

Chapter 7

Preventive Medicine

Disease and nonbattle injuries 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 disease and nonbattle injuries than to wounds sustained in combat. During the Civil War, more Federal soldiers died from disease than wounds. Approximately 44,238 were killed in battle; 49,205 died of wounds; and 186,216 died of disease.

Preventive medicine efforts can dramatically reduce the incidence of disease during military operations. Proactive preventive medicine measures should be incorporated into all levels of care. Real-time disease surveillance data should be used to brief commanders on potential medical and environmental threats and on the effectiveness of preventive medicine measures.

Prevention of disease and nonbattle injuries is a critical function of the HSSE. Naval Medical (NAVMED) P-5010, *BUMED Manual of Naval Preventive Medicine*, prescribes specific preventive medicine measures.

7001. Pre-Deployment

Specific preventive medicine taskings and efforts to be conducted before deployment include—

- Collecting and disseminating environmental 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.
- Recommending personnel augmentation requirements to support the OPLAN.
- Recommending immunizations and other preventive measures to counter medical threats within the theater of operations and in-transit staging points.
- Training individuals (through unit training) in personal hygiene, personal protective measures, protection equipment, and field sanitation practices.
- Assisting medical units in completing pre-deployment requirements (immunization, preventive medicine threat briefings, and permethrin treatment of clothing) and in preparing for embarkation of preventive medicine equipment.

7002. Deployment

Specific preventive medicine taskings and efforts to be conducted while deployed include—

- Disseminating militarily significant preventive medicine information to commanders and HSS units in the theater of operation.

- Providing technical oversight on food service operations and procurement.
- Providing oversight and testing at water points and bulk water storage areas.
- Conducting disease vector and pest surveillance and control when feasible.
- Maintaining environmental health and pest control equipment.
- Conducting weekly disease and injury surveillance at all battalions and squadrons.

7003. Marine Expeditionary Force Preventive Medicine Sources

The MEF surgeon's staff includes a physician (the preventive medicine officer) with special expertise in preventive medicine and public health. This physician is responsible to the MEF commander and MEF surgeon for coordinating preventive medicine efforts among the division, the wing, and the FSSG.

Most preventive medicine assets organic to the MEF are found in the FSSG's preventive medicine section of the medical battalions' 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 evaluating local food sanitation, sight, and hearing conservation programs.

7004. Mobile Medical Augmentation Readiness Team

During peacetime, any operational commander may request preventive medicine MMART assistance from the Chief of Naval Operations (N931) via the operational chain of command.

7005. Navy Environmental Health Center

The Navy Environmental Health Center, located in Norfolk, VA, supports operational units. It conducts—

- Risk screening.
- Data evaluation.
- Exposure assessments.
- Toxicity assessments.
- Health risk evaluations.
- Health and safety planning.
- Environmental risk communication workshops and seminars.

The Navy Environmental Health Center and its supporting activities establish and disseminate preventive medicine and environmental protection policy recommendations for BUMED. Field activities in direct support of the Center follow:

- Navy Environmental Preventive Medicine Units—provide updated disease information on areas of the world or specific countries, public health and preventive medicine issues, and occupational health and safety support to military forces.

- Navy Disease Vector Ecology and Control Centers—provide 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, 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.
- Forward Deployed Laboratory—can quickly identify infectious and biologic threats to the deployed force. During contingency operations, the task force commander may request the support of this deployable, advanced public health laboratory (NWP 4-02, *Operational Health Service Support*).

7006. Additional Resources

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, MD.

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 also located in Bethesda, MD.

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