Centers of Excellence

# Department of Defense Hearing Center of Excellence

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As a joint initiative between the DoD and the VA, the Hearing Center of Excellence is committed to reducing the incidence of tinnitus, or ringing in the ears, and hearing loss in warriors and veterans.



Federal Practitioner's 30th anniversary celebration continues with the spotlight this month on the accomplishments of the Department of Defense Hearing Center of Excellence.

he ability to hear and communicate is critical to warrior and unit safety prior to, during, and outside of battle. It is central to effective command and control as well as mission performance. In spite of current hearing conservation efforts, military hearing loss and auditory injuries are still on the rise in the VA. In fact, auditory injuries, including hearing loss and tinnitus (ringing in the ear[s]), are the most common service-connected disabilities: Unique claims in 2012 showed 90,000 hearing loss claims and 148,000 tinnitus claims. There are currently 1.9 million cases of serviceconnected auditory system disabilities; such injuries result in substantial costs for the military, VA, and society, especially in military operational effectiveness, disability benefit payments, warrior health and safety, and overall quality of life (QOL).

## **RISING RATES AND COST OF AUDITORY INJURIES**

Although the military services teach the importance of hearing protection, provide the means for hearing protection, and monitor risk through conservation programs, the need for hearing during battle often overrides the expediency of hearing protective devices. Military personnel sometimes equate hearing protection with increased vulnerability, widening the gap between, and decreasing the potential impact of, preventative efforts and hearing preservation. The scope and magnitude of the impacts of war and military service on the auditory system reaffirm the requirements put forth by the National Defense Authorization Act (NDAA) to address these injuries and warrant a vigilant, focused effort to combat them. The Hearing Center of Excellence (HCE) was legislated by Congress in the NDAA fiscal year 2009 and directed institutions of higher education and other appropriate public and private entities to partner with the VA to reduce the incidence and impact of auditory system injuries.

# REDUCING THE COST OF AUDITORY INJURIES

The DoD established the HCE to focus on the prevention, diagnosis, mitigation, treatment, and rehabilitation of hearing loss and auditory injury. The mission of the HCE is to heighten readiness and to continuously improve the health and QOL of service members and veterans through advocacy and leadership as it pertains to all aspects of the clinical continuum. The HCE's primary responsibilities include developing a data registry to track hearing loss and auditory injuries throughout a member's active service and to share such registry data with the VA; encouraging and facilitating research; developing best practices and clinical education; and ensuring the coordination and delivery of VA rehabilitation benefits and services to former service members.

## **5 MISSION DIRECTORATES**

Organized into 5 directorates, each focused on a separate but related set of objectives, the HCE is leading a comprehensive movement to address this complex issue: (1) the Prevention and Surveillance Directorate supports HCE's goal to prevent au-

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ditory injury by ensuring that the framework and tools are in place to monitor the effectiveness of preventive measures and to track the incidence of injury: (2) the Clinical Care, Rehabilitation and Restoration Directorate is designed to set the standard of care, as well as provide clinical skills training and education across the DoD and the VA; (3) the Research Directorate is charged with leading an advanced collaborative effort to better unify the individual mission objectives of research organizations, academia, and industry to overcome traditional silos and information stovepipes, address knowledge gaps, and enable better synergy and resource sharing across organizations with shared missions; (4) the Global Outreach Directorate supports HCE's collaborative and knowledge sharing efforts by providing a mechanism to forge and manage such partnerships and disseminate training and educational resources; and (5) the Informatics Directorate (ID) ensures hearing loss and auditory injury patient data are securely captured and tracked and shared within and between the DoD and VA. In addition, the ID encourages and facilitates the analysis and use of such data for research and education.

### STANDARDS AND CLINICAL PRACTICE GUIDELINES

Traditionally, the clinical community has been limited in its ability to assess and affect ear function and injury and to predict predisposition to future injury after the temporary effect of significant injuries because of its current understanding of auditory injury patterns and because of the limited threshold sensitivity of diagnostic capabilities. The HCE is looking to advance the diagnosis, care, and treatment of auditory system injuries and related conditions by collaborating with various organizations and institutions to develop clinical practice guidelines (CPGs) to set the standard of care. In collaboration with the Defense Center of Excellence for Psychological Health and Traumatic Brain Injury, the American Academy of Otolaryngology, and the Uniformed Services University of the Health Sciences, CPGs related to primary care for the dizzy patient, management of auditory impairment associated with concussion, sudden hearing loss, and asymmetric hearing loss are under development and nearing completion. The HCE's planning efforts have placed a heavy emphasis on creating an efficient system to encourage and facilitate the collaborative use of research efforts and promote the development of clinical guidelines and tools.

## LEADING A REVOLUTIONARY, COLLABORATIVE MOVEMENT

The HCE is committed to working together with the armed services and the VA to enhance training, education, innovation, and practice in its ultimate commitment to support our warfighters, veterans, and the military at large. Over the next few years, the organization will focus on fostering seamless care for patients as they transition from the DoD to the VA by providing a framework for data management to ensure that the continuity of care reaches the same end destination as the patient. As described by HCE Director Col. Mark Packer, "The HCE hopes to have an efficient system in place so that the iterative process is routine, where we can continually scan the environment, looking for opportunities to fill gaps and provide the translation of products into real outcomes. The job of the HCE is not done until we can absolutely stop the risk of hearing loss and effectively address this invisible injury."

For more information about the HCE, please visit http://hearing .health.mil.

#### Acknowledgments

The contents of this article have been compiled from contributors by the HCE directorates.

#### Author disclosures

The author reports no actual or potential conflicts of interest with regard to this article.

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