# Preventing Substance Use in Service Members and Veterans: Factors and Strategies

In *Leading Change 2.0: Advancing the Behavioral Health of the Nation 2015–2018,* SAMHSA identifies service members and veterans as a priority population for prevention services, and highlights the importance of tailoring prevention efforts to address the key health and related factors associated with military service [1].

Service members and veterans[1] are at greater risk than the civilian population of experiencing adverse psychological, social, and emotional health outcomes, including depression, anxiety, suicide, homelessness, criminal justice system involvement, and other psychological distresses. Often, these problems are further complicated by substance misuse and related disorders [2]. Rates of substance misuse, particularly alcohol misuse, among active duty service members are higher than those in the civilian population. This is cause for concern, as substance misuse can affect soldiers' readiness and performance, as well as their overall health and functioning [3].

This tool is designed to help practitioners understand the complexities of substance misuse among service members and veterans. Specifically, it provides:

- A summary of risk and protective factors associated with substance misuse in service members and veterans, based on a comprehensive review of the research literature.
- Examples of evidence-based strategies for preventing substance misuse in this group.
- Information on national, state, and local sources of substance misuse data for this population.

## WHAT RISK AND PROTECTIVE FACTORS ARE ASSOCIATED WITH SUBSTANCE MISUSE AMONG SERVICE MEMBERS AND VETERANS?

Research demonstrates that certain factors place service members and veterans at increased risk for substance misuse. Awareness of these characteristics is crucial, as it allows us to select prevention interventions that are most likely to be successful in mitigating this risk. The characteristics associated with **increased risk** of substance misuse among service members and

[1] "Service members and veterans" includes current personnel or veterans of the Army, Navy, Marine Corps, Coast Guard, Air Force or National Guard/Reserve.

Developed under the Substance Abuse and Mental Health Services Administration's Center for the Application of Prevention Technologies task order. Reference #HHSS283201200024I/HHSS28342002T. September 2017

veterans, some of which parallel those of the general population, can be organized into five categories:

- **Psychological,** defined as factors related to the mental and emotional state of a person. For example:
    - Service members and veterans diagnosed with **post-traumatic stress disorder** are at an increased risk for alcohol misuse, problem substance use, and developing a lifetime substance use disorder [4-12].
    - Service members and veterans who experience **mental health disorders** (that is, depression or anxiety) are at an increased risk for problem substance use [5, 13, 14].
    - Experiencing greater levels of **stress** is associated with an increase in problematic alcohol behavior, and drinking and driving behavior among service members [15].
    - Having the **personality trait of neuroticism** is associated with increased frequency, quantity, and total drinking in the past year among service members and veterans [16].
    - National guard service members with **low positive emotionality** (for example, limited capacity to experience pleasure or reward) who were deployed to Iraq are more likely to develop post-deployment onset of alcohol use disorders [17].
- **Exposure to combat,** defined as factors related to experiencing combat situations such as firing rounds at the enemy or being on dangerous duty. For example, engaging in **combat** or having killed someone in combat is associated with alcohol abuse for Iraq or Afghanistan service members and veterans [7, 9, 18].
- **Stressful or abusive relationships,** defined as situations in which an individual has experienced cruelty, violence, or otherwise stressful circumstances. For example:
    - Service members returning from war in Iraq or Afghanistan who had experienced **adverse childhood experiences** (for example, experienced abuse or were exposed to a problem drinker in the household) or lifetime exposure to assaultive **trauma,** are at increased risk for alcohol misuse [5, 10].
    - Women veterans who have experienced **rape** either as a child, prior to military service, during military service, or after military service are at an increased risk for lifetime substance use disorder [12].
    - Male Vietnam veterans who associate with **peers who have drug use problems** are more likely to develop drug dependence or abuse [19].
- **Risk-taking behaviors,** defined as behaviors that involve danger in order to experience a desired outcome. For example:

- **Risk taking and impulsive behaviors** are associated with increased frequency, quantity and total drinking in the past year [10, 16].
- Service members who separated from the military and engage in **sensation seeking behavior** are more likely to have problem substance use [6].

- **Other substance use.** For example:
  - Male Vietnam Veterans who engaged in **early cannabis use** are more likely to use illegal drugs (other than cannabis), have illegal drug abuse/dependence, or develop alcohol dependence as they age [20].
  - Having been **prescribed pain relievers and/or anxiety/depression medication** is associated with their misuse for active duty service members [14, 21].
  - Being a **current smoker** and engaging in **other drug use** is associated with past year marijuana use for veterans [22].

There are also factors that can buffer and **protect against** substance misuse. For example:

- Veterans who have a routine population-based screening for alcohol misuse during their **annual primary care visit** are less likely to have a positive alcohol abuse screen during a subsequent visit [23].

## HOW CAN WE PREVENT SUBSTANCE MISUSE AMONG SERVICE MEMBERS AND VETERANS?

The research literature reveals three main approaches to preventing substance misuse among service members and veterans. These include screening and brief intervention; increased access to care through integration of mental health and substance misuse treatment into primary care services; and strengthening coping skills for military service members and veterans with or at risk for post-traumatic stress disorder (PTSD). These approaches are described in further detail below:

- **Screening for all service members and veterans and brief intervention for those at risk.** Researchers are beginning to learn more about the effectiveness of early, routine **screening** for problem drinking as a strategy for decreasing substance misuse among service members and veterans. One example of a screening tool used in medical and mental health settings is the **Alcohol Use Disorders Identification Test – Consumption (AUDIT-C)**. This 3-item measure reliably assesses and identifies people who are high-risk drinkers or have active alcohol use disorders [24]. In a study conducted among recently deployed U.S. Army personnel to evaluate the AUDIT-C, nearly 29 percent of participants screened positive for at-risk drinking. In addition, 5.6 percent of those screened had an AUDIT-C score of 8 or higher (on a scale of 0-12, with 12 being considered the highest risk for at-risk drinking or active alcohol abuse/dependence [25].

**Brief intervention** refers to feedback, risk information, and recommendations provided to those who have screened positive for problem alcohol use. While many brief interventions have been developed, few have been used and/or evaluated with the military population. One exception is the **Veteran Drinker's Check-up.** Designed specifically for service members and veterans, this web-based program assesses drinking habits, determines if risks exist, and provides a pathway to services, if necessary. Evaluation of this program suggests that veterans may benefit from participation.

- **Integrating mental health and substance use treatment into primary care.** Research suggests that when primary care and mental health treatment services are provided in the same space, or when communication between the two sectors is more fluid, substance misuse prevention efforts are more successful. Two strategies designed to support this type of integration have been evaluated. These include:

    - **Co-locating primary care and mental health services [26].** Findings from a pilot demonstration of a co-located drop-in center for homeless veterans in Greater Los Angeles revealed improved access to primary care services and reduced emergency services among homeless veterans, but no improved perceived physical health status over 18 months that the pilot was in progress.

    - **Using telephone-based referral care management within primary care settings [27].** This approach was implemented with primary care patients at the Philadelphia Veterans Affairs Medical Center. Under this model, a designated alcohol or depression care manager works closely with the patient to identify treatment goals, provide psychoeducation related to depression or alcohol use, in order to promote patient engagement and adherence to treatment. This level of care management has been shown to improve patient engagement and reduce heavy drinking.

- **Strengthening coping skills for service members and veterans with PTSD symptoms.** Some examples of programs designed to strengthen coping skills in this group include the following:

    - **VetChange [28, 29].** This Web-based, self-management program is designed to help service members and veterans reduce their drinking to a safer level (that is, to moderate drinking or abstinence) and to improve their ability to cope with high-risk situations and internal experiences, including moods and combat-related PTSD symptoms, that might trigger problem drinking.

    - **Seeking Safety [30].** This approach comprises up to 25 coping skill topics organized according to four content areas: cognitive, behavioral, interpersonal, and case management. A key feature of this approach is that it addresses PTSD and substance abuse disorders simultaneously, usually in a group format.

    - **Battlemind [31, 32].** The goal of this training is to increase the psychological strength and positive performance, and reduce the incidence of maladaptive responses, of

service members and veterans. It comprises an assessment of emotional, social, family, and spiritual fitness for each soldier returning from deployment, accompanied by a set of learning modules tailored to individual needs. The program also trains high-ranking personnel to employ techniques to increase resilience in their subordinates.

- **Mindfulness-based exposure therapy [33, 34].** This approach focuses on developing non-judgmental awareness of the present moment. Meditation techniques are often included in therapy, such as mindful breathing and focusing carefully on one's experiences in the moment.

## WHERE CAN YOU FIND DATA ON SUBSTANCE USE-RELATED INDICATORS FOR SERVICE MEMBERS AND VETERANS?

The chart presented below presents a list of national data sources that provide information on risk and protective factors associated with substance misuse among service members and veterans. For each entry, we provide information on relevant indicators, level of reporting (that is, national, state or local), and links to additional information on survey background, methodology, and documentation. Practitioners can use these data to plan, monitor and evaluate substance misuse and behavioral health concerns among service members and veterans.

| Data Source | Indicators | Level of Reporting | Link |
|---|---|---|---|
| Behavioral Risk Factor Surveillance System | • Past 30-day alcohol<br>• Binge drinking<br>• Heavy drinking | • National<br>• State, including District of Columbia, Guam and Puerto Rico | • BRFSS Web-Enabled Analysis Tool (BRFSS WEAT) |
| Department of Defense Survey of Health Related Behaviors Among Active Duty Military Personnel | • Alcohol use<br>• Illicit and prescription drug use<br>• Culture of substance abuse<br>• Stress and mental health<br>• Deployment and combat exposure<br>• Overview of service commitment | • National | • Full Report: 2011 |

| Data Source | Indicators | Level of Reporting | Link |
|---|---|---|---|
| National Survey on Drug Use and Health | • Lifetime, past-year, and past-month use of alcohol and drugs (e.g., marijuana, heroin, cocaine, stimulants) | • National | • Interuniversity Consortium for Political and Social Research (ICPSR) (users need to create an account) |
| Treatment Episode Data Set | • Primary substance abuse at the time of admission | • National<br>• State | • SAPPET-RD (password: SAPPET)<br>• ICPSR (users need to create an account) |
| Veterans Affairs National Center for Veterans Analysis and Statistics | • Demographic characteristics about the veteran population, including age, gender, race/ethnicity, period served, branch of service, history of homelessness, and residential setting | • National<br>• State<br>• Counties<br>• Congressional districts | • Veteran Population—Population Tables<br>• State summaries |

## CONCLUSION

Service members and veterans experience a higher likelihood of negative psychological, social, and emotional health outcomes than the general population. Helping service members and veterans to overcome risk factors related to their military service is an important step toward ensuring that these individuals are able to lead happy, successful lives post-deployment. Some research has been done on these factors, as well as those that may protect service members and veterans from substance misuse. Yet there is still considerable research that needs to be done to understand why some service members and veterans are at greater risk of developing substance misuse and mental health problems more often than the general population. With this research, we will be better prepared to develop interventions most likely to be effective.

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