



Key Points Summary

Pugh, M. J., Swan, A. A., Amuan, M. E., Eapen, B. C., Jaramillo, C. A., Delgado, R., Tate, D. F., Yaffe, K., & Wang, C. (2019). Deployment, suicide, and overdose among comorbidity phenotypes following mild traumatic brain injury: A retrospective cohort study from the Chronic Effects of Neurotrauma Consortium. *Plos One*, 14(9). doi:10.1371/journal.pone.0222674

Primary Question this Study Addresses

What are the longitudinal comorbidity phenotypes among Post-9/11 deployed Veterans with mild traumatic brain injury (mTBI) compared to those with no evidence of mTBI?

Study Findings That Add to Our Knowledge

There were 5 phenotypes identified among the mTBI and no mTBI cohorts. Moderately Healthy and Mental Health phenotypes were common to both. The Healthy phenotype was found only in the no brain injury cohort. Unique phenotypes in mTBI included Moderately Healthy+Decline, Polytrauma, and Polytrauma+Improvement.

The Polytrauma+Improvement phenotype had the lowest likelihood of adverse outcomes. There were no differences between Moderately Healthy+Decline and Polytrauma phenotypes.

How Study Evidence Might Be Used in Practice

Identifying risk factors for each of the phenotypes will help us better understand the early patterns of comorbidity that are associated with neurodegenerative sequelae following mTBI, and plan more patient-centered care.

This information may provide treating clinicians with optimal treatment plans for a specific patient's phenotype.

For more information, please visit:

 [Resource](#)

To access the study abstract, click here:

 [Abstract](#)

This work was supported by the Assistant Secretary of Defense for Health Affairs endorsed by the Department of Defense, through the Psychological Health/Traumatic Brain Injury Research Program Long-Term Impact of Military-Relevant Brain Injury Consortium (LIMBIC) Award/W81XWH-18-PH/TBIRP-LIMBIC under Awards No. W81XWH1920067 and W81XWH-13-2-0095, and by the U.S. Department of Veterans Affairs Awards No. I01 CX002097, I01 CX002096, I01 HX003155, I01 RX003444, I01 RX003443, I01 RX003442, I01 CX001135, I01 CX001246, I01 RX001774, I01 RX 001135, I01 RX 002076, I01 RX 001880, I01 RX 002172, I01 RX 002173, I01 RX 002171, I01 RX 002174, and I01 RX 002170.