Research Brief

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The War Within

Suicide Prevention in the U.S. Military

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The casualty toll exacted by the wars in Iraq and Afghanistan is well known. But also emerging is another cost: stress among servicemembers, which can manifest in a variety of negative ways. One of the most disturbing manifestations is suicide, which has increased among U.S. military personnel for the past decade. In response, the U.S. Department of Defense (DoD) asked researchers from the RAND National Defense Research Institute to examine data on military suicides, identify what the scientific literature suggests and leaders in the field indicate to be state-of-the-art suicide-prevention strategies, and recommend ways to ensure that the programs in each service reflect the state of the art. The results of this research appear in *The War Within: Preventing Suicide in the U.S. Military*.

Key findings:

- **An increasing number of suicides is causing concern in the U.S. Department of Defense (DoD).**
- **DoD asked RAND to identify best suicide-prevention practices and ascertain whether DoD and military service prevention programs used them.**
- **No empirical evidence supports a definition of best practice, but comprehensive programs share six common characteristics.**
- **Suicide-prevention programs in DoD and across the services have some of the characteristics but not others.**
- **RAND makes 14 recommendations to bring DoD programs in closer alignment with comprehensive programs.**

Suicides in the Military

RAND researchers examined how the suicide rate in each service compares with that in the civilian population and the characteristics of those who attempt suicide and of those who are most at risk.

What Is the Suicide Rate in the Military?

DoD tracks suicides only among servicemembers on active duty.[1] In 2008, the Army and the Marine Corps had the highest suicide rates, at 18.5 and 19.5 per 100,000, respectively; corresponding rates in the Air Force and the Navy were 12.1 and 11.6, respectively. In DoD, the suicide rate climbed from just over 10 per 100,000 in 2001 to almost 16 per 100,000 in 2008, and the increase stems largely from a statistically significant increase in the suicide rate in the Army.

How Does the Military Suicide Rate Compare with That of the U.S. Population?

The annual suicide rate for the U.S. population hovers at about 10 per 100,000. Comparing the crude U.S. rate with that of the military is misleading because the military population differs substantially from the general population. The RAND study team thus calculated the expected suicide rate for a U.S. population with comparable age, sex, and race to the military. The figure shows the results of that comparison.[2] The rate in the comparable U.S. population is substantially higher than in DoD; however, the narrowing of that divide is of concern.

[1] Suicides among members of the reserve component who are not on active duty are not currently tracked.

[2] The most recent year for which data about general-population suicides are available is 2006.

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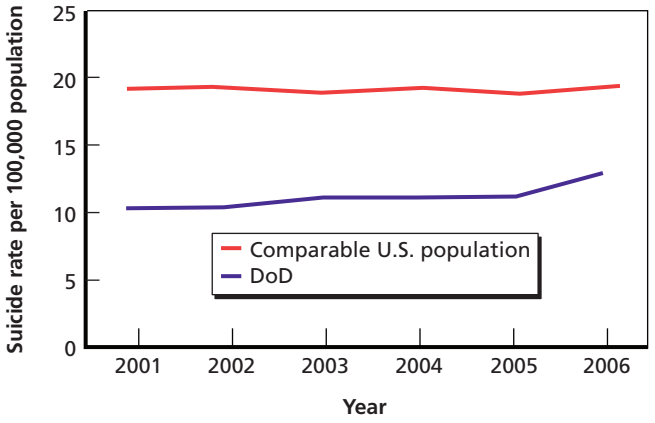
Suicides in DoD and Comparable U.S. Population



SOURCE: DoD data from Mortality Surveillance Division, Armed Forces Medical Examiner. Comparable U.S. population data based on our estimates from the Centers for Disease Control and Prevention.

Who Dies by Suicide in the Military, and Who Is at Risk?

Members of the military services are disproportionately male, and males are generally more likely to die by suicide than are females. The literature shows that the strongest predictor of dying by suicide is a prior suicide attempt. Other predictors include having a mental disorder, harmful substance use and substance-use disorders, and a head trauma or traumatic brain injury. However, none of these factors has strong predictive power—in other words, only a small percentage of those who attempt suicide or who have a mental illness will die by suicide. The research suggests that "triggers," that is, events such as the death of a family member or a rupture in marital or familial relations, detrimentally affect only those with an underlying vulnerability, such as a mental illness. Some evidence indicates that a "contagion" effect may exist (i.e., the suicide or reporting of a suicide may lead to a subsequent suicide), although, again, this is thought to affect primarily those with an underlying vulnerability. Evidence also consistently indicates that availability of firearms correlates with suicide.

State-of-the-Art Suicide-Prevention Programs

RAND researchers reviewed the evidence pertaining to a wide range of suicide-prevention strategies, including those that target entire populations, those that focus only on at-risk groups, those that concentrate on making the environment safer, and those that are implemented following a suicide. The authors' assessment of these programs indicates that promising practices exist, but much about what constitutes a best practice remains unknown because empirical evidence showing that programs or interventions reduced suicides is sparse. However, any comprehensive program should accomplish the following:

Raise awareness and promote self-care. A focus on skill building may be important at all stages of prevention and for reducing known risk factors, such as substance abuse and mental health problems.

Identify those at high risk. A comprehensive suicide-prevention program should have a way of identifying those at risk, such as screening for mental health problems, one of the strongest risk factors for suicide.

Facilitate access to high-quality care. Access to high-quality behavioral health care is an integral component of many suicide-prevention programs. But often, multiple barriers obstruct such access, including perceptions that behavioral health care is ineffective or will harm a person's military career.

Provide high-quality care. The strongest empirical support for effectively preventing suicide involves quality mental health treatment and specific interventions focused on suicide.

Restrict access to lethal means. Evidence consistently shows that means restriction relates to lower suicide rates. This includes not only restricting access to firearms but also attending to the way potentially lethal medications are packaged and how door hinges and shower rods are constructed.

Respond appropriately. Given the possibility of imitative suicides, suicide-prevention programs must have a strategy for suicide response that focuses on how details of the suicide are communicated in the media, as well as how the information is passed on to groups to which the deceased belonged.

Suicide Prevention in DoD and the Services

Along with DoD, each service has a variety of suicide-prevention programs. The table arrays the service activities against the six characteristics that should appear in programs for them to be effective.

Recommendations

RAND researchers made 14 recommendations aimed at strengthening suicide-prevention programs in DoD and across the services. Two of the 14 cut across all characteristics:

Track suicides and suicide attempts systematically and consistently. The recently implemented DoD-wide surveillance program to track suicides and suicide attempts will help ensure that communication about suicide is consistent within DoD and foster information sharing among the services. However, the services and each installation should use the same criteria to determine which suicide attempts require completion of a surveillance report.

Evaluate existing programs and ensure that new programs contain an evaluation component when implemented. Evaluation provides a basis for decisionmaking and helps ensure that resources are used effectively and achieve anticipated outcomes. Current initiatives should be evaluated, and an evaluation plan should be a required component of any new initiative.

Assessment of Suicide-Prevention Activities Across Services

Goal	Army	Navy	Air Force	Marines
Raise awareness and promote self-care	Primarily awareness campaigns, with fewer initiatives aimed at promoting self-care			
Identify those at high risk	Expansive but mostly rely on gatekeepers	Mostly rely on gatekeepers	Investigation policy	Mostly rely on gatekeepers
Facilitate access to high-quality care	Stigma addressed primarily by locating behavioral health care in nontraditional settings			
	No policy to assuage privacy or professional concerns		Limited privilege	No policy
	No education about benefits of accessing behavioral health care			
Provide high-quality care	Not considered in domain of suicide prevention		Past efforts exist with a sustainment plan	Past efforts exist, but not sustained
Restrict access to lethal means	No current policies exist		Limited guidance	No policy
Respond appropriately	Personnel/teams available, but limited guidance			

Present in program | Present to some degree | Not present

The remaining recommendations appear below, aligned with the characteristics they are designed to foster.

Raise Awareness and Promote Self-Care

Include training in skill building, particularly help-seeking behavior, in programs and initiatives that raise awareness and promote self-care. Most prevention programs in the services focus on raising awareness about suicide, publicizing helping resources, and sometimes promoting messages about recognizing peers in distress. More effort should be made to teach servicemembers the skills that they may need to refer themselves to behavioral health professionals or chaplains.

Define the scope of what is relevant to preventing suicide, and form partnerships with the agencies and organizations responsible for initiatives in other areas. Suicide-prevention programs within each service should link with the organizations responsible for prevention of other behavioral health problems that are known risk factors for suicide, such as mental health and substance use, to ensure consistent messaging, create jointly sponsored projects, and avoid duplication.

Identify Those at High Risk

Evaluate gatekeeper training. The services rely heavily on gatekeepers—people trained to identify those at risk for suicide and to take these individuals (or encourage them to go) to behavioral health-care providers or chaplains. No evidence indicates that this type of prevention technique is effective. It has intuitive appeal because it can reach a wide number of people and may help reduce stigma. On the other hand, it may send the message that suicide is always another person's problem, and some individuals will not be good gatekeepers or will hesitate to refer peers out of fear that such a referral may adversely affect the referred servicemember's military career. Evaluating these programs will help clarify these issues.

Develop prevention programs based on research and surveillance; selected and indicated programs should be based on clearly identified risk factors specific to military populations and to each service. Most services produce reports that describe servicemembers who have killed themselves but cannot identify the factors that actually place individuals at risk of suicide, which requires a well-defined control group. Identifying risk factors is critical for developing prevention programs for high-risk groups.

Ensure, in a way that respects servicemembers' privacy and autonomy, that continuity of services and care is maintained when servicemembers or their caregivers transition between installations. Because military personnel frequently move between installations and commands as well as between active and reserve status, it is important that they know of the resources available at each new command. Efforts should be made to help ensure that servicemembers receiving care or counseling continue to get it when they or their caregivers transfer. Behavioral health providers and chaplains can help facilitate successful transfers by providing clients with information they need to access resources at new installations and commands and by occasionally checking in with them after they have moved.

Facilitate Access to High-Quality Care

Make servicemembers aware of the benefits of accessing behavioral health care and of specific policies and repercussions for accessing such care, and conduct research to inform this communication. Many military personnel view behavioral health care as ineffective and believe that seeking such care could harm their careers. There are no explicit policies with respect to repercussions across the services for accessing this care, and research is needed to clarify these issues.

Make servicemembers aware of the different types of behavioral health caregivers available to them, including information on caregivers' credentials, their capabilities, and the confidentiality afforded by each. The behavioral health-care workforce in the military is diverse with respect to education, licensing, and certification and credentialing. Each service also relies heavily on chaplains to provide

pastoral counseling. Educating military personnel about the differences among referral specialists is important. Since confidentiality is a specific barrier to care among this population and is not offered uniformly across providers, servicemembers should also be made aware of the confidentiality afforded by different referral specialists.

Improve coordination and communication between caregivers and service providers. Those who offer behavioral health care should work as a team to ensure that the emotional well-being of those for whom they care is maintained. There were conflicting reports about the relationship between these professionals on military bases. Improved communication and collaboration among and between behavioral health-care providers and chaplains help create a trustworthy handoff to ensure that individuals are not overlooked when transitioning from one form of care to another.

Assess whether there is an adequate supply of behavioral health-care professionals and chaplains available to servicemembers. Messages promoting behavioral health-care professionals and chaplains assume a capacity that can deliver timely, high-quality care to those who request it. Anecdotal reports of a shortage of military chaplains and known challenges that DoD has faced in recruiting and retaining adequately trained behavioral health-care providers highlight a need for research to address this concern.

Provide High-Quality Care

Train chaplains, health-care providers, and behavioral health-care professionals on evidence-based or state-of-the-art practices for behavioral health generally and in suicide risk assessment specifically. Few behavioral health-care providers are adequately trained in effective ways to assess suicide risk and manage patients at varying levels of risk. Also, the provision of high-quality behavioral health care is not universal across such providers. The Marines and Air Force take some steps to train providers in suicide risk assessment and management, but efforts to improve behavioral health-care quality, such as training providers in evidence-based practices, are not integrated into the system of behavioral health care offered in DoD treatment facilities. Almost no evidence exists on the quality of counseling offered by chaplains. Training all health-care providers on mental health awareness and quality behavioral health care is also an important component of provider training.

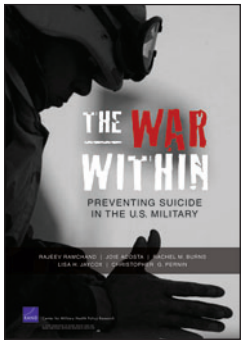
Restrict Access to Lethal Means

Develop creative strategies to restrict access to lethal means among military servicemembers or those indicated to be at risk of harming themselves. Firearms figure prominently in military suicides, so initiatives to restrict access to firearms should be considered. There is some precedent for firearm restrictions in both the Veterans Health Administration and DoD. In particular, strategies may include establishing policies or procedures in which access is restricted specifically among those identified as being at risk of harming themselves.

Respond Appropriately

Provide formal guidance to commanders about how to respond to suicides and suicide attempts. Responding to a suicide appropriately not only can help acquaintances of the suicide victim grieve but also can prevent possible imitative suicides and serve as a conduit to care for those at high risk. No service has a direct policy regarding appropriate ways in which a leader should respond to a suicide within his or her unit. In addition, some servicemembers report being ostracized or ridiculed after seeking behavioral health care or having been treated for suicidal behavior. This not only increases the risk of another suicide attempt but also creates a hostile and stigmatizing environment for others in the unit who may be under psychological or emotional duress. Guidance for leaders is needed to help care for their units after a member has died by suicide, has attempted suicide, or has expressed suicidal ideation.

Suicide is a tragic event, though the research suggests that it can be prevented. These recommendations represent the ways in which the best available evidence suggests that some of these untimely deaths could be avoided. ■



This research brief describes work done for the RAND Center for Military Health Policy Research, a joint endeavor of RAND Health and the RAND National Defense Research Institute, documented in *The War Within: Preventing Suicide in the U.S. Military*, by Rajeev Ramchand, Joie Acosta, Rachel M. Burns, Lisa H. Jaycox, and Christopher G. Pernin, MG-953-OSD, 2010, 228 pp., $28, ISBN: 978-0-8330-4971-1 (available at http://www.rand.org/pubs/monographs/MG953/). This research brief was written by Jerry M. Sollinger.

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