



US DEPARTMENT OF DEFENSE

# BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

## Risk Assessment and Surveillance

### Influence of the Severity and Location of Bodily Injuries on Post-concussive and Combat Stress Symptom Reporting after Military-related Concurrent Mild Traumatic Brain Injuries and Polytrauma

Sponsored by NICOE, DVBIC researchers examined the influence of location and severity of bodily injuries on symptom reporting after mTBI to assess how bodily injuries might be associated with TBI symptoms. Participants were US military Service Members who sustained an uncomplicated mTBI with concurrent bodily injuries and were evaluated at two military medical centers ( $n = 579$ ). Bodily injury severity was quantified using a modified Injury Severity Score (ISSmod). Participants completed the NSI and the PTSD Checklist-Civilian Version (PCL-C), on average, 2.5 months post-injury. There was a significant negative association between ISSmod scores and NSI and PCL-C total scores. Bodily injury severity was inversely related to TBI symptom reporting in this sample. Possible reasons for this include underreporting of symptoms, increased peer support, disruption of fear conditioning because of acute morphine use, or delayed expression of symptoms. These findings may help inform diagnostic procedures, particularly in individuals with significant bodily injury and delayed expression of TBI symptoms.