

Putting Research to Work for Military Families



Focus:
Marines

Risk Factors Associated With Suicide Completions Among US Enlisted Marines

Phillips, C. J., LeardMann, C. A., Vyas, K. J., Crum-Cianflone, N. F., & White, M. R. (2017). Risk factors associated with suicide completions among US enlisted Marines. *American Journal of Epidemiology*, 186(6), 668-678. doi:10.1093/aje/kwx117

SUMMARY: Death by suicide is a growing concern for US Military branches. Enlisted Marines is one segment of the military that has experienced a significant increase in suicide rates. This study examined risk factors associated with the risk of suicide completion among male Active Duty Marines. Results suggest that certain pre-service and in-service factors are associated with a higher risk of suicide completion.

KEY FINDINGS:

- Of the 790 deaths among male Active Duty Marines between the years 2001 and 2012, 123 were suicides (15.6%).
- The pre-service characteristics significantly associated with a higher risk of suicide completion were not graduating from high school, smoking, a lack of social support, a history of self-harm behaviors, an Adverse Childhood Experiences (ACE) score greater than four, and being White.
- In-service factors most associated with suicide completion included being married, a lower military rank, traumatic brain injury (TBI), alcohol abuse, an adjustment disorder, depression, relationship counseling with an intimate partner, and a prescription for opiates or an antidepressant.
- Deployment OEF or OIF was associated with a reduced risk of suicide. The suicide rate for those who were never deployed was three times higher than those who were deployed.

IMPLICATIONS FOR PROGRAMS:

Programs could:

- Provide education to Service members on how to identify risk factors for suicide and disseminate information regarding where military families can find help for at-risk Service members
- Host workshops that teach normative versus problematic responses to military-related stress and coping strategies to manage possible stressors Service members may experience
- Offer support groups for Service members who have contemplated or attempted suicide. Since factors signifying relationship conflict were associated with a higher suicide risk, consider including intimate partners at these groups

IMPLICATIONS FOR POLICIES:

Policies could:

- Encourage the development and continuation of programs focused on suicide prevention among Active-Duty Service members
- Recommend integrating suicide awareness and prevention information into existing service delivery systems for military families
- Encourage the training of professionals to better identify factors associated with an increased suicide risk and where to refer Service members and their intimate partners for help with relationship stress

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METHODS

- Data were collected from Marines who voluntarily completed a baseline health survey between the years of 2001-2010 as a part of the Recruit Assessment Program.
- Data from the Defense Medical Mortality Registry were used to identify suicide deaths among Active Duty Marines between the years 2001-2012 and electronic personnel files were used to identify pre-service and in-service factors most associated with suicide.
- Factors that were analyzed in the study included, but were not limited to, adverse childhood experiences, substances use, mental health diagnoses, medications, anger management, issues with authority, and social support.

PARTICIPANTS

- Participants were 108,930 Active Duty male Marines.
- The racial breakdown of the sample was 68% White, 18% Latino, and 14% other or unknown.
- The average age was 19 years old and approximately 55% were married.
- The participants completed basic training at the Marine Corps Recruit Depot in San Diego, California.

LIMITATIONS

- The study focused solely on suicide completions during Active Duty service, thus limiting the generalizability of the findings to Veterans or Reservists.
- No female Service members were included in the study and therefore the ability to apply the results about risk factors or rates of suicide completion to Active Duty female Service members is limited.
- Several confounding variables were not included in the analysis, such as severity of combat exposure and individual mental health therapy; thus, caution in the interpretation of results is necessary.

AVENUES FOR FUTURE RESEARCH

Future research could:

- Include data gathered on Veterans and Reservists to increase the generalizability of the findings
- Include data from female Marines in order to identify gender differences regarding risk factors for suicide
- Control for additional factors that may influence results to increase the validity of the findings

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