

Risk Factors for Sleep Problems in U.S. Service Members

A summary of sleep-related projects by the Millennium Cohort Study

KEY POINTS

Poor sleep has negative effects on service member readiness. The Millennium Cohort Study research team has investigated the effects of sleep health over the last decade. Key study findings indicate that poor sleep and sleep disorders increase risks for chronic health conditions, mental health issues, and sleep medication usage.

Risk Factors

- Certain military-related factors (e.g., active component, Army or Marine Corps service, longer than average deployment lengths, and combat deployment) were associated with the new onset and reoccurrence of short sleep duration and/or insomnia symptoms¹
- Risk factors for new-onset insomnia included Army service, combat deployment experience, and separation from military service²
- Time-in-service and separation from the military had differing relationships with sleep duration and insomnia symptoms; they lowered risk for those with ≤ 5 h sleep but increased risk for insomnia symptoms¹

Impact

- Short sleep duration, insomnia, and obstructive sleep apnea (OSA) negatively impact service member readiness through multiple mechanisms such as impaired cognitive processing (brain fog) and slowed reaction times, worse physical health (e.g., type 2 diabetes, weight gain), and worse mental health (e.g., PTSD, anxiety, depression)
- More than half who screened positive for insomnia reported using sleep medication. Findings indicate that there may be an underlying issue related to the inability to obtain adequate sleep in certain populations, such as military personnel with combat experience and individuals who have recently separated from the military

IMPLICATIONS AND RECOMMENDATIONS

- Sleep interventions (e.g., relaxation methods, consistent bedtime routines, reducing stimulus before bedtime) may be useful during periods when service members have more liberty with their daily activities and sleep schedules (e.g., when stationed within the United States or deployed to non-combat zones)
- Given the importance of sleep hygiene for service member readiness, military leadership can identify opportunities to distribute sleep health best practices and help increase the importance of sleep prioritization within the military. In addition, assessments of sleep quality and quantity should be included as part of routine health screenings

1. Cooper AD, Kolaja CA, Markwald RR, Jacobson IG, Chinoy ED. Longitudinal associations of military-related factors on self-reported sleep among U.S. service members. *Sleep*. 2021 Jul 3;zsab168. Epub ahead of print. PMID: 34216467.

2. Markwald RR, Carey, FR, Kolaja CA, Jacobson IG, Cooper AD, Chinoy ED. Prevalence and predictors of insomnia and sleep medication use in a large tri-service U.S. military sample. *Sleep Health*, 2021, ISSN 2352-7218, <https://doi.org/10.1016/j.sleh.2021.08.002>.



Millennium Cohort Study
Protecting Service Member and Veteran Health



For more information regarding this research and other research being conducted by the Millennium Cohort Study, please visit us at www.millenniumcohort.org