

Reducing Suicide Among U.S. Veterans

Implications from RAND Research

Terri Tanielian

CT-510

Testimony presented before the House Oversight and Reform Subcommittee on National Security on May 8, 2019.



For more information on this publication, visit www.rand.org/pubs/testimonies/CT510.html

Testimonies

RAND testimonies record testimony presented or submitted by RAND associates to federal, state, or local legislative committees; government-appointed commissions and panels; and private review and oversight bodies.

Published by the RAND Corporation, Santa Monica, Calif.

© Copyright 2019 RAND Corporation

RAND® is a registered trademark.

Limited Print and Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law. This representation of RAND intellectual property is provided for noncommercial use only. Unauthorized posting of this publication online is prohibited. Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Permission is required from RAND to reproduce, or reuse in another form, any of its research documents for commercial use. For information on reprint and linking permissions, please visit www.rand.org/pubs/permissions.html.

Reducing Suicide Among U.S. Veterans: Implications from RAND Research

Testimony of Terri Tanielian¹
The RAND Corporation²

Before the Committee on Oversight and Reform
Subcommittee on National Security
United States House of Representatives

May 8, 2019

Chairman Lynch, Ranking Member Hice, and Members of the Subcommittee, thank you for the opportunity to testify today. We all know the often-cited statistic: 20 veterans die by suicide each day. Since this figure became a rallying cry 2,256 days ago, we have lost 270,720 Americans to suicide, 45,120 of whom have been veterans or service members. Suicide is the tenth leading cause of death in the United States, and over the past 30 years, America's suicide rate has increased by 30 percent.³ Suicide is a national public health crisis, not just a veteran problem. Yet the number of veterans and service members lost to suicide in just one year now surpasses the number of lives lost during the operations in Afghanistan and Iraq to date. The total number lost in the past decade totals more than the number of deaths incurred during the Vietnam War. This is a national security problem. We can and must do more to address this problem, and that is why I am here today.

I am a senior behavioral scientist at the RAND Corporation. I have been conducting mental health service research for 25 years, and for the past two decades, my research has focused specifically on the mental health-related issues facing U.S. service members, veterans, their families, and their caregivers. During this time, I have conducted multiple studies that have estimated the size and scope of mental health conditions, such as posttraumatic stress disorder (PTSD) and depression, among service members and veterans. I have conducted studies designed to understand the consequences associated with military service, combat exposure,

¹ The opinions and conclusions expressed in this testimony are the author's alone and should not be interpreted as representing those of the RAND Corporation or any of the sponsors of its research.

² The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest.

³ Centers for Disease Control and Prevention, "Suicide Rising Across the US: More Than a Mental Health Concern," June 7, 2018 (<https://www.cdc.gov/vitalsigns/suicide/index.html>).

military sexual harassment, or assault. My work has also focused on how well our systems of care are equipped to effectively address these problems. My colleagues and I have assessed the effectiveness of prevention and resilience programs, as well as the efficacy of specific mental health interventions. We have looked to identify gaps in how the Department of Defense (DoD), the Department of Veterans Affairs (VA), and community health care providers are addressing the needs of service members and veterans. This includes specifically examining the use of evidence-based interventions for treating mental health problems and preventing suicide. It is on this 25-year career of studying mental health, mental health care, suicide, and suicide prevention that I base my remarks today.

The increasing suicide rate among Americans, veterans, and our men and women in uniform has been a harrowing rallying cry for improved efforts in suicide prevention, particularly in the past six years. To ensure we remember the number of veterans we lose to suicide each day, there have been major awareness campaigns, some led by the federal government and others led by the private sector. These have included public service announcements by celebrities, push-up challenges promulgated over social media, the sale of “trigger” rings, and other efforts designed to raise awareness and call on the public to do something. But what are we asking them to do? Unfortunately, this is where those same campaigns have been less specific.

As a nation, we need to do more than just acknowledge the problem: We need to implement and sustain meaningful approaches to not only reduce the risk of suicide but promote a life worth living for all veterans. I am joined today on this panel with colleagues from DoD and the VA, two agencies on the front line in the effort to reduce suicide among veterans in the United States. When relevant, I will acknowledge their roles, their progress, and opportunities for each to consider in expanding their efforts. However, it should be noted that these agencies should not bear this burden alone. As my comments will highlight, there are other federal agencies that should be engaged and equally invested in addressing this public health challenge.

As you know, DoD is responsible for training, equipping, and maintaining the military forces needed to deter war and protect the security of our nation. As part of fulfilling this mission, it is responsible for maintaining the readiness of the forces, which includes addressing the health-related risks and consequences associated with military service and deployment. To support the readiness of the troops and their families, DoD operates a large military health system (MHS) and maintains programs focused on preventing injuries, promoting health, increasing readiness, and improving the culture of the force. The Defense Suicide Prevention Office was established in 2011 within the Office of the Under Secretary of Defense for Personnel and Readiness as an initiative designed to inform policy and provide oversight of suicide prevention programs across the service branches.

The VA operates the largest integrated health care system in the United States. It provides care, offers programs, and conducts research that make it a national leader in suicide prevention. The VA treats more than 6 million patients each year, most of whom are middle-aged white men.⁴ Data from the Centers for Disease Control and Prevention indicate that middle-aged

⁴ RAND Health, *Current and Projected Characteristics and Unique Health Care Needs of the Patient Population Served by the Department of Veterans Affairs*, Santa Monica, Calif.: RAND Corporation, RR-1165/1-VA, 2015 (https://www.rand.org/pubs/research_reports/RR1165z1.html).

white men are the group of Americans at highest risk of suicide nationally; therefore, is it not necessarily so surprising that, within the veteran population, this is also the group at highest risk of dying by suicide. Many VA patients have also been exposed to trauma in war zones, from Vietnam to Iraq. As a result, many veterans have both visible and invisible wounds, including depression, traumatic brain injury, and PTSD.⁵ RAND research shows that the VA is providing these veterans the high-quality care that they deserve. Our analyses reveal that the quality of the mental health care delivered at the VA generally exceeds the care offered in other health systems,⁶ and that in many ways the services provided by the Veterans Crisis Line surpass most crisis lines operating in the United States today.⁷

Over the past decade, both DoD and the VA have prioritized suicide prevention by directing significant resources to public awareness and education campaigns. DoD has also taken strides to increase public awareness, including holding multiple stand-down events to educate troops and creating the Defense Suicide Prevention Office. The service branches have also continued to implement their own education campaigns and rely heavily on gatekeepers; however, fewer efforts have been invested across DoD in connecting these activities to efforts designed to expand and improve the clinical capacity of mental health care within the MHS. Efforts to improve care transitions between DoD and the VA have also been launched as a means of ensuring better continuity of care for individuals at potential risk of mental health problems and suicide. Despite these investments, however, rates of suicide within military and veteran populations continue to rise, calling into question whether the efforts are effective or sufficient. Are the VA and DoD doing enough?

In the sections below, I provide insights from RAND research on suicide prevention approaches and improving our mental health care systems and outline a series of recommendations for improving our collective federal efforts to reduce suicide in the military and veteran community.

What Is a Comprehensive Suicide Prevention Approach?

Over the past decade, my colleagues and I have conducted several studies examining various aspects of suicide prevention approaches.⁸ As part of this, we reviewed the available

⁵ Rajeev Ramchand, Terry L. Schell, Benjamin R. Karney, Karen Chan Osilla, Rachel M. Burns, and Leah Barnes Calderone, “Disparate Prevalence Estimates of PTSD Among Service Members Who Served in Iraq and Afghanistan: Possible Explanations,” *Journal of Traumatic Stress*, Vol. 23, No. 1, 2010, pp. 59–68.

⁶ RAND Health, *Resources and Capabilities of the Department of Veterans Affairs to Provide Timely and Accessible Care to Veterans*, Santa Monica, Calif.: RAND Corporation, RR-1165/2-VA, 2015 (https://www.rand.org/pubs/research_reports/RR1165z2.html); Katherine E. Watkins, Harold Alan Pincus, Brad Smith, Susan M. Paddock, Thomas E. Mannie, Jr., Abigail Woodroffe, Jake Solomon, Melony E. Sorbero, Carrie M. Farmer, Kimberly A. Hepner, David M. Adamson, Lanna Forrest, and Catherine Call, *Veterans Health Administration Mental Health Program Evaluation: Capstone Report*, Santa Monica, Calif.: RAND Corporation, TR-956-VHA, 2011 (https://www.rand.org/pubs/technical_reports/TR956.html).

⁷ Rajeev Ramchand, “Is America’s Crisis ‘System’ in Crisis?” *U.S. News and World Report*, July 17, 2016.

⁸ RAND Corporation, “Suicide: Understanding and Prevention,” webpage, undated (<https://www.rand.org/health-care/key-topics/mental-health/suicide.html>).

evidence of the effectiveness of different strategies for carrying out activities related to suicide prevention.⁹ We have also specifically examined what was being implemented across DoD and each of the service branches, evaluated the capacity and quality of crisis lines, and outlined the critical components of a comprehensive suicide prevention approach.¹⁰ This work has highlighted the need for increased use of proven, evidenced-based approaches for suicide prevention and the importance of creating and sustaining a comprehensive approach. Below, I outline the five goals of a comprehensive suicide prevention approach and discuss the components and necessary investments required to effectively achieve them. It should be noted that, because of the interrelated nature of these goals, strategies designed to achieve them must be pursued simultaneously if they are to have the intended effect on reducing suicides.

Increase Awareness and Use of Self-Care Skills

Promoting the use of self-care skills—specifically, teaching individuals to use positive coping skills and how to self-refer when they are in distress—has been shown to increase knowledge and awareness about depression, and also to decrease suicide attempts. Although media campaigns that include public service announcements or disseminate resources about suicide can help draw more attention to the problem and provide information about how to reach out in crisis, these interventions must also incorporate more training on self-care, positive coping, and how to self-refer or refer someone else when in distress. Ideally, the promotion of self-care should occur well before there are signs of any risk.

Although DoD and the VA have implemented significant awareness campaigns calling attention to suicide, including media campaigns that involve public service announcements, social media pledges, and stand-down events, much less attention has been paid to effectively promoting the use of self-care techniques in the military and veteran communities. Despite DoD’s significant investments in approaches to build resilience and promote healthy behaviors in the military in the early 2000s, these efforts have waned considerably since.

Improve Identification of Individuals at Risk

There are multiple efforts underway to better identify individuals at risk of dying by suicide, both at the population and individual levels. Although there is no direct evidence linking the improved identification of individuals at risk to reduced suicides, there is evidence to demonstrate that identification can help to trigger better acute crisis response or appropriate referrals to high-quality mental health care (each discussed below). Over the past decade, DoD

⁹ Joie D. Acosta, Rajeev Ramchand, Lisa H. Jaycox, Amariah Becker, and Nicole K. Eberhart, *Interventions to Prevent Suicide: A Literature Review to Guide Evaluation of California’s Mental Health Prevention and Early Intervention Initiative*, Santa Monica, Calif.: RAND Corporation, 2012 (https://www.rand.org/pubs/technical_reports/TR1317.html).

¹⁰ Rajeev Ramchand, Joie D. Acosta, Rachel M. Burns, Lisa H. Jaycox, and Christopher G. Pernin, *The War Within: Preventing Suicide in the U.S. Military*, Santa Monica, Calif.: RAND Corporation, MG-953-OSD, 2011 (<https://www.rand.org/pubs/monographs/MG953.html>); Rajeev Ramchand, “A States of Emergency,” *U.S. News and World Report*, July 13, 2016 (<https://www.usnews.com/opinion/articles/2016-07-13/suicide-prevention-call-centers-should-emulate-lifelines-for-veterans>).

has implemented several specific efforts designed to identify individuals at risk. Some of these efforts have been designed to create indicators of individuals at risk and other efforts designed to just identify the groups of people at potential risk through mining available health and personnel data. DoD has also relied heavily on gatekeepers—individuals specifically trained to recognize the signs and symptoms of suicide and to know the resources available for those at risk. These approaches (such as the Ask, Care, Escort campaign) depend on the ability of those gatekeepers to feel comfortable asking questions about distress and suicidal ideation, as well as intervening.

The VA has similarly taken steps to identify groups at risk to help target outreach and follow-up approaches to specific individuals. The department has mandated screening in its clinical settings, and reviews of its implementation of suicide risk assessments indicate high rates of compliance and appropriate follow-up.¹¹

Screening historically relies on individuals’ reporting their own thoughts of suicide. However, a person who dies by suicide may decide not to reveal those thoughts to anyone or, when asked, may deny them. It’s also possible that people who die by suicide might not have been suicidal when they were last asked—whether by their commanding officer or chaplain or at a primary care appointment. To bolster these screening efforts that require self-disclosure, VA and Army efforts are underway to develop algorithms that identify those at high risk based on existing, historical personnel and medical records.¹² Similarly, Kaiser Permanente and other organizations are benefiting from the work of Army STARRS (Study to Assess Risk and Resilience in Servicemembers) and the VA’s REACH VET (Recovery Engagement and Coordination for Health—Veterans Enhanced Treatment) initiative to use health and other records to predict individuals who have higher probabilities of dying by suicide.¹³

Increase Access to and Provision of High-Quality Care

The provision of high-quality mental health care is a fundamental component of suicide prevention. Multiple studies have demonstrated that the use of evidence-based treatment for

¹¹ Katherine E. Watkins, “Suicide Prevention Efforts and Behavioral Health Treatment in the Veterans Health Administration,” testimony presented before the House Veterans' Affairs Committee, Subcommittee on Health, Santa Monica, Calif.: RAND Corporation, CT-370, December 2, 2011 (<https://www.rand.org/pubs/testimonies/CT370.html>).

¹² R. C. Kessler, I. Hwang, C. A. Hoffmire, J. F. McCarthy, M. V. Petukhova, A. J. Rosellini, N. A. Sampson, A. L. Schneider, P. A. Bradley, I. R. Katz, C. Thompson, and R. M. Bossarte, “Developing a Practical Suicide Risk Prediction Model for Targeting High-Risk Patients in the Veterans Health Administration,” *International Journal of Methods in Psychiatric Research*, Vol. 26, No. 3, September 2017; J. F. McCarthy, R. M. Bossarte, I. R. Katz, C. Thompson, J. Kemp, C. M. Hannemann, C. Nielson, and M. Schoenbaum, “Predictive Modeling and Concentration of the Risk of Suicide: Implications for Preventive Interventions in the US Department of Veterans Affairs,” *American Journal of Public Health*, Vol. 105, No. 9, September 2015, pp. 1935–1942.

¹³ G. E. Simon, E. Johnson, J. M. Lawrence, R. C. Rossom, B. Ahmedani, F. L. Lynch, A. Beck, B. Waitzfelder, R. Ziebell, R. B. Penfold, and S. M. Shortreed, “Predicting Suicide Attempts and Suicide Deaths Following Outpatient Visits Using Electronic Health Records,” *American Journal of Psychiatry*, Vol. 175, No. 10, October 2018, pp. 951–960.

depression and PTSD reduces suicidal ideation among those at risk.¹⁴ History of certain mental health problems is known to increase the risk of suicide; thus, it is critical that individuals with mental health conditions receive evidence-based, high-quality mental health care. Yet, despite significant investment in public awareness campaigns within the military and veteran populations, many barriers to seeking and receiving such care remain. Although efforts to improve help-seeking among service members and veterans with mental health problems have primarily focused on changing the attitudes and beliefs about seeking care, there are other barriers that also need attention. One example is addressing the known shortage of mental health providers trained in the use of evidence-based techniques.

Both DoD and the VA have invested heavily in increasing the capacity of their mental health workforces. Both have increased provider training on the use of evidence-based techniques and on screening for suicide risk within their health care facilities. These efforts are laudable, but the increased reliance on community-based mental health professionals as sources of care for service members (through TRICARE) and veterans (either through VA Community Care or through non-VA sources for those that are not enrolled in the VA) increases the likelihood that service members and veterans might not receive the same high-quality care as they would from a DoD or VA provider.

Over the past several years, DoD has taken efforts to realign its mental and behavioral health care workforce in a way that serves to lower barriers to care-seeking (such as integrating behavioral health providers into units) and worked to increase the use of evidence-based techniques within its military treatment facilities. These efforts have focused on providers within the direct-care system.¹⁵ Similar investments to ensure the adequacy of training and use of evidence-based treatments among TRICARE providers are needed.¹⁶ Unfortunately, little is known about the provision of high-quality care in the network, yet this may be a primary source of care for many former service members.¹⁷

¹⁴ Jaimie L. Gradus, Michael K. Suvak, Blair E. Wisco, Brian P. Marx, and Patricia A. Resick, “Prevention and Treatment: Treatment of Posttraumatic Stress Disorder Reduces Suicidal Ideation,” *Depression and Anxiety*, Vol. 30, 2013, pp. 1046–1053; A. M. Norr, D. J. Smolenski, and G. M. Reger, “Effects of Prolonged Exposure and Virtual Reality Exposure on Suicidal Ideation in Active Duty Soldiers: An Examination of Potential Mechanisms,” *Journal of Psychiatric Research*, Vol. 103, August 2018, pp. 69–74.

¹⁵ Kimberly A. Hepner, Carol P. Roth, Elizabeth M. Sloss, Susan M. Paddock, Praise O. Iyiewuare, Martha J. Timmer, and Harold Alan Pincus, *Quality of Care for PTSD and Depression in the Military Health System: Final Report*, Santa Monica, Calif.: RAND Corporation, RR-1542-OSD, 2017 (https://www.rand.org/pubs/research_reports/RR1542.html).

¹⁶ Terri Tanielian, Coreen Farris, Caroline Batka, Carrie M. Farmer, Eric Robinson, Charles C. Engel, Michael Robbins, and Lisa H. Jaycox, *Ready to Serve: Community-Based Provider Capacity to Deliver Culturally Competent, Quality Mental Health Care to Veterans and Their Families*, Santa Monica, Calif.: RAND Corporation, RR-806-UNHF, 2014 (https://www.rand.org/pubs/research_reports/RR806.html).

¹⁷ Carrie M. Farmer, Terri Tanielian, Christine Buttorff, Phillip Carter, Samantha Cherney, Erin L. Duffy, Susan D. Hosek, Lisa H. Jaycox, Ammarah Mahmud, Nicholas M. Pace, Lauren Skrabala, and Christopher Whaley, *Integrating Department of Defense and Department of Veterans Affairs Purchased Care: Preliminary Feasibility Assessment*, Santa Monica, Calif.: RAND Corporation, RR-2762-DHA/VHA, 2018 (https://www.rand.org/pubs/research_reports/RR2762.html).

Multiple studies have demonstrated that the VA is a leader in the provision of high-quality mental health care,¹⁸ though variation does exist across VA facilities. Investments in expanding capacity, reinforcing training, and continued use of quality-monitoring are critical to maintain the VA's ability to serve its population.¹⁹

For those veterans who are either not enrolled in the VA health care system or choose not to use it, including those who rely on TRICARE, efforts to address the quality of mental health care in the community are necessary.²⁰ Although the VA has resources available for community providers, efforts to disseminate those and partner with community health care systems to disseminate resources have not been prioritized as part of a suicide prevention approach; as a result, these efforts have been underresourced and underutilized.

Enhance Provision of Acute Crisis Response and Intervention

There is evidence that some suicide attempts can be interrupted by third parties, such as family members, emergency response personnel, clinicians, and even strangers. This is the basis for relying on crisis hotlines and gatekeeper trainings to intervene and respond to individuals at imminent risk of suicide.

Founded in 2007, the Veterans Crisis Line (VCL) created a separate capacity for veterans contacting the National Suicide Prevention Lifeline to be connected to individuals specifically trained in understanding the veteran population and linking them to VA-based resources. The VCL can be a critical pathway for facilitating emergency interventions and acute crisis response for veterans. When the VCL experiences a high volume of calls, calls roll over to other crisis hotlines that make up the network of call centers for the National Suicide Prevention Lifeline. A recent Government Accountability Office report found that, although calls to the VCL were answered within 120 seconds, the wait times for calls to the Lifeline were longer and in one case was routed to a voicemail system.²¹ Unlike the Lifeline, the VCL has been subject to external investigations and internal evaluations, and it has continued to improve its performance. The VCL has hired more responders and expanded the number of call centers, but if the United States is going to continue to demand more be done to address veteran suicide, then we should expect the same level of performance from the system that provides crisis services to everyone.

RAND also examined the theoretical basis and role of gatekeeper trainings. Although there is evidence from the literature that these trainings can improve knowledge about suicide, beliefs and attitudes about suicide prevention, and self-efficacy to intervene, how trainings actually

¹⁸ RAND Health, *Resources and Capabilities of the Department of Veterans Affairs to Provide Timely and Accessible Care to Veterans*; Watkins et al., *Veterans Health Administration Mental Health Program Evaluation: Capstone Report*.

¹⁹ Watkins et al., *Veterans Health Administration Mental Health Program Evaluation: Capstone Report*.

²⁰ Tanielian et al., *Ready to Serve: Community-Based Provider Capacity to Deliver Culturally Competent, Quality Mental Health Care to Veterans and Their Families*.

²¹ Government Accountability Office, *Veterans Crisis Line: Additional Testing, Monitoring, and Information Needed to Ensure Better Quality Service*, Washington, D.C., GAO-16-373, 2016.

affect intervention behaviors has not been studied.²² DoD relies heavily on the role of gatekeepers to identify individuals at risk and refer them to services, yet our earlier work found that some in this role are uncomfortable making such referrals. Thus, despite efforts to train individuals to understand the signs of distress and how to make referrals, individuals may be unwilling to engage and intervene for fear that they could be held responsible for the impact that such a referral could have on the service members' careers.²³ The VA also utilizes gatekeeper trainings, such as Operation SAVE (Signs of suicide, Asking about suicide, Validating feelings, Encouraging help and Expediting treatment) and ASIST (Applied Suicide Intervention Skills Training), and these have similar limitations.

Reduce Access to Lethal Means

Social and policy interventions designed to make the environment safer and reduce access to lethal means are an effective way to prevent suicide. Examples of such initiatives are policies that require use of blister packaging when dispensing lethal medications to prevent intentional overdoses, bridge safeguards to prevent fatal falls, and reconstruction of shower curtain rods and door hinges to prevent fatal hangings. In fact, the VA has been able to reduce inpatient hospital suicides significantly largely through creating ligature-resistant environments.²⁴

Similar social and policy interventions have been considered and implemented to reduce traffic-related accidental deaths—specifically, through the requirement for cars to have airbags and seat belts. In response to concerns about the number of traffic-related fatalities, laws were then used to promote seat belt use, and new federal regulations and standards motivated a reluctant auto industry to change the design of their vehicles to make them safer. As a result, there has been a dramatic decrease in the number of traffic-related deaths in the United States. The United States needs to consider a similar set of social and policy interventions to improve safety as it relates to suicide.

For military service members and veterans, the leading mechanism of fatal injury is firearms. Individuals who attempt suicide by firearm are much more likely to die in the attempt than people who attempt by any other means. Approximately 85 percent of people who attempt suicide with a firearm die in that attempt, compared with about 2–4 percent who attempt by overdose. Ecological studies have also shown that gun ownership is positively correlated with suicides.²⁵ Although some states have sought to restrict access to firearms among those with a

²² Crystal Burnette, Rajeev Ramchand, and Lynsay Ayer, *Gatekeeper Training for Suicide Prevention: A Theoretical Model and Review of the Empirical Literature*, Santa Monica, Calif.: RAND Corporation, RR-1002-OSD, 2015 (https://www.rand.org/pubs/research_reports/RR1002.html).

²³ Lynsay Ayer, Rajeev Ramchand, Lily Geyer, Lane F. Burgette, and Aaron Kofner, “The Influence of Training, Reluctance, Efficacy, and Stigma on Suicide Intervention Behavior Among NCOs in the Army and Marine Corps,” *Journal of Primary Prevention*, Vol. 37, No. 3, June 2016, pp. 287–302.

²⁴ B. V. Watts, B. Shiner, Y. Young-Xu, and P. D. Mills, “Sustained Effectiveness of the Mental Health Environment of Care Checklist to Decrease Inpatient Suicide,” *Psychiatric Services*, Vol. 68, No. 4, April 2017, pp. 405–407.

²⁵ V. Ajdacic-Gross, M. Killias, U. Hepp, E. Gadola, M. Bopp, C. Lauber, U. Schnyder, F. Gutzwiller, and W. Rossler, “Changing Times: A Longitudinal Analysis of International Firearm Suicide Data,” *American Journal of Public Health*, Vol. 96, No. 10, 2006, pp. 1752–1755.

history of mental health problems, more could be done to promote firearm safety—including the safe storage of personally owned weapons—among military service members and veterans. As a result, gun ownership and access to firearms remain significant risk factors for suicide death for all Americans, and especially for veterans. DoD and the VA have both sought to implement campaigns to distribute gun locks and train individuals on safe storage, but there have been obstacles to allowing health care professionals to discuss access to firearms with their patients, and there has not been enough work to ensure that meaningful safety planning is routine practice for all gatekeepers. The evidence is clear that if we are to take this problem seriously, we must directly address the risk firearms pose to veterans. We need to find more strategies for improving safety planning for those who own firearms and especially for service members and veterans who are at risk of suicide and may have easy access to their own personal firearm or one issued to them.

Recommendations for Creating and Implementing Effective Solutions

It is widely acknowledged that a public health approach is needed to address the challenge of suicide. Such an approach relies on the use of a balance of strategies aimed at everyone in the population (universal prevention); those aimed specifically at groups of individuals who may be at higher risk, such as veterans in transition or veterans who visit emergency rooms (selective prevention); and those aimed at individuals known to have one or more risk factors, such as young women veterans with a history of military sexual trauma or male veterans over the age of 55 who have a history of substance use problems and have easy access to a firearm (targeted prevention). Below, I provide a series of recommendations for actions that could be implemented within the context of a public health approach to complement and strengthen existing approaches underway within DoD and the VA. Addressing this national security crisis requires that we do more to create and sustain efforts to promote healthier environments, provide effective intervention to those at risk, and reduce access to lethal means.

Create Healthy Environments for All Service Personnel and Veterans

1. **Implement and enforce zero-tolerance policies to eliminate the culture of harassment and assault that pervades the military and veteran community.** Military sexual trauma is a known risk factor for dying by suicide among veterans and represents an important clinical indicator for targeted suicide prevention activities.²⁶ If we are to prevent suicide risk among veterans, then we must be serious about decreasing exposure to military sexual harassment and assault while individuals are still in uniform. Although efforts to address sexual assault and harassment have been increasing over the past several years, significant concerns about the pervasive nature of assault and harassment remain. Many service members continue to not report sexual assault and harassment for fear of retribution or lack of any meaningful consequences or change. Unfortunately, the culture of sexual harassment can continue after

²⁶ Rachel Kimerling, Kerry Makin-Byrd, Samantha Louzon, Rosalinda V. Ignacio, and John F. McCarthy, “Military Sexual Trauma and Suicide Mortality,” *American Journal of Preventive Medicine*, Vol. 50, No. 6, 2016, pp. 684–691.

the military-to-civilian transition. For example, many women veterans have reported feeling uncomfortable in VA settings largely because they continue to experience a derogatory environment in which harassment on the basis of sex is common. Zero-tolerance policies in DoD and the VA could help to change this culture, thereby reducing exposure to military sexual trauma while in the military and perhaps increasing comfort and willingness among women veterans to seek treatment in the VA.

2. **Promote better sleep.** Sleep disturbances can be a major source of lowered productivity and poorer health, but there is also increasing research demonstrating that such disturbances may confer increased risk of suicide.²⁷ Sleep problems are common in the military, and their prevalence is particularly high among those who have deployed to conflict environments. These problems can lead to the development of serious mental health problems. Thus, treating sleep problems early can reduce the risk of downstream mental health consequences and lower the risk of suicide. There is evidence that cognitive-behavioral therapy and imagery rehearsal therapy for insomnia can help to alleviate sleep problems, but these interventions have not been widely disseminated for use in military and veteran populations. Training health care providers to screen for sleep disturbances in health care settings and educating providers on clinical practice guidelines can help reduce a known risk for suicide. In addition to disseminating and using these interventions, better education and policies designed to promote adequate, restful sleep can have important implications for reducing the risk of suicide.
3. **Reduce alcohol and drug use among veterans.** Substance use disorders can increase risk of suicide among veterans, especially women.²⁸ Thus, a substance use disorder represents a clinical indicator for follow-up suicide risk assessment and prevention. Use of substances and substance use disorders are particularly high among veterans, especially older men. Heavy drinking among young veterans is also common and can be associated with adverse consequences. Alcohol and drugs can be a toxic accelerant for many risky behaviors, as they lower inhibition and interfere with decisionmaking and problem-solving skills. Thus, more attention on identifying those with substance use problems and providing them evidence-based interventions will be important components of a comprehensive suicide prevention approach.
4. **Reduce work-related stress.** Stress is on the rise across America. Stress can lead to poor sleep, increased use of alcohol and drugs, poor performance, and poorer health overall. Work is often cited as a common source of stress for those in the labor market. Financial security and housing stability can also be sources of stress. To reduce stress in the workplace, efforts to work with employers should be pursued as a critical component of promoting health and reducing the risk of suicide. The federal government not only should work with nongovernmental partners to ensure healthier and supportive environments in the

²⁷ R. A. Bernert, J. S. Kim, N. G. Iwata, and M. L. Perlis, "Sleep Disturbances as an Evidence-Based Suicide Risk Factor," *Current Psychiatry Reports*, Vol. 17, No. 3, March 2015.

²⁸ K. M. Bohnert, M. A. Ilgen, S. Louzon, J. F. McCarthy, and I. R. Katz, "Substance Use Disorders and the Risk of Suicide Mortality Among Men and Women in the US Veterans Health Administration," *Addiction*, Vol. 112, No. 7, July 2017, pp. 1193–1201.

community but should recognize its own role as an employer of a significant number of veterans. Veterans make up a significant portion of the workforce within DoD (47.6 percent of the defense workforce), the Department of Transportation (36.7 percent), the VA (32.4 percent), and the Department of Homeland Security (27.4 percent).²⁹ Employee engagement surveys conducted for these agencies provide insight into the workforce environments and suggest areas for improved support, particularly for the Department of Homeland Security.³⁰ Overall, employees at the VA are satisfied with their work-life balance but report concerns with respect to the senior leaders' support for them. Less than half of the VA employees report being satisfied with the recognition they receive for doing their job. More efforts may be needed within and across the federal government to support its own veteran employees. Efforts to support the veteran workforce within the federal government could have important implications for reducing stress-related problems while also promoting the use of self-care skills and referrals to support for mental health problems, thereby reducing the risk of suicide.

Provide Access to High-Quality Care for Those at High Risk

5. **Enhance the capacity of the U.S. mental health care system.** Most efforts to reduce the risk of suicide, either in individuals who have a history of mental health problems or among those referred while in crisis, rely on a working mental health system. Although the VA has been a demonstrated leader in providing appropriate follow-up for individuals in crisis and delivering high-quality mental health care, data on the quality of care in the private sector either is nonexistent or, when publicized or made available for comparison, is worse than in the VA.

For the veterans who do rely on the VA (nearly 7 million veterans use the VA health care system in a year) and DoD (5.25 million military retirees and their family members get care through TRICARE) for health care services, efforts should be pursued to expand the workforce that serves them, prioritize training in evidence-based techniques, and ensure that any use of community-based sources of care for these same individuals meets the same high standard for quality. Although these investments are necessary, because the majority of veterans in the United States do not rely on the VA for their health care, efforts to reduce suicide will require that the United States vastly improves its mental health care system. There are known shortages of mental health professionals in the United States, particularly in remote areas. New models of care delivery have been implemented to address some of these access challenges (tele-mental health, primary care integration), but more-concerted efforts are needed to recruit, train, and support a growing mental health workforce.³¹ This

²⁹ Office of Personnel Management, *Employment of Veterans in the Federal Executive Branch: Fiscal Year 2017*, Washington, D.C., February 2019.

³⁰ Institute of Medicine, *A Ready and Resilient Workforce for the Department of Homeland Security: Protecting America's Front Line*, Washington, D.C.: National Academies Press, 2013.

³¹ Grant R. Martsolf, Andrada Tomoaia-Cotisel, and Terri Tanielian, "Behavioral Health Workforce and Private Sector Solutions to Addressing Veterans' Access to Care Issues," *JAMA Psychiatry*, Vol. 73, No. 12, December 2016, pp. 1213–1214.

training must include adequate attention to assessing and managing suicide risk, safety planning, and delivery of evidence-based treatments for specific mental health problems, including suicide. There are proven, evidence-based treatments for most mental health conditions, and treatment works—if the provider delivers the appropriate course of treatment.

To attract individuals into these mental health care positions and indicate the appropriate value of their role in providing high-quality care, the United States must also do more to ensure the implementation and enforcement of parity laws. Reimbursement for mental health conditions remains low and is often cited as a barrier by providers for why they do not take health insurance. If we are to meaningfully address barriers to care for those in crisis, we must ensure that they have access to affordable, high-quality mental health care. Recently, there were concerns about the reimbursement rate under TRICARE for mental health services. This is particularly problematic if we are to ensure that service members and their families have access to high-quality services. Ensuring that parity is fully enforced will help address the workforce issue and expand access to care for those at risk, and recent analyses indicate that it could also be associated with lower suicide rates.³²

Reduce Access to Lethal Means

6. **Promote firearm safety.** Firearms are the method of suicide for nearly 70 percent of veteran suicide deaths. Policies that directly address the risk that firearm availability poses to veterans with respect to suicide need to be created, enacted, and tested. This will require continued study of those policies that provide some evidence of being effective at reducing suicides, such as background checks and child access prevention laws, but it will also require investment in research to study new policies, such as extreme risk protection orders.³³ It should be acceptable for health care providers, leaders, friends, and family to ask about firearm access, to discuss safe storage, and to discuss appropriate removal of firearms for individuals who are at highest risk of suicide—and those working in these professions should be encouraged to do so.³⁴ Discussions about firearms are an effort to help save lives.

Conclusion

As I noted in my introduction, more than 45,000 veterans have died by suicide since the VA released its 20-a-day suicide statistic six years ago. This number is not just a statistic designed to draw attention to a problem. It reminds us that these were grandfathers, fathers, grandmothers, mothers, aunts, uncles, brothers, sisters, and friends. Using a number often

³² M. Lang, “The Impact of Mental Health Insurance Laws on State Suicide Rates,” *Health Economics*, Vol. 22, No. 1, January 2013, pp. 73–88.

³³ RAND Corporation, *The Science of Gun Policy: A Critical Synthesis of Research Evidence on the Effects of Gun Policies in the United States*, Santa Monica, Calif., RR-2088-RC, 2018 (https://www.rand.org/pubs/research_reports/RR2088.html).

³⁴ Murray B. Stein, Ronald C. Kessler, and Robert J. Ursano, “Reframing the Suicide Prevention Message for Military Personnel,” *JAMA Psychiatry*, Vol. 76, No. 5, 2019, pp. 466–468.

misrepresents the complexity and nuances of a problem. But let's remember that while they served our nation, these were the very same individuals we sought to protect with better body armor, improved technology, and more-effective policies and programs to improve injury survivability and the same individuals for whom we designed complex benefit and health care systems as a sign of our gratitude for their service. Improved leadership and sustained investments in effective solutions can make a difference in addressing suicide. The United States can and must do better. The federal government has an important role in facilitating these efforts, which must include increased investments in changing the culture within the military and improving our mental and behavioral health care systems, but the federal government must also take a leadership role in reducing stress and promoting lives worth living for all Americans through policies designed to increase health and well-being. This will take dedicated leadership and sustained investment to create system-level changes to improve the cultures within DoD and the VA. Undertaking this effort is a national security imperative.

Thank you for the opportunity to offer this testimony. I look forward to your questions.