

# **Suicide Mortality in Rural Vermonters**

### December 2022

Both nationally and in Vermont, suicide death rates are higher in rural areas compared to urban areas.<sup>i</sup> There are several factors that may explain why rates are higher in rural areas. A few of these include social isolation, firearms used as a means of death, mental health stigma, and reduced access to healthcare.<sup>ii</sup>

## **Rural populations at risk**

**Rural residents 15 years and older** are much more likely to die by suicide compared to their urban counterparts. The greatest differences in suicide rates by rurality are seen among Vermonters 15 to 24 and those 65 years and older. The rates among rural residents are three and a half and two times higher, respectively, compared to urban residents of the same age. **Males living in rural areas** are also much more likely to die by suicide compared to males living in

#### **KEY POINTS**

- Rural residents at higher risk for suicide death:
  - Males
  - Those 15 years and older
  - Veterans
- Risk factors elevated in rural suicide deaths:
  - Use of firearms as means
  - Possible mental health stigma, as evidenced by lower rates of mental health diagnoses and treatment compared to urban suicide deaths.

urban areas and females (rural males 35.3 per 100,000, urban males 18.7; rural females 7.5, urban 8.2). **Rural veterans** are also at higher risk for suicide (85% of veterans who die were rural residents). For more data, <u>see here</u>.



Source: Vermont Vital Statistics, 2019-2021

<sup>&</sup>lt;sup>i</sup> For this analysis, rurality was determined using county of residence. Residents of Chittenden County were classified as urban, residents of the remaining 13 counties were classified as rural.

<sup>&</sup>quot; Casant J, Helbich M. Inequalities of Suicide Mortality across Urban and Rural Areas: A Literature Review. Int J Environ Res Public Health. 2022 Feb 25;19(5):2669. doi: 10.3390/ijerph19052669. PMID: 35270369; PMCID: PMC8909802.

## **Risk factors in rural suicide deaths**

Vermont data indicates there are three factors that may explain the higher rates of suicide death in rural residents. One of these factors is the means used in death. Rural Vermonters who have died by suicide are significantly more likely to have used a firearm compared to urban Vermonters (57% vs. 43%). The other two factors are stigma towards mental health, which may influence willingness to seek help, and the availability of mental health services. Rural Vermonters who have died by suicide are significantly less likely to have a diagnosed mental health problem compared to urban Vermonters (61% vs. 76%). Rural Vermonters are also significantly less likely to be receiving mental health or substance misuse treatment at the time of their death (30% vs. 46%). This data suggests that rural residents may be less willing to seek mental health help, or that mental health treatment could be harder to access.

#### Rural Vermonters who have died by suicide are more likely to have used a firearm, and less likely to have had mental health diagnosis or treatment.



Mental health treatment includes treatment for substance misuse.

Source: Firearm, Vermont Vital Statistics, 2019-2021; Mental Health Vermont Violent Death Reporting System (VTVDRS), 2018-2020

#### **Key Takeaways**

Some rural populations may be at higher risk for suicide in Vermont. Based on the data, males, residents over the age of 15, and veterans have the highest rates of suicide death. Evidence based strategies that could help reduce rural suicide rates include promoting safe storage of firearms, improving access to mental health services, and "gatekeeper training" for programs and community leaders that work with rural Vermonters.

#### Limitations

NVDRS is subject to the completeness of information available, mental health indicators may be underestimated.

For more information about the data: Caitlin Quinn, <u>Caitlin.Quinn@vermont.gov</u> For more information about suicide prevention: Nick Nichols, <u>Nick.Nichols@vermont.gov</u> For more information on resources for suicide prevention: <u>FacingSuicideVT.com</u>,