



Mental Health

Veteran suicide remains a critical public health concern.^{1,2} In 2023, approximately 6400 veterans died from suicide.¹ About half of these veterans had previously reported pain and sleep-related issues.¹ A recent study identified access to firearms as a clear risk factor for suicide, while other factors — including high rates of adverse childhood experiences and moral injury — were linked to increased suicidal ideation and behaviors.²⁻⁴

PTSD, depression, alcohol use disorder (AUD), bulimia nervosa, and binge eating disorder are common mental health conditions among veterans.⁵⁻⁸ Psychosocial factors, including loneliness, drive higher PTSD prevalence in younger veterans, while modifiable social needs, such as housing stability, affect mental health outcomes.^{5,9}



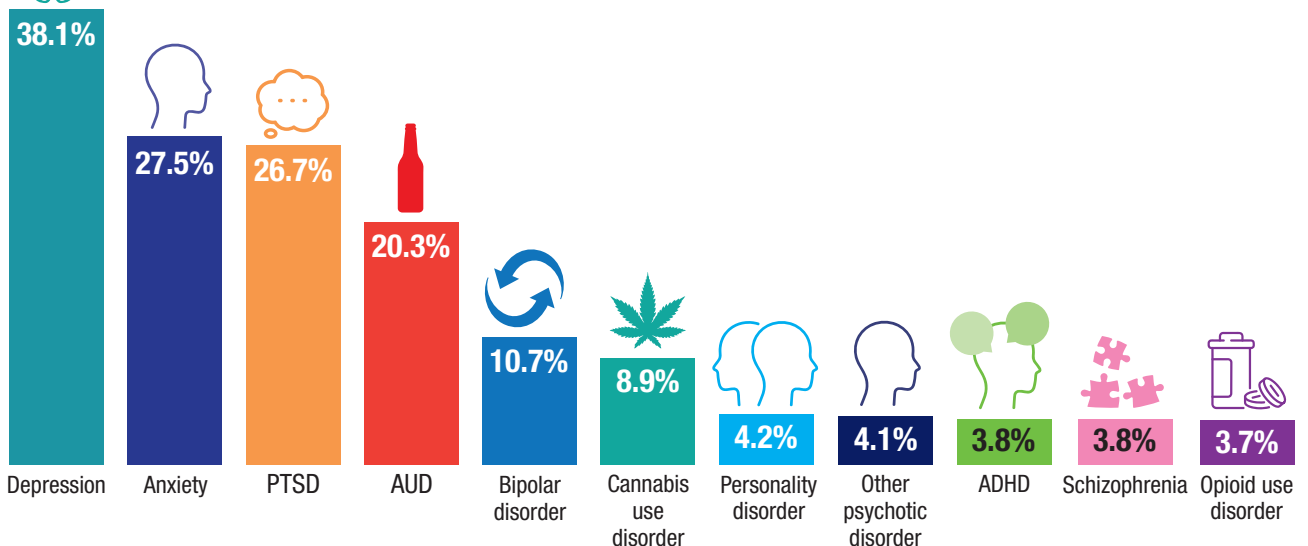
If you or someone you know is having thoughts of suicide, **call or text 988 to reach out to the National Suicide Prevention Lifeline, or contact the Veterans Crisis Line:** www.veteranscrisisline.net.



Veteran Suicide Statistics for 2023¹



Prevalence of Mental Health Diagnoses in 2023



Comprehensive Suicide Risk Evaluation in the VHA^{1,2}



A study of over 260,000 comprehensive suicide risk evaluation (CSRE) reports from more than 150,000 VHA patients compared responses to mortality data. CSREs included questions about suicidal ideation and behavior, warning signs, and risk factors, and are typically administered only to high-risk veterans. Because of this selection bias, suicide rate data from this group may far exceed the overall veteran suicide rate of 33.9 to 35.2 per 100,000.

Displayed as hazard ratios



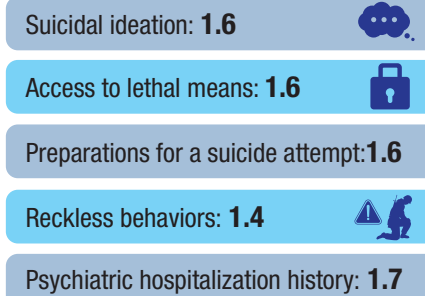
Risk Factors for Acute Suicide

Defined as within 30 days of CSRE



Risk Factors for Chronic Suicide

Defined as within 365 days of CSRE



Factors such as anger, prior trauma, and recent transition from military service showed an inverse association with suicide risk, which is inconsistent with previous data. These results could may have been influenced by treatment received after the CSRE.

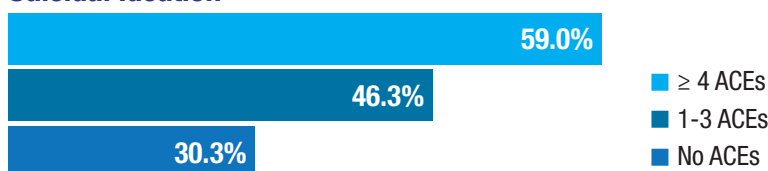
Adverse Childhood Experiences and Suicide³



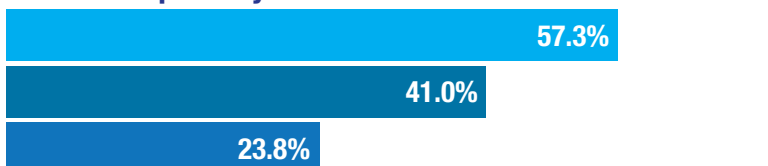
The relationship between adverse childhood experiences (ACEs) and suicidal ideation and behaviors was analyzed among over 3500 veterans who completed ACE screens from 2018 to 2023. ACEs were determined through the Adverse Childhood Experience Scale, while suicidal ideations and behaviors were measured by the Columbia Suicide Severity Rating Scale.

Proportion of participants with ideation or behavior

Suicidal Ideation



Suicidal Preparatory Behaviors



Veterans with higher ACEs scores were...

13% more likely to have suicidal ideation in the past 5 years

18% more likely to engage in lifetime suicide preparatory behaviors



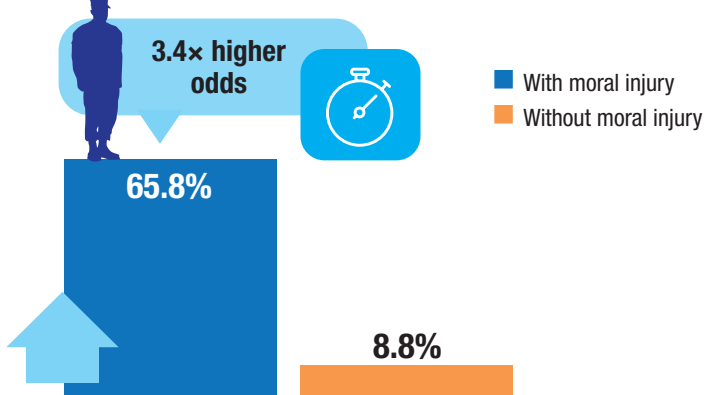
Despite the demonstrated link between ACEs and suicidal ideation and behaviors, few VHA clinics conduct ACE screens, with 32.4% of all ACE screens in this study being administered at one outpatient clinic. The most commonly reported ACEs in veterans were separation from a parent, emotional abuse, living with a problem drinker, and physical abuse.

Moral Injury and Suicidality⁴

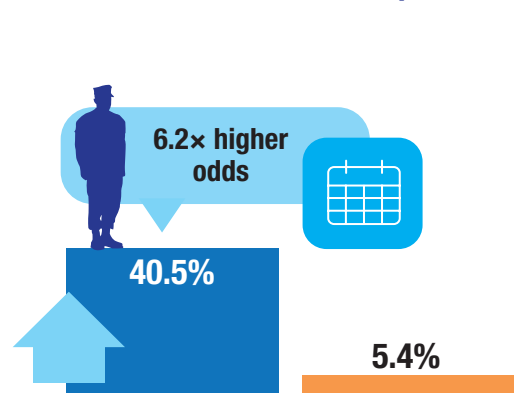


Moral injury is the psychological distress that can result from being involved in, witnessing, or failing to prevent a situation that violates one's core moral beliefs (eg, inadvertent civilian harm) and can be marked by intense guilt and shame, withdrawal, and self-sabotaging behaviors. A recent study using 2021 data assessed the relationship between moral injury and suicidal thoughts and behaviors in approximately 1200 US military veterans, healthcare workers, and first responders. The study controlled for common mental health contributors to suicidality.

Current Suicidal Ideation



Lifetime Suicide Attempt



The Moral Injury and Distress Scale was used to assess moral injury. Suicidal ideation was assessed by specific items in the Patient Health Questionnaire, while suicidal behavior was assessed based on number of lifetime suicide attempts.

VHA Telehealth CBT Program for Suicide Prevention¹⁰



Using EHR data from April 2021 to September 2023, researchers analyzed outcomes for more than 2700 veterans who received telehealth Cognitive Behavioral Therapy (CBT) for Suicide Prevention (SP). Veterans were eligible if they engaged in suicidal self-directed violence in the past 12 months. CBT-SP typically consists of 12 to 14 sessions. Patients were treated in all 50 states.

Average Attendance

8.5 sessions

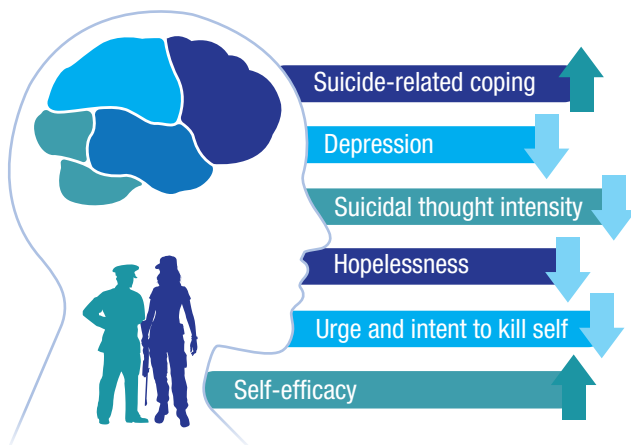
Average Wait Time: Intake to First Session

24.1
days

Average Time in Program

96.2
days

Improvements in Suicide-Related Outcomes



Post-Treatment Outcomes



Factors Related to Higher PTSD Prevalence in Younger Veterans⁵



Using a sample of more than 4000 veterans from the National Health and Resilience in Veterans Study, researchers examined sociodemographic, psychosocial, and trauma-specific factors that may affect higher PTSD prevalence in older vs younger veterans. Psychosocial characteristics encompassed difficulties (in work, relationships, or daily activities), loneliness, and avoidance coping, while trauma characteristics included military sexual trauma (MST), combat exposure severity, and adverse childhood experiences.

Positive Screen for PTSD



Aged < 50



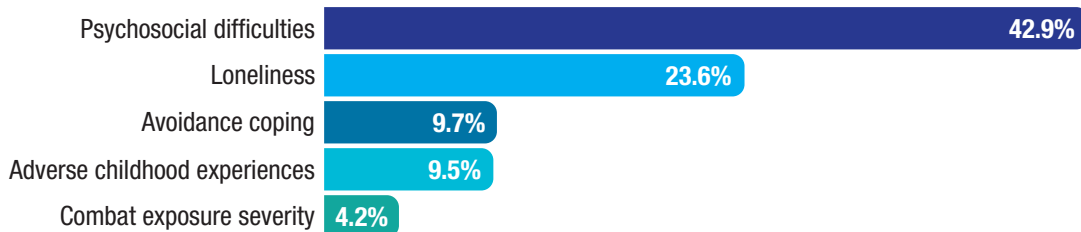
Aged ≥ 50

Despite a 3× higher prevalence, younger age no longer predicted a positive PTSD screen after accounting for the indirect effect of trauma and psychosocial factors.



Factors Contributing to Higher PTSD Prevalence

Percentages are the proportion of variance in PTSD prevalence accounted for by younger age by each variable.



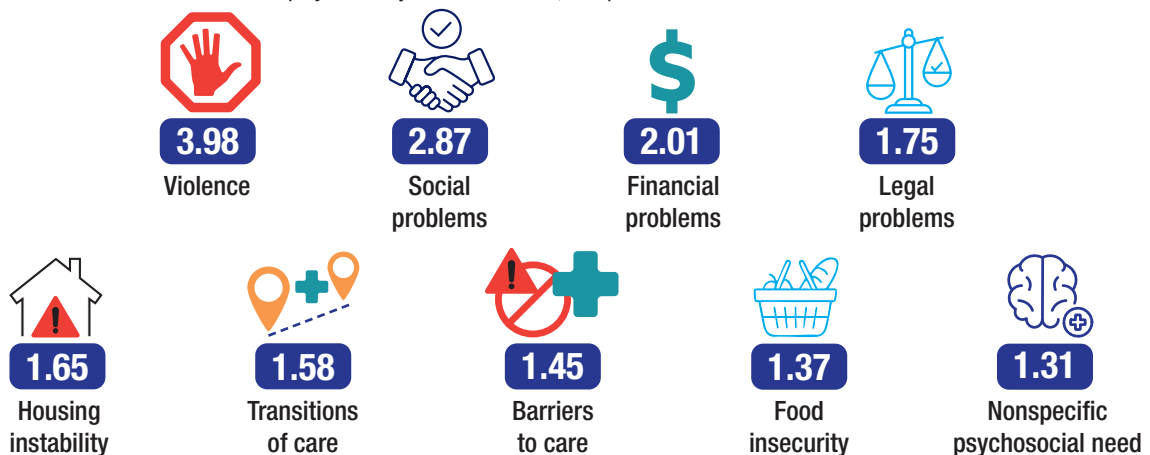
PTSD and Health-Related Social Needs in Veterans⁹



A recent dual-design study examined short- and long-term associations between PTSD diagnosis and health-related social needs. By using natural language processing models to extract VHA EHR data, researchers analyzed a cross-sectional sample from 2012 (n = 62,298) and a 10-year cohort from 2013 to 2023 (n = 11,758) to identify PTSD risks across social domains.

Short-Term Findings: Risk of Baseline Health-Related Social Needs in Those with PTSD

Displayed as adjusted odds ratios; compared to those without PTSD



Long-Term Findings: Trends Over 11-Year Study Period

- ▶ Social problems, violence, barriers to care, transitions of care, and nonspecific psychosocial needs: Increased risk initially, followed by a decline
- ▶ Financial problems, housing instability, legal problems, and food insecurity: No significant increase or decrease
- ▶ Overall trends: Health-related social needs remained elevated in some factors, indicating an ongoing impact of PTSD.



LGBTQ+ Veterans with PTSD¹¹



A study of over 270,000 veterans assessed demographic, comorbidity, and healthcare utilization differences in LGBTQ+ veterans with PTSD and non-LGBTQ+ veterans with PTSD using EHR data from 2017 to 2021. More than one-quarter of the cohort (27.4%) were LGBTQ+.

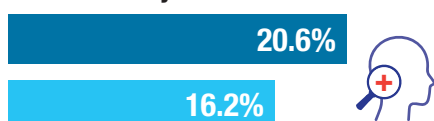
Drug use disorder



Bipolar disorder



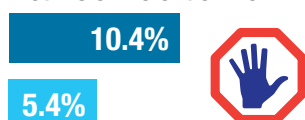
General anxiety disorder



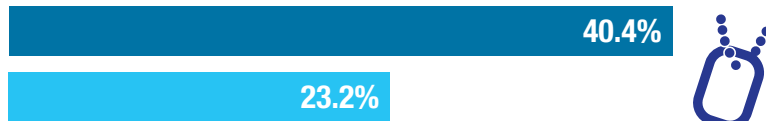
Major depressive disorder



Victims of violent crime



MST



Number of outpatient visits (mean)



LGBTQ+ veterans with PTSD were more likely to be female (32.9% vs 15.9%), less likely to be currently married (39.7% vs 49.5%), and more likely to be never married (25.9% vs 16.3%) than non-LGBTQ+ veterans with PTSD.

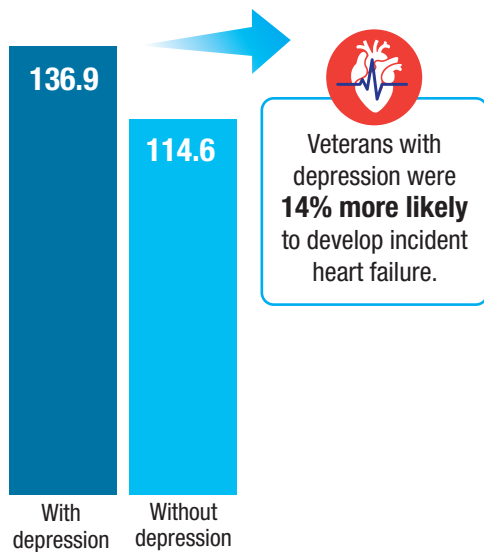
Depression and Heart Failure in Veterans¹²



An analysis of 15 years of data from more than 2.8 million veterans assessed the relationship between heart failure risk and depression. Prevalent depression was defined as one inpatient or two outpatient visits with codes for depression logged.

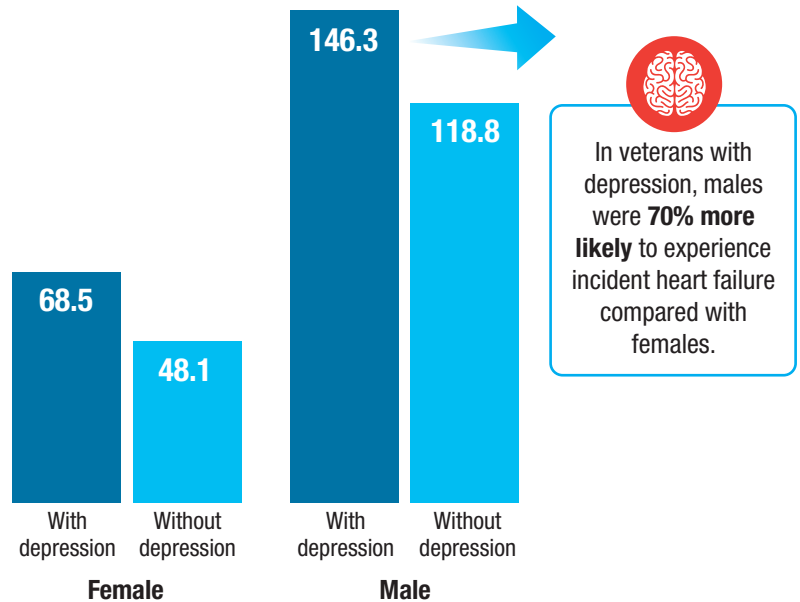
Unadjusted Incident Heart Failure Rate

Per 10,000 person-years



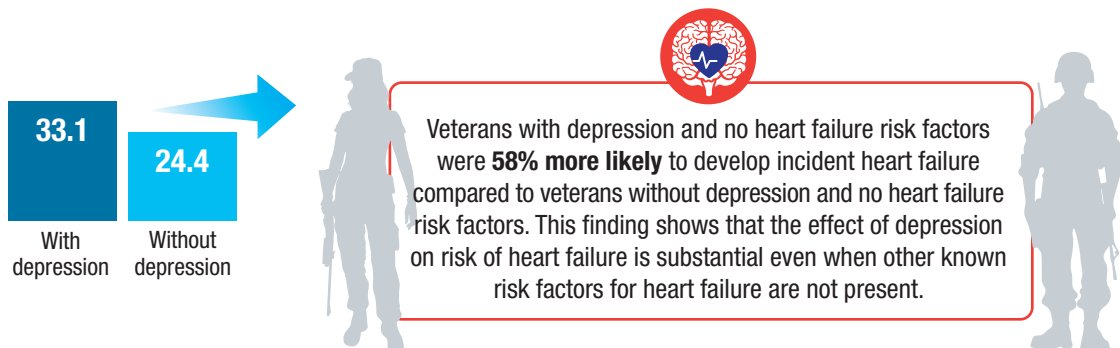
Unadjusted Incident Heart Failure Rate by Sex

Per 10,000 person-years



Unadjusted Heart Failure Incidence Rate in Low-Risk Cohort

Per 10,000 person-years

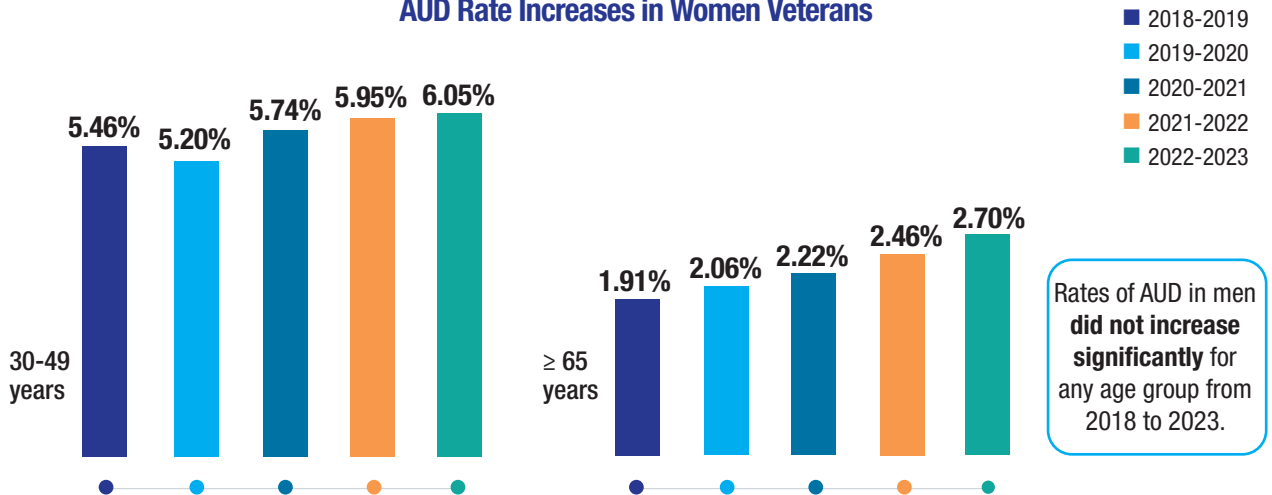


AUD and Insomnia Rates in Veterans⁷

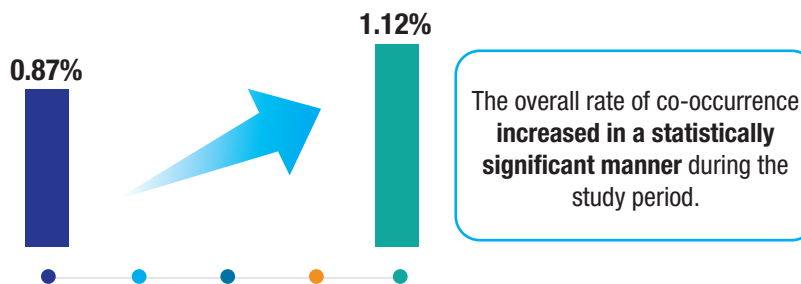


VA electronic records of more than 5.6 million veterans (age ≥ 18 years) were analyzed to assess rates of AUD and the co-occurrence of AUD and insomnia between 2018 to 2023. AUD rates were 5%.

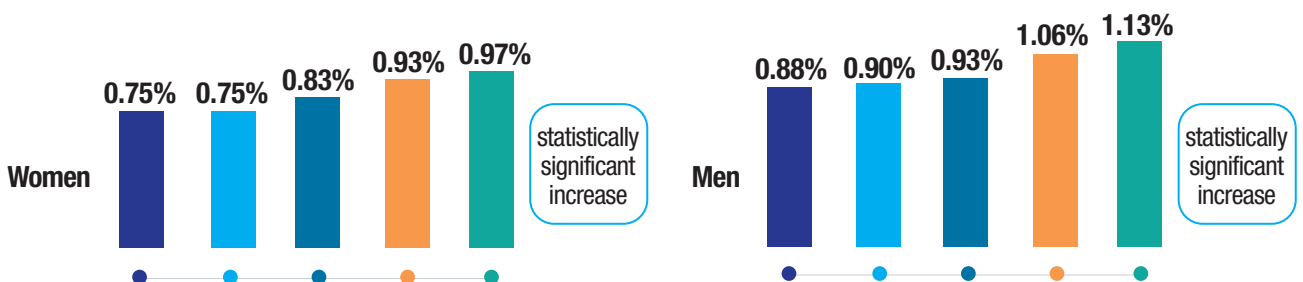
AUD Rate Increases in Women Veterans



Co-Occurrence of AUD and Insomnia



Co-Occurrence of AUD and Insomnia by Sex



Rate of co-occurring insomnia and AUD increased annually, while AUD rates only increased annually for women veterans in certain age groups.

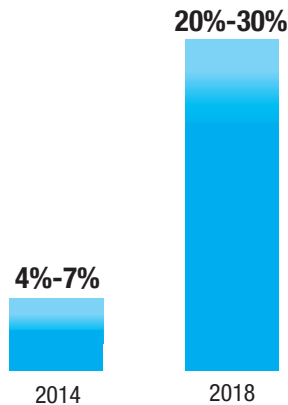
Healthcare Utilization for Veterans with AUD^{13,14}



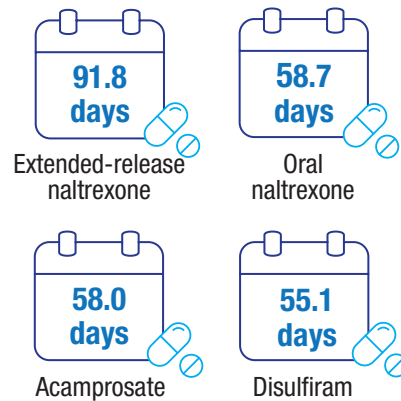
Researchers recently analyzed real-world data from over 31,000 VHA patients with AUD to assess treatment patterns, treatment adherence, and healthcare resource utilization between 2013 and 2019.

AUD Medication Initiation

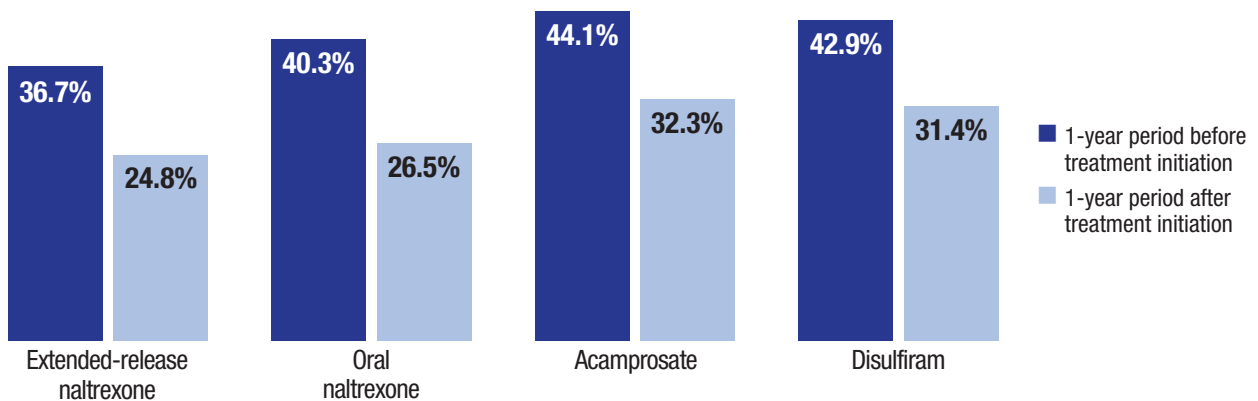
% of patients



Mean Time to Treatment Discontinuation



Proportion of Patients with ≥ 1 Inpatient Hospitalization



Another study looked at healthcare utilization among 280 women veterans, aged 21 to 65 years, who screened positive for at-risk drinking from 2010 to 2016. At-risk alcohol behavior was determined from the Alcohol Use Disorders Identification Test-Consumption.

Of those referred to treatment after an initial alcohol screen,

73.0%
initiated treatment.

Factors Related to Treatment Initiation



Less likely to initiate
Hispanic women and those aged 21-24 years



More likely to initiate
Those with female providers, and a history of MST, AUD, or binge drinking



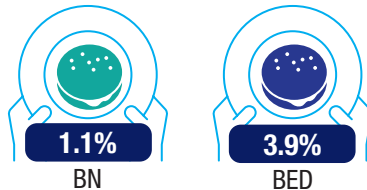
Racial, Ethnic, and Sex Differences in Eating Disorders⁸



Two decades of VHA data were analyzed from over 180,000 military service members to determine prevalence of bulimia nervosa (BN) and binge eating disorder (BED), and the association with racial, ethnic, and sex-based factors. Probable BN and BED were measured by the eating disorder module of the Primary Care Evaluation of Mental Health Patient Questionnaire.

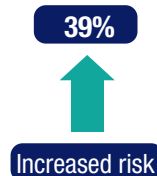
Screened Prevalence

% of sample



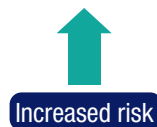
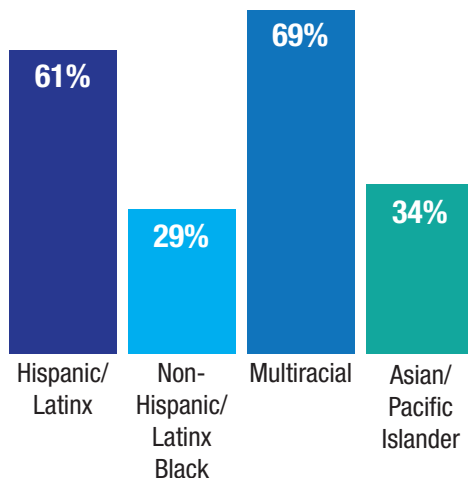
Sex Differences in BN

Women



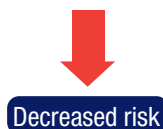
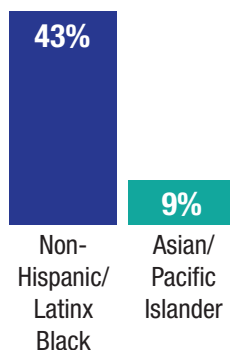
...compared with men service members.

Racial and Ethnic Differences in BN



...compared with non-Hispanic/Latinx White service members.

Racial and Ethnic Differences in BED



...compared with non-Hispanic/Latinx White service members.



There were no differences in BED by sex, but there were racial and ethnic factors that affected likelihood of BED among military service members.