressed in the respective OPLAN.

## **Health Service Support Operations**

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When a patient requires evacuation, the originating MTF has responsibility to provide the PMI. These items accompany a patient throughout the chain of evacuation from originating MTF to destination MTF, whether it is an intra- or inter-theater transfer. The Services include and maintain initial quantities of PMI in the appropriate medical assemblages.

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### **Disposal of Materials**

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Disposal of soiled, contaminated, or other unserviceable Class VIII items must be accomplished with due consideration for the safety of US forces and local civilian populations.

Disposal must also be in compliance with local and international laws, ordinances, and customs governing such disposal whenever operations allow. When disposal takes place in the United States or its territories, Class VIII disposal is coordinated with the local office of the Defense Reutilization Marketing Office. Peacetime disposal overseas is coordinated under the guidance of the Defense Reutilization Marketing Office or supporting LCE.

When the tactical situation permits during combat operations, the safest method of field disposal is burning, followed by deep burial (6 feet or more). The burial site must be located at a safe distance from watersheds and populated areas. Responsibility for neutralization and disposal of clothing, equipment, and dressings removed during CBRN decontamination processes resides with the command's CBRN officer.

Disposal of body parts, tissues, and Class VIII blood and blood products obtained during operative or diagnostic procedures is,

preferably, accomplished in the same manner as used by local medical facilities. Alternative disposal by burning or deep burial requires prior authorization and specific guidance of higher authority. Prior coordination with local health authorities and religious leaders should be accomplished whenever possible.

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### **Protection of Medical Supplies**

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Medical material and supplies are protected under The Law of War (see MCRP 5-12.1A) and the Geneva Conventions; however, when medical material and supplies are mixed with combat supplies, they lose the protection afforded by these covenants. Marking of medical material and supply storage areas with the red cross of the Geneva Conventions is a tactical decision to be made by the CCCR. The Geneva Conventions and The Law of War prohibit the destruction of medical material and supplies that must be abandoned in a retrograde movement occasioned by enemy action or other tactical considerations.

## **Chapter 5**

# **Command and Control**

The complexities of the operational environment, the myriad of medical functions and assets, and the requirement to provide health care across full spectrum operations to diverse populations (i.e., United States, joint, interagency, intergovernmental, multinational, host nation, and civilian) necessitates a medical command authority that is capable of utilizing the scarce medical resources available to their full potential and capability.

Medical command and control provides a seamless state-of-the-art health support system across multiple operational areas. The medical C2 capability is flexible and versatile and is capable of providing reliable medical support ashore and afloat in support of current and future operations. The medical C2 capability integrates both vertically and horizontally with the C2 unit commander to enhance situational awareness. In combination, these areas develop, process, and disseminate orders and information to subordinate units and provide the means to receive and implement orders from higher authority.

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### **Command and Control Organization**

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Health service support is a part of every level of the MAGTF. However, available communications assets vary and HSS shares these assets with other warfighting functions. In the Marine Corps, the same radios that carry fire support or command information also carry medical information, and commanders and HSS personnel use the same telephones and switches. There is no separate or

dedicated medical network in the tactical Marine Corps communications architecture. The architecture supports all users.

Units responsible for providing detachments that support command and control for HSS operate under the staff cognizance of the G-6/S-6 of the supported unit. Marines assigned to these units, in concert with the personnel assigned to the G-6/S-6 sections and HSS organizations, ensure that an effective communications and information systems (CIS) network is planned, installed, operated, and maintained.

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## **Communications and Information Systems**

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Communications and information systems provide management and decision support tools for the HSS commander and staff to collect, transport, process, disseminate, and protect voice, data, and information. Communications and information systems include tactical single channel very high frequency, super-high frequency, high frequency, and ultrahigh frequency radios; tactical and commercial telephones; multichannel digital systems; satellite communications; cryptographic equipment; and data systems for classified and unclassified local area network/wide area network connectivity. All of these systems are used by common units and are allocated in accordance with the commander's priorities.

To improve interoperability, increase efficiency, and reduce costs, DOD has mandated that the Services move to a common set of information systems and services. This implementation is occurring with the fielding of the Global Command and Control System (GCCS) and the implementation of the defense information infrastructure common operating environment.

## Health Service Support Operations

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Health service support uses the Joint Operation Planning and Execution System for planning and execution under GCCS. The Joint Operation Planning and Execution System combines joint policies, procedures, personnel, training, and a reporting structure supported by automated data processing on GCCS. The medical analysis tool is the HSS analysis tool supported by GCCS at the Marine Corps component level for planning and execution of the HSS medical mission.

Communications and information systems support for HSS organizations is provided by MEF's communications battalion. The G-6/S-6 must plan for connectivity among the division, wing, and MLG, as well as external communications with organizations in the joint arena:

- *Division.* CIS support for HSS personnel is provided by communications company, H&S battalion.
- *Wing.* CIS support for HSS personnel is provided by the Marine wing communications squadron and MAG.
- *Marine Logistics Group.* CIS support for HSS personnel is provided by communications company, H&S battalion and communications platoon, medical battalion.

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## Information Management

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Health service support has traditionally been supported by a variety of information systems and procedures that aided the user in the collection, analysis, presentation, and storage of information. Systems used unique hardware and software configurations that performed specialized functions. These systems were typically unable to access or share data and



information with other systems. New designs have been developed that consolidate and improve accessing and sharing information. This migration has continued under the auspices of the theater medical information program (TMIP).

The TMIP's mission is to provide integrated automation of the theater medical environment. The TMIP provides a global capability, linking HSS information databases and integration centers that are accessible to the warfighter while engaged in any mission. The connectivity is essential to aid theater commanders in making time-sensitive decisions, critical to the success of their operations. The connectivity is accomplished by integrating the GCCS with the Global Combat Support System. The TMIP integrates HSS capabilities under a joint concept of operations to assist the HSS commander/theater surgeon and to support the delivery of responsive combat medical care. The TMIP establishes the means to combine existing, developing, and future medical information.

The TMIP's C2 capabilities collect medical information about personnel, medical units, facilities, equipment, supplies, and training during alert/mobilization, deployment/sustainment, and reconstitution/redeployment. Information is received, processed, displayed, and analyzed to generate and publish plans and orders. The TMIP enables the assessment of personnel medical status and the readiness and capabilities of the HSS units. The program provides the required information links to HSS organizations and enables rapid decisionmaking regarding—

- Medical capabilities assessment and sustainability analysis.
- Medical threat/intelligence.
- Combat casualty care.
- Medical logistics.

- Blood management.
- Patient movement.
- Manpower/training.

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### **MAGTF Command and Control Centers, Agencies, and Facilities**

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The main MAGTF C2 center, agency, or facility for HSS is the medical support operations center (MSOC). The MSOC is part of the COC of the MLG. The HSSO manages the MSOC. The COC, an agency within the LCE and subordinate units, controls and coordinates day-to-day operations. At the MLG, the COC is operated by the G-3/S-3. Within the ACE, these duties are performed by the logistic staff officer at the MAG/Marine aviation logistics squadron/Marine wing support squadron levels.

The COCs are centrally organized around the functional areas of supply, health services, maintenance, engineering, transportation, and services. The COC controls the radio nets and has direct telephone lines to subordinate units, supported units, and higher headquarters.

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## **Chapter 6**

# **Preventive Medicine**

Disease and nonbattle injuries (DNBI) and OEH hazards can have a rapid and widespread impact on the effectiveness of our military organizations. The devastation of disease and environmental hazards on personnel is not isolated to the people of a Third World developing nation. Throughout history, military forces have lost more personnel to acute and chronic exposures to environmental hazards and DNBI than to wounds sustained in combat. For example, during the Civil War, more soldiers died from disease than wounds. The best estimates indicate that approximately 204,000 Union and Confederate soldiers died in battle or had battle wound-related deaths and 414,000 died of disease nonbattle injuries.

Preventive medicine efforts can dramatically reduce the incidence of disease during military operations. Proactive PVNTMED measures should be incorporated into all levels of care. Real-time disease surveillance data and results from OEH monitoring should be used to brief commanders on potential medical and environmental threats and on the effectiveness of PVNTMED. Prevention of DNBI is a critical function of the HSSE. Navy Medical (NAVMED) P-5010, *Manual of Naval Preventive Medicine*, prescribes specific PVNTMED measures.

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### Predeployment

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Specific PVNTMED tasking and efforts to be conducted before deployment are as follows:

- Collect and disseminate entomology, environmental, occupational, and epidemiological information on the theater of operations to the supported commander, HSS units, and MAGTF elements that might be affected, for use in planning and action as changes occur.
- Conduct predeployment occupational and environmental health site assessment (OEHSA) including preliminary health hazard site survey during predeployment site survey to identify potential OEH threats to deployed personnel.
- Recommend personnel augmentation requirements to support the OPLAN.
- Recommend immunizations and other preventive measures to counter medical threats within the theater of operations and in-transit staging points.
- Train individuals (via unit training) in personal hygiene, personal protective measures, protection equipment, and field sanitation practices.
- Assist medical units in completing predeployment requirements (immunization, PVNTMED threat briefings, and permethrin treatment of clothing) and in preparing for embarkation of PVNTMED equipment.
- Conduct predeployment OEHSA including preliminary health hazard site survey during predeployment site survey to identify potential OEH threats to deployed personnel.
- Conduct health threat briefings whenever health threats are identified and/or countermeasures are required.

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### Deployment

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Specific PVNTMED taskings and efforts to be conducted while deployed are as follows:

- Disseminate militarily significant PVNTMED information to commanders and HSS units in the theater of operation.
- Provide technical oversight on food service operations and procurement.
- Provide oversight and testing at water points and bulk water storage areas.
- Conduct disease vector and pest surveillance and control when feasible.
- Maintain environmental health and pest control equipment.
- Conduct weekly disease and injury surveillance at all battalions and squadrons.
- Conduct food and water vulnerability assessments.
- Conduct and validate health risk assessments performed during predeployment activities.
- Conduct OEHSA and performance of health surveillance activities to detect environment health hazards.

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### Marine Expeditionary Force Preventive Medicine Capabilities

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The MEF surgeon's staff includes a physician who is board certified in PVNTMED with expertise in occupational health, PVNTMED, and/or public health. This physician is responsible

to the MEF commander and MEF surgeon for coordinating PVNTMED efforts among the division, wing, and the MLG.

Most PVNTMED assets organic to the MEF are found in the MLG's PVNTMED section of the medical battalion's H&S company. The section is responsible for providing general support to all MEF commands. Support includes identifying information regarding environmental health factors, demographics, living conditions, water supply, waste disposal, insects, diseases, and vector issues of military importance and their management and evaluating local food sanitation, sight, and hearing conservation programs.

General PVNTMED capabilities include identifying information related to real and potential environmental health risks; conducting health threat assessments; performing OEHS, characterizing demographics and populations at risk; assessing living conditions; ensuring adequate water quality and supply; recommending proper waste disposal methods; evaluating food safety and food sanitation programs; management of sight and hearing conservation programs; and entomology issues such as insects, diseases, and vectors of military importance.

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### **Navy and Marine Corps Public Health Center**

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The Navy and Marine Corps Public Health Center, located in Portsmouth, Virginia, supports operational units. It conducts—

- Risk screening and mitigation.
- Data evaluation.
- Exposure assessments.

- Toxicity assessments.
- Health risk evaluations.
- Health and safety planning.
- Environmental risk communication workshops and seminars.

The Navy and Marine Corps Public Health Center and its supporting activities establish and disseminate PVNTMED and environmental protection policy recommendations to ensure mission readiness through disease prevention and health promotion. Field activities in direct support of the Center include the Navy Entomology Center, Naval Dosimetry Center, and Drug Screening Laboratory.

### **Navy Entomology Center of Excellence**

The Navy Entomology Center of Excellence provides technical and specialized services in the field of disease vector surveillance and control, as well as providing vector control training to various agencies of the Federal Government. These centers test and evaluate vector control equipment and techniques and collect, summarize, and disseminate disease vector and health threat information. This diverse mission includes a special emphasis on contingency response in the event of armed conflicts, military operations other than war, and operational support of both fleet and shore activities.

### **Naval Dosimetry Center**

The Naval Dosimetry Center provides a centralized, accredited radiation dosimetry and spectroscopy service, an occupational radiation exposure registry, and radiation health consultation.



### **Drug Screening Laboratory**

The Drug Screening Laboratory provides drug testing using state of the art testing procedures. The laboratory ensures personnel readiness by deterring illegal drug use through forensic drug testing, expert testimony, technical consultation, drug abuse education, and development of drug testing methods.

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### **Additional Resources**

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The Naval Medical Research and Development Command conducts basic clinical and applied field research directly related to military requirements and operational needs. It is located in Bethesda, Maryland.

The Naval Medical Research Institute provides research related to immediate operational problems, which include heat stress research that leads to exposure limits for hot-humid shipboard environments; safety equipment, including protective clothing, flight goggles, safety belts, and repellents for insect vectors of disease; and sharks. It is located in Bethesda, Maryland.

# Chapter 7

## Patient Movement

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### Fundamental Principles

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The primary mission of the DOD patient movement system is to transport US military casualties to the appropriate taxonomy of care within the combat zone or out of the combat zone, as required. Timely patient movement plays an important role in HSS and supports the joint task force concept of operations and evacuation requirements. Patient movement is a system that provides a continuum of care and coordinates the movement of patients from the site of injury or onset of disease, through successive taxonomies of care, that can meet the needs of the patient. Each Service component has an organic patient movement capability and is responsible for evacuation from point of injury to initial treatment at a health care facility.

Casualty evacuation, a term used by all Services, refers to the unregulated movement of casualties aboard ships, vehicles, or aircraft. Medical evacuation traditionally refers to US Army, United States Navy, United States Marine Corps, and United States Coast Guard patient movement using dedicated or pre-designated tactical or logistic aircraft, boats, ships, and other watercraft temporarily equipped and staffed with medical personnel for en route care; however, US Army has traditionally had dedicated air and ground evacuation assets. Aeromedical evacuation specifically refers to US Air Force fixed-wing movement of regulated casualties using organic and/or contracted mobility airframes

with aeromedical evacuation aircrews trained explicitly for the mission. In addition, the civil reserve air fleet may be used for aeromedical evacuation mission.

Dedicated medical evacuation assets are patient movement assets configured for medical evacuation, externally marked with a red cross, and specifically reserved to support the medical evacuation mission. Dedicated medical evacuation offers a specific level of en route care capability to prevent degradation of patient conditions during transport. Dedicated medical evacuation assets are authorized protection under the Geneva Conventions. Ground ambulances are the only dedicated medical evacuation assets in the Marine Corps.

Designated casualty evacuation assets are nonmedical patient movement assets, not externally marked with a red cross, but configured and allocated for patient movement. Like dedicated medical evacuation, designated casualty evacuation offers a specific level of en route care capability to prevent degradation of patient conditions during transport. Designated casualty evacuation assets are not afforded protection under the Geneva Conventions. For example, a helicopter designated as a casualty evacuation asset provides a lift of opportunity to move patients to a facility that can provide the necessary treatment capability.

During major operations and campaigns, the operational environment may present lethal threats requiring the evacuation of casualties to highly developed medical capabilities in the joint operations area and locations outside the theater of operations for advanced medical services and rehabilitative care. The decreased medical footprint and the increased patient movement requirements demand a more interdependent medical community, improved interagency and multinational partnerships, and developing joint solutions.

A general summary of the HSS system and the specific tactic, techniques, and procedures (TTPs) for naval expeditionary force medical regulating for joint operations is provided in MCRP 4-11.1G, *Patient Movement*. MCRP 4-11.1G also addresses Navy and Marine Corps patient movement capabilities available to the operational commander and prescribes for theater operations, mission planning, and training.

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### En Route Care Capability

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En route care ensures the continuation of care during patient movement within the HSS continuum of care without clinically compromising the patient's condition. Patient movement involves transitory medical care, patient holding, and staging capabilities during transport from the site of injury or onset of disease to a taxonomy of care that can meet the needs of the patient. Each Service component has an organic patient movement capability for evacuation from point of injury to initial treatment at a health care facility.

Both CASEVAC and MEDEVAC are accomplished through a combination of litter carries, manual carries, ground transportation, and limited air (i.e., fixed- or rotary-wing) transport. The United States Army generally employs dedicated patient evacuation assets, such as ground and air ambulances. The United States Navy normally relies on lifts of opportunity. The United States Marine Corps has some dedicated ground evacuation and relies on opportune lift for air transport. If US Air Force assets are required, lifts of opportunity may be used.

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### Decisionmaking

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The degree of care for the sick and wounded in any area of combat is greatly influenced by prevailing tactical situations. Conditions are seldom static, and success in combat must remain the primary goal of combat, combat support, and combat service support units. This environment requires a dynamic casualty management decisionmaking process that must be applied at all levels within the patient movement system.

### Casualty Sorting (Triage)

An effective process of casualty sorting, also referred to as triage, is basic to the successful operation of a patient movement system. Rapid evaluations must be made to identify which patients need immediate resuscitation and which patients can tolerate delay in treatment. Deciding which patients should be moved after initial treatment to a higher taxonomy of care is of equal importance.

### Medical Management

Under combat conditions, the flow of sick and wounded patients puts varying pressures on capabilities of medical facilities. Incoming casualties necessitate the movement of stable casualties who can be evacuated. Close coordination between clinical and administrative services must be maintained to achieve effective management of individual casualties. Medical personnel who are responsible for decisions on movement of individual casualties must work closely with administrative officers charged with implementing patient movement for evacuation. Underlying all considerations is the basic objective of preserving life, limb, and eyesight.

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### Medical Evacuation Assets

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The Marine Corps' assigned mission dictates the number and types of aircraft assigned to accomplish all assault support tasks—typically, the Marine Corps' top priority. Therefore, the limited number of aircraft in the Marine Corps inventory precludes, in most cases, the assignment of dedicated CASEVAC/MEDEVAC aircraft. All Marine Corps rotary-wing transport and utility aircraft have the capability to perform CASEVAC missions. Allocation of aircraft to perform the CASEVAC mission would be at the discretion of the MAGTF commander. Assets are designated to perform CASEVAC missions through implied mission tasking or by assuming a standby posture.

Prior planning is essential to ensure proper allocation of aircraft to support CASEVAC/MEDEVAC missions. Within the MLG of the MEF, the Marine air-ground task force movement control center plans for MEDEVAC aircraft. The Marine air-ground task force movement control center air liaison officer is the direct link to the MAW for identification of medical evacuation missions in the air tasking order. In the absence of CASEVAC/MEDEVAC capability, evacuation is accomplished using any available surface transportation (e.g., ground ambulance, 7-ton truck, small boat, landing craft air cushion).

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### Casualty/Medical Evacuation Request Procedures

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When control is sea-based, units normally request CASEVAC/MEDEVAC by radio to the amphibious air traffic control center using the helicopter direction net. When command and/or net

control has been passed ashore, units request CASEVAC/MEDEVAC from the direct air support center using the tactical air request/helicopter request net. The air officer then consults with either the amphibious task force medical regulating control officer when sea-based or the landing force patient evacuation team officer when ashore for a recommendation of the best medical facility to care for the patient.

In operations where designated CASEVAC/MEDEVAC assets are assigned, the direct air support center makes liaison with the units responsible to provide evacuation.

Casualty evacuation/medical evacuation missions are classified as preplanned or immediate. Both types of support are delivered in response to specific requests via the assault support request. The CASEVAC/MEDEVAC missions from Marine Corps SCs to theater hospitals are coordinated by the patient evacuation/patient movement section of the COC within the MLG (see fig. 7-1).

## Health Service Support Operations

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LINE 1: Location of Pickup Site (Grid)
LINE 2: Radio, Frequency, Call Sign, and Suffix
LINE 3: Number of Patients by Precedence A - Urgent B - Urgent Surgical C - Priority D - Routine E - Convenience
LINE 4: Special Equipment A - None B - Hoist C - Extraction Equipment D - Ventilator
LINE 5: Number of Patients by Type L - Litter A - Ambulatory
LINE 6: Security of Marking Pickup Site N - No Enemy Troops in Area P - Possibly Enemy Troops in Area (approach with caution) E - Enemy Troops in Area (approach with caution) X - Enemy Troops in Area (armed escort required)
LINE 7: Method of Marking Pickup Site A - Panels B - Pyrotechnic Signal C - Smoke D - None E - Other
LINE 8: Patient Nationality Status A - US Military B - US Civilian C - Non-US Military D - Non-US Civilian E - Enemy Prisoner of War
LINE 9: CBRN Contamination (Wartime) C - Chemical B - Biological R - Radiological N - Nuclear
LINE 9: Terrain Description (Peacetime): include details of terrain features in and around proposed landing site. If possible, describe relationship of site to prominent terrain feature (lake, mountain, tower)

**Figure 7-1. 9-Line Medical Evacuation Request.**



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## **Chapter 8**

# **Chemical, Biological, Radiological, and Nuclear Defense**

All military personnel must be prepared to operate in a contaminated environment. Health service support personnel must also be prepared to provide patient care in a CBRN environment. Decontamination of patients and transportation assets causes evacuation delays, making first aid and patient care even more critical. Since the staffing of HSS units is based on conventional warfare requirements, these units are taxed in their ability to provide effective HSS. Chemical, biological, radiological, and nuclear actions cause high casualty rates, materiel losses, obstacles to maneuver, and contamination. Mission-oriented protective posture (MOPP) levels 3 and 4 result in body heat build up, reduced mobility, and degraded senses (sight, touch, hearing), ultimately reducing unit effectiveness.

Contamination is a major problem in providing HSS in a CBRN environment. To maximize the unit's survival and effectiveness, commanders must take action to avoid CBRN contamination by making maximum use of alarm and detection equipment, unit dispersion, overhead shelters, shielding materials, protective covers, collective protection shelters, and chemical agent resistant coatings.

On a contaminated battlefield, the focus is on keeping the Marine in the battle. Effective and efficient triage, emergency treatment, decontamination, and contamination control in the operational area saves lives, assures prompt evacuation, and maximizes the return-to-duty rate.

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### **Preparations Before a Chemical, Biological, Radiological, and Nuclear Attack**

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Before a CBRN attack, HSS personnel must train to survive the attack, to operate the SC in the environment, and to effectively care for CBRN casualties. Health service support personnel must keep their immunizations current, use available preventive treatment against suspected agents, pretreat for suspected agents, and have antidotes and essential Class VIII supplies readily available for known or suspected chemical or biological agents.

The best defense for HSS personnel is to protect themselves, their patients, Class VIII supplies, and equipment by following contamination avoidance procedures. Health service support personnel must ensure that stored Class VIII supplies and equipment are in protected areas or in their storage containers with covers in place.

One method of protecting supplies and equipment is to keep them in their shipping containers until needed. When time permits after receiving warnings that a CBRN attack is imminent or that a downwind hazard exists, HSS personnel should seek protected areas such as basements, culverts, and ravines for themselves and their patients.

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### **Location During a Chemical, Biological, Radiological, and Nuclear Attack**

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Health service support personnel and their patients should remain in the best available protected areas and take positions within the shelter that are away from windows and other openings, and

move out of these positions only when notified that it is safe to do so. In the absence of higher authority, HSS personnel should use caution in their movements, as all casualties entering a medical unit after a CBRN attack should be considered contaminated unless certified as noncontaminated.

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### **Response After a Chemical, Biological, Radiological, and Nuclear Attack**

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Health service support personnel must survey their equipment to determine the extent of damage and their ability to continue the mission during and after a CBRN attack. All patients receiving treatment must be checked for CBRN contamination. Health service support personnel may expect disorientation in patients and other HSS personnel in a CBRN environment. Patients are decontaminated before treatment to reduce the hazard to HSS personnel unless life-, limb-, or eyesight-threatening conditions exist. Patients requiring treatment before decontamination are treated in the HSS area of the decontamination station.

Note: Cardiac arrest, massive hemorrhage, and respiratory distress are conditions that may require treatment in the decontamination area.

Health service support personnel must be vigilant and look for the following in their evaluation of patients:

- Nuclear-induced injuries are observable immediately and typically include thermal burns or blast injuries.
- Radiation-induced injuries may not be observable until a few hours or days after the attack.

- Chemically-induced injuries are observable immediately upon exposure to the agent; however, blister agent patients can show signs of exposure immediately or up to 14 days later.
- Biologically-induced injuries/illnesses may not become apparent for hours to days after exposure.

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## Nuclear Environment

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If a nuclear environment exists, the HSS unit must be prepared to continue its mission in well-constructed, protective shelters:

- Well-constructed fighting positions with overhead cover and expedient shelters (e.g., reinforced concrete structures, basements, railroad tunnels, or trenches) provide good protection from nuclear attacks.
- Armored vehicles provide protection against both the blast and radiation effects of nuclear weapons.

Casualties generated in a nuclear attack will likely suffer multiple injuries (combinations of blast, thermal, and radiation injuries) that complicate HSS. Nuclear radiation casualties fall into three categories—

- *Irradiated.* The irradiated casualty has been exposed to ionizing radiation but is not contaminated. These casualties are not radioactive and pose no radiation threat to medical care providers. Casualties who have suffered exposure to initial nuclear radiation fit into this category.
- *Externally Contaminated.* The externally contaminated casualty has radioactive dust and debris on clothing, skin, or hair. This presents a problem to the SC similar to the lice-infested patient

arriving at a peacetime SC. This contamination may also present a threat to HSS personnel. The externally contaminated casualty is decontaminated at the earliest time consistent with required medical care. Lifesaving care is always rendered before decontamination.

- *Internally Contaminated.* The internally contaminated casualty has ingested or inhaled radioactive materials, or radioactive material has entered the body through an open wound. The radioactive material continues to irradiate the casualty internally until radioactive decay and biological elimination remove the radioactive isotope. Attending HSS personnel are shielded, to some degree, by the patient's body. Inhalation, ingestion, or injection of quantities of radioactive material sufficient to present a threat to medical care providers is highly unlikely.

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### Radiological Environment

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Decontamination of patients in a radiological environment is performed in a similar manner to that of chemical decontamination. Normally, radiation-induced injuries are observed within a few hours or days after the attack. The initial management of a casualty contaminated by radiological agents is to perform all immediate life-, limb-, or eyesight-saving actions without regards to contamination.

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### Biological Environment

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A biological attack may be difficult to recognize because frequently it does not have an immediate effect on exposed

personnel. Health service support personnel must monitor for biological warfare indicators such as:

- An increase in disease incidences or fatality rates.
- A sudden presentation of an exotic disease.
- Other sequential epidemiological events, especially when presented in lines of communications.

Passive defensive measures (e.g., immunizations, good personal hygiene, physical conditioning, use of arthropod repellents, use of protective mask, good sanitation practice) lessen the effects of most biological intrusions.

Commanders of SCs must enforce contamination control to prevent injury to HSS personnel and to preserve the SCs integrity. Incoming patients and equipment must be surveyed for contamination. Ventilation systems in medical treatment facilities without collective protection shelters must be turned off if biological or chemical exposure is imminent.

Decontamination of most biologically contaminated patients and equipment can be accomplished with soap and water. Patients exposed to a biological agent may require observation and evaluation to determine necessary medications, isolation, or treatment.

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## Chemical Environment

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Handling chemically contaminated patients presents a great challenge to HSS units. The vapor hazard associated with contaminated patients may require HSS personnel to remain at MOPP level 4 for long periods; therefore, HSS personnel must locate clean areas to set up their SC. The SC should operate in a

contaminated environment only until HSS personnel have the time and means to move to a clean area.

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### **Medical Evacuation**

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A CBRN environment forces the unit commander to consider what evacuation assets will be committed to the contaminated area. If operating forces are in a contaminated area, most or all of the medical evacuation assets will operate there; however, efforts should be made to keep some ambulances free of contamination.

There are three basic modes of evacuating casualties: personnel, ground vehicles, and aircraft. Commanders must recognize the constraints CBRN warfare places on casualty evacuation during operations and then plan and train to overcome these deficiencies.

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### **Personnel Considerations**

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Medical treatment requirements increase when operating in a CBRN contaminated environment. As a result, HSS personnel reinforcement and replacement may be necessary. Plans for HSS following a CBRN attack must include efforts to conserve available HSS personnel and ensure their best use. Health service support personnel provide emergency medical treatment or advanced trauma management and more definitive treatment as time and resources permit. To provide definitive care, they must be able to work in a long-sleeved environment, not in MOPP levels 3 or 4. Non-HSS personnel conduct search and rescue operations for the injured or wounded; they may also provide immediate first aid and decontamination.



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## Chapter 9

# Combat Casualty Reporting

The G-1/S-1 section is responsible for submitting prompt, accurate, and complete casualty reports to higher headquarters. The Marine Corps Wounded, Ill, and Injured Tracking System is utilized for casualty tracking purposes. In combat operations casualty tracking information can be obtained from the Role III taxonomy of care via the TRAC2ES system. TRAC2ES provides a responsive communications system essential to the conduct of patient movement. TRAC2ES is a web-based system, which maximizes the internet while maintaining and protecting patient privacy and troop strength information. It replaced the defense medical regulating information system (DMRIS), Automated Patient Evacuation System (APES) and theater Army medical management information system (TAMMIS) MEDREG module. TRAC2ES provides global support throughout the full operational medical continuum: fixed and deployable medical treatment facilities and global and TPMRCs. TRAC2ES links GPMRC and TPMRCs through global communications. Personnel must be thoroughly familiar with casualty reporting procedures. Marine Corps Order P3040.4E, *Marine Corps Casualty Procedures Manual (MARCORCASPROC MAN)*, and other local directives in the 3040 series addresses casualty reporting. The system described in these directives is essentially one in which personnel losses, regardless of cause, are reported through the chain of command to a central location.

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## **Tactical Combat Casualty Care Card**

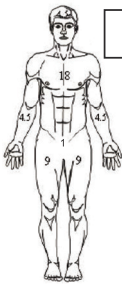

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Hospital corpsmen at the unit level usually provide the first written information on a casualty through the use of a tactical combat casualty care card (TCCC-C) (see fig. 9-1). It is actually a casualty tag printed in a set that provides a hardened original copy for attaching to the casualty, whether wounded or deceased. A carbon copy is retained by the hospital corpsman rendering initial treatment. Hospital corpsmen must render initial casualty treatment promptly and deliver copies of TCCC-Cs to the unit commander or his representative. Unit commanders need these documents to carry out casualty reporting responsibilities through their chain of command, as required by MCO P3040.4E.

When initial casualty treatment is rendered at point of injury, a BAS, or other taxonomy of care, a TCCC-C is initiated and a copy forwarded through the facility's chain of command. Regardless of whether a casualty is received in a facility with or without a TCCC-C, the receiving facility will compile a casualty list and forward the list upward through the facility's chain of command. The casualty list is prepared no less than once daily and should show each casualty received, held, evacuated, or returned to duty during the reporting period. Minimum information required on each casualty includes the following:

- Name.
- Social Security number.
- Rank.
- Unit.
- Brief description of wound/injury/disease.
- Actual or expected disposition.

## Health Service Support Operations

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DA Form 7656

**Figure 9-1. Tactical Combat Casualty Care Card.**

Training and planning for operations should include instructions in casualty reporting procedures for all MAGTF elements.

The TCCC-C establishes patient accountability and provides a means to document assessment of condition and treatment rendered by HSS personnel. The TCCC-C is to be used as an emergency medical tag for all casualties at the time they are initially treated in the field or field medical facility. Completion of a TCCC-C initiates an important medical record that will follow the casualty through the taxonomies of care. At the same time, it is an administrative document that may contain the most dependable information a commanding officer may have regarding a

casualty in his unit. Our NATO allies, by formal agreement, use TCCC-Cs containing the same essential information as recorded on the US card. Medical personnel must be trained in the preparation and use of this form. The following general guidelines apply:

- Upon rendering treatment, HSS personnel will tag all casualties with TCCC-C.
- Careful preparation of each TCCC-C is essential and special attention must be given to recording time, medications, and treatment administered.
- The TCCC-C remains attached to the casualty until he reaches his ultimate destination in the chain of evacuation or until a clinical record has been established.
- Treatment administered by different levels of medical care is recorded on the previously attached TCCC-C.
- If all space on the original card has been utilized, an additional card is prepared and attached to the casualty. The original TCCC-C is not removed when an additional card(s) is attached.
- Upon the establishment of a clinical record for the casualty, the TCCC-C becomes part of the clinical record.
- If the patient requires decontamination, the contaminated TCCC-C is transcribed onto a clean form.

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### Identification Tags

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Identification tags are essential to casualty identification and recording. Each member is issued a chain and two tags to be worn at all times. The tags contain the member's name, Social Security number, blood type, Service component, religion or sect, and protective mask size.

## Health Service Support Operations

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The member and his/her unit are jointly responsible for ensuring that all information is current and accurate. The BUMEDINST 6150.35 series contains information on medical warning tags.

Both identification tags remain with a casualty at all times. JP 4-06, *Mortuary Affairs in Joint Operations*, provides detailed procedures for handling.

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## Chapter 10

### Training

The primary goal of all military training is to achieve and maintain the highest level of preparation possible, thereby developing confidence among the troops and ensuring a high state of readiness. The importance of training as a means of enhancing combat readiness is equally important to HSS personnel. This is especially true given the greatly reduced peacetime staffing of HSS units and the difficulty of obtaining realistic, hands-on trauma training.

Reaching the essential state of readiness requires the medical department to contend with unique circumstances and conditions, including manning levels and the coordinated availability of training. In peacetime, the majority of operating force units is manned at slightly more than two-thirds of their mobilization strength, while HSS units are generally manned only with half of the personnel required to carry out their wartime mission. Authorized manning levels fill only a small percentage of medical corps and nurse corps billets within medical battalions. The end result is that upon mobilization more than half of the medical personnel assigned to operating forces HSS units are augmentees with greatly varying degrees of field medical skills and experience.

Medical department personnel must, to the maximum degree possible, be involved in all phases of every exercise. The necessity of this involvement is easily and often overlooked in peacetime due to budgetary and time constraints.



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### **Health Service Support Goals**

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Manning and training constraints require that training efforts be directed toward developing a nucleus of personnel highly skilled in the techniques of establishing and effectively operating HSS units in the field. This nucleus, when mobilized, becomes the core of each field medical unit and faces the formidable task of receiving large numbers of augmentees and shaping them into effective health delivery teams. It is not possible to lay out a training program that would be applicable to all HSSDs due to geographic, climatic, and mission variations. Individual commanders of HSS units and other key medical department personnel must structure training based on achievable goals and limiting factors.

#### **Increased Individual Readiness**

Efforts to increase and maintain readiness should extend beyond currently assigned personnel and incorporate augmentees into all training evolutions to the maximum degree funds and scheduling permit. Surgeons and other key personnel should encourage commanders to involve identified augmentation personnel in exercises when possible. In addition to enhancing individual training, this practice aids in fostering a sense of unit identity and cohesiveness.

#### **Standardized Methods and Procedures**

Standardization of methods and procedures is a necessary goal that must be accomplished before mobilization. Augmentees must be familiar with and able to depend on well-developed standing operating procedures, including desktop procedures and procedural manuals. The importance of this goal cannot be overly stressed.

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### Training Courses

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The following training courses are essential to the development of effective, efficient, and successful HSS personnel. Course quota management and control are under the cognizance of BUMED.

#### Field Medical Training Battalion

There are two field medical training battalions: one at Camp Lejeune, North Carolina, and the other at Camp Pendleton, California. The mission of these Marine Corps schools is to prepare Navy medical department personnel for service with the MARFOR. Before reporting to the MARFOR, all enlisted medical department personnel not having previous field medical service training are required to attend an appropriate course of instruction at one of the schools. Medical department officers may attend the Field Medical Service Officer Course. Both schools teach—

- The role and requirements of HSS units in the field.
- Military tactical and defensive techniques related to field HSS.
- HSS planning and concepts for officers and senior petty officers, including medical estimates, medical staff planning, and logistic support.
- MARFOR and MAGTF organization.
- The use and handling of designated table of organization weapons for medical department personnel.

### **Combat Casualty Care Course**

Before reporting to the MARFOR, all Medical department officers who are clinical providers (i.e., Medical Corps, Dental Corps, and Nurse Corps) may attend a course of instruction in advanced combat life support. In combat support operations, non-physician health care providers may be required to assist medical officers in presurgical preparation and wound management. Training is available through the Defense Medical Readiness Training Institute, Fort Sam Houston, Texas and the Naval Operational Medical Institute in Pensacola, Florida.

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### **Commander's Responsibilities**

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Commanders are responsible for ensuring that all command personnel receive appropriate training in both military and technical subject areas, including emergency medical training of nonmedical personnel and the continued training of medical department personnel in field medical practices and related military subjects. Commanders develop, conduct, and evaluate individual and collective HSS training based on training standards published by the Training and Education Command. When standards have not been published, unit commanders ensure training is based on doctrinal, tactical, and technical publications approved for Navy and Marine Corps use.

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### **Medical Department Officers and Senior Enlisted**

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The division and wing surgeons maintain staff supervision of all medical training programs, including exercise planning and

execution, for medical department personnel assigned to their respective subordinate commands. Within the MLG, the group surgeon and dental officer, in coordination with the G-3, exercises staff cognizance of all general medical training programs. Medical and dental battalion commanders are responsible for all battalion training programs, including internal planning and execution. The MLG HSSO exercises staff cognizance of MLG planning and exercises; all medical department officers and senior hospital and dental corps conduct and/or supervise the training of hospital corpsmen.

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### **Types of Training**

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#### **Individual Training**

Individual training may be conducted in a formal school or at the member's command. This training prepares an individual to perform specific tasks related to general military duties or assigned specialties. Medical department personnel who regularly perform duties of their occupational specialty develop increased confidence and proficiency. Individual training may include first aid and CPR [cardiopulmonary resuscitation], as well as more formal programs such as the Plans, Operations, and Medical Intelligence Course; the Joint Medical Planners Course; and the Medical Regulating Course.

#### **Unit Training**

Unit training prepares an individual to function within a unit and as part of a cohesive element. Such elements may include teams, platoons, sections, companies, or whatever size is feasible. Unit

training for the MARFOR is normally conducted afloat or in a field environment and involves the entire organization, including assigned HSSes. Unit training has proven most effective when conducted in a simulated combat environment. These exercises entail setting up treatment facilities in the field and treatment of simulated casualties. Other field units such as infantry battalions, regiments, and combat support and combat service support organizations conduct field training exercises that involve HSS personnel organic to those units. One out of four Marines per unit are required to receive the combat lifesaver (CLS) training.

### Exercises

Training exercises provide a realistic training environment, allowing HSS personnel to apply and refine their field medical skills as well as expand their knowledge and skills in the following areas:

- Landing force organization and communications.
- HSS functions in the field.
- Deployment procedures, including combat loading of HSS equipment.
- Sanitation standards for shipboard and field troops.
- Ship-to-shore operations.
- CASEVAC/MEDEVAC.
- Mass casualty training.
- HSS supply and resupply.
- Operations in severe environments.
- Special problems in the amphibious objective area.

### **Chemical, Biological, Radiological, and Nuclear Defense Training**

Readiness training for patient decontamination, patient care, and CBRN defense may be conducted at the individual or unit level. Training in medical procedures associated with CBRN casualties cannot be adequately addressed in on-the-job training and requires the participation of instructors specifically trained in the subject area (see MCRP 4-11.1A, *Multi-Service Tactics, Techniques, and Procedures for Treatment of Chemical Agent Casualties and Conventional Military Chemical Injuries*).

### **Preventive Medicine Training**

Health service support personnel in all MARFOR units must receive instruction in the recognition of diseases and environmental hazards that may occur within a specific area of operations. Emphasis should be placed on proactive identification of environmental risk through OEHS activities combined with personal and unit-wide PVNTMED measures at all levels. Division, group, and wing surgeons should periodically review contingency plans, with emphasis on identifying measures necessary to promptly identify and effectively prevent disease and other health hazards. This information should be incorporated into training programs for medical department personnel.

### **Logistics and Supply Training**

The Marine Corps and Navy supply systems are sufficiently different to invalidate most information in Navy training manuals with regard to its applicability to the Marine Corps system. Unit commanders with a health care mission must ensure Navy

personnel are sufficiently trained in basic procedures to operate within the Marine Corps supply system.

Marine Corps supply personnel in key positions are provided training in procedures that enable them to provide medical supply support when deployed. Training should encompass interfacing with the SIMLM system.

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### **Nonhealth Service Support Personnel**

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The health service support personnel are responsible for training the non-HSS personnel in subjects such as CPR [cardio-pulmonary resuscitation], CLS, first aid, buddy aid, personal hygiene, field sanitation, and PVNTMED (see FM 21-10, *Field Hygiene and Sanitation*).

All non-HSS personnel, including chaplains and religious program specialists, should receive extensive training in first aid procedures, self-aid, buddy aid, and personal decontamination. Field Manual 4-23.11, *First Aid*, and the *Marine Corps Institute's Marine Battle Skills Training Handbook* identifies subjects that must be taught.

Personnel should be indoctrinated in specific personal protection and disease prevention topics as described in NAVMED P-5010.

Additional information on the availability and applicability of specific individual or unit HSS training can be found by addressing the Medical Programs Officer, Training and Education Command or the Director, Operational Readiness and Training Division, BUMED.

# Appendix A

## Authorized Medical and Dental Allowance Lists

Health service support AMALs/ADALs are arranged in a modular concept. The equipment module contains equipment and reusable materiel required to establish the basic function of the module; e.g., operating room. The supply module contains consumable material designed to support the function in the treatment of a designated number of casualties or to perform a specific task. For readiness purposes, an equipment module may be stored in combination with its corresponding supply module. The AMALs/ADALs are maintained and resupplied by MEDLOG, supply company, MLG. Each AMAL that has a consumable block has a ratio of one set of equipment per two sets of consumables with the exception of the FRSS, which has a 1:5 ratio. The AMALs/ADALs number and nomenclatures are described in the following table:

AMAL	Nomenclature
618–Lab Equipment	Equipment and reusable materiel to establish a laboratory capable of hematology, microbiology, urinalysis, collecting, and chemistry testing.
619–Lab Supply	Consumable supplies to perform hematology, microbiology, urinalysis, and chemistry testing for 100 patients.
627–X-Ray	Equipment, consumable supplies, and reusable materiel to establish 1 X-ray suite.
631–Shock Surgical/Triage Equipment	Equipment and reusable materiel to establish a basic shock trauma surgical team or triage supporting the receipt, resuscitation, sorting, and temporary holding of casualties.



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AMAL	Nomenclature
632–Shock Surgical Team/Triage Supply	Consumable supplies required to receive, resuscitate, sort, and temporarily hold 50 casualties with major wounds.
633–Acute Care Ward Equipment	Equipment and reusable materiel to establish a 10-bed unit providing care for patients.
634–Acute Care Ward Supply	Consumable supplies to provide ward support for 100-bed days to patients.
635–Battalion Aid Station Equipment	Consumable supplies to provide aid station support, initial resuscitative and stabilizing care for 50 casualties with major wounds prior to evacuation and resupplying basic line corpsman.
636–Battalion Aid Station Supply	Consumable supplies to provide aid station support, initial resuscitative and stabilizing care for 50 casualties with major wounds prior to evacuation and resupplying basic line corpsman.
637–Preventive Medicine Maneuver	Equipment and reusable materiel to establish a PVNTMED section providing technical PVNTMED advice and inspection of food service operations, waste disposal, water potability and sources, vector control, coordinating control measures required of communicable diseases, and monitoring and assisting in immunization programs.
638–Preventive Medicine Technician	Consumable supplies required to support PVNTMED effort of the MEF in 12, 5-day packages for 60 days.
639–Operating Room Equipment	Equipment and reusable materiel required to support 1 operating room for performing major surgical procedures, administering general anesthesia, sterilizing, and maintaining sterile materiel.
640–Operating Room Supply	Consumable supplies required to provide operating room support for 25 surgical cases.
645–FRSS	Equipment, consumable supplies, and reusable materiel required to care for 18 patients in a 48-hour period.

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<b>AMAL</b>	<b>Nomenclature</b>
646–FRSS Resupply	Equipment and consumable supplies required to reconstitute the FRSS suite.
647–ERCS	Equipment, consumable supplies, and medical treatment protocols necessary for the medical management of 2 critically injured/ill, but stabilized, patients during transport aboard Marine Corps aircraft from elements ashore to elements at sea or ashore.
648–CASEVAC	Provides the equipment and consumables required to conduct en route care for 2 critically injured/ill, but stabilized patients within the ACE.
650–Preventive Medicine OEHS	Provides the equipment and consumables required to conduct industrial hygiene functionality and environmental health assays.
651–Preventive Medicine ENTO	Provides equipment and consumables required to conduct entomology functionality.
652–CBIRF	Provides the equipment and consumables required to provide care to military and civilian casualties from a CBRN or high-yield explosives incident in CONUS and OCONUS.
660–MARSOC	Provides the equipment and consumables required to provide initial resuscitative and stabilization capability for a MARSOC unit.
685–GEO Mission/Cold Weather	Consumable supplies and reusable materiel to accommodate special mission/geographic related requirements into areas where cold-related injuries are likely to occur.
686–GEO Mission/Hot Weather Supplement	Consumable supplies and reusable materiel to accommodate special mission/geographic related requirements into areas where heat-related injuries are likely to occur.
687–GEO Mission/CBRN Individual	Materiels required for the individual to conduct primary decontamination and treatment in a CBRN environment.

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AMAL	Nomenclature
688—GEO Mission/CBRN Unit	Materials required for the units to conduct primary and secondary decontamination and treatment in a CBRN environment.
691—MEDLOG Test/Repair Equipment	Equipment and reusable materiel to perform testing, calibration, and 3d and 4th echelon maintenance of medical/dental equipment.
692—MEDLOG Test/Repair Supply	Consumable supplies to accommodate a medical repair section in the testing, calibrating, and intermediate maintenance of medical/dental equipment.
699—Sick Call	Medical materiel to provide essential treatment for DNBIs during routine sick call for 300 deployed Marine Corps forces for 30 days. This AMAL provides the sick call capability for a BAS and will usually be deployed with the BAS AMALs.
ADAL	Nomenclature
662—Field Dental Operatory	Equipment and reusable materiel establishing a field dental clinic. Consumable supplies providing emergency, diagnostic, preventive, and maintenance dental support for 400 patients.
<b>Legend:</b> <b>CONUS</b> —continental United States <b>ENTO</b> —entomology <b>GEO</b> —geological <b>MARSOC</b> —United States Marine Corps Forces, Special Operations Command <b>MEDLOG</b> —medical logistics <b>OCONUS</b> —outside the continental United States <b>OEHS</b> —Office of Environmental Health Services	

## Appendix B

### Blood Support

The Joint Blood Program requires deploying medical forces that use blood and blood products in order to meet their mission to write standing operating procedures which allow them to contact and integrate into the Armed Services Blood Distribution System. Examples of deploying forces would include flight surgeons, air-ground forces, AOE [fast combat support ships], CG [guided-missile cruisers], LCC [amphibious command ship], LPD [amphibious transport dock], destroyer tender, repair ship, LHA, LHD, T-AH, Expeditionary Medical Facility (EMF), and Marine Corps medical battalions.

Armed Services Whole Blood Processing Laboratories (ASWBPL) are a US Air Force-managed, tri-Service-staffed, central repository for liquid and frozen blood required in peacetime, contingencies, and war. An ASWBPL releases blood to unified commands upon approval by the Armed Services Blood Program Office. Theater MTFs may not go directly to the ASWBPL for blood. The ASWBPL is responsible for—

- Retyping blood for A, B, and O blood types and Rhesus factor only.
- Packing, icing, and preparing blood for shipment to the theater.
- Maintaining a peacetime inventory of 250 units of liquid blood for use as a rapid response requirement.

See MCO 6530.2, *Department of the Navy Blood Program*, for more information.

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# Glossary

## Section I: Acronyms and Abbreviations

ACE.....	aviation combat element (MAGTF)
ADAL.....	authorized dental allowance list
AMAL.....	authorized medical allowance list
ASWBPL .....	Armed Services Whole Blood Processing Laboratories
ATF.....	amphibious task force
BAS.....	battalion aid station
BUMED .....	Bureau of Medicine and Surgery (USN)
C2.....	command and control
CAP.....	corpsman assault pack
CASEVAC.....	casualty evacuation
CATF.....	commander, amphibious task force
CBRN.....	chemical, biological, radiological, and nuclear
CCDR.....	combatant commander
CIS .....	communications and information systems
CJCSM.....	Chairman of the Joint Chiefs of Staff manual
CLB.....	combat logistics battalion
CLR.....	combat logistics regiment
CLS .....	combat lifesaver
COC .....	combat operations center
CRTS.....	casualty receiving and treatment ship

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DNBI .....	disease and nonbattle injury
DOD .....	Department of Defense
EMF .....	expeditionary medical facility
ERCS .....	en route care system
FM .....	field manual (Army)
FRSS .....	forward resuscitative surgical system
FST .....	fleet surgical team
G-1 .....	assistant chief of staff, personnel
G-3 .....	assistant chief of staff, operations
G-6 .....	assistant chief of staff, communications systems
GCCS .....	Global Command and Control System
GCE .....	ground combat element (MAGTF)
H&S .....	headquarters and service
HSAP .....	Health Services Augmentation Program
HSS .....	health service support
HSSD .....	health service support detachment
HSSE .....	health service support element
HSSO .....	health service support officer
JP .....	joint publication
LCE .....	logistics combat element
LFSP .....	landing force support party
LHA .....	amphibious assault ship (general purpose)
LHD .....	amphibious assault ship (multipurpose)

## Health Service Support Operations

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MAG .....	Marine aircraft group
MAGTF.....	Marine air-ground task force
MARFOR.....	Marine Corps forces
MAW .....	Marine aircraft wing
MEDEVAC .....	medical evacuation
MEDLOGCO .....	medical logistics company
MEF .....	Marine expeditionary force
MEU .....	Marine expeditionary unit
MLG.....	Marine logistics group
MOPP .....	mission-oriented protective posture
MSOC .....	medical support operations center
MTF .....	medical treatment facility
NAVMED.....	Navy Medical
NCMI .....	National Center for Medical Intelligence
NWP .....	Naval warfare publication
OEH .....	occupational and environmental health
OEHS .....	occupational and environmental health surveillance
OEHSA .....	occupational and environmental health site assessment
OIC.....	officer in charge
OPLAN .....	operation plan
PMI.....	patient movement item
PVNTMED .....	preventive medicine
S-3 .....	operations officer
S-6 .....	communications systems officer



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SIMLM ..... single integrated medical logistics manager  
STP ..... shock trauma platoon  
SC ..... surgical company  
  
T-AH ..... hospital ship  
TCCC-C ..... tactical combat casualty care card  
TLAMM ..... theater lead agent for medical materiel  
TMIP ..... theater medical information program  
  
US ..... United States

### Section II: Terms and Definitions

**aeromedical evacuation**—The movement of patients under medical supervision to and between medical treatment facilities by air transportation. Also called AE. (JP 1-02)

**aviation combat element**—The core element of a Marine air-ground task force (MAGTF) that is task-organized to conduct aviation operations. The aviation combat element (ACE) provides all or a portion of the six functions of Marine aviation necessary to accomplish the MAGTF's mission. These functions are antiair warfare, offensive air support, assault support, electronic warfare, air reconnaissance, and control of aircraft and missiles. The ACE is usually composed of an aviation unit headquarters and various other aviation units or their detachments. It can vary in size from a small aviation detachment of specifically required aircraft to one or more Marine aircraft wings. The ACE itself is not a formal command. Also called **ACE**. (JP 1-02)

**casualty**—Any person who is lost to the organization by having been declared dead, duty status—whereabouts unknown, missing, ill, or injured. (JP 1-02)

**casualty collection**—The assembly of casualties at collection and treatment sites. It includes protection from further injury while awaiting evacuation to the next level of care. Planning for casualty collection points must include site selection and manning. (MCRP 5-12C)

**casualty evacuation**—The unregulated movement of casualties that can include movement both to and between medical treatment facilities. (JP 1-02) The movement of the sick, wounded, or

injured. It begins at the point of injury or the onset of disease. It includes movement both to and between medical treatment facilities. All units have an evacuation capability. Any vehicle may be used to evacuate casualties. If a medical vehicle is not used it should be replaced with one at the first opportunity. Similarly, aeromedical evacuation should replace surface evacuation at the first opportunity. Also called **CASEVAC**. (MCRP 5-12C)

**casualty receiving and treatment ship**—In amphibious operations, a ship designated to receive, provide treatment for, and transfer casualties. (JP 1-02)

**casualty treatment**—Treatment that includes triage and all levels of care from self-aid or buddy-aid through resuscitative care. (MCRP 5-12C)

**chemical, biological, radiological, and nuclear defense**—Measures taken to minimize or negate the vulnerabilities and/or effects of a chemical, biological, radiological, or nuclear incident. Also called **CBRN defense**. (JP 1-02)

**combatant command (command authority)**—Nontransferable command authority established by Title 10 (“Armed Forces”), United States Code, Section 164, exercised only by commanders of unified or specified combatant commands unless otherwise directed by the President or the Secretary of Defense. Combatant command (command authority) cannot be delegated and is the authority of a combatant commander to employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction over all aspects of military operations, joint training, and logistics necessary to accomplish the missions assigned to the command. Combatant command (command

authority) should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and Service and/or functional component commanders. Combatant command (command authority) provides full authority to organize and employ commands and forces as the combatant commander considers necessary to accomplish assigned missions. Operational control is inherent in combatant command (command authority). Also called **COCOM**. (JP 1-02)

**combatant commander**—A commander of one of the unified or specified combatant commands established by the President. Also called **CCDR**. (JP 1-02)

**combat loading**—The arrangement of personnel and the stowage of equipment and supplies in a manner designed to conform to the anticipated tactical operation of the organization embarked. Each individual item is stowed so that it can be unloaded at the required time. (JP 1-02)

**combat operations center**—The primary operational agency required to control the tactical operations of a command that employs ground and aviation combat, combat support, and logistics combat elements or portions thereof. The combat operations center continually monitors, records, and supervises operations in the name of the commander and includes the necessary personnel and communications to do the same. Also called **COC**. (MCRP 5-12C)

**combat power**—The total means of destructive and/or disruptive force which a military unit/formation can apply against the opponent at a given time. (JP 1-02)

**combat readiness**—Synonymous with operational readiness, with respect to missions or functions performed in combat. (JP 1-02)

**combat service support**—The essential capabilities, functions, activities, and tasks necessary to sustain all elements of operating forces in theater at all levels of war. Within the national and theater logistic systems, it includes but is not limited to that support rendered by service forces in ensuring the aspects of supply, maintenance, transportation, health services, and other services required by aviation and ground combat troops to permit those units to accomplish their missions in combat. Combat service support encompasses those activities at all levels of war that produce sustainment to all operating forces on the battlefield. Also called **CSS**. (JP 1-02)

**combat zone**—1. That area required by combat forces for the conduct of operations. (JP 1-02, part 1 of a 2-part definition)

**command and control**—The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission. Also called **C2**. (JP 1-02)

**continental United States**—United States territory, including the adjacent territorial waters, located within North America between Canada and Mexico. Also called **CONUS**. (JP 1-02)

**definitive care**—Care rendered to conclusively manage a patient's condition. It includes the full range of preventive, curative acute, convalescent, restorative, and rehabilitative medical care. This normally leads to rehabilitation, return to duty, or discharge from the Service. (JP 1-02)

**disease and nonbattle injury**—All illnesses and injuries not resulting from enemy or terrorist action or caused by conflict. Indigenous disease pathogens, biological warfare agents, heat and cold, hazardous noise, altitude, environmental, occupational, and industrial exposures, and other naturally occurring disease agents may cause disease and nonbattle injury. Disease and nonbattle injuries include injuries and illnesses resulting from training or from occupational, environmental, or recreational activities, and may result in short- or long-term, acute, or delayed illness, injury, disability, or death. Also called **DNBI**. (JP 1-02)

**en route care**—Continuation of the provision of care during movement (evacuation) between the health service support capabilities in the continuum of care, without clinically compromising the patient's condition. (JP 1-02)

**essential care**—Medical treatment provided to manage the casualty throughout the range of care. This includes all care and treatment to either return the patient to duty (within the theater evacuation policy), or begin initial treatment required for optimization of outcome, and/or stabilization to ensure the patient can tolerate evacuation. (JP 1-02)

**evacuation**—1. Removal of a patient by any of a variety of transport means (air, ground, rail, or sea) from a theater of military

operation, or between health service support capabilities, for the purpose of preventing further illness or injury, providing additional care, or providing disposition of patients from the military health care system. (JP 1-02, part 1 of a 4-part definition)

**ground combat element**—The core element of a Marine air-ground task force (MAGTF) that is task-organized to conduct ground operations. It is usually constructed around an infantry organization but can vary in size from a small ground unit of any type to one or more Marine divisions that can be independently maneuvered under the direction of the MAGTF commander. It includes appropriate ground combat and combat support forces, and in a joint or multinational environment, it may also contain other Service or multinational forces assigned or attached to the MAGTF. The ground combat element itself is not a formal command. Also called **GCE**. (MCRP 5-12C)

**health care provider**—Any member of the Armed Forces, civilian employee of the Department of Defense, or personal services contract employee under Title 10 United States Code Section 1091 authorized by the Department of Defense to perform health care functions. The term does not include any contract provider who is not a personal services contract employee. Also called **DOD health care provider**. (JP 1-02)

**health maintenance**—Those tasks to ensure that a unit and its personnel are medically ready for combat operations. Included are routine sick calls, physical examinations, preventive medicine and dentistry programs, records maintenance, and medical reporting. (MCRP 5-12C)

**health service support**—All services performed, provided, or arranged to promote, improve, conserve, or restore the mental or physical well-being of personnel. These services include, but are not limited to, the management of health services resources, such as manpower, monies, and facilities; preventive and curative health measures; evacuation of the wounded, injured, or sick; selection of the medically fit and disposition of the medically unfit; blood management; medical supply, equipment, and maintenance thereof; combat stress control; and medical, dental, veterinary, laboratory, optometric, nutrition therapy, and medical intelligence services. Also called **HSS**. (JP 1-02)

**health surveillance**—The regular or repeated collection, analysis, and interpretation of health-related data and the dissemination of information to monitor the health of a population and to identify potential health risks, thereby enabling timely interventions to prevent, treat, reduce, or control disease and injury. It includes occupational and environmental health surveillance and medical surveillance subcomponents. (JP 1-02)

**health threat**—A composite of ongoing or potential enemy actions; adverse environmental, occupational, and geographic and meteorological conditions; endemic diseases; and employment of nuclear, biological, and chemical weapons (to include weapons of mass destruction) that have the potential to affect the short- or long-term health (including psychological impact) of personnel. (JP 1-02)

**hospital**—A medical treatment facility capable of providing inpatient care. It is appropriately staffed and equipped to provide



diagnostic and therapeutic services, as well as the necessary supporting services required to perform its assigned mission and functions. A hospital may, in addition, discharge the functions of a clinic. (JP 1-02)

**identification**—3. In ground combat operations, discrimination between recognizable objects as being friendly or enemy, or the name that belongs to the object as a member of a class. Also called **ID**. (JP 1-02, part 3 of a 3-part definition)

**information management**—The function of managing an organization's information resources by the handling of knowledge acquired by one or many different individuals and organizations in a way that optimizes access by all who have a share in that knowledge or a right to that knowledge. (JP 1-02)

**interoperability**—1. The ability to operate in synergy in the execution of assigned tasks. 2. The condition achieved among communications-electronics systems or items of communications-electronics equipment when information or services can be exchanged directly and satisfactorily between them and/or their users. The degree of interoperability should be defined when referring to specific cases. (JP 1-02)

**joint force**—A general term applied to a force composed of significant elements, assigned or attached, of two or more Military Departments operating under a single joint force commander. (JP 1-02)

**lead agent**—2. In medical materiel management, the designated unit or organization to coordinate or execute day-to-day conduct

of an ongoing operation or function. Also called **LA**. (JP 1-02, part 2 of a 2-part definition)

**Marine air-ground task force**—The Marine Corps' principal organization for all missions across the range of military operations, composed of forces task-organized under a single commander capable of responding rapidly to a contingency anywhere in the world. The types of forces in the Marine air-ground task force (MAGTF) are functionally grouped into four core elements: a command element, an aviation combat element, a ground combat element, and a logistics combat element. The four core elements are categories of forces, not formal commands. The basic structure of the MAGTF never varies, though the number, size, and type of Marine Corps units comprising each of its four elements will always be mission dependent. The flexibility of the organizational structure allows for one or more subordinate MAGTFs to be assigned. In a joint or multinational environment, other Service or multinational forces may be assigned or attached. Also called **MAGTF**. (MCRP 5-12C)

**Marine expeditionary force**—The largest Marine air-ground task force (MAGTF) and the Marine Corps' principal warfighting organization, particularly for larger crises or contingencies. It is task-organized around a permanent command element and normally contains one or more Marine divisions, Marine aircraft wings, and Marine logistics groups. The Marine expeditionary force is capable of missions across the range of military operations, including amphibious assault and sustained operations ashore in any environment. It can operate from a sea base, a land base, or both. In a joint or multinational environment, it may also contain other Service or multinational forces assigned or attached to the MAGTF. Also called **MEF**. (MCRP 5-12C)

**Marine expeditionary unit**—A Marine air-ground task force (MAGTF) that is constructed around an infantry battalion reinforced, a composite squadron reinforced, and a task-organized logistics combat element. It normally fulfills Marine Corps' forward sea-based deployment requirements. The Marine expeditionary unit provides an immediate reaction capability for crisis response and is capable of limited combat operations. In a joint or multinational environment, it may contain other Service or multinational forces assigned or attached to the MAGTF. Also called **MEU**. (MCRP 5-12C)

**Marine logistics group**—The logistics combat element (LCE) of the Marine expeditionary force (MEF). It is a permanently organized command tasked with providing combat service support beyond the organic capabilities of supported units of the MEF. The Marine logistics group (MLG) is normally structured with direct and general support units, which are organized to support a MEF possessing one Marine division and one Marine aircraft wing. The MLG may also provide smaller task-organized LCEs to support Marine air-ground task forces smaller than a MEF. Also called **MLG**. (MCRP 5-12C)

**mass casualty**—Any large number of casualties produced in a relatively short period of time, usually as the result of a single incident such as a military aircraft accident, hurricane, flood, earthquake, or armed attack that exceeds local logistic support capabilities. (JP 1-02)

**medical evacuation**—The timely and efficient movement of the wounded, injured, or ill while providing en route medical care to and between medical treatment facilities. Also called **MEDEVAC**. (MCRP 5-12C)

**medical intelligence**—That category of intelligence resulting from collection, evaluation, analysis, and interpretation of foreign medical, bio-scientific, and environmental information that is of interest to strategic planning and to military medical planning and operations for the conservation of the fighting strength of friendly forces and the formation of assessments of foreign medical capabilities in both military and civilian sectors. Also called **MEDINT**. (JP 1-02)

**medical regulating**—The actions and coordination necessary to arrange for the movement of patients through the levels of care. This process matches patients with a medical treatment facility that has the necessary health service support capabilities and available bed space. (JP 1-02)

**medical regulating control officer**—A medical administrative officer who controls and coordinates the seaward evacuation of casualties in the amphibious objective area. He is located on the primary control ship. (MCRP 5-12C)

**medical treatment facility**—A facility established for the purpose of furnishing medical and/or dental care to eligible individuals. Also called **MTF**. (JP 1-02)

**multinational**—Between two or more forces or agencies of two or more nations or coalition partners. (JP 1-02)

**National Military Strategy**—A document approved by the Chairman of the Joint Chiefs of Staff for distributing and applying military power to attain national security strategy and national defense strategy objectives. Also called **NMS**. (JP 1-02)

**nonbattle injury**—A person who becomes a casualty due to circumstances not directly attributable to hostile action or terrorist activity. Also called **NBI**. (JP 1-02)

**occupational and environmental health surveillance**—The regular or repeated collection, analysis, archiving, interpretation, and dissemination of occupational and environmental health-related data for monitoring the health of, or potential health hazard impact on, a population and individual personnel, and for intervening in a timely manner to prevent, treat, or control the occurrence of disease or injury when determined necessary. (JP 1-02)

**operation order**—A directive issued by a commander to subordinate commanders for the purpose of effecting the coordinated execution of an operation. Also called **OPORD**. (JP 1-02)

**organic**—Assigned to and forming an essential part of a military organization. Organic parts of a unit are those listed in its table of organization for the Army, Air Force, and Marine Corps, and are assigned to the administrative organizations of the operating forces for the Navy. (JP 1-02)

**patient**—A sick, injured, wounded, or other person requiring medical and/or dental care or treatment. (JP 1-02)

**patient movement**—The act or process of moving a sick, injured, wounded, or other person to obtain medical and/or dental care or treatment. Functions include medical regulating, patient evacuation, and en route medical care. (JP 1-02)

**preventive medicine**—The anticipation, communication, prediction, identification, prevention, education, risk assessment, and

control of communicable diseases, illnesses and exposure to endemic, occupational, and environmental threats. Also called **PVNTMED**. (JP 1-02)

**rehabilitative care**—Therapy that provides evaluations and treatment programs using exercises, massage, or electrical therapeutic treatment to restore, reinforce, or enhance motor performance and restores patients to functional health allowing for their return to duty or discharge from the Service. Also called restorative care. (JP 1-02)

**resuscitative care**—Advanced emergency medical treatment required to prevent immediate loss of life or limb and to attain stabilization to ensure the patient could tolerate evacuation. (JP 1-02)

**supported commander**—1. The commander having primary responsibility for all aspects of a task assigned by the Joint Strategic Capabilities Plan or other joint operation planning authority. In the context of joint operation planning, this term refers to the commander who prepares operation plans or operation orders in response to requirements of the Chairman of the Joint Chiefs of Staff. 2. In the context of a support command relationship, the commander who receives assistance from another commander's force or capabilities, and who is responsible for ensuring that the supporting commander understands the assistance required. (JP 1-02)

**sustainment**—The provision of logistics and personnel services required to maintain and prolong operations until successful mission accomplishment. (JP 1-02)

**theater hospitalization capability**—Essential care and health service support capabilities to either return the patient to duty and/or stabilization to ensure the patient can tolerate evacuation to a definitive care facility outside the theater. It includes modular hospital configurations required to support the theater (emergency medical services, surgical services, primary care, veterinary services, dental services, preventive medicine, and combat and operational stress control, blood banking services, hospitalization, laboratory and pharmacy services, radiology, medical logistics and other medical specialty capabilities as required). (JP 1-02)

**wellness**—Force health protection program that consolidates and incorporates physical and mental fitness, health promotion, and environmental and occupational health. (JP 1-02)

# References

## **Department of Defense (DOD) Instruction**

6480.4      Armed Services Blood Program (ASBP) Operational Procedures

## **Chairman of the Joint Chiefs of Staff Manual (CJCSM)**

3122.03C    Joint Operation Planning and Execution System, Volume II, Planning Formats and Guidance

## **Joint Publications (JPs)**

4-02          Doctrine for Health Services Support in Joint Operations  
4-06          Mortuary Affairs in Joint Operations

## **Army Publications**

### Field Manuals (FMs)

21-10          Field Hygiene and Sanitation  
4-23.11       First Aid

### Department of the Army Pamphlet (DA PAM)

27-1          Treaties Governing Land Warfare

## **Marine Corps Publications**

### Marine Corps Warfighting Publications (MCWPs)

2-3            MAGTF Intelligence Production and Analysis



## **MCWP 4-11.1**

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- 5-12.1 The Commander's Handbook on the Law of Naval Operations

### Marine Corps Reference Publications (MCRPs)

- 3-31B Amphibious Ships and Landing Craft Data Book
- 4-11.1A Multi-Service Tactics, Techniques, and Procedures for Treatment of Chemical Agent Casualties and Conventional Military Chemical Injuries
- 4-11.1E Health Service Support Field Reference Guide
- 4-11.1G Patient Movement
- 5-12.1A The Law of Land Warfare

### Marine Corps Orders (MCOs)

- P3040.4E Marine Corps Casualty Procedures Manual
- 6530.2 Department of the Navy Blood Program
- 6700.5 Medical and Dental (Class VIII) Materiel Support of the Marine Operational Forces

### Miscellaneous

Marine Battle Skills Training Handbook

## **Navy Publications**

### Naval Warfare Publications (NWP)

- 4-02 Naval Expeditionary Health Service Support Afloat and Ashore

### Navy Tactics, Techniques, and Procedures (NTTP)

- 4-02.4 Expeditionary Medical Facilities

## **Health Service Support Operations**

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### Navy Medical (NAVMED)

P-5010      Manual of Naval Preventive Medicine

### Bureau of Medicine and Surgery (BUMED) Instruction

6150.35      Medical Warning Tags

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