



# Ten Frequently Asked Questions About Veterans' Transitions

## Results of a Decade of RAND Work on Veteran Life

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### Overview

The transition from military service to the civilian world can be very challenging, particularly for young veterans with no prior civilian work experience and those with injuries or disabilities. As part of their duty to care for the men and women who have served the country in uniform—as well as to promote strong member recruitment in the future—the U.S. Department of Defense and the U.S. Department of Veterans Affairs seek to monitor and improve the education and employment opportunities and the health and well-being of military veterans and reservists.

Over the past decade, RAND has proactively pursued a program of research addressing veterans' transitions to the civilian labor market. This document compiles RAND's body of work on this topic and highlights the breadth of topics RAND has studied. It distills more than a decade's worth of research on many facets of veteran life into a set of ten questions and answers gleaned from this work.

In this report, a decade of RAND work on veteran life has been distilled into answers to the following ten questions:

- How widespread is veteran unemployment?
- Why are so many veterans on unemployment insurance?
- Are tax credits for hiring veterans useful and cost-effective?
- Do service members and veterans earn less than civilians?
- How effective are support services for veterans' transitions?
- What are veterans' education outcomes?
- How widespread and costly are mental health problems among service members and veterans?
- Is suicide a crisis in the military?
- Are disabled veterans and survivors suitably compensated?
- What are promising avenues for future research on veterans?



## HOW WIDESPREAD IS VETERAN UNEMPLOYMENT?

**Short Answer:** Both unemployment and workforce participation among post-9/11 veterans are comparable to those of demographically similar civilians, according to RAND research. However, veterans aged 18–24 who have recently separated appear to face more hurdles than their civilian peers for a short time after leaving the military.

### RAND Findings

Since 9/11, media reports have raised concerns about rampant unemployment among veterans, particularly those returning from Iraq and Afghanistan. Data from the Bureau of Labor Statistics (BLS) indicated dramatic increases in veteran unemployment in 2003–2005 and again in 2011, when the jobless rate for veterans aged 18–24 reportedly peaked at 29 percent.

### Collecting the Right Data

To properly evaluate these unemployment trends, RAND researchers first questioned whether the BLS data were appropriate for making conclusions about the veteran subpopulation (Savych, Klerman, and Loughran, 2008). BLS unemployment numbers are based on its Current Population Survey, a monthly survey of approximately 50,000 U.S. households. While suitable for gauging trends in the broader U.S. population, this survey does not facilitate robust analysis of smaller subpopulations. For example, the sample of recently separated veterans numbers only a few hundred in the Current Population Survey, while there are several thousand in the American Community Survey—a nationally representative survey of two million households conducted by the U.S. Census Bureau. The Census Bureau survey is also less sensitive to sampling variation because it has a much higher response rate and samples both household units and people living in group quarters, such as college residence halls and correctional facilities. Unfortunately, media reports on unemployment are often based only on the more limited BLS data—which tend to capture short-run fluctuations and produce less reliable estimates of the veteran subpopulation.

Furthermore, RAND researchers noted that the media often focus on raw comparisons of employment rates across veteran and nonveteran populations without taking into account important differences in their demographic characteristics (Heaton and Krull, 2012). Post-9/11 veterans are younger and more likely to be black, to be U.S. citizens, to have a high school diploma or GED, and to be male compared to the general population. A true apples-to-apples comparison requires applying statistical matching of veterans to demographically similar nonveterans.

### More-Robust Results

Using more-extensive census data and more-robust statistical methods, RAND studies have consistently concluded that unemployment and labor force participation are similar for post-9/11 veterans and demographically similar nonveterans (Heaton and Krull, 2012). In addition, post-9/11 veterans are actually more likely than similarly situated nonveterans to be employed full time rather than part time.

While the unemployment rates are similar on average, RAND researchers found that *recently separated* veterans aged 18–24 may indeed face additional hurdles in the labor market compared with their civilian peers. Heaton and Krull (2012) found that the unemployment rate among recent young male veterans measured 17.4 percent in 2010, compared with 15.3 percent for demographically similar civilians. The elevated level of unemployment can be attributed to an overall weakness in the labor market for young adults and to the fact that young veterans are more likely to have just separated from a job—namely, military service. Thus, they are more likely to be engaged in a job search, which takes time—especially during periods of slow economic growth and generally high unemployment (Loughran, 2014). However, the unemployment gap closes quickly with age and time since separation from the military.

Therefore, there is little support for the hypothesis that veterans overall are inherently or systematically disadvantaged in the civilian labor market. While employer discrimination, skills mismatch, injury, and poor health may hinder some veterans' success, census data do not reflect a net veteran disadvantage in employment. Of course, these barriers may exist and may affect other outcomes, such as job satisfaction, that are not reflected in employment rates or earnings. Further research using other kinds of data, such as surveys and interviews, could help the Department of Defense (DoD) identify and overcome these challenges. The evidence does suggest that programs aimed at

helping young veterans transition to civilian employment more quickly could help narrow the gap seen immediately after they leave the military.

## Read More

- Bogdan Savych, Jacob Alex Klerman, and David S. Loughran, *Recent Trends in Veteran Unemployment as Measured in the Current Population Survey and the American Community Survey*, 2008. Online: [www.rand.org/t/TR485](http://www.rand.org/t/TR485)
- Paul Heaton and Heather Krull, “Unemployment Among Post-9/11 Veterans and Military Spouses After the Down-turn,” 2012. Online: [www.rand.org/t/OP376](http://www.rand.org/t/OP376)
- David S. Loughran, *Why Is Veteran Unemployment So High?* 2014. Online: [www.rand.org/t/RR284](http://www.rand.org/t/RR284)



## WHY ARE SO MANY VETERANS ON UNEMPLOYMENT INSURANCE?

**Short Answer:** Dramatic increases since 9/11 in the number of veterans receiving unemployment benefits were primarily due to the large numbers of reservists mobilized in Iraq and Afghanistan. Because more reservists were deployed, more were eligible for unemployment benefits, and long deployments made returning to their civilian jobs more difficult. RAND found little evidence that poor health, discrimination against veterans, or an adverse job market were to blame.

## RAND Findings

Veteran unemployment rates may be similar to those of comparable nonveterans, but there may still be cause for concern. RAND was asked to uncover the reasons behind dramatic increases in the number of veterans claiming Unemployment Compensation for Ex-Servicemembers (UCX) and the cost of unemployment benefits to DoD.

The UCX program is the military counterpart to state unemployment insurance programs, which provide income assistance to the unemployed as they search for work. Both honorably discharged active-duty personnel who meet various

service requirements and reservists who complete 90 or more days of continuous active-duty service are eligible for UCX benefits, provided they meet other federal and state-specific requirements of the unemployment insurance system.

## Building a Better Database

RAND researchers built a comprehensive database to examine postservice employment and health, drawing on a wide variety of both civilian and military data sources. First, Loughran and Klerman (2008) analyzed aggregate data on the UCX program maintained by the U.S. Department of Labor’s Employment and Training Administration. Second, they undertook the costly and time-consuming task of extracting data from hard-copy reports maintained by the individual military services to build an individual-level database of UCX recipients. (At the time, the services did not keep digital records, and some still do not.) Third, they incorporated information on service, rank, and deployment histories from military service records. Fourth, they incorporated self-reported health information from the Post-Deployment Health Assessment. And finally, they analyzed survey data on postactivation employment of reservists from the Status of Forces Survey of Reserve Component Members.

RAND found that the sharp rise in the UCX caseload was largely attributable to the sharp spike in reservists mobilized after 9/11 for long periods of deployment. This increased the number of veterans eligible to receive UCX and subsequently boosted the number of claims. Longer deployments are typically associated with a higher claim rate because they require reservists to be away from their civilian jobs for longer periods. While it may be easy to return to one’s civilian job after just a month away, it may be far more difficult after a year or more, when the circumstances of both the veteran and the employer have likely changed. RAND found little evidence to suggest that poor health, discrimination against veterans, or an adverse civilian labor market was to blame for the spike in UCX claims.

Further research has explored some of the ways in which deployments may have disadvantaged reservists in the civilian labor market. For example, Heaton and Loughran (2013) explored the possibility that reservists with symptoms of post-traumatic stress disorder (PTSD) might experience reduced civilian earnings. Controlling for demographic and military characteristics, the study found that reservists’ reported symptoms of PTSD had little effect on the earnings of reservists in the years following deployment, decreasing them by only 6

percent in the four years following deployment. This finding adds further evidence for the hypothesis that dramatic increases in UCX uptake were driven more by expanded eligibility than by actual barriers to successful reintegration in the civilian labor force.

### Suggested Solutions

Notably, despite the Uniformed Services Employment and Reemployment Rights Act (USERRA) guaranteeing reservists the right to return to their civilian jobs after activation, many reservists choose not to return to their preactivation jobs. They often cite voluntary reasons, such as needing a break or disliking their previous job. Given that reservists already accumulate paid leave while serving on active duty, and that USERRA already allows reservists up to three months to return to their preactivation jobs, Loughran and Klerman (2008) recommended that policymakers determine whether UCX is an appropriate vehicle for delivering income support to reservists returning from deployments.

If, instead, policymakers were to aim to reduce the UCX caseload, Loughran and Klerman (2008) suggested several steps they could consider. Examples include ensuring reservists understand that having a USERRA-protected job prior to activation that is still available to them upon their return will make them ineligible for UCX, and issuing guidance to state unemployment insurance program employees requiring them to determine whether claimants have access to a USERRA-protected job before they are granted UCX benefits. Gates et al. (2013) found that knowledge of USERRA laws and available support among civilian employers of military reservists is incomplete and suggested that continued efforts by Employer Support for the Guard and Reserve (ESGR) to promote awareness of current protections could further help reservists return to their predeployment jobs.

### Read More

- David Loughran and Jacob Klerman, *Explaining the Increase in Unemployment Compensation for Ex-Servicemembers during the Global War on Terror*, 2008. Online: [www.rand.org/t/TR588](http://www.rand.org/t/TR588)
- David Loughran and Paul Heaton, *Post-Traumatic Stress Disorder and the Earnings of Reservists*, 2013. Online: [www.rand.org/t/TR1006](http://www.rand.org/t/TR1006)
- Susan M. Gates, Geoffrey McGovern, Ivan Waggoner, John D. Winkler, Ashley Pierson, Lauren Andrews, and Peter Buryk, *Supporting Employers in the Reserve Operational Forces Era: Are Changes Needed to Reservists' Employment Rights Legislation, Policies, or Programs?* 2013. Online: [www.rand.org/t/RR152](http://www.rand.org/t/RR152)



### ARE TAX CREDITS FOR HIRING VETERANS USEFUL AND COST-EFFECTIVE?

**Short Answer:** Tax credits can be a powerful and cost-effective tool for stimulating veteran hiring. A 2007 tax credit expansion added 32,000 disabled veterans to the employment rolls in 2007 and 2008 who would otherwise have been unemployed, and it increased their aggregate earnings by 40 percent. The tax credits cost roughly \$10,000 or less per job-year, on a par with other tax credit programs. Overall, the new credits cost \$610 million or less over 2007 and 2008, while increasing the veterans' yearly income by more than \$1 billion.

### RAND Findings

In 2011, Congress passed the Vow to Hire Heroes Act to expand tax credits for businesses that hire unemployed veterans. However, there had been little rigorous empirical research establishing whether tax credits actually increase employment among targeted groups. RAND sought to measure the effect of tax credits by analyzing an earlier expansion of the Work Opportunity Tax Credit (WOTC) program in 2007 and 2009 that offered financial incentives to employers that hired certain groups of veterans, including the disabled.

Using data from the Census Bureau's 2005–2008 American Community Survey of 2 million households, Heaton (2012) estimated the effects of the 2007 WOTC expansion, which made tax credits of up to \$4,800 available to employers who hired disabled veterans who were recently discharged or unemployed for more than six months. Prior to 2007, hiring tax credits did not apply to either group—only to veterans whose service-related disabilities forced them to end their military careers prematurely.

### **Do Companies Unfairly Benefit?**

A legitimate concern is that savvy companies apply for tax credits tied to hiring disabled veterans whom they would have hired anyway. RAND's research casts doubt on this theory. While the employment gap between the disabled and nondisabled was fairly stable between 2005 and 2006, employment fell much less sharply for the disabled group than for the nondisabled group after the policy was initiated. The 2007 tax credit expansion targeting disabled veterans appears to have shielded them from some of the negative employment effects of the recession.

Employing sophisticated regression approaches, RAND researchers estimated that the 2007 tax credit expansion added 32,000 disabled veterans to the employment rolls in 2007 and 2008—veterans who would otherwise have been unemployed—and increased aggregate earnings of the target group by 40 percent. Veterans 40 and older, and veterans who were not receiving Social Security payments benefited most. The jobs were primarily full time rather than part time, and employment grew for veterans with both cognitive and physical disabilities.

### **Benefits Outweigh the Costs**

The tax credits cost roughly \$10,000 or less per job-year, on a par with other tax credit programs and substantially less than some larger-scale federal employment initiatives (e.g., the American Recovery and Reinvestment Act, which cost \$151,000 per job-year). Overall, the new credits cost \$610 million or less over 2007 and 2008, while increasing yearly income for disabled veterans by more than \$1 billion. The results suggest that hiring tax credits can be a powerful and cost-effective policy tool to stimulate the hiring of veterans.

## **Read More**

- Paul Heaton, “The Effects of Hiring Tax Credits on Employment of Disabled Veterans,” 2012.  
Online: [www.rand.org/t/OP366](http://www.rand.org/t/OP366)



## **DO SERVICE MEMBERS AND VETERANS EARN LESS THAN CIVILIANS?**

**Short Answer:** RAND has repeatedly found that both current service members and veterans earn more than demographically comparable civilians. Veterans who served in health care, communications, or intelligence positions during their military service enjoy larger earnings gains in civilian life than other veterans do.

## **RAND Findings**

Just as with employment rates, raw comparisons between the earnings of veterans and nonveterans are uninformative about the effects of military service on earnings because the two groups have very different characteristics. It is impossible to tell from raw comparisons whether the difference in earnings is due to these characteristics or to military service. To overcome this problem, RAND researchers have employed creative empirical strategies (see Loughran et al., 2011, and Martorell et al., 2014). For example, one approach (first suggested by MIT econometrician Joshua Angrist) compares the pool of military *applicants*, some of whom enlist (and become veterans) and some of whom do not (and remain civilians). In addition, RAND researchers controlled for a rich array of applicant characteristics available on the military application record, including earnings prior to application.

Contrary to the belief that service members and veterans earn less than demographically comparable civilians, RAND research has repeatedly found that both current service members and veterans earn more than demographically comparable civilians (Loughran et al., 2011; Martorell et al., 2014). The prevailing view among current service members that they would be earning more outside the military turns out to be a misconception (Hansen and Nataraj, 2011). Current service members enjoy a substantial earnings premium, especially when benefits are taken into account.

This earnings premium predictably decreases during the initial year following military service, which largely reflects that many veterans commence college during that year and others spend several months engaged in job search. However, after this initial period, the earning premium steadily increases with time and endures long after members separate. This is true for veterans across all lengths of service, except for those who leave before the end of their initial service commitment. Failure to complete the terms of one's first contract is most likely correlated with other factors that impair long-term earnings in the civilian labor market.

The finding also holds true for reservists. RAND studies find that reserve activations lead to moderate losses in civilian earnings in the year immediately following activation. These losses disappear and turn to earnings gains in subsequent years (Loughran and Klerman, 2012; Loughran, Klerman, and Martin, 2006).

### Occupational Differences

For all occupational categories, military service is associated with sizable long-run earnings gains, but there are some differences across specialties. These differences likely reflect the differing degrees to which skills are transferable to the civilian labor market across military occupations. Veterans who served in health care, communications, or intelligence positions enjoy larger earnings gains than other veterans do. (Martorell et al., 2014).

### College Enrollment

Broadly speaking, the finding that veterans earn more than nonveterans suggests that they do not have a skills gap or poor productivity. Indeed, the data show that while many service members delay college enrollment to serve in the military, they are as likely as similar nonenlistees to enroll at some point. There is very little difference in patterns of college enrollment and graduation by military occupational specialty except in health care, where education levels are higher.

### Economic Condition

One factor that has a strong influence on a separating member's future earnings is the economic conditions that prevail at the time of separation. When a servicemember exits the military during a period of high unemployment, civilian earnings are substantially lower, and the negative effects last up to seven years (Martorell et al., 2014).

### Read More

- Paco Martorell, Trey Miller, Lindsay Daugherty, and Mark Borgschulte, *Effects of Military Service on Earnings and Education Revisited: Variation by Service Duration, Occupation, and Civilian Unemployment*, 2014. Online: [www.rand.org/t/RR342](http://www.rand.org/t/RR342)
- David Loughran, Paco Martorell, Trey Miller, and Jacob Klerman, *The Effect of Military Enlistment on Earnings and Education*, 2011. Online: [www.rand.org/t/TR995](http://www.rand.org/t/TR995)
- David S. Loughran and Jacob Alex Klerman, "The Effect of Activation on the Post-Activation Civilian Earnings of Reservists," *Labour Economics*, 2012.
- Michael Hansen and Shanthi Nataraj, *Expectations About Civilian Labor Markets and Army Officer Retention*, 2011. Online: [www.rand.org/t/MG1123](http://www.rand.org/t/MG1123)
- David S. Loughran, Jacob Alex Klerman, and Craig Martin, *Activation and the Earnings of Reservists*, 2006. Online: [www.rand.org/t/MG474](http://www.rand.org/t/MG474)



## HOW EFFECTIVE ARE SUPPORT SERVICES FOR VETERANS' TRANSITIONS?

**Short Answer:** It depends on the service. RAND's evaluations of three programs designed to improve veterans' transition and employment opportunities found mixed results. The 100,000 Jobs Mission, launched in 2011 with a goal of employing 100,000 veterans by 2020, has already hired more than 265,000 veterans. The Army Partnership for Youth Success program had no measurable positive impact on employment outcomes. Meanwhile, most Beyond Yellow Ribbon programs RAND evaluated were partially meeting their goals for employment and other types of assistance but struggled with common problems, including uncertain and limited funding.

### RAND Findings

Numerous programs aim to improve veterans' employment opportunities. Although many of the programs do not yet collect and track all the data needed to evaluate their outcomes, RAND has studied several of these programs using a range of quantitative and qualitative methods and has developed a toolkit showing how military skills can apply to civilian jobs.

#### PaYS

Under the Army Partnership for Youth Success (PaYS) program, roughly 400 large employers have committed to interview participating soldiers after they separate from the military. An employer is expected to project future openings by military occupational specialty and list those openings in an Army database. Although PaYS is primarily a recruiting tool, it gives troops a foot in the door at a veteran-friendly employer that has identified a need for their skills. The intention is to smooth veterans' transitions and to help them find jobs that align with their skills.

As part of a broader project examining the effect of military service on earnings, RAND researchers investigated the earnings of PaYS participants (Martorell et al., 2014). They found no evidence that the program had a positive impact on job market outcomes. In fact, participants earned an average of \$1,000 to \$2,000 *less* in the first years after separation

than comparable nonparticipants. Based on the data available, the study could not rule out the possibility that the program improved participants' nonmonetary job outcomes, such as greater job satisfaction or better working conditions. Despite controlling for observable characteristics, the study also could not rule out the possibility that the earnings gap between participants and nonparticipants reflects differences in unobservable characteristics, rather than a causal effect of the program.

#### 100,000 Jobs Mission

The 100,000 Jobs Mission, launched in 2011 by JPMorgan Chase & Co. and ten other businesses, aimed to hire 100,000 veterans by 2020. By June 2015, the program already had 206 member companies that together had hired more than 265,000 veterans. RAND was asked to identify lessons learned from the program (Hall et al., 2014).

In interviews with 26 member companies, the authors heard that veterans make excellent employees, and that the coalition helped employers share best practices for recruiting veterans, relay details about strong job candidates, and collaborate on hiring challenges. However, many employers still reported having trouble locating and hiring veterans, and some had difficulty understanding how various military skills might match civilian job requirements. RAND identified several opportunities for improvement, including collecting hard data on veteran employees' performance to improve their perceived value and justify continued investment.

#### Beyond Yellow Ribbon

In 2011, Congress appropriated funding to expand the Yellow Ribbon Reintegration Program, which supports Beyond Yellow Ribbon (BYR) programs aimed at easing veterans' transitions to civilian life by providing critical outreach services. To date, the programs have tended to be organized within the state National Guard structures and focus on employment, mental health issues, legal assistance, and other forms of support and outreach. However, many of these programs are not regularly evaluated and are difficult to evaluate because they have not developed clear objectives and do not collect data on relevant metrics.

The Office of the Assistant Secretary of Defense for Reserve Affairs asked RAND to assess 13 programs in the ten states that received fiscal year 2013 BYR funding. Werber et al. (2015) found that, while nearly all BYR programs were partially

meeting their goals, many were struggling with common problems, including planning under uncertainty about future funding. While several programs lacked clearly defined goals and did not routinely reach out to the full eligible population, many demonstrated promising practices, such as documenting their procedures and practices, and using strong technology-based tracking systems for managing clients and capturing output and outcomes. Their recommendations have helped BYR programs address important challenges, confront areas of improvement, and share best practices.

### Toolkit for Translating Skills

One challenge identified by veterans and employers alike is communicating how the skills and qualifications gained in the military through formal courses and on-the-job training apply to civilian workplaces. RAND researchers developed a pilot toolkit that employers can use to understand the full value veterans can bring to their organizations (Hardison et al., 2015). The toolkit includes overviews that concisely break down which specific skills and competencies are attained through each formal military education course for enlisted personnel in the Army and Marine Corps.

### Read More

- Kimberly Curry Hall, Margaret C. Harrell, Barbara Bicksler, Robert Stewart, and Michael P. Fisher, *Veteran Employment: Lessons from the 100,000 Jobs Mission*, 2014. Online: [www.rand.org/t/RR836](http://www.rand.org/t/RR836)
- Chaitra M. Hardison, Michael G. Shanley, Anna Rosefsky Saavedra, James C. Crowley, Jonathan P. Wong, and Paul S. Steinberg, “What Veterans Bring to Civilian Workplaces: A Prototype Toolkit for Helping Private-Sector Employers Understand the Nontechnical Skills Taught in the Military,” 2015. Online: [www.rand.org/t/TL160](http://www.rand.org/t/TL160)
- Paco Martorell, Trey Miller, Lindsay Daugherty, and Mark Borgschulte, *Effects of Military Service on Earnings and Education Revisited: Variation by Service Duration, Occupation, and Civilian Unemployment*, 2014. Online: [www.rand.org/t/RR342](http://www.rand.org/t/RR342)
- Laura Werber, Jennie W. Wenger, Agnes Gereben Schaefer, Lindsay Daugherty, and Mollie Rudnick, *An Assessment of Fiscal Year 2013 Beyond Yellow Ribbon Programs*, 2015. Online: [www.rand.org/t/RR965](http://www.rand.org/t/RR965)



## WHAT DO VETERANS EXPERIENCE WHEN RETURNING TO SCHOOL?

**Short Answer:** Veterans are increasingly taking advantage of the GI Bill. While their college experience is similar to those of civilians, veterans report difficulty relating to civilian classmates and finding like-minded students and staff. For these reasons, many veterans choose to attend for-profit institutions, which provide many conveniences and benefits over traditional universities, but which are associated with lower graduation rates and higher student debt.

### RAND Findings

The education benefits of the GI Bill, including tuition and a monthly stipend, are key reasons that young people join the military. One concern is that recent spikes in tuition may have eroded the value of these benefits. The two most significant education programs are the 1984 Montgomery GI Bill and its successor, the Post-9/11 GI Bill, implemented in 2009 to improve affordability. RAND has conducted studies into various aspects of both programs.

### GI Bill Costs and Savings

Martorell and Bergman (2014) analyzed usage patterns of the Montgomery GI Bill and its potential impact on future costs. Nearly half of veterans separating before 2000 claimed the benefits, and usage increased steadily from 1990 to 2005. Given this trend and the newer bill’s generosity, the authors expect spending on the GI Bill to grow in the future.

With the implicit goal of finding cost savings, Buryk et al. (2015) reviewed all major military education assistance programs. Key recommendations were that programs improve data collection and do more to track and assess outcomes and that veterans be encouraged to choose programs that bestow academic credit through testing and conversion of prior military courses and work experience—the quickest, least costly way to get academic credit.

Given that the GI Bill is partly a recruiting tool, is it worth the cost? While Buryk et al.’s review of the academic litera-



ture found some evidence to indicate that the GI Bill attracts higher-quality recruits, some research suggests that recipients may leave service earlier than others. Future research could help DoD design benefits that balance recruitment with retention.

### **Veterans' College Experience and For-Profit Institutions**

Steele, Salcedo, and Coley (2010, 2011) conducted in-depth focus groups, interviews, and an online survey in the first year of the Post-9/11 GI Bill to gain insight into veteran student experiences, the challenges of adapting to campus life, and how they chose which institution to attend. Veterans choose educational institutions based mainly on the programs offered, the reputations of these programs, their proximity to home or work, and whether friends or relatives were attending the same institution—none of which is necessarily unique to veterans. What is unique is their reported difficulty relating to non-veteran students and finding like-minded students or staff. In addition, about 37 percent of survey respondents rated coping with service-related disabilities and posttraumatic stress disorder as a moderate or major challenge. RAND researchers recommended several ways to serve student veterans more effectively, including veteran-specific advising and new organizations to connect veterans with each other.

Veterans frequently choose to attend for-profit institutions, which have come under scrutiny due to high student debt levels and default rates, high dropout rates, and low postgraduation employment rates. In 2010, the Senate Committee on Health, Education, Labor, and Pensions published a series of reports that also raised concerns about the schools' aggressive and misleading recruitment of veterans. The reports and media attention helped perpetuate an image of veterans as undiscerning consumers, duped into choosing overpriced institutions with subpar outcomes. In 2012, RAND investigated the trend, and the researcher testified before the House Committee on Veterans' Affairs about the reasons veterans choose for-profit institutions (Steele 2012).

Veterans see for-profits as adult-oriented, career-focused, and flexible. Veterans, especially those with families, want flexible course hours and options, and locations near home or work. They perceive for-profits as offering more practical learning environments. Degrees from for-profits take less time to complete because for-profits are more willing to accept military transcripts and transfer military to academic credits, and their courses are less likely to be oversubscribed. Timely graduation

is important for many veterans, given the four-year limit on receiving GI Bill benefits.

Many for-profits have campuses in multiple states. For veterans likely to relocate, enrolling in a for-profit institution decreases the risk of having to transfer to another institution. Finally, veterans can often ignore the higher overall cost of for-profit institutions because the out-of-pocket costs for veterans who qualify for the full GI Bill benefit are equal. For-profits cost the government more because they set tuition to match the maximum GI Bill benefits allowed.

The findings suggest that for-profit schools provide the flexibility and services that veterans need, but that deceptive practices, high dropout rates, and lower postgraduation employment rates may diminish their effectiveness in some cases. Further, for-profit schools may be less desirable from the government's perspective due to their higher cost.

### **Read More**

- Peter Buryk, Thomas E. Trail, Gabriella C. Gonzalez, Laura M. Miller, and Esther M. Friedman, "Federal Educational Assistance Programs Available to Service Members: Program Features and Recommendations for Improved Delivery," 2015. Online: [www.rand.org/t/RR664](http://www.rand.org/t/RR664)
- Paco Martorell and Peter Bergman, "Understanding the Cost and Quality of Military-Related Education Benefit Programs," 2014. Online: [www.rand.org/t/RR297](http://www.rand.org/t/RR297)
- Jennifer L. Steele, Nicholas Salcedo, and James Coley, "How Military Veterans Are Using the Post-9/11 GI Bill and Adapting to Life in College," 2010. Online: [www.rand.org/t/RB9560](http://www.rand.org/t/RB9560)
- Jennifer L. Steele, Nicholas Salcedo, and James Coley, *Service Members in School: Military Veterans' Experiences Using the Post-9/11 GI Bill and Pursuing Postsecondary Education*, 2011. Online: [www.rand.org/t/MG1083](http://www.rand.org/t/MG1083)
- Jennifer L. Steele, "Military Veterans' Experiences in For-Profit Higher Education" (congressional testimony), 2012. Online: [www.rand.org/t/CT376](http://www.rand.org/t/CT376)



## HOW WIDESPREAD AND COSTLY ARE MENTAL HEALTH PROBLEMS AMONG SERVICE MEMBERS AND VETERANS?

**Short Answer:** RAND estimated that nearly 1 in 5 of the 1.64 million service members deployed between October 2001 and October 2007 suffered from PTSD or major depression. Estimated costs related to PTSD and major depression among these service members over the first two years after their deployment range from \$4.0 billion to \$6.2 billion. The major cost related to PTSD is lost productivity. Estimated costs related to traumatic brain injury (TBI) range from \$591 million to \$910 million, and the major driver is mortality (often due to suicide). RAND found that only half of those who sought medical care received minimally adequate treatment. Adopting evidence-based treatments with better outcomes could potentially save as much as \$1.7 billion, or an average of \$1,063 per returning veteran, through increased productivity and fewer suicides.

### RAND Findings

Unlike the physical wounds of war, PTSD, major depression, and TBI are often invisible, unrecognized, and unacknowledged. Their effects are also poorly understood. In 2008, Tanielian and Jaycox (2008) led an ambitious effort to fill the gap and conducted a comprehensive study of the postdeployment health-related needs associated with these three conditions among veterans of the wars in Afghanistan and Iraq. The RAND study also evaluated the health care system in place to meet those needs, gaps in the system, and the costs associated with those conditions.

Based on a telephone survey of 1,965 previously deployed individuals, RAND estimated that of the 1.64 million service members deployed between October 2001 and October 2007, approximately 300,000 suffered from PTSD or major depression, and about 320,000 experienced a probable TBI during deployment. Using a micro-simulation model and a review of existing research, the authors estimated that, over the first

two years after service members' deployment, costs related to PTSD and major depression could range from as little as \$4.0 billion to as much as \$6.2 billion, and that TBI-related costs could range from \$591 million to \$910 million. Productivity losses are the main cost drivers for PTSD and major depression, accounting for 55 to 95 percent of total PTSD- and depression-related costs. Mortality is the major cost driver for TBI, accounting for 70 to 80 percent of total TBI-related costs.

### Gaps in Mental Health Services

As in the civilian population, many afflicted individuals had not sought help from a physician or mental health provider. Only half of those who sought medical care received minimally adequate treatment. Tanielian and Jaycox (2008) estimated that the adoption of evidence-based treatments could save as much as \$1.7 billion, or \$1,063 per returning veteran on average, through increased productivity and reduced numbers of suicides.

RAND researchers found a large gap between the need for mental health services and the use of those services, largely owing to structural factors (high wait times, low availability of providers), as well as institutional, personal, and cultural factors. Many service members expressed concern that using mental health services will negatively affect their military careers. RAND provided numerous recommendations for improving the delivery of evidence-based care and estimated that this care would pay for itself within two years, or even save money.

### Effects of PTSD on Earnings

Although these problems are serious, RAND has also found some relatively encouraging evidence that the effects of PTSD on productivity and earnings may be smaller than previously thought. Loughran and Heaton (2013) show that military reservists symptomatic of PTSD at the end of deployment experience just a 6-percent decline in labor market earnings four years after deployment and that much of this decline is attributable to higher rates of military separation among those symptomatic of PTSD—not lower civilian earnings. The smaller-than-expected effects of PTSD on productivity and earnings may be further evidence of the resilience of military service members and veterans.

## Read More

- Terri Tanielian and Lisa H. Jaycox (eds.), *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery*, 2008.  
Online: [www.rand.org/t/MG720](http://www.rand.org/t/MG720)
- David S. Loughran and Paul Heaton, *Post-Traumatic Stress Disorder and the Earnings of Military Reservists*, 2013.  
Online: [www.rand.org/t/TR1006](http://www.rand.org/t/TR1006)



## IS SUICIDE A CRISIS IN THE MILITARY?

**Short Answer:** A 2008 study found a sharp spike in the number of suicides among military personnel in the decade after 9/11, from 10 per 100,000 in 2001 to almost 16 per 100,000 in 2008. Among civilians with similar demographics, the rate is about 20 per 100,000. While the military spends large amounts on suicide prevention research into proven methods, it often fails to direct funding to new research that might better advance its goals.

## RAND Findings

In the decade after 9/11, suicide rates increased among U.S. military personnel (Ramchand et al., 2011). Overall, the average rate climbed from just over 10 per 100,000 service members in 2001 to almost 16 per 100,000 in 2008, largely driven by a sharp increase in Army suicides. In 2008, the Army and Marine Corps had the highest suicide rates, at 18.5 and 19.5 per 100,000, respectively; corresponding rates in the Air Force and Navy were 12.1 and 11.6, respectively.

The annual suicide rate for the U.S. population is about 10 per 100,000. However, comparing this rate with that of the military is misleading because the military population is younger and disproportionately male. Among the comparable

civilian population, the suicide rate hovers at about 20 per 100,000. The gap between the military and similar civilian populations was substantially larger during the 1990s but narrowed during the Iraq and Afghanistan wars, raising considerable concern among policymakers.

The Department of Defense asked RAND to identify best practices and recommend changes to DoD programs that would bring them in line with state-of-the-art suicide prevention strategies. Ramchand et al. (2011) conducted a comprehensive study investigating suicide in the military, the military's existing suicide prevention strategies, and the evidence on suicide-prevention best practices. The study made concrete recommendations for how DoD could improve its approach, including mandating training on evidence-based practices for behavioral health generally—and on suicide risk assessment specifically—for chaplains, health care providers, and mental health professionals; developing creative strategies to restrict access to lethal means for those who appear to be a suicide risk; and providing formal guidance to commanders about how to respond to suicides and suicide attempts.

## Mismatched Research Funding

For a subsequent project, RAND was tasked with helping DoD create a unified, strategic, and comprehensive portfolio of military suicide prevention research across topics in prevention, intervention, and postintervention. Ramchand et al. (2013) found that DoD is one of the largest U.S. funders of research related to suicide prevention. At the time, DoD was funding 62 studies at a cost of almost \$200 billion. However, the funding priorities did not reflect DoD's research needs (Ramchand et al., 2013). The study found that DoD was overwhelmingly funding research into already proven, mature prevention methods and was providing little funding in new areas in which it had the most potential to learn. It was also providing little funding to fulfill goals considered most appropriate for the military context: (1) ensuring that non-health professionals such as noncommissioned officers and chaplains are trained to identify, care for, and refer at-risk personnel; and (2) implementing population-based programs that reduce suicide risk factors and build resilience, which accounts for just 10 percent of DoD's suicide prevention research spending.

RAND researchers also found that DoD suffers from a research-to-practice gap, often failing to respond when new evidence emerges, or to share and implement best practices. The study identified key strategies to deal with this gap and prepared case studies of instances in which the strategies were implemented. The authors also recommended better ways to ensure that the most promising results—from studies funded both inside and outside DoD—are integrated into DoD operating procedures to help prevent further loss of lives to suicide.

## Read More

- Rajeev Ramchand, Joie Acosta, Rachel M. Burns, Lisa H. Jaycox, and Christopher G. Pernin, *The War Within: Preventing Suicide in the U.S. Military*, 2011. Online: [www.rand.org/t/MG953](http://www.rand.org/t/MG953)
- Rajeev Ramchand, Nicole K. Eberhart, Christopher Guo, Eric Pedersen, Terrance D. Savitsky, Terri L. Tanielian, and Phoenix Voorhies, *Developing a Research Strategy for Suicide Prevention in the Department of Defense: Status of Current Research, Prioritizing Areas of Need, and Recommendations for Moving Forward*, 2013. Online: [www.rand.org/t/RR559](http://www.rand.org/t/RR559)



## ARE DISABLED VETERANS AND SURVIVORS SUITABLY COMPENSATED?

**Short Answer:** Disabled veterans' lost civilian earnings are more than offset by disability payments, the tax-free status of those payments, and the ability of veterans with disability ratings of 50 percent or greater to collect disability and retirement pay at the same time. However, this is not universally true. For example, former officers fare worse because disability programs do not account for their higher earning potential. As for deceased soldiers' survivors, monthly benefits replace about two-thirds of the household's lost earnings; however, combined with lump-sum benefits, the total amount of compensation can offset those losses for 20 years or more at a rate of about 120 percent on average.

## RAND Findings

Casualties in Iraq and Afghanistan heightened concern about whether veterans were being adequately compensated for service-connected disabilities. When RAND addressed the question in 2012, DoD and the Department of Veterans Affairs (VA) were paying about \$35 billion per year to 3.2 million veterans for disabilities and health conditions ranging from combat-related injuries to asthma and diabetes (Buddin and Han, 2012).

Two RAND studies have established that, on average, disabled veterans are compensated at a rate that is slightly higher than their lost earnings. Buddin and Han (2012) found that disability payments, the tax-free status of those payments, and the ability of veterans with disability ratings of 50 percent or greater to receive disability and retirement payments concurrently exceed average lost earnings. Heaton, Loughran, and Miller (2012) found that compensation exceeds losses by an average of 107 percent.

However, both studies found substantial variation. While compensation exceeds the projected earnings loss for *most* veterans, *some* groups did incur an uncompensated loss. Disability payments are proportionately less generous for former officers because those payments do not account for their higher earning potential. The programs also neglect such factors as individual

training, experience, and pre-injury earnings that tend to affect earnings potential. Other subgroups that fare worse are veterans with medical separations and those with disability separations from active duty. RAND recommended that DoD and VA better define the goals and objectives of disability compensation and spell out the basis for awards.

### Disability Benefits

In a broader study of military compensation reform options, Asch, Hosek, and Mattock (2014) proposed a new basis for determining compensation that addresses the shortcomings identified in the prior two studies. Given that DoD disability compensation is paid only to those unfit for service, they suggested that DoD disability benefits should compensate for the loss of a military career, and VA benefits should compensate for other losses. The authors proposed using the value of the loss of the military career as a standard and calculated this value at each year of service using RAND's Dynamic Retention Model. In addition to being simpler and more coherent, this reform would provide higher benefits to veterans with disability separations.

### Disincentive to Return to Work

RAND research has identified one potential unintended consequence of generous disability compensation. The payments may be a disincentive for veterans to return to work when they are able (Osilla and Van Busum, 2012). In their study of return-to-work resources available to help wounded warriors obtain and retain employment, Osilla and Van Busum (2012) found that existing programs are poorly coordinated, difficult to navigate, and fail to track key metrics that could be used to evaluate programs, design new ones, and mitigate unintended consequences such as disincentive effects.

### Compensating Survivors

When troops die in combat, their families often lose the main breadwinner. Families may receive recurring monthly benefits from federal sources including DoD, the VA, and the Social Security Administration (SSA). They may also be eligible for one-time payments from the Servicemembers' Group Life Insurance program, the DoD Death Gratuity, and Combat-Zone Tax Forgiveness. Using longitudinal administrative data from military personnel records, casualty records, and annual

Social Security earnings databases, and linking those data with data on payments made to surviving spouses and children from DoD, VA, and SSA, Miller, Heaton, and Loughran (2012) found that recurring benefits replace about two-thirds of lost earnings. However, recurring and lump-sum benefits combined can fully offset lost earnings for 20 years or more at a rate of about 120 percent on average.

### Read More

- Beth J. Asch, James Hosek, and Michael G. Mattock, *Toward Meaningful Military Compensation Reform: Research in Support of DoD's Review*, 2014. Online: [www.rand.org/t/RR501](http://www.rand.org/t/RR501)
- Richard Buddin and Bing Han, *Is Military Disability Compensation Adequate to Offset Civilian Earnings Losses from Service-Connected Disabilities?* 2012. Online: [www.rand.org/t/MG1098](http://www.rand.org/t/MG1098)
- Karen Chan Osilla and Kristin R. Van Busum, "Labor Force Reentry: Issues for Injured Service Members and Veterans," 2012. Online: [www.rand.org/t/OP374](http://www.rand.org/t/OP374)
- Paul Heaton, David S. Loughran, and Amalia Miller, *Compensating Wounded Warriors: An Analysis of Injury, Labor Market Earnings, and Disability Compensation Among Veterans of the Iraq and Afghanistan Wars*, 2012. Online: [www.rand.org/t/MG1166](http://www.rand.org/t/MG1166)
- Amalia Miller, Paul Heaton, and David S. Loughran, *Analysis of Financial Support to the Surviving Spouses and Children of Casualties in the Iraq and Afghanistan Wars*, 2012. Online: [www.rand.org/t/TR1281](http://www.rand.org/t/TR1281)



## WHAT ARE PROMISING AVENUES FOR FUTURE RESEARCH ON VETERANS?

**Short Answer:** Research has proven the value of evaluating both the needs of veterans and the effectiveness of programs meant to serve them and their families. Veterans' outcomes could be improved through more research in the following areas: (1) mapping veterans' employment paths to provide a better understanding of how their military skills and experience can apply to the civilian workplace, and (2) studying veterans' educational outcomes to determine how veterans are faring and what their returns from education are. Research in these areas would benefit from the establishment of a system of data that follows the life events of veterans from the time they leave military service.

### Findings from Previous Research

Previous and ongoing research, including the RAND research cited earlier, seeks to dispel the myths surrounding veterans and expose the facts. One lesson learned from previous research is how inaccurate many stereotypes about veterans are. For example, the research takes issue with the simplified narrative that veterans' military training and experience have left them ill-equipped for success in the modern economy. A large body of research directly challenges this narrative, including RAND's work on suicide in the military and on the productivity effects of posttraumatic stress disorder and invisible wounds.

A second lesson is the need for careful evaluation of the effectiveness of programs meant to aid veterans and their families to ensure that the limited resources dedicated to such programs go to those who need them most. Examples include work on the cost of disability compensation and the future cost of GI Bill education benefits; the real impact of the many well-meaning, taxpayer-funded veteran transition programs; the effects of benefits paid to veterans; and the laws and tax incentives designed to help veterans.

### Potential Research on Veterans' Transitions

While previous research has helped dispel the myths surrounding veterans, a gap in the research exists in our understanding of veterans' long-term choices and outcomes. In addition to specific evaluations of recent programs, we recommend a complementary program of strategic research with broader, more ambitious objectives. Based on the insight gained from past research contributions, the Department of Defense should consider focusing on two broad areas of future research.

### Mapping Veterans' Employment Paths

Policymakers, veterans, employers, and other stakeholders need a better understanding of how skills and experience acquired in the military transfer to civilian jobs. For example, Martorell et al. (2014) found that veterans who served in the health care, communications, or intelligence occupations in the military enjoy larger earnings gains as civilians. A natural follow-up that RAND is currently exploring would be an in-depth exploration focused on linking military occupations with postservice occupations. Some of the top civilian jobs that veterans attain (e.g., security, mechanical professions) differ from the most common civilian jobs. Are veterans pursuing jobs different from those of the overall civilian population, or are they getting different jobs? The answer should influence the job-hunting resources and transitional support services offered.

In past analyses, RAND researchers studied *a few* broad occupational categories, *such as health care, communications, and intelligence*. Drilling deeper into specific occupations may yield further insight into the exact skills that are most valued in the civilian job market. What specific skills in the communications and intelligence occupational categories account for the apparent earnings premium? Looking at specific military occupations could determine which ones have been historically successful or difficult in terms of job placement; transitional job search resources could then be allocated accordingly. Perhaps certain groups of veterans need extra help translating their military experience into civilian terms to ensure they are not overlooked.

In addition to looking at historical outcomes from the "supply-side" point of view of the job seeker, "demand-side" analysis from the point of view of the employers could contribute to better educational and employment outcomes for veterans. Qualitative assessment, interviews, and surveys could be leveraged to determine the skills that employers want from veterans and where gaps exist. Transitional aid in filling skill gaps could be highly beneficial.

## ***Broad Long-Term Study of Veterans' Education Outcomes***

Policymakers require better research on how veterans are faring in school and their returns from education. So far, the studies concerning the Post-9/11 GI Bill draw mainly on detailed surveys and direct student testimonials and focus on short-term experiences—one year after implementation of the Post-9/11 GI Bill. Ongoing analysis will be necessary to evaluate long-term veteran education and employment outcomes after college, measured in terms of full-time employment rates, income, and student loan indebtedness. Data from the National Center for Education Statistics' Baccalaureate and Beyond Surveys could be used to track cohorts of both veteran and nonveteran degree recipients. For example, are veterans more or less likely to graduate with debt than nonveterans? Do education outcomes for veterans differ across public, private nonprofit, and private for-profit schools?

RAND research indicates that veterans are informed consumers who make deliberate decisions that fit their life goals as working adults. Their higher education needs differ significantly from those of traditional undergraduates arriving straight from high school. A potentially high-impact area is the development of veteran-centric education advisory services. This first requires understanding veterans' preferred areas of study—the college majors they are pursuing and the degrees

they attain. In addition to collecting overall long-term educational outcome data, it would be important to track veterans' most common educational paths to provide detailed statistics of expected jobs and salaries upon graduation. This information would provide key measures of the returns on education for veterans and could guide their decisions regarding taking on education debt. In addition, research suggests large differences in earnings by college quality. Providing service members with information to help them select the right institutions will optimize the use of their education benefits.

Finally, both areas of research would benefit greatly from establishment of a system of data that follows the progress of cohorts of veterans over time. There are considerable barriers in integrating deep, longitudinal, administrative data such as military personnel records, occupational information, education records, health records, and compensation data. These databases reside in disparate locations at DoD, the VA, the Census Bureau, the Bureau of Labor Statistics, and the Social Security Administration. Rather than creating ad hoc data sets repeatedly for each study, a system of veteran data would provide a more efficient, scalable platform to answer the range of questions that frequently surface surrounding veterans and to create future services tailored toward helping them smoothly transition back into civilian life.

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## About This Report

This document seeks to synthesize previous research studies conducted by RAND on veterans' transitions. It is by no means a comprehensive review of all research on veterans' transition. The studies summarized here were conducted throughout the RAND Corporation. The compilation of this report was sponsored by the Office of the Secretary of Defense and conducted within the Forces and Resources Policy Center, part of the RAND National Defense Research Institute (NDRI). NDRI is a federally funded research and development center sponsored by the Office of the Secretary of Defense, the Joint Staff, the Unified Combatant Commands, the Navy, the Marine Corps, the defense agencies, and the defense intelligence community.

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