

**STATEMENT OF  
DR. PATRICIA R. HASTINGS  
CHIEF CONSULTANT, POST DEPLOYMENT HEALTH SERVICES  
VETERANS HEALTH ADMINISTRATION  
DEPARTMENT OF VETERANS AFFAIRS (VA)  
BEFORE THE  
SENATE COMMITTEE ON VETERANS' AFFAIRS**

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Chairman Isakson, Ranking Member Tester, and Members of the Committee. Thank you for the opportunity to discuss the ongoing processes, research, and actions that VA uses to identify illnesses and care for Veterans who may have an illness associated with environmental health hazards during military service. I am joined by Dr. Drew Helmer, Deputy Director of the Center for Innovations in Quality, Effectiveness, and Safety at the VA Medical Center in Houston, Texas, and immediate past Director of the War Related Illness and Injury Study Center (WRIISC) at the VA New Jersey Health Care System in East Orange, New Jersey.

*Post Deployment Health Services*

Post Deployment Health Services (PDHS) oversees health-related concerns of relevance to Veterans and their occupational and environmental exposure.

PDHS consists of four programs: Pre-9/11 and Post-9/11 Era Environmental Health Programs—addressing military environmental concerns from conflicts as well as garrison exposures; Epidemiology—providing research and scientific review to inform policy; and WRIISC located at three sites. WRIISC provides research, education, and medical consultation for cases that are difficult to diagnose or treat. WRIISC NJ houses the congressionally-mandated Airborne Hazards and Burn Pits Center of Excellence. Your support has accelerated Airborne Hazards research and Veteran care. Thank you.

VA recognizes that environmental exposures during deployment may be associated with both immediate and delayed adverse health consequences. There are over 18 million Veterans in the United States, and VA cares for approximately

9.6 million of them. Exposures are a major concern of Veterans and why PDHS exists. One in three Veterans report a possible exposure to environmental hazards and one in four report health concerns due to deployment exposures. PDHS oversees VA's efforts to mitigate health effects of exposures and to provide care for the associated adverse health outcomes when necessary. When a disability is determined to be due to an in-service exposure, whether through direct proof or because the disability is eligible for presumptive service connection, the Veterans Benefits Administration (VBA) provides disability compensation. The teams addressing exposure concerns are diverse: epidemiologists, physiologists, pulmonologists, internists, other medical specialties, bench researchers, VBA, Department of Defense (DoD), and academia.

### *The Presumptive Process*

In certain circumstances, VA presumes that certain disabilities were caused by military service and subsequently awards disability compensation to a veteran. The presumption of service connection takes the place of some of the proof elements that apply in an ordinary direct service connection claim, such as proof of exposure or a causal link between the in-service exposure and subsequent disability, otherwise known as the nexus requirement. The first presumptions were established in 1921, with more added through the decades.

The way VA currently handles decisions on claims based on illness asserted to be due to in-service exposure is through presumption or a direct causation analysis. Both of these methods can be complicated by a lack of contemporaneous proof of what happened to a given person in service. I will discuss a better method of documenting exposure and health outcomes in a moment. It is called the Longitudinal Exposure Record (ILER).

Presumptions are established by Congress or by the Secretary after review of the science by subject matter experts (SME). VA uses external agencies such as the National Academy of Science, Engineering, and Medicine, the National Institutes of Health, and the Agency for Toxic Substance Disease Registry, as well as its own experts for these reviews. The greatest challenge with the presumption policymaking

process is that it usually takes time to conduct the research to link military service to an illness for presumptive service connection. In the absence of a presumption, however, the Veteran can submit a claim for a condition that they believe was caused or exacerbated by their military experience. Other challenges are: establishing a dividing line for exposure; addressing attributable risk; advances in medical science; the relationship to service; delayed diagnosis; and incomplete or unavailable records.

Military exposures research is challenging. Exposure information can be difficult to obtain. Individual exposure levels can vary tremendously even for Veterans deployed to the same geography or conflict. Details, such as the timing of deployment, exact locality, occupation, and actual assigned duties, can affect the presence or absence and extent of an exposure.

Most literature on chemical and toxin exposures comes from occupational health providing some objective data about health risk and outcomes through analogy. Occupational exposures in civilian settings are managed proactively and systematically with a host of controls to include elimination, substitution, administrative controls, and personal protective equipment. Military Servicemembers in high-tempo operations or high-pressure environments often do not have the luxury of such controls.

Researchers use scientific methods to detect causal associations between exposures and disease. Theoretically, the best method is a randomized clinical trial, but this is generally unethical for exposure research. Therefore, other techniques must be used such as animal and in vitro toxicity studies, observational studies, and case control studies. A disadvantage of these studies is the inability to make firm conclusions based on one study.

A central question that remains unanswered in many cases is: What aspect of the deployment experience is contributing to poor health outcomes? In the matter of airborne hazards, is it the particulate matter, burn pits themselves, blast overpressure, an infectious agent, or a combination of exposures? VA and DoD continue working alongside academia to find these answers.

As mentioned above, an exciting opportunity to improve our understanding and management of exposure-related health concerns comes from the new Individual ILER. VA and DoD are working jointly to improve real-time exposure monitoring and to capture

these data in ILER. Initial Operational Capability for the ILER is scheduled for release on October 1, 2019. The ILER identifies a Servicemember's deployments by date, location, and known toxic exposures. ILER will improve care, benefits, and research.

#### *A Strategic Vision on Research to Enhance Collaboration Between VA and DoD*

In the Deployment Health Working Group, VA and DoD SMEs meet monthly to discuss and plan joint actions regarding deployment-related exposures and their possible association with subsequent adverse health conditions. VA and DoD also hold scientific exchanges for a variety of different exposures: in March 2019, the Airborne Hazards Symposium; in April 2019, a review of chelation interventions regarding toxic embedded fragments; and, in July 2019, the Environmental Health Conference.

In order to improve evaluation and care of Veterans, PDHS/WRIISC has a robust educational program aimed at improving VHA and private sector providers' knowledge about deployment-related health concerns. WRIISC delivers monthly continuing education accredited Webinars for VHA providers and has eLearning modules available online and on demand. SMEs present and lead workshops to discuss exposure issues at professional and scientific meetings. We publish our research findings in peer-reviewed journals to improve clinical practice. All these education and dissemination activities contribute to raising the standard of care to improve Veterans' health and function.

#### *Conclusion*

VA is committed to the health and well-being of Veterans and is dedicated to working with our Interagency and academic partners to investigate potential adverse health effects associated with exposure during deployment.

To this end, your continued support is essential. Mr. Chairman, this concludes my testimony. My colleague and I are prepared to answer any questions.