



**THE ASSISTANT SECRETARY OF DEFENSE**

1200 DEFENSE PENTAGON  
WASHINGTON, DC 20301-1200

**HEALTH AFFAIRS**

**NOV 29 2005**

The Honorable John W. Warner  
Chairman, Committee on Armed Services  
United States Senate  
Washington, DC 20510-6050

Dear Mr. Chairman:

This letter provides an interim reply to the requirement for a Department of Defense report on training on environmental hazards, as directed by Section 736 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005.

The final report, due on October 28, is delayed pending completion of Service and Joint Staff coordination. We expect to forward the complete report by the end of January.

The report will document the training provided by each of the Military Departments regarding the identification of common environmental hazards and exposures to such hazards, and the prevention and treatment of adverse health effects of such exposures. It will also discuss current and future actions to improve such training.

Thank you for your continued support of the Military Health System.

Sincerely,

A handwritten signature in black ink that reads "William Winkenwerder, Jr." with a stylized flourish at the end.

William Winkenwerder, Jr., MD

Enclosure:  
As stated

cc:  
Senator Carl Levin

**Department of Defense  
Interim Report to Congress  
Training on Environmental Hazards  
October 2005**

## Background

Department of Defense directives and instructions require the military Services and combatant commanders to identify the populations at risk during deployments, determine potentially hazardous exposures to occupational and environmental contaminants and the appropriate protective measures, and conduct overall assessments of servicemembers' health. Some actions, such as determination of baseline rates of illness and injury, are required on a repeated basis. All of these requirements support the environmental hazards training program.

The environmental hazards training provided to medical personnel is adequate and is in accordance with Department of Defense, Joint Staff, and Service policy directives and instructions. Service institutional training curricula cover the spectrum of environmental hazard issues and are structured to support mission requirements. Treatment for environmental hazards exposures is part of standard medical training received by all medical personnel. Theater-specific environmental hazards training is provided to all medical personnel during pre-deployment training. Finally, each deploying servicemember receives an overview of environmental hazards as part of pre-deployment individual readiness training. This continuum of training is combined with an active use of lessons learned and after-action reviews to assure the force health protection of deploying servicemembers.

## United States Navy

The goal of the Navy environmental hazards training program is to protect the health of the force by formulating evidence-based health risk reduction interventions and to foster informed risk management decisions by the theater commander by completing scientifically defensible, in-theater health risk analyses and employing sound risk communication strategies. The environmental hazard training program is based on an American Society for Testing and Materials validated methodology for identifying potential deployment-health threats. The methodology is defined by the American Society for Testing and Materials (*ASTM Standard Guide E2318-03, The Environmental Health Site Assessment Process for Military Deployments*). Environmental Health Site Assessments are completed specifically to evaluate potential health risks resulting from complete

and/or potentially complete exposure pathways. This methodology demands that environmental data collection be driven by development of conceptual site models (CSMs) for each deployment site. These CSMs, in turn, define potential exposure pathways. Support courses teach the use of a sophisticated suite of direct reading and field analytical technologies employed by preventive medicine professionals to generate actionable environmental data without dependence on reach-back analytical laboratories and risk communication strategies.

## United States Army

The Army Medical Department Center and School (AMEDD C&S) is the proponent for medical occupational specialties training, in the classroom, in the field, or by correspondence. The AMEDD C&S training program is supplemented by courses provided by other Army and DoD organizations to maintain a tiered or continuous level of training sustainment.

Army environmental hazards training incorporates the prevention of exposures and adverse health impacts through enforcing the concepts of inspection, evaluation, and sustainment. Those concepts help preventive medicine personnel collect data for occupational and environmental health/endemic disease surveillance. Other areas addressed within environmental hazards training include but are not limited to: sanitation and safety of living quarters, food service facilities, recreational facilities, water supplies, wastewater systems, waste disposal operations, industrial operations, and other facilities and operations, as required.

With emphasis on improving the training programs through the use of lessons learned and deployment after-action reports, the Army can introduce new concepts and new technologies, and at the same time reinforce and adapt to important philosophies. All of this ensures that the Army will address environmental hazards through educating, sustaining, and evaluating Active, Reserve, and International military healthcare personnel of Department of Defense components and allied countries so that they can ensure optimal health and readiness of America's military forces and its coalition partners.

## United States Air Force

The Air Force offers a variety of courses in environmental hazards training for medical enlisted and officer personnel. Training includes varying levels of expertise in the following environmental programs: operational or combat stress; water-borne disease prevention; environmental conditions and concerns; occupational health and safety (including proper wear/use of hearing protection); heat and cold injury prevention; eye protection; disease vector (insects)

surveillance; personal protection from dangerous flora and fauna; characteristics of nuclear, biological, and chemical weapons; current/future chemical, biological, radiological, nuclear and explosive (CBRNE) detection capabilities; EHSA (Environmental Health Site Assessment); environmental (airbase) site selection considerations; field hygiene and sanitation; field drinking water theory and laboratory testing.