

## Key Points Summary

Gottshall JL, Guedes VA, Pucci JU, Brooks D, Watson N, Sheth P, Gabriel A, Mithani S, Leete JJ, Lai C, Qu BX, Devoto C, Gill JM, Kenney K, Werner JK. Poor Sleep Quality is Linked to Elevated Extracellular Vesicle-Associated Inflammatory Cytokines in Warfighters With Chronic Mild Traumatic Brain Injuries. Front Pharmacol. 2022 Jan 27;12:762077. doi: 10.3389/fphar.2021.762077. PMID: 35153739.

## **Primary Question this Study Addresses**

Is sleep quality associated with inflammatory processes in warfighters with a history of mTBI?

## Study Findings That Add to Our Knowledge

In this exploratory study of 182 warfighters with and without a history of mTBI, self-reported sleep quality in the mTBI cohort was significantly associated with exosomal levels of inflammatory cytokines IL-10 and TNFa.

## How Study Evidence Might Be Used in Practice

Self-reported sleep quality in Warfighters with a history of TBI is associated with inflammatory processes. Larger prospective studies are needed to investigate mechanisms, directionality, and therapeutic implications of the sleep-inflammation relationship.

Nonetheless, clinicians treating Veterans with a history of TBI who report sleep issues should recommend best practice sleep interventions, which may also help regulate chronic inflammation.

For more information on managing sleep:



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. 101 CX002097, 101 CX002096, 101 HX003155, 101 HX003444, 1