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STATEMENT BY
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SENATE COMMITTEE ON VETERANS AFFAIRS HEARING ON RESEARCH ON PERSIAN GULF WAR ILLNESS

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Mr. Chairman and distinguished members of the committee, thank you for the opportunity to discuss the Department of Defense's (DoD's) Force Health Protection and Readiness Program and the programs within the Military Health System, with a focus on the aspects of those programs related to research on veterans of the 1991 Gulf War.

Two primary objectives of the Military Health System are to ensure a medically ready force and to provide world class care for those who become ill or injured. The importance of these objectives is recognized throughout the DoD, and we have a multitude of proactive programs in place to educate our Service members and their families and our military leadership. We also have robust surveillance and research programs in place to monitor the health of our force.

The medical lessons learned from the 1991 Gulf War led to the implementation of the Force Health Protection concept, policies, and programs. Shortly after the 1991 Gulf War, some of the 700,000 Service members deployed during that conflict began to present for care with symptoms they believed were related to their deployment. The unclear cause of symptoms, in some cases, presented a challenge for both military and Veterans Affairs (VA) providers.

As a result, the VA established the VA Gulf War Health Examination Registry to identify possible endemic diseases or hazardous exposures resulting from U.S. military personnel service in Southwest Asia. Subsequently, the Assistant Secretary of Defense for Health Affairs initiated the Comprehensive Clinical Evaluation Program to offer examinations to Gulf War veterans.

A combined analysis of the VA and DoD Gulf War clinical evaluation programs' study of over 100,000 participants showed that more than 80 percent of veterans evaluated had well-known

health problems and received conventional diagnoses and treatment. Moreover, six to nine percent of evaluated veterans reported that they did not have a clinically significant new illness. The findings from over 100,000 clinical examinations have substantially aided health care efforts. Veterans of the 1991 Gulf War who report health problems are definitely ill. However, they do not have a single type of health problem. Consequently, these veterans have to be evaluated and treated as individuals. Assumptions based on participation in the 1991 Gulf War cannot be made about the health of a veteran who presents for clinical evaluation. Each veteran requires a medical history and screening examination, with treatment tailored to the specific needs of the patient. For 1991 Gulf War veterans who have well-known health problems, effective therapy is available. Treatment also is available for veterans with chronic, unexplained symptoms.

In 1991, the DoD established the Deployment Health Research Center, the Deployment Health Clinical Center (DHCC), and the Deployment Health Surveillance Center to work closely with the VA's War Related Illness and Injury Study Centers. The DHCC's mission began with a focus on illnesses associated with the 1991 Gulf War and was expanded to include not only clinical care of deployment veterans, but also deployment-related health research and training, education, and communication responsibilities. The DHCC added risk communication, clinical and health services research, and epidemiological expertise to its staff, and now has a research portfolio comprising a dozen demographic and epidemiology projects, nine health services research projects, and clinical trials.

Major focus areas for DHCC research include post-war syndromes, especially illness related to the 1991 Gulf War, medically unexplained physical symptoms, and Post Traumatic Stress Disorder (PTSD) that occurs subsequent to combat, sexual assault, or terrorist attack. The DHCC was involved in the creation of the DoD/VA Post-Deployment Health Evaluation and Management Clinical Practice Guideline. The guideline was completed in 2001, following Institute of Medicine recommendations to incorporate deployment healthcare into primary care and to regularly screen all military beneficiaries. The DHCC also supports the DoD/VA guidelines for primary-care based detection and treatment of depression, PTSD, and medically unexplained symptoms through staff assistance, training programs, and research projects.

The Deployment Health Research Center, in collaboration with the VA, designed the Millennium Cohort Study, to evaluate the long-term health effects of military service, specifically deployments. The study was initiated in 2001. Funded by the DoD, and supported by military, VA, and civilian researchers, almost 140,000 Service members will eventually participate in this groundbreaking study. As force health protection continues to be a priority for the future of the United States military, the Millennium Cohort Study will be providing a crucial step towards enhancing the long-term health of military Service members.

Since 1992, the DoD, VA, and Health and Human Services (HHS) have funded over 300 distinct projects related to health problems affecting Gulf War veterans. The DoD Gulf War Illness research program was established in 1994 and was renamed the Force Health Protection Research Program in 2002. While it continued to support diagnostic and treatment capabilities for 1991 Gulf War veterans, the focus was expanded to include current and future military deployments and how to respond better to the health care needs of those who deploy. Research pertaining to illnesses of Gulf War veterans has also been funded through the Military-Relevant

Disease Management topic area of the Congressionally Directed Medical Research Program. DoD support for a coherent research program for illnesses of the veterans of the 1991 Gulf War has four focus areas:

- 1. Identification of mechanisms underlying the illnesses;
- 2. Chronic effects of neurotoxic substances to which veterans were exposed during deployment;
- 3. Studies that expand on earlier research identifying neurological and immunological abnormalities in ill veterans; and
- 4. Identification of promising treatments.

DoD has made significant improvements and advances in deployment health-related processes, based on research results and healthcare outcomes since the 1990 - 1991 Gulf War. Pre-Deployment and Post-Deployment Health Assessments (PDHAs) were begun in 1998. The PDHA was augmented in 2003 to collect a standardized set of information about medical symptoms or concerns, again because of medical lessons learned from those returning home from deployments. The Post-Deployment Health Reassessment (PDHRA) was begun in June 2005 to reevaluate the health of those who returned from deployments some three to six months after their return. This reassessment was initiated because of military medical research data showing increased physical and mental health symptoms and concerns in Service members after they were home and reintegrating with their families and their work.

The PDHA and the PDHRA are both designed to include a one-on-one interaction of each Service member with a healthcare provider to review the concerns identified by the member on the assessment and to make a determination of the medical indications for referral for further evaluation and diagnostic workup. The assessments are not medical diagnostic instruments, but are screening tools to identify the need for medical evaluation.

The PDHA enables the medical provider to determine if any further medical evaluations are needed before making a medical recommendation on the individual's deployability. We are consistently finding that about four percent of those evaluated at the pre-deployment processing centers have medical problems identified that preclude them from deploying at that time.

The PDHAs from the worldwide deployments of Service members from January 1, 2003, to February 12, 2007, show that 93 percent of Active Duty Service members indicate their general health as "good," "very good," or "excellent," 22 percent indicate they have medical concerns, and five percent indicate they have mental health concerns. Referral rates after discussion with a medical provider show that 18 percent are referred for further medical evaluation. The referrals are fairly equally divided among "medical" only, "mental health" only, and both "medical and mental health." For the Reserve component, 90 percent rate their health as good, very good, or excellent; 41 percent indicate they have medical problems; six percent indicate they have mental health concerns; and 24 percent are referred.

The PDHRAs from the worldwide deployments of Service members from June 2005 to March 2007, show that 85 percent of Active Duty Service members indicate their general health as "good," "very good," or "excellent"; 33 percent indicate they have medical concerns; and 27 percent indicate they have mental health concerns. Referral rates after discussion with a medical provider show that 16 percent are referred for further medical evaluation. The referrals are fairly equally divided among "medical" only, "mental health" only, and both "medical and mental"

health." For the Reserve component, 82 percent indicate their health is good, very good, or excellent; 56 percent indicate medical concerns, 42 percent indicate mental health concerns; and 51 percent are referred. An important element of the PDHA and the PDHRA is education of the Service members about medical conditions, both physical and mental, and the signs and symptoms that indicate the need for further evaluation.

To better understand the mental health needs of the deployed forces, the Army sent a Mental Health Advisory Team (MHAT) to theater in September and October 2003. This was the first time that such an assessment was conducted during a wartime deployment. The Army has sent MHATs to theater three subsequent times, September to October 2004, October to November 2005, and August to October 2006, to continue to evaluate adequacy of mental health support in theater and preparation of medical and support staff for mental health care.

Deployment-related research is performed at local, Service, and interagency collaborative levels to maintain quality care in an environment of expanding knowledge. At the present time, 358 deployment health-related research projects are being conducted across various organizations of the DoD, VA, and HHS, as well as other federal and academic organizations. These focus on a wide variety of physical health and mental health topics. For example, there are 50 projects on traumatic musculoskeletal injuries; 97 projects on traumatic brain and spinal cord injuries; 67 projects on mental disorders, including PTSD; and 29 projects on infectious diseases. From 1992 to 2006, more than 250 deployment health-related research projects were initiated and completed. During the past 14 years, more than 850 articles were published in peer-reviewed medical and scientific journals on deployment-related medical research.

The DoD is very concerned about the short-term and long-term health effects of deployments and military service for all of its Service members. Our ability to analyze medical data related to deployments in a proactive way is enabling us to develop and modify programs to better prepare our Service members and their families for the stressors of military service, to educate them and our leadership on recognizing when to seek medical evaluation for concerns and to make changes when medically indicated. Since we repeatedly assess both physical and mental health of our force, we will continue to analyze the information to assure we are doing everything possible to protect their health and to provide the care and treatment they need and deserve while they are deployed and when they come home.

Mr. Chairman, I thank you for the opportunity to provide you and the members of the Committee with an overview of the Military Health System's Force Health Protection research program. I am ready to answer your questions.