



## **Understanding the impact of mild traumatic brain injury on Veteran service-connected disability: results from Chronic Effects of Neurotrauma Consortium**

### **Purpose**

To examine the association of VA service-connected disability (SCD) ratings with lifetime mTBI exposure in three models: any mTI, total mTBI number, and blast-related mTBI.

### **Participants**

A total of 492 participants who were Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn Veterans from four US VA Medical Centers were enrolled in the study between January 2015 and August 2016. Of those, 302 with mTBI exposure and 57 with no mTBI were available for analysis.

### **How was the study conducted?**

A modified version of the Ohio State University TBI identification screening instrument was used to identify any lifetime potential concussive event. Service-connected disability rating was obtained from medical records. Demographics, combat exposure, military history, alcohol and drug abuse, depression, posttraumatic stress disorder, and pre-injury health information was obtained. Data was analyzed using standard covariate-adjusted linear regression models, accounting for demographic, military, and health-related confounders and covariates.

### **Findings**

Lifetime mTBI was significantly associated with increase SCD (Unadjusted and adjusted results). This largest effect of this association was observed for blast-related mTBI. Every unit increase in mTBI was associated with a 3.6 point increase of percent SCD.

### **Military Impact**

Veterans and service members with mTBIs have significant disability as measured by VA SCD ratings.

*Dismuke-Greer, C. E., Nolen, T. L., Nowak, K., Hirsch, S., Pogoda, T. K., Agyemang, A. A., et al. (2018).*

*Understanding the impact of mild traumatic brain injury on veteran service-connected disability: Results from chronic effects of neurotrauma consortium. Brain Injury, , 1-10.*

*doi:10.1080/02699052.2018.1482428*