Rural–Urban Differences in Rates, Risk and Methods of Suicide Among VA Patients

Investigators from the VA Serious Mental Illness Treatment Resource and Education Center recently published a study in the American Journal of Public Health on the results from their study examining rural-urban differences in rates, risks and methods of suicides among Veterans receiving care in the VA Health Care System. In their analysis, they identified VA patients from the VA’s National Patient Care Database from two different time periods: 2003 and 2004 (FY03-04) who were alive at the start of FY04 (n=5,447,257) and all patients in FY06-07 who were alive at the start of FY07 (n=5,709,077). Mortality was assessed from National Death Index searches. Rurality was assessed by categorizing patients’ zip codes of residence as rural or urban based on US census categories. For the FY07-08 cohort, VA patients in rural areas were less likely than urban patients to have had a diagnosis of bipolar disorder, schizophrenia, or substance use disorders, but more likely have had a diagnosis of depression, PTSD and other anxieties. Crude suicide rates were greater in rural areas than in urban areas in both time periods. Further, residence in a rural zip code was associated with a 20% and a 22% increased risk for suicide mortality than for urban residents in the first and second time period cohorts, respectively. Firearms were the most common method of suicide overall, followed by poisoning. Suicide by firearms was more common in rural than in urban areas (77% vs 61%). In their analysis of possible factors contributing to higher rates of suicide among rural Veterans as compared to their urban counterparts, these investigators found that measures of distance to a VA facility was not related to increased suicide risk. Their data suggest that instead, it has more to do with factors such as socioeconomic status, differences in health service treatment seeking and greater use and availability of firearms in rural areas. 


Did You Know?
- Since the early 1970’s suicide rates among men in rural areas of the US have exceeded those of urban men, and this disparity has increased over time among both genders.
- Elevated suicide rates in rural areas have been attributed to factors including geographic and interpersonal isolation, economic and social distress, lack mental health treatment resources, and rural culture.
- Firearm suicide mortality is a significant public health problem in rural areas.
- The VA has pioneered health system suicide prevention initiatives including 24 hour and web-based suicide prevention crisis line (1-800-273-TALK), ongoing national monitoring and support for development of suicide prevention programs.
- The National Institute on Drug Abuse reported on study of Army soldiers screened 3 to 4 months after returning from deployment to Iraq in which 27 percent of them met criteria for alcohol abuse and were at increased risk for related harmful behaviors.

Variability in Veterans’ Alcohol use by place of Residence

Investigators from the VA Office of Rural Health’s Central Region Veterans Rural Health Resource Center in Iowa City studied risky alcohol use among active duty and Veteran military personnel. Rates of risky alcohol use appear to be elevated among these groups however, little is known about the characteristics associated with alcohol misuse. Although there is evidence to suggest that patterns of alcohol use differ according to place of residence, no prior studies have investigated variability in alcohol use according to level of rurality and geographic region in US military veterans. The present study evaluated variations in alcohol use (i.e., past 30-day use, heavy use, and binge drinking) and drinking and driving according to place of residence among 55,452 US military veterans participating in the Behavioral Risk Factor Surveillance System. Veterans residing in rural areas were significantly less likely than those from suburban and urban areas to have consumed alcohol in the past 30 days. Conversely, rural-dwelling veterans who did drink alcohol had higher odds of binge drinking and drinking and driving Veterans residing in the South were significantly less likely than those from other geographic regions to report past 30-day alcohol use. In addition, veterans living in the Midwest were significantly more likely than those from the South to report drinking and driving. No differences in heavy alcohol use were observed based on location of residence.