

# Association of mild traumatic brain injury with and without loss of consciousness with dementia in US military Veterans

### **Purpose**

To examine if mild traumatic brain injuries (mTBIs) that do not result in loss of consciousness (LOC) increase a veteran's chance of being diagnosed with dementia.

#### **Participants**

Researchers identified all veterans who had been diagnosed with TBI between the years of 2001 and 2014 and matched them with a comparison group who had not been diagnosed with TBI.

## How was the study conducted?

Severity of TBI was categorized as mild without LOC, mild with LOC, mild with LOC status unknown, moderate, or severe. Demographics and medical conditions were obtained from medical records. Data were statistically analyzed using Cox proportional models.

### **Findings**

Veterans with a TBI diagnosis were two to four times more likely to be diagnosed with dementia, even if the injury was mild and did not result in LOC.

# **Military Impact**

Veterans and service members with mTBIs without LOC have more than a two-fold increased risk of dementia diagnosis.

Barnes, D.E., Byers, A.L., Gardener, R.C., Seal, K.H., Boscardin, W.J., Yaffe, K. (2018). Association of mild traumatic brain injury with and without loss of consciousness with dementia in US military veterans.

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