# Health and Health Behavior Differences: U.S. Military, Veteran, and Civilian Men

**PUBLICATION:** American Journal of Preventive Medicine (2012); 43(5), 483–489.

**PUBLICATION TYPE:** Peer-Reviewed Journal

**KEYWORDS:** Health status, health behavior, male veterans, military

# **RESEARCH HIGHLIGHTS:**

- Although many studies have reported veterans to be more likely to participate in recommended preventative care, there is national data suggesting poorer health among veterans when compared to civilians. More current and rigorous studies are needed to examine whether this is in fact the case and to identify areas for targeted intervention.
- Compared to civilian men, veteran men were more likely
  to report fair or poor health, frequent poor physical health,
  limited activities because of physical or mental health status
  and a history of depressive and anxiety disorders. Both
  veterans and active duty men were more likely to report
  smoking and heavy alcohol use, compared to civilians and
  National Guard/Reserve members and active duty service
  members were more likely to report smokeless tobacco use
  than civilians.
- National Guard and Reserve members were more likely than active duty men to be obese, have a history of diabetes, and more likely to report a history of cardiovascular disease compared to civilian men. They also had poorer healthcare access, with more than a quarter reporting being uninsured.

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## **ABSTRACT:**

"Background: Little is known about health and health behavior differences among military service veterans, active duty service members, National Guard/Reserve members, and civilians. Several important differences were identified among U.S. women from these subpopulations; to identify areas for targeted intervention, studies comparing men from these subpopulations are needed.

Purpose: To compare veteran, military, and civilian men on leading U.S. health indicators.

Methods: Data were from the 2010 Behavioral Risk Factor Surveillance Survey, a U.S. population based study. In 2011, self-reported health outcomes were compared using multivariable logistic regression across male veterans (n=53,406); active duty service members (n=2144); National Guard/Reserve service members (n=3724); and civilians (n=110,116).

Results: Multivariate logistic regression results are presented. Despite better healthcare access, veterans had poorer health and functioning than civilians and National Guard/Reserve members on several indicators. Veterans also were more likely than those on active duty to report diabetes. Veterans were more likely to report current smoking and heavy alcohol consumption than National Guard/Reserve members and civilian men, and lack of exercise compared to active duty men and National Guard/Reserve members. National Guard/Reserve men had higher levels of obesity, diabetes, and cardiovascular disease (versus active duty and veterans, active duty, and civilians, respectively). Active duty men were more likely to report current smoking and heavy alcohol consumption than civilians and National Guard/Reserve members, and reported more smokeless tobacco use than civilians.

Conclusions: Veterans have poorer health and health behaviors; increased prevention efforts are needed from veteran-serving organizations. Despite good health, active duty men reported unhealthy lifestyles, indicating an important area for prevention efforts."



# **Implications**

# **FOR PRACTICE**

Several health disparities in terms of both healthcare access and health status were observed between the military and civilian populations in this study, including veterans, civilians, active duty and National Guard and Reserve members. These results are similar to previous studies focusing on the differences in healthcare access between civilian and military women, and demonstrate the need for interventions targeted at reducing health inequalities. As expected, due to the national healthcare systems serving the military, active duty servicemen generally had superior access to care, followed by veterans. Still, male veterans had worse overall health on a number of health indicators, including functional limitations, arthritis, cancer and depression and anxiety compared to civilian men. Compared to National Guard and Reserve members, male veterans were more likely to report a history of depression, frequent poor health and limited activities as a result of poor health, either mental or physical. Veterans also had higher rates of diabetes and obesity than active duty men; otherwise there were few differences between these populations. These results suggest that in addition to healthcare provided by the Department of Veterans Affairs (VA), there is a place for other organizations that serve military and veteran groups to create and expand preventative health services and health education, including disease management, to ensure that veterans are receiving needed care.

### **FOR POLICY**

This study identified several significant health disparities between civilian men, military service members and veterans. In order to address these issues, policy makers, VA administrators and the Department of Defense (DoD) will need to continue working together to prioritize health and healthcare access initiatives for military and veteran populations. Since active duty men had high rates of heavy alcohol use and tobacco use, policies supporting health education programs focused on substance abuse for military populations may be especially beneficial. Programs focused on reducing these and other risk behaviors, as well as introducing healthy alternatives to managing stress, may be able to reduce poor health outcomes in military service members. National Guard and Reserve men were specifically vulnerable to cardiovascular issues, so policy makers may wish to focus their efforts on funding cardio-metabolic prevention and disease-management interventions for this population. They were also at a greater risk for poor healthcare access, which will need to be addressed using both outreach and policy. The most severe health disparities were between veteran and civilian populations, which may point to a need for expansion of outreach efforts and disease-management program implementation.

#### FOR FUTURE RESEARCH

As this study focuses on cross-sectional data, there is no way to assess within-group health differences during transitional periods, including moving from civilian to active duty military, and moving from military to veteran status. Future researchers should perform longitudinal studies that allow for analysis of health status and healthcare access over time, including the development and treatment of health conditions in military servicemen and veterans. Future studies should aim to gather a higher response rate and more detail from study participants, including periods of service in the National Guard or Reserve, which were unavailable for this sample. Since some of the condition-specific questions, including those addressing cancer and arthritis, were only asked of participants in certain states, these results may not be generalizable beyond those geographic regions. Researchers should focus on gathering data from a more diverse and representative sample of the military population for all questions, including those for specific conditions, and should also aim to objectively verify information to reduce biases from self-reported data. Deployment and combat experience data, as well as more thorough measures of health conditions and their interactions in military and civilian populations, would be useful additions to future studies. Mental distress may impact health outcomes in ways that could not be assessed using the current data set alone and should be included in future studies.

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