Using Evidence to Prevent Military and Veteran Suicides

2 Service Members Die by Suicide Daily
Each Day 17 Veterans Die by Suicide

POST 9/11 VETERAN STUDY

Data have been collected through The Veterans Metrics Initiative (TVMI) and the Veterans Engaging in Transition Studies (VETS) to examine military-to-civilian transitions.

- Longitudinal survey administered since 2016
- National sample of 9,566 post 9/11 veterans
- Non-response weights used to represent the population of separated 2016 post-9/11 veterans
- Mental health, suicidal ideation, transition challenges (e.g., unemployment, combat exposure, disability, and military sexual trauma) and the four well-being domains of vocation (education and employment), mental and physical health, finances, and social relationships were examined.

FOR MORE STUDY DETAILS, VISIT: https://veteranetwork.psu.edu/projects/tvmi-study/

STUDY FINDINGS

- Suicidal ideation was endorsed by 9.1% of veterans and 7.5% of veterans reported engaging in suicidal behavior.
- 8.6% of veterans reported suicidal ideation within 3 months of separation and this increased to 11.3% four years later.
- Female veterans were 45% more likely to experience suicidal ideation than males.
- Reports of depression symptoms increased from 18.4% shortly after military separation to 20.7% four years later.
- Within three months of separation, female veterans were 32% more likely to meet criteria for probable depressive symptoms compared to males. Four years later, female veterans were 42% more likely to meet the criteria.

SUPPORTING SUCCESSFUL MILITARY-TO-CIVILIAN TRANSITIONS

Social determinants of health (SDH) are known to be strong predictors of suicide risk; they remain associated with suicide morbidity even after adjusting for mental health diagnoses.

Suicide is the 10th leading cause of death in the United States. SDH associated with suicidal behavior include factors like social isolation, financial stress, and trauma exposure. As adverse SDH increase, the odds of suicidal ideation increase. Below is a sample of SDH data from TVMI and VETS:

- Adverse childhood experiences (ACEs) increased suicidal ideation by at least 2.58 times for female veterans and 2.44 times for males. Approximately 59% of female veterans and 39% of males reported ACEs.
- Warfare exposure increased suicidal ideation 9 times for female veterans and 2.5 times for males.
- Nearly one-quarter of veterans were not able to pay for immediate financial needs 3 months post-separation.
- Compared to veterans with another type of discharge status, veterans with a medical (2.3 times) or disability (3.7 times) discharge were more likely to be persistently looking for work.
Up to 1,500 Service members attempt and 300-500 die by suicide yearly. Since 2010, 65,000 veterans have died by suicide. Many were seen in a military or VA medical clinic within two weeks of their death.

**ZERO SUICIDE SYSTEMS APPROACH (ZSSA)**

The United States Air Force (USAF) partnered with the Clearinghouse to implement the first system-wide, healthcare suicide prevention effort in the military. Five USAF bases used ZSSA: a suicide prevention framework that closes gaps in care through which patients at risk for suicide often fall. ZSSA uses 7 distinct components.

- Suicide rates decreased significantly at ZSSA pilot bases over time.
- Suicide rates were significantly lower at ZSSA bases vs. the comparison bases. See the figure below.
- Over the course of the project (2015–2019), when a suicide death occurred, it was 60% more likely to occur at a comparison base than at a ZSSA base.

**EVIDENCE-INFORMED STRATEGIES TO PREVENT MILITARY/VETERAN SUICIDES**

- Adopt universal screening at every clinical encounter in all medical clinics to identify those at risk for suicide.
- SDH are associated with suicidal behavior, so healthcare providers should ask about SDH (e.g., relationship dissolution, financial security, legal problems, ACEs) and consider these factors when planning treatment.
- Implement and evaluate ZSSA using a randomized controlled trial.
- Treat at-risk patients using the least restrictive means.
- Develop data-driven, continuous quality improvement systems for the prevention of suicide. Include SDH and behavioral data in Electronic Health Records.
- Encourage a Case Management Model to augment suicide prevention efforts in healthcare settings.

![Graph showing suicide death rates over time](image)

**CALL TO ACTION** - In October 2021, the Biden-Harris administration announced five priorities for reducing military and veteran suicide. We encourage leaders at both governmental and community levels to use existing evidence to enact these priorities and other best practices for high quality prevention and intervention.

- Improving lethal means safety
- Enhancing crisis care and facilitating care transitions
- Increasing access to and delivery of effective care (i.e., ZSSA)
- Addressing upstream risk and protective factors (i.e., the SDH highlighted)
- Increasing research coordination, data sharing, and evaluation efforts (i.e., TVMI and VETS data)

See definitions of evidence-informed and evidence-based strategies published by the National Academies of Sciences, Engineering, and Medicine (page 240).