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### **Study Sheds Light on Prognosis of mTBI Symptoms for Returning Soldiers**

**Bethesda, Md.** – Nearly 50 percent of recently-deployed Soldiers who sustained a mild traumatic brain injury reported post-concussive symptoms – like headaches, sleep disturbance, and forgetfulness – three months after returning from deployment, according to a study published March 17 in *Neurology* by researchers at the Uniformed Services University of the Health Sciences (USU), and the Defense and Veterans Brain Injury Center.

A mild traumatic brain injury, also referred to as mTBI or concussion, is the most prevalent form of brain injury among service members returning from the wars in Afghanistan and Iraq. To better understand the prevalence and prognosis of symptoms associated with this common deployment-related injury, the team of researchers reviewed data from about 1,500 Soldiers who had been non-medically evacuated from Afghanistan and Iraq to two military bases between 2009 and 2014 – all of whom were screened for mTBI. Of those who were found to have sustained mTBI, about half (47%) reported at least one severe or very severe post-concussive symptom three months post-deployment. The most commonly reported symptoms were sleep problems, forgetfulness, irritability, headaches, and trouble concentrating.

The large, longitudinal study, “Epidemiology and Prognosis of mTBI in Returning Soldiers: A Cohort Study,” found that these Soldiers were nearly twice as likely as soldiers without a recent mTBI to report one or more post-concussive symptom, at their three-month follow up. They were also nearly twice as likely as other soldiers to report receiving rehabilitative services. Most soldiers in the study also reported having experienced one or more TBI before their most recent deployment – either before joining the military or during an earlier deployment, according to the researchers.

Consistent with prior research, this study also found many of these soldiers with mTBI reported concurrent health issues, such as post-traumatic stress and bodily pain in locations other than the head or neck, and these factors were also related to the later likelihood of reporting post-concussive symptoms.

“We hope that by better defining the prevalence and prognosis of the broad array of symptoms associated with deployment-related mTBI, we can understand the extent of these problems and whether they persist or improve over time, not to mention the opportunity to offer our service members a better understanding of this injury,” according to study author Dr. Ann Scher, a professor in USU’s Preventive Medicine and Biostatistics Department.

Dr. Karen Schwab, first author and researcher with the Defense and Veterans Brain Injury Center and USU affiliated faculty member, added, “These findings can also lead to more focused medical follow-up after concussion, and to further research on the outcomes of military concussion.”

The study was funded by the congressionally-mandated Directed Medical Research Programs with additional support provided by USU’s Center for Neuroscience and Regenerative Medicine, Defense Medical Research and Development Program, and the Defense and Veterans Brain Injury Center. USU researchers collaborated with colleagues at the Defense and Veterans Brain Injury Center, Silver Spring, Md., Evans Army Community Hospital, in Fort Carson, Colo., Rocky Mountain Mental Illness Research Education and Clinical Center, Denver, Colo., the University of Colorado, and the Intrepid Spirit Defense and Veterans Brain Injury Center, Fort Bragg, N.C.

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### **About the Uniformed Services University of the Health Sciences**

The Uniformed Services University of the Health Sciences, founded by an act of Congress in 1972, is the nation’s federal health sciences university and the academic heart of the Military Health System. USU students are primarily active duty uniformed officers in the Army, Navy, Air Force and Public Health Service who receive specialized education in tropical and infectious diseases, TBI and PTSD, disaster response and humanitarian assistance, global health, and acute trauma care. A large percentage of the university’s more than 5,200 physician and 1,000 advanced practice nursing alumni are supporting operations around the world, offering their leadership and expertise. USU also has graduate programs in biomedical sciences and public health committed to excellence in research, and in oral biology. The University's research program covers a wide range of clinical and other topics important to both the military and public health. For more information about USU and its programs, visit [www.usuhs.edu](http://www.usuhs.edu).