

# The Effects of Combat Deployments on Veterans' Outcomes

Based on BFI Working Paper 2022-151, *"The Effects of Combat Deployments on Veterans' Outcomes,"* by Jesse M. Bruhn, Brown University; Kyle Greenberg, West Point; Matthew Gudgeon, West Point; Evan K. Rose, University of Chicago; and Yotam Shem-Tov, University of California, Los Angeles

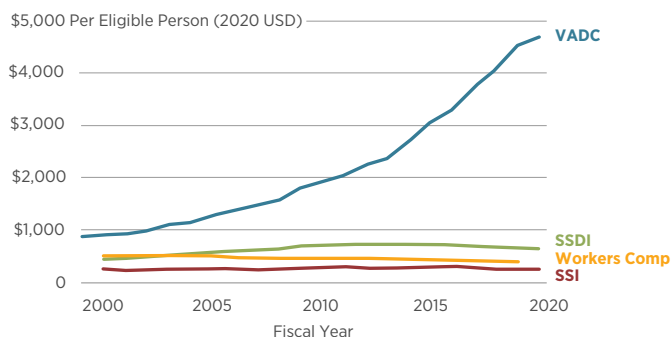
*Combat deployments increase disability compensation and deaths and injury as a result of combat, but there is limited evidence that combat deployments affect suicide, deaths of despair, financial health, incarceration, or education.*

Almost 2 million American servicemembers deployed to Iraq or Afghanistan following September 11, 2001. Over the following years, the age and sex adjusted suicide rate of veterans rose nearly twice as fast as non-veterans, and real annual Veterans Affairs Disability Compensation (VADC) payments per living veteran rose from \$900 to \$4,700, reaching total annual expenditures of nearly \$100B by 2021, a rate 10 times larger per eligible beneficiary than Social Security Disability Insurance.

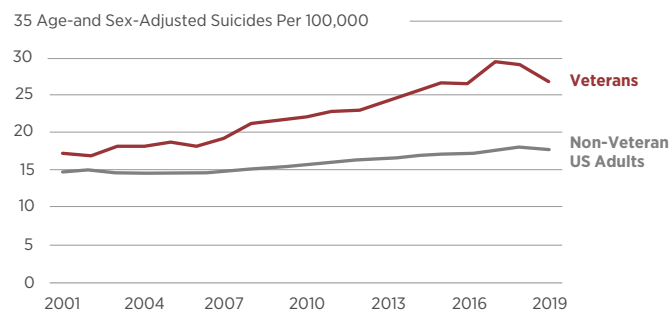
What explains the decline in veteran well-being and rise in VADC? Many point to the long-run behavioral and health consequences of combat deployments. However, assessing the causal role of warfighting is challenging because many other factors have changed over this period, such as the Army permitting more soldiers with low Armed Forces Qualification Test (AFQT) scores or prior felony convictions to enlist in response to recruiting shortfalls. In addition, changes in policy have also made it easier for veterans to qualify for VADC.

**Figure 1 - Trends in Veterans' Outcomes**

### A) Disability Payments Per Eligible Person



### B) Age- and Sex-Adjusted Suicide Rates



Notes: Panel A plots federal spending per person for several government programs in 2020 USD. The blue line shows total Veterans Affairs Disability Compensation (VADC) payments per living veteran (US Department of Veterans Affairs, 2022). The red line shows total federal Supplemental Security Income payments per fully insured worker (Social Security Administration, 2020, 2022b). The green line shows total Social Security Disability Insurance payments per fully insured worker (Social Security Administration, 2022a, b). The orange line shows total Workers Compensation payments per member of the civilian labor force (Murphy et al., 2021; Bureau of Labor Statistics, 2022.) Panel B is taken directly from a 2021 report written by the Department of Veteran Affairs (Department of Veterans Affairs, 2021.)

To examine these issues, the authors construct a unique dataset that combines numerous military and non-military administrative data sources. These data allow the authors to investigate the causal effects of deployment on VADC and noncombat deaths, including deaths of despair and suicides, and other key measures of veteran well-being over long time horizons.

Despite their rich dataset, identifying the causal effect of combat deployments remains challenging because soldiers are not deployed at random. For example, unit commanders may prefer to bring their best soldiers to war and leave the rest behind, while soldiers with extenuating family or other circumstances may also avoid deployment. To overcome these challenges, the authors employ an empirical strategy that leverages the quasi-random assignment of newly recruited soldiers to units. This allows them to compare soldiers assigned “as-good-as randomly” to units that vary in their propensity to deploy but that are otherwise similar, approximating a true randomized experiment in which some soldiers are sent to war, but others are not.

The authors’ findings include the following:

- Combat deployments substantially increase VADC payments. An average 10-month deployment increases any VADC receipt by 9.4pp and annual VADC compensation by \$2,602 per person eight years after enlistment. Some of this increase is explained by warfighting. Other channels also play a role, however, including physical overuse and psychological trauma from deployment, as well as the potential for the deployment experience to relax VADC eligibility requirements.
- Combat deployments increase the risk of death and injury. A 10-month deployment increase all-cause mortality by 0.53p.p within eight years of enlistment, but almost all of this is a result of deaths directly attributable to combat. The estimated effect on overall noncombat deaths within eight years of enlistment is 0.05pp and not statistically distinguishable from zero. For deaths of despair, which primarily comprise suicide and drug or alcohol-related deaths, the estimated effect is 0.002pp.

To better understand whether deployment has important adverse effects beyond increasing average disability and mortality due to combat, the authors also conduct additional analyses and find the following:

- Deployments do not cause soldiers to be removed from service for misconduct or to be incarcerated. Deployments do not worsen credit scores or educational outcomes.
- Soldiers assigned to brigades with higher casualty rates are no more likely to die outside of combat. Additionally, soldiers exposed to more violence on deployments of the same duration do not have worse outcomes on non-combat mortality, misconduct, incarceration, credit, or educational attainment.

The authors conclude by revisiting the striking trends in veterans’ outcomes that have been the focus of much public attention. They find that while deployment explains a large portion of the early 2000s increase in VADC receipt, more recently VADC and deployment have decoupled. The most recent cohorts of soldiers have some of the highest levels of VADC and the lowest deployment risk, suggesting that changes in overall VADC generosity and eligibility criteria may be responsible for the most recent surge. Deployment also does not explain changes in noncombat deaths, which are more closely connected to changes in the observable characteristics of whom the Army allowed to serve.

Bottom line for policymakers: This work offers a cautionary note against laying too much blame for veterans’ outcomes on combat deployment itself. To better support veterans of both past and future wars, it is important to understand a broad set of determinants of veterans’ outcomes, as well as the drivers of selection into service.

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NO. 2022-151 · NOVEMBER 2022

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