

# CDP



## **Research Update – February 12, 2026**

### **What's Here:**

- Longitudinal Trends in Aeromedical Evacuations for Mental Health Disorders and Battle Injuries From Central Command Between 2001 and 2023.
- Moral injury prevention and intervention.
- Types of decorations, their social meaning and influence on moral injury: A mixed methods approach.
- Rates of potentially morally injurious events, combat, and lifetime traumas among Black/African American, White, Hispanic/Latino/a/e and non-Hispanic/Latino/a/e U.S. combat veterans.
- Impact of Demographic and Deployment Related Factors on Structured Inventory of Malingered Symptomatology Performance in Veterans and Service Members.
- Interpersonal and Trauma-Related Guilt moderate the relationship between intensity of combat experiences and suicidality.
- Associations among psychological health problems, intimate-relationship problems, and suicidal ideation among United States Air Force active-duty personnel.
- The possible effect of fentanyl on PTSD.
- Changes in suicidal ideation in a randomized clinical trial for trauma-related guilt in post 9/11 Iraq and Afghanistan veterans.

- Deployment-related toxic exposures, mental health problems, and suicide outcomes among Gulf War era U.S. veterans.
- Examining the efficacy of a digital therapeutic to prevent suicidal ideation and behaviors in a primary care setting: Design and methodology of a randomized controlled trial with military service members.
- Examining Suicide Crisis Syndrome as an Indirect Indicator of Suicide Risk in the Military Suicide Research Consortium's Common Data Elements.
- Latent class patterns of adverse childhood experiences and mental health among National Guard recruits.
- Treatment Responsivity in Service Members With PTSD and a History of Childhood Trauma and Combat
- A Systematic Review of Evidence-Based Prevention Approaches for Alcohol Problems with Viability for Military Implementation.
- A cross-sectional study of the association between sleep disturbance profiles, unmet mental health or substance use needs, and presenteeism among United States activity-duty service members using the 2018 health-related behaviours survey (HRBS).
- Patterns of Dual-Task Interference in Service Members With Mild Traumatic Brain Injury Using the Portable Warrior Test of Tactical Agility.
- Risk of Suicide Attempt in US Army Infantry, Combat Engineer, and Combat Medic Soldiers.
- Risk and Protective Factors Associated With Adjustment to Military Relocation: A Pilot Study.
- Moral, Religious, or Spiritual Problem: An Expanded Z Code Diagnostic Category in the DSM-5-TR.
- Links of Interest
- Resource of the Week: DoD Personnel, Workforce Reports & Publications

----

## **Longitudinal Trends in Aeromedical Evacuations for Mental Health Disorders and Battle Injuries From Central Command Between 2001 and 2023.**

Cowser, M. A., Gomes, K. D., Straud, C. L., Young-McCaughan, S., Raps, S. J., Gardner, C. L., & Peterson, A. L.

Military Medicine

Published: 24 October 2025

### **Introduction**

Aeromedical evacuations from the deployed combat theater for both physical (battle-related) and psychological injuries consume a great deal of US military resources. Aeromedical evacuations attributable to mental health disorders are often the leading cause of evacuations and need to be monitored and studied further for the development of future prevention and treatment strategies. Although there has been recognition of the increase in aeromedical evacuations due to mental health disorders over the past 2 decades, little attention has been dedicated to examining the longitudinal trend of mental health aeromedical evacuations as compared to those for battle injuries in consideration of medical planning for future conflicts.

### **Materials and Methods**

We conducted a retrospective descriptive epidemiological review analyzing selected publications in the Medical Surveillance Monthly Reports published by the Armed Forces Health Surveillance Division that reported counts of aeromedical evacuations for service members deployed to the Central Command (CENTCOM) area of responsibility between 2001 and 2023.

### **Results**

There was an overall decrease in the percentage of aeromedical evacuations out of CENTCOM for battle-related physical injuries between 2001 (11.0%) and 2023 (1.9%) corresponding to the decrease in active military conflict and the US withdrawal of forces from Iraq and Afghanistan. Conversely, there was an overall increase in the percentage of aeromedical evacuations out of CENTCOM related to mental health conditions between 2001 (6.0%) and 2023 (27.5%). The total number of aeromedical evacuations fluctuated across the surveillance period and the resulting impact on the percentages of those attributed to mental health conditions and battle injuries will be discussed.

## Conclusions

Battle injuries are the leading cause of aeromedical evacuations during times of active military conflict. During times of decreased military conflict, mental health conditions are often the leading cause of aeromedical evacuations. Mental health conditions have been the leading cause of aeromedical evacuations from CENTCOM since 2009 and as of 2023 account for 27.5% of aeromedical evacuations as compared to 1.9% for battle injuries. The increase in the percentage of mental health aeromedical evacuations highlights the importance of continued psychological screening and support for deployed active duty military personnel, with implications for the prevention and treatment of mental health disorders in medical planning for future conflicts.

---

<https://doi.org/10.1080/20008066.2025.2567721>

## **Moral injury prevention and intervention.**

Williamson, V., Kothari, R., Bonson, A., Campbell, G., Greenberg, N., Murphy, D., & Lamb, D.

European Journal of Psychotraumatology  
2025; 16(1)

### Background:

Those working in high-risk occupations may often face ethical dilemmas that violate their moral code which can lead to moral injury (MI). While research into the impact of MI is growing, evidence for effective treatment interventions and prevention approaches remains limited.

### Objective:

To review recent developments in treatment and prevention approaches for MI-related mental health difficulties.

### Method:

We synthesised emerging treatments, including trauma focused therapies and spiritual approaches, as well as possible prevention strategies.

### Results:

Conventional treatments for post-traumatic stress disorder (PTSD) (e.g. prolonged exposure) often inadequately address MI and may exacerbate symptoms. Adapted or

novel approaches, including Impact of Killing, Adaptive Disclosure, and Restore and Rebuild, show promise, particularly when co-produced with patients and clinicians. Spiritual interventions demonstrate mixed outcomes. Prevention research remains very limited but highlights the potential of systemic reforms, leadership fostering psychological safety, preparedness training, structured reflection, and peer support. Evidence remains constrained by small samples, military-focused populations, and inconsistent measurement of MI.

#### Conclusions:

While no gold-standard intervention exists, values-based and compassion-focused approaches appear promising. Prevention strategies targeting organisational culture and fostering preparedness are urgently needed, particularly for civilian and diverse occupational groups, to better support and protect those exposed to potentially morally injurious events.

#### HIGHLIGHTS

Moral injury (MI) occurs when potentially morally injurious events (PMIEs) violate an individual's moral code, leading to intense guilt, shame, and anger. Strongly associated with PTSD, depression, and suicidality, MI is increasingly recognised beyond military contexts, affecting first responders, healthcare, and media workers, with significant consequences for psychological wellbeing and occupational functioning.

Standard PTSD treatments often fail to address MI-specific symptoms and may worsen guilt or shame. Emerging approaches such as Adaptive Disclosure, Impact of Killing, and Restore and Rebuild show promise, especially when co-produced with patients. These therapies emphasise values-based behaviour, self-compassion, and moral repair, but evidence remains limited to small, predominantly military-focused studies.

Prevention research is extremely limited. Leadership that fosters psychological safety, preparedness training, structured reflection, and peer support may reduce risk of MI. Systemic reforms – such as improved working conditions and fairer workloads – are also recommended.

---

<https://doi.org/10.1371/journal.pone.0333344>

**Types of decorations, their social meaning and influence on moral injury: A mixed methods approach.**

Lathouwers, R., & Molendijk, T.

PLOS One

Published: October 27, 2025

Research on moral injury has thus far paid little attention to social factors and cultural elements. This study addresses this gap by examining the effects of one particular cultural artefact on moral injury that is typical of armed forces, (military) decorations, including awards and medals. Through a preregistered experiment involving two scenarios—omission of helping behavior and commission of mortar fire—resulting in civilian deaths, we manipulated the factors self-attribution versus attribution of blame to others/the system and the presence or absence of a decoration. Moreover, we conducted seven qualitative interviews. Contrary to our expectations, none of the experimental conditions within the scenarios yielded significant differences. However, the scenarios themselves differed significantly from each other, indicating that wrongful inaction may have a stronger effect on moral injury than wrongful action. The subsequent qualitative interviews (N = 7) revealed nuanced insights, suggesting that the effects of decorations on moral injury may vary. Cases were discerned in which military decorations demonstrated the potential to either alleviate or exacerbate moral injury. This dynamic depended on factors such as an individual's assessment of the justifiability of the act for which they received the decoration, and the perceived authenticity of the decoration's bestowal – whether it was experienced as a genuine acknowledgment or merely a superficial gesture. These findings indicate a possibly complex interplay of cultural artifacts and moral injury within military contexts.

---

<https://doi.org/10.1016/j.jpsychires.2025.10.029>

**Rates of potentially morally injurious events, combat, and lifetime traumas among Black/African American, White, Hispanic/Latino/a/e and non-Hispanic/Latino/a/e U.S. combat veterans.**

Harris, E., O'Brien, S. F., Kurz, A. S., Krauss, A., Roehl, L., & Wild, M. G.

Journal of Psychiatric Research

Volume 192, January 2026, Pages 59-68

## Highlights

- Black veterans reported slightly more moral injury events than White veterans.
- Hispanic veterans reported fewer moral injury events than non-Hispanic veterans.
- Black veterans endorsed slightly less combat exposure, compared to White veterans.
- Moral injury measures may not reflect the experiences of Black or Hispanic veterans.

## Abstract

### Objective

Potentially morally injurious events (PMIEs) involve transgressions of one's deeply held sense of right and wrong. Race-related stress may be a source of PMIEs, but no studies have investigated how PMIE exposures differ by racial or ethnic identity. This study explored variations in reported rates of PMIEs among Black/African American, White, Hispanic/Latino/a/e, and non-Hispanic/Latino/a/e United States post-9/11 combat veterans.

### Methods

Secondary data analysis were conducted using observational cohort data from a repository on post-deployment functioning among combat veterans ( $n = 487$ ). Participants completed two measures of PMIEs (Moral Injury Questionnaire – Military Version [MIQ-M], Currier et al., 2015; Moral Injury Events Scale [MIES], Nash et al., 2013) and measures of combat exposure and trauma exposure. Participants self-identified as White (57 %), Black or African American (31 %), Hispanic/Latino/a/e (20 %), and non-Hispanic/Latino/a/e (80.5 %). Racial/ethnic differences were analyzed at the item level using item response theory models.

### Results

All latent mean differences between racial and ethnic groups on the PMIE measures were small. The largest difference was between Black/African American and White veterans on the MIES ( $d = 0.38$ ) and the smallest difference was between Hispanic/Latino/a/e and non-Hispanic/Latino/a/e veterans on trauma exposure ( $d = -0.01$ ).

### Conclusions

Possible reasons for results include that: 1) between-group differences are negligible; 2) differences are greater within groups than between groups; 3) the MIES and MIQ-M do not assess race-based PMIEs. Future studies should use mixed methods to investigate

cultural processes operative in PMIEs with an emphasis on the perspectives of people from diverse racial and ethnic identities.

---

<https://doi.org/10.1093/arclin/acaf037>

## **Impact of Demographic and Deployment Related Factors on Structured Inventory of Malingered Symptomatology Performance in Veterans and Service Members.**

Troyanskaya, M., Abu-Suwa, H., Scheibel, R. S., & Pastorek, N. J.

Archives of Clinical Neuropsychology

Volume 40, Issue 7, October 2025, Pages 1366–1373

### **Background**

Screening for feigning and exaggeration in military populations is necessary for accurate interpretation of findings in clinical and research settings. The Structured Inventory of Malingered Symptomatology (SIMS) is a commonly used symptom validity measure, but little is known about the impact of non-clinical factors on its performance. The primary objective of this study was to examine relationships among demographic and deployment-related characteristics and SIMS performance in a cohort of veterans and reservists.

### **Methods**

One hundred and sixty-two participants with a history of combat deployment completed the SIMS and a measure of combat exposure. Demographic and deployment-related information was also collected. Multiple linear regression models were created to determine the impact of demographic and deployment-related factors on the SIMS total score and scale scores.

### **Results**

Higher SIMS total scores were associated with more severe combat exposure, being unemployed, being married or divorced as opposed to being single, and fewer years of education. Higher Neurological Impairment scale scores were associated with being unemployed, being married or divorced, fewer years of education, and older age. Furthermore, higher amnesic disorders scale scores were associated with more severe combat exposure and being unemployed, and higher affective disorders scale scores were associated with more severe combat exposure, fewer years of education, and older age.

## Discussion

Notable relationships between SIMS scores and several demographic and deployment-related factors were identified. This was the first study that examined relations of demographic and deployment factors and SIMS performance in a military population.

---

<https://doi.org/10.1080/08995605.2024.2413819>

## **Interpersonal and Trauma-Related Guilt moderate the relationship between intensity of combat experiences and suicidality.**

McCue, M. L., Allard, C. B., Dalenberg, C. J., & Hauson, A. O.

Military Psychology

Volume 37, 2025 - Issue 6

Suicide rates in military-affiliated communities remain elevated since the dawn of the Global War on Terror, despite substantial efforts by clinicians and researchers. While some risk factors have been identified, mixed results need to be clarified. The current study builds on previous research by testing a structural equation model of suicide risk associated with combat experiences that by incorporates risk factors with the most empirical support (combat experiences, guilt, PTSD, depression, and the Interpersonal Psychological Theory of Suicide [IPTS] factors of Perceived Burdensomeness, Thwarted Belongingness, Acquired Capability), using improved measures, in a more representative sample of Post-9/11 deployers. The models were evaluated separately for each of two different conceptualizations of guilt (trauma-related and interpersonal) as moderating factors. The results show that higher levels of guilt, whether trauma-related or interpersonal, strengthened the relationship between combat experiences and pathology. In contrast to previous studies, intensity of combat experiences was indirectly linked to suicidality through pathology and the IPTS constructs of Perceived Burdensomeness and Acquired Capability. The most prominent pathway to suicidal thoughts and behaviors in both guilt models traveled from combat experiences through PTSD and Perceived Burdensomeness, providing a clear target for clinical and organizational interventions.

---

<https://doi.org/10.1080/08995605.2024.2423110>

**Associations among psychological health problems, intimate-relationship problems, and suicidal ideation among United States Air Force active-duty personnel.**

Parsons, A. M., Slep, A. M. S., Heyman, R. E., Kim, S., Mitnick, D., Lorko, K., Gupta, A., Balderrama-Durbin, C., Cigrang, J. A., & Snyder, D. K.

Military Psychology  
Volume 37, 2025 - Issue 6

Linkages among psychological health problems, intimate relationship distress, and suicide risk have been widely studied, but less is known about how these factors interact, especially in military populations. With steady increases in suicide rates among active military and post-service members (SMs), it is critical to better understand the relation among known risk factors. The current study addresses this gap by testing a model hypothesizing that the association between intimate-relationship problems and suicidal ideation is mediated by individual mental health symptoms. We tested this model on a sample of 862 active-duty Air Force members in committed relationships. The sample consisted of 35.0% women and 64.8% men, with an average age of 21.9 years and a mean relationship length of 2.8 years. Findings supported the hypothesized statistical mediation model. Results indicated that relationship problems contribute to psychological health problems, which, in turn, are related to suicidal ideation. These findings may help direct suicide intervention and prevention protocols that consider intimate relationship distress as a significant risk factor. Limitations and further implications for policies regarding suicide prevention in the armed forces are discussed.

---

<https://doi.org/10.1016/j.pnpbp.2025.111519>

**The possible effect of fentanyl on PTSD.**

Weiss Schonberg, Y. O., & Peled-Avron, L.

Progress in Neuro-Psychopharmacology and Biological Psychiatry  
Volume 142, 2 October 2025, 111519

## Highlights

- Evidence on fentanyl's role in PTSD is limited and mainly observational.
- Morphine shows different pharmacokinetics and potential PTSD effects than fentanyl.
- Fentanyl, morphine, and ketamine differ in neurobiological and clinical impact.
- Mechanisms include vagus nerve, HPA axis, and neurotransmitter modulation.
- Research agenda suggested for exploring opioid use in PTSD treatment and prevention.

## Abstract

Post-traumatic stress disorder (PTSD) is a severe mental health disorder that appears as a result of trauma exposure and adversely affects the daily life and well-being of those who suffer from it. Major risk factors for PTSD include serving as a combat soldier and having traumatic and painful injuries. This review aims to investigate the possible beneficial effects of fentanyl on PTSD, and the possible theoretical mechanisms at the base of these effects. Fentanyl is a powerful analgesic from the opioid family that is often administered in cases of painful injuries, both as a prehospital battlefield treatment and at the hospital. Morphine, another opioid used for analgesia in similar situations, was shown to help both with the prevention and treatment of PTSD. Only a few studies examine the direct influence of fentanyl on PTSD, but there is evidence that indirectly suggests that fentanyl can treat or prevent PTSD via three mediating factors. In this review we suggest three possible hypotheses. In one possible route, the influence of fentanyl on PTSD is mediated by pain relief. Fentanyl was found to effectively reduce pain, and a positive correlation between pain level and PTSD severity was also found. The second route suggests that fentanyl's influence on PTSD is mediated by the activity of the vagus nerve. There is evidence that fentanyl administration results in vagal activity and that the activation of the vagus nerve reduces PTSD levels. A third possible route may be through fentanyl's activation of opioid receptors in limbic region which were found to have protective effects against PTSD. Future research of fentanyl's role in PTSD prevention and treatment is essential, and should account for pre-existing mental health struggles, TBI, delirium, and injury severity.

----

<https://doi.org/10.1016/j.jpsychires.2025.09.042>

**Changes in suicidal ideation in a randomized clinical trial for trauma-related guilt in post 9/11 Iraq and Afghanistan veterans.**

Lyons, R., Klein, A. B., Haller, M., Panza, K. E., McCue, M. L., Saraiya, T. C., Lang, A. J., Schnurr, P. P., Allard, C. B., Capone, C., & Norman, S. B.

Journal of Psychiatric Research

Volume 191, November 2025, Pages 463-469

## Introduction

Trauma-related guilt is associated with suicidality among veterans. Limited research has examined if addressing trauma-related guilt in treatment decreases suicidal ideation (SI). Investigating pathways for reducing risk factors for suicide is crucial given the high rates of veteran suicide.

## Method

U.S. combat veterans (N = 145) deployed in service of post-9/11 conflicts enrolled and randomized in a randomized controlled trial comparing Trauma Informed Guilt Reduction Therapy (TriGR) with Supportive Care Therapy (SCT). This study included a subset of participants endorsing trauma-related guilt and SI at baseline (N = 73; mean age = 39, 93.2 % male). Veterans completed semi-structured interviews of suicidal thoughts and behaviors (Columbia Suicide Severity Rating Scale; C-SSRS) and a self-report measure of trauma-related guilt (Trauma Related Guilt Inventory; TRGI) at baseline, posttreatment, 3- and 6-month follow-ups. Two outcome variables were examined: SI intensity (i.e., wish to be dead to active suicidal ideation with specific plan and intent) and severity (i.e., frequency, duration, controllability, deterrents, and reasons for ideation). Linear mixed models tested whether: 1) SI intensity and severity changed significantly over time across both treatments and 2) there was a significant treatment effect on SI intensity and severity.

## Results

SI intensity ( $b = -1.17$ ,  $p < 0.001$ ) and severity ( $b = -0.35$ ,  $p < 0.001$ ) decreased over time in both conditions; however, significant differences between treatments were not observed.

## Conclusions

Supportive therapy and therapy targeting trauma-related guilt were associated with decreased SI among treatment-seeking veterans presenting with SI. Findings suggest that brief interventions can reduce SI.

----

<https://doi.org/10.1016/j.jpsychires.2025.09.036>

**Deployment-related toxic exposures, mental health problems, and suicide outcomes among Gulf War era U.S. veterans.**

Patel, T. A., Bourassa, K. J., Calhoun, P. S., Beckham, J. C., Pugh, M. J., & Kimbrel, N. A.

Journal of Psychiatric Research  
Volume 191, November 2025, Pages 402-408

Exposure to toxins, such as pesticides, smoke from burning oil fields, and nerve gas, during military operations have been linked to poor physical health among veterans. However, less is known about how these exposures may affect mental health outcomes, especially those relevant to military populations (e.g., posttraumatic stress disorder [PTSD], depression, alcohol use disorder, suicide). The goal of the present study was to examine how any toxic exposure and total toxic exposures were associated with probable current diagnoses of PTSD, major depressive disorder, and alcohol use disorder as well as lifetime history of suicidal ideation and suicide attempts among a large national sample of Gulf War-Era veterans ( $N = 1153$ ). Notably, when covarying for demographic factors, any toxic exposure was associated with increased odds of probable PTSD ( $AOR = 2.66$ ), probable depression ( $AOR = 1.92$ ), and suicidal ideation ( $AOR = 1.75$ ), but these associations, except for suicidal ideation ( $AOR = 1.50$ ), were no longer present once accounting for military covariates (i.e., combat exposure and Gulf War illness). Further, higher total number of deployment-related toxic exposures were associated with increased odds of meeting criteria for probable PTSD ( $AOR = 1.83$ ), probable depression ( $AOR = 1.28$ ), probable alcohol use disorder ( $AOR = 1.22$ ), and of reporting suicidal ideation ( $AOR = 1.22$ ), even after accounting for both demographic and military covariates. Our findings suggest that self-reported toxic exposures are uniquely related to worse mental health problems after military service.

---

<https://doi.org/10.1016/j.cct.2025.108107>

**Examining the efficacy of a digital therapeutic to prevent suicidal ideation and behaviors in a primary care setting: Design and methodology of a randomized controlled trial with military service members.**

Rudd, M. D., Wine, M., Pedler, R., Wright, M., Gleason, V. L., Pérez-Muñoz, A., Tuna, B., Tempchin, J., Flowers, T. A., & Bryan, C. J.

Contemporary Clinical Trials

Volume 158, November 2025, 108107

Suicide is a leading cause of death among active-duty military personnel. Although specialty mental health services are readily available, primary care clinics represent the most frequently accessed clinical setting immediately preceding suicide deaths and suicide attempts among service members. Primary care clinics offer a critical and unique opportunity to implement interventions targeting suicide prevention. Effective engagement and response to servicemembers with elevated suicide risk requires scalable alternatives to traditional mental health care. The central focus of this study is to test the efficacy of Aviva, a scalable, digital adaptation of Brief Cognitive Behavioral Therapy for Suicide Prevention in three primary care clinics with active-duty military servicemembers in comparison to treatment as usual. This paper describes the design, methodology, and protocol of an active randomized controlled trial comparing Aviva to treatment as usual. The impact on subsequent suicidal ideation and behaviors during a year-long follow-up period will be evaluated. Clinical Trial Registration: [NCT06318962](https://doi.org/10.1080/13811118.2024.2434745)

----

<https://doi.org/10.1080/13811118.2024.2434745>

### **Examining Suicide Crisis Syndrome as an Indirect Indicator of Suicide Risk in the Military Suicide Research Consortium's Common Data Elements.**

Rogers, M. L., Richards, J. A., Peterkin, D., & Galynker, I.

Archives of Suicide Research

Volume 29, 2025 - Issue 4

#### **Objective**

The Suicide Crisis Syndrome (SCS) has accumulated support as an indicator of suicide risk in patient settings; however, it has not been evaluated in military/veteran populations. The present study tested the factorial structure, measurement invariance, latent mean differences, and incremental validity of a SCS proxy variable developed from the Military Suicide Research Consortium's (MSRC) Common Data Elements (CDE).

## Method

A secondary data analysis of 6,556 adults (40.5% current service members, 27.0% veterans, 26.6% civilians) who participated in MSRC-funded studies was conducted. CDE items were selected to form a SCS proxy, which was tested in subsequent analyses.

## Results

A bifactor model exhibited superior model fit to alternative configurations. This model was partially invariant across those with differing histories of suicide and military service. Individuals with a history of suicidal ideation or attempts had more severe SCS symptoms than those without such history, and the SCS factor was incrementally related to lifetime suicide attempts and their characteristics above other relevant factors.

## Conclusions

These findings provide evidence for the generalizability of the SCS to military service member and veteran populations, as well as the potential utility of proxy measures as an assessment tool in settings in which lengthy measures may be prohibitive.

---

<https://doi.org/10.1016/j.chiabu.2025.107671>

## **Latent class patterns of adverse childhood experiences and mental health among National Guard recruits.**

Flowers, T. A., Campbell, E. H., Noorbaloochi, S., & Polusny, M. A.

Child Abuse & Neglect

Volume 169, Part 2, November 2025, 107671

## Background

Most studies have relied on a cumulative risk approach when examining adverse childhood experiences (ACEs). This approach assumes equal weighting of adversities and fails to consider how the nature, severity, and combination of ACEs may differentially impact outcomes.

## Objective

Employing a person-centered approach, we identified distinct patterns of ACEs in a sample of Army National Guard recruits and investigated how these patterns relate to

internalizing symptoms (i.e., self-reported mental health) and externalizing problems (i.e., substance use and rule-breaking behaviors).

#### Participants and setting

Participants were 1201 Army National Guard recruits from the Advancing Research on Mechanisms of Resilience (ARMOR) study.

#### Methods

Latent class analysis (LCA) was performed to identify distinct latent classes of recruits with similar ACEs patterns. Associations between classes and mental health and behavioral outcomes of interest were examined using the Bolck-Croon-Hagenaars (BCH) method.

#### Results

LCA revealed four latent classes of ACEs: (1) low adversity (51.1 %), (2) emotional and physical maltreatment (18.3 %), (3) poly-adversity (16.1 %), and (4) parental separation (14.5 %). There were no significant interclass differences found in internalizing symptoms or substance use. However, the emotional/physical maltreatment and low adversity classes showed significantly higher counts of rule-breaking behaviors than the other classes.

#### Conclusions

Findings suggest recruits enter military service reporting distinct patterns of ACEs, which are differentially associated with rule-breaking behaviors but not mental health outcomes or substance use.

---

<https://doi.org/10.1093/milmed/usaf306>

#### **Treatment Responsivity in Service Members With PTSD and a History of Childhood Trauma and Combat.**

Maria A Morgan, PhD, MPS , Derek J Smolenski, PhD, MPH , Kiriana Cowansage, PhD, Marija Spanovic Kelber, PhD , Bradley E Belsher, PhD , Daniel P Evatt, PhD

Military Medicine

Volume 191, Issue 1-2, January/February 2026, Pages e62–e69

## Introduction

Adverse childhood experiences (ACEs) and combat exposure are risk factors for developing posttraumatic stress disorder (PTSD) in adulthood. Higher proportions of military service members (SMs) self-report ACEs than do civilians. Combat exposure subsequent to ACEs has been found to predict PTSD severity beyond the expected effect of combat exposure alone. Adverse childhood experiences appear to impede responsiveness to treatment of mood disorders; less is known about their impact on responsiveness to treatment of PTSD, including following combat exposure. The current study examined whether SMs receiving treatment for self-reported PTSD differed in symptom severity trajectories based on their childhood sexual and/or physical abuse and combat exposure histories.

## Materials and Methods

We conducted a secondary analysis of data from a randomized clinical trial (RCT) that evaluated the effectiveness of collaborative primary care programs for treating SMs with self-reported PTSD (N = 561). Patients completed PTSD, depression, and somatic symptom assessments over 12 months. We used latent growth-curve models to measure symptom trajectories based on childhood sexual and/or physical abuse (ACE status) and combat exposure status. The original RCT was approved by multiple institutional research review boards.

## Results

Of 561 patients who screened positive for probable PTSD, 47.2% reported exposure to ACEs and 69.0% to combat; 30.7% of patients reported exposure to both. On average, participants had reductions in PTSD, depression, and somatic symptoms by 12 months ( $d = -0.59$ ,  $-0.66$ , and  $-0.34$ , respectively). We did not find evidence for effect measure modification between ACE and combat exposure for any of the 3 outcome models. The decreases in PTSD and depression did not appreciably differ as a function of ACE or combat exposure. There was weak evidence that combat-exposed individuals had a smaller decrease in depression symptoms and ACE-exposed individuals had a larger decrease in somatic symptoms by 12 months compared to their nonexposed counterparts.

## Conclusions

There was only weak evidence of an association between ACEs or combat exposure, alone or in combination, on the symptom improvement shown by SMs with self-reported PTSD. This suggests that SMs with ACEs can benefit from PTSD treatment managed through collaborative primary care to a similar extent as SMs without ACEs. Further research is needed to determine which characteristics of the childhood trauma, adult

trauma, patient population, and trauma-focused therapy interact to best predict responsivity to treatment in SMs with PTSD.

---

<https://doi.org/10.1093/milmed/usaf182>

## **A Systematic Review of Evidence-Based Prevention Approaches for Alcohol Problems with Viability for Military Implementation.**

Piscitello, J., Heyman, R. E., Smith Slep, A. M., & Hogan, J. N.

Military Medicine

Volume 190, Issue 11-12, November/December 2025, Pages e2328–e2338

### **Introduction:**

Hazardous alcohol use in the military exceeds that of the general population and is associated with a host of negative personal, health, social, emotional, and occupational consequences. Prevention is a cost-effective way to reduce problematic drinking. Despite numerous reviews and meta-analyses synthesizing the literature on prevention programs targeting civilians, there is a dearth of such resources specifically targeting active duty service members and other military personnel. The purpose of this systematic review was to summarize existing evidence-based prevention programs that have documented success in reducing the onset of alcohol problems in young adults, emphasizing programs that may be implementable in the U.S. military.

### **Materials and methods:**

We identified alcohol prevention programs through two methods: we conducted (1) a meta-review of evidence-based prevention programs in clearinghouses and (2) a systematic review of alcohol-prevention evaluations in military settings.

### **Results:**

Integrated results review 6 prevention programs that were identified as a good fit based on inclusion criteria (i.e., universal or selective prevention, administrable to individuals or small groups) with sufficient support for effectiveness. All included programs demonstrate research supporting their application in either active duty or veteran populations.

### **Conclusions:**

This review adds to the literature by synthesizing the current evidence-based prevention

programs targeting the onset of alcohol problems, with an emphasis on those programs that have strong potential for successful implementation among military populations. Specific recommendations and considerations for implementation are provided.

---

<https://doi.org/10.1111/jsr.14477>

**A cross-sectional study of the association between sleep disturbance profiles, unmet mental health or substance use needs, and presenteeism among United States activity-duty service members using the 2018 health-related behaviours survey (HRBS).**

Russell, T. L., Singer, D. E., Werner, J. K., Jr, Mancuso, J. D., & Ahmed, A. E.

Inadequate sleep, unmet mental health or substance use needs (unmet needs), and presenteeism are prevalent among military populations. This study aimed to cross-sectionally determine the association between sleep disturbance profiles, unmet needs, and presenteeism in US active-duty service members, both separately and combined. Data were collected from the 2018 Health-Related Behaviours Survey. The response rate was 9.6%. Presenteeism was collected as the number of days (0-30) then collapsed for analysis. Latent class analysis (LCA) was used to classify service members into sleep disturbance profiles. Odds ratios and confidence intervals (CIs) were estimated by binary and ordinal logistic models. Approximately 21% of the 17,166 service members reported at least one presentee day (95% CI: 19.8%-21.8%). Persistent presenteeism was 13.6% (95% CI: 12.7-14.4%). Four sleep disturbance profiles were identified by LCA: (1) high sleep disturbance (reported in 22.5%), (2) short sleep duration (26%), (3) trouble sleeping (6.9%), and (4) none to slight sleep disturbance (reference, 44.6%). Female sex, being separated/divorced/widowed, short sleep duration, trouble sleeping, high sleep disturbance, unmet needs, and both unmet needs and inadequate sleep together were associated with higher odds of high presenteeism levels and persistent presenteeism. Bachelor's or higher educated, 25-34-year-old, Hispanic/Latinx, Officer, Air Force, and Coast Guard service members were associated with lower odds of high presenteeism levels and persistent presenteeism. Despite the decreasing trends between 2015 and 2018, the high prevalence of presenteeism presents a significant burden on work productivity and readiness that behavioural modification may alter.

---

## **Patterns of Dual-Task Interference in Service Members With Mild Traumatic Brain Injury Using the Portable Warrior Test of Tactical Agility.**

Ramsey, C. R., Harrison, C. H., Gangwani, R. R., & McCulloch, K. L.

Military Medicine

Volume 190, Issue 11-12, November/December 2025, Pages e2505–e2512

### **Introduction**

Return-to-duty assessment for service members (SM) following mild traumatic brain injury (mTBI) combining motor and cognitive skills in dual task (DT) scenarios may better approximate the demands of active duty service. The Portable Warrior Test of Tactical Agility (POWAR-TOTAL) is a valid mTBI assessment tool which incorporates DT assessment.

### **Materials and Methods**

Forty-six SM diagnosed with mTBI and 59 healthy control (HC) SM performed the POWAR-TOTAL. Group differences in relative DT effect were categorized based on performance trade-offs and prioritizations. A paired-sample t-test was performed to examine the relationship between the motor and cognitive relative DT scores for SM with mTBI and HC. Cognitive and motor performance of the mTBI group pre- and post-intervention were compared to the HCs values using an independent t-test. Average pre- and post-intervention relative DT effects were charted on a polar plot.

### **Results**

Although cognitive and motor performance differed between the HC and pre-intervention groups, relative DT effects (% change normalized by SM baseline performance) were not significantly different. Relative DT for the pre- and post-intervention mTBI group also were not significantly different. HC group and post-intervention group differences were non-significant, suggesting improvement in performance after therapy. Patterns of interference between the groups differed at mTBI pre-intervention, but were similar at post-intervention.

### **Conclusion**

Service members prioritized motor performance over cognitive performance, with relative dual-task costs that were small and similar in both groups. Cognitive accuracy changes over multiple trials could be minimized by an improved testing protocol. Since simple single and dual-task measures of cognitive and motor performance captured

significant group differences, the calculation of POWAR-TOTAL dual-task effects does not appear to provide critical information for test interpretation.

---

<https://doi.org/10.1093/milmed/usaf232>

## **Risk of Suicide Attempt in US Army Infantry, Combat Engineer, and Combat Medic Soldiers.**

Military Medicine

Volume 190, Issue 11-12, November/December 2025, Pages e2489–e2498

### **Introduction**

Understanding the relationship of military occupational specialties (MOSs) to suicide attempt (SA) among US Army soldiers, and the patterns of these associations over time, can identify periods of increased risk and inform prevention and treatment efforts. The current study aimed to identify SA risk and sociodemographic and service-related risk factors for SA among infantry, combat engineers, and combat medics, soldiers identified in previous research to have elevated suicidal behavior rates relative to soldiers in other MOSs. This examination also builds on previous work (2004-2009) by including women, who were integrated into previously closed combat arms billets in 2016.

### **Materials and Methods**

This longitudinal, retrospective case-control study of administrative person-month records from Regular Army enlisted soldiers on active duty from 2016 through 2019 identified all first SAs ( $n=1,393$  person-months) among only soldiers in each of 3 MOS categories (infantry, combat engineer, combat medic), stratifying soldiers in these mutually exclusive MOS groups. Our study also included independent equal-probability control subsamples for each of the 3 groups, totaling 17,317 control person-months. Logistic regression models examined sociodemographic and service-related time-varying risk factors of SA among each of the MOS groups. Discrete-time survival models with person-month as the unit of analysis estimated MOS-specific SA risk by time in service. Analysis of the deidentified data was approved by Institutional Review Boards of the Uniformed Services University of the Health Sciences, University of Michigan Institute for Social Research, University of California San Diego, and Harvard Medical School.

## Results

The sample was primarily male (94.3%), White (66.1%), and in their first 4 years of service (65.6%). In all, 813 infantry soldiers (yearly rate: 353.1/100,000 soldiers), 214 combat engineers (rate: 566.3/100,000), and 366 combat medics (rate: 524.2/100,000) attempted suicide. In separate multivariable models, odds of SA in all 3 MOSs were higher among soldiers who were women, had less than a high school education, and had less time in service, with those who had less than 1 year of service at particularly elevated risk. Among infantry and combat medics, SA risk was higher among those who had never deployed. Timing of greatest SA risk during the first year of service differed by MOS: months 9-12 among infantry; months 1-3 among combat engineers; and months 6-9 among combat medics. SA rates among combat medics remained uniquely elevated over the first 4 years of service.

## Conclusions

Risk factors for SA were similar across the 3 MOS categories. However, the timing of highest risk in the first year differed by MOS. Findings highlight the importance of MOS-specific risk factors and timing in identifying important stressors and targeting interventions.

---

<https://doi.org/10.1093/milmed/usaf142>

## **Risk and Protective Factors Associated With Adjustment to Military Relocation: A Pilot Study.**

Thomas H Nassif, MSC USA , Thomas W Britt, PhD , Amy B Adler, PhD

Military Medicine

Volume 191, Issue 1-2, January/February 2026, Pages e33–e38

## Introduction

Military relocations represent an opportunity for growth and a potential risk in terms of psychological adjustment. Although relocation is common in the military, little research has examined associated risk and protective factors. This study examined relocation stressors and facilitators and how they related to 3 forms of adjustment: loneliness, perceived stress, and work satisfaction. Since the first relocation experience may be particularly challenging, this study also compared relocation stressors and facilitators between soldiers arriving at their first duty station and those with previous relocation experience.

## Materials and Methods

Active duty soldiers ( $n = 242$ ) at 2 U.S. military installations participated in an anonymous survey on military relocation. Relocation risk and protective factors were assessed using the Relocation Stressor Scale and the Relocation Facilitator Scale developed for this study. Primary outcomes included loneliness, perceived stress, and work satisfaction. To examine the extent to which the relocation stressor and facilitator scales predicted adjustment outcomes, hierarchical multiple regressions were conducted accounting for rank, marital status, having children, and first duty station.

## Results

Over half of participants rated relocation stressors related to affordable housing, loss of social support, moving logistics, and adjustment of the soldier's family and spouse as at least "somewhat stressful." Regarding relocation facilitators, a majority agreed that leaders and unit members were helpful after relocation. However, less than half reported that leaders and unit members were welcoming before relocation and only 1 in 3 reported their sponsor was helpful. Relocation stressors predicted more loneliness, more perceived stress, and less work satisfaction after adjusting for rank, marital status, having children, and first duty station. Likewise, relocation facilitators predicted less loneliness, less perceived stress, and more work satisfaction, after adjusting for the same demographics. Soldiers at their first duty station of assignment also reported higher levels of relocation stressors than those with prior relocation experience ( $P < .001$ ); there was no difference between these 2 groups in terms of relocation facilitators ( $P = .297$ ).

## Discussion

The findings offer insight into relocation stressors and facilitators and suggest the need to consider the stress of relocation from both a practical standpoint and an emotional one. Since the association between relocation variables and adjustment was evident even after accounting for rank, marital status, children, and first duty station, the results also suggest that intervening to address relocation stressors and enhance the level of relocation facilitators is important regardless of a soldier's specific demographics. Nonetheless, soldiers experiencing their first relocation may understandably require more support in addressing their relocation stressors. While limited by cross-sectional self-report data from only 2 military posts, this study produced the first military Relocation Stressor Scale and Relocation Facilitator Scale. Taken together, results suggest steps that leaders, unit members, and the organization can take to help incoming soldiers better adjust to their new unit.

<https://doi.org/10.1097/NMD.0000000000001856>

## **Moral, Religious, or Spiritual Problem: An Expanded Z Code Diagnostic Category in the DSM-5-TR.**

Mattson, S., VanderWeele, T. J., Lu, F., Carey, L. B., Cowden, R. G., Fung, E. N., Koenig, H. G., Peteet, J., & Wortham, J.

Journal of Nervous and Mental Disease  
213(11): p 297-304, November 2025

### **Introduction:**

The DSM has made advances in helping clinicians address cultural factors important in psychiatric care, including the acknowledgement of religious and spiritual problems that impact a patient's mental health. However, moral problems have been under-recognized as a culturally contextualized source of negative consequences for occupational, social, and other areas of functioning.

### **Methods:**

To recognize the clinical significance of moral problems, an expanded DSM Z-code diagnostic category entitled "Moral, Religious, or Spiritual Problem" was recently approved.

### **Results:**

In light of this development, this paper reviews the conceptual and empirical connections with regard to moral, religious, and spiritual problems. A definition of moral problems is presented in relationship to transgressions of an individual's moral identity, which may include moral dilemmas, moral distress, and moral injury.

### **Conclusions:**

Various differential diagnostic issues are raised related to this expanded Z-code, as well as potential implications for clinical practice, public health, and future research.

---

## Links of Interest

Practically Speaking: It's Not the Principal's Office! The ABCs of EAPs (podcast)  
<https://deploymentpsych.org/blog/practically-speaking-its-not-principals-office-abc-eaps>

Staff Perspective: Micro-Resilience – Small Daily Habits That Strengthen Mental Wellness  
<https://deploymentpsych.org/blog/staff-perspective-micro-resilience-%E2%80%93-small-daily-habits-strengthen-mental-wellness>

Beer and wine at chow halls of the future? Commanders will decide  
<https://www.militarytimes.com/pay-benefits/mil-money/2026/02/10/beer-and-wine-at-chow-halls-of-the-future-commanders-will-decide/>

Where the military stands in mandate for free Wi-Fi in enlisted housing  
<https://www.stripes.com/theaters/us/2026-02-09/military-mandate-free-wi-fi-troops-20680964.html>

Research on problem gambling included in defense funding law  
<https://www.defensenews.com/pentagon/2026/02/06/research-on-problem-gambling-included-in-defense-funding-law/>

Leading the Transformation: USU Faculty and Students Chart the Path for AI in Military Medicine  
<https://news.usuhs.edu/2026/02/leading-transformation-usu-faculty-and.html>

---

## Resource of the Week: [DoD Personnel, Workforce Reports & Publications](#)

From the Defense Manpower Data Center (DMDC):

DMDC maintains a DoD Personnel, Workforce Reports & Publications site. Users of this site may view and print DoD Personnel and U.S. Military casualty statistics, as well as, historical DoD procurement reports and data files.

[Military Personnel](#) ▶

[Civilian Personnel](#) ▶

[Historical Publications](#) ▶

[Glossary of DoD Work Force Terms for Historical Publications](#) ▶

---

Shirl Kennedy  
Research Editor  
HJF employee collaborating with Center for Deployment Psychology  
DoW and Uniformed Service Contractor  
Phone: (727) 537-6160  
Email: [shirley.kennedy.ctr@usuhs.edu](mailto:shirley.kennedy.ctr@usuhs.edu)



Henry M. Jackson Foundation for the Advancement of Military Medicine