VERMONT
DEPARTMENT OF HEALTH

Intentional Self-Harm and Death by Suicide

May 2022

Intentional self-harm is anything a person does to purposefully cause injury to themselves, with or without suicide intent. Death by suicide is intentionally taking one's own life. Research suggests that self-injurious behaviors, which include suicide attempts, are risk factors for suicide.[1]

KEY POINTS

- **Hospital visit rates for intentional self-harm are higher for females* and 15-24-year-olds.***
- **Suicide rates are higher for males.***
- **The number and rate of suicide deaths are the highest recorded.**
- **The number of poisoning deaths is nearly 2 times higher than previous years.**
- **Veterans accounted for 1 in every 5 deaths in 2021.**

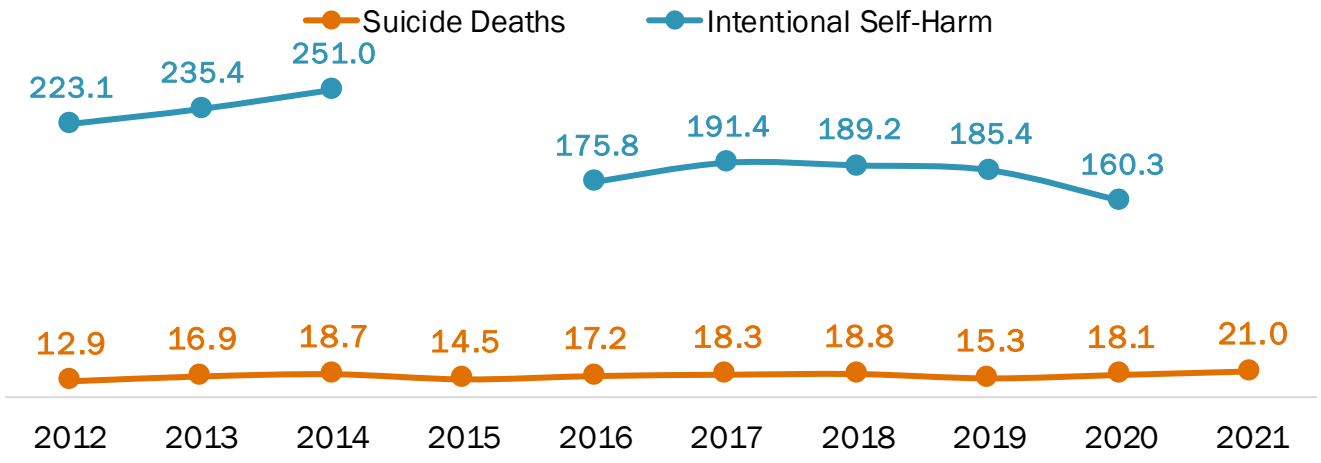
Trends in Intentional-Self Harm & Death by Suicide

In 2020, Vermont had 903 hospital visits for intentional self-harm, with a rate of 160.3 per 100,000. The rate of visits in 2020 decreased from 2019, and this may have been influenced by the COVID-19 pandemic and fewer visits to the hospital overall. The rate of intentional-self harm increased from 2009 to 2014* and has been decreasing since 2017. No rate in 2015 is shown due to a change in billing codes, and caution should be taken when comparing 2014 to later data.[3]

In 2021, there were 142 suicide deaths among Vermont residents, with a rate 21.0 per 100,000. This is the highest number and rate of suicide deaths recorded in Vermont. Suicide is the 8th leading cause of death in the state. Over the past 10 years, the rate of death by suicide has fluctuated, with the rate lowest in 2012, and highest in 2021. The rate of suicide increased 16% from 2020 to 2021. Compared to the U.S., Vermont's rate of suicide deaths was higher in 2020 (U.S. rate 13.5)*.

Intentional self-harm rates have decreased in recent years while death by suicide rates have increased.

Age-adjusted rates per 100,000 Vermonters



Source: Vermont Vital Statistics, 2012-2021, Vermont Uniform Hospital Discharge Data Set, 2011-2020
2021 data are preliminary

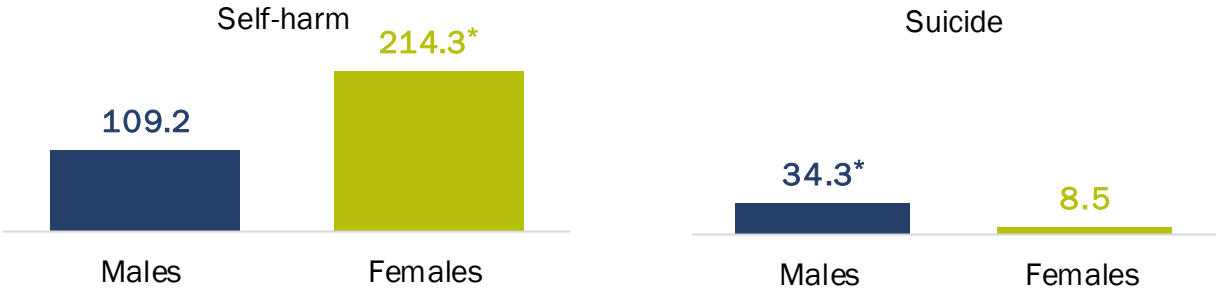
Vermont Population at Risk for Intentional Self-Harm and Death by Suicide

Biological Sex

The rate of hospital visits for intentional self-harm is higher among females compared to males (186.9 vs. 101.5 per 100,000 respectively)*. Males have higher rates of suicide deaths compared to females (34.3 vs. 8.5 per 100,000, respectively)*.

Hospital visits for intentional self-harm and suicide deaths by biological sex.

Rates per 100,000 Vermonters



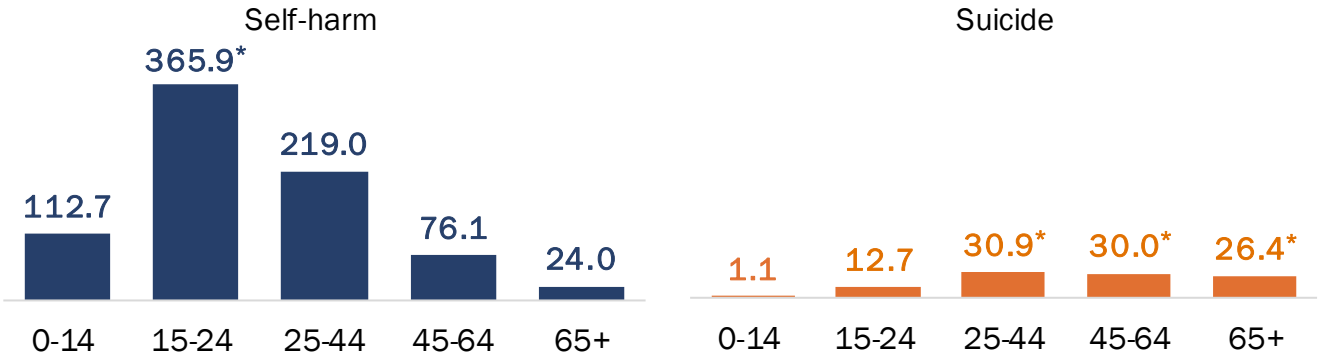
Source: Vermont Vital Statistics 2021, Vermont Uniform Hospital Discharge Data Set 2020; 2021 data are preliminary

Age

Younger people, specifically 15 to 24-year-olds have intentional self-harm rates higher than any other age group.* Suicide rates are higher among Vermonters 25 and older.

Hospital visits for intentional self-harm and suicide deaths by age.

Rates per 100,000 Vermonters



Source: Vermont Vital Statistics 2021, Vermont Uniform Hospital Discharge Data Set 2020; 2021 data are preliminary

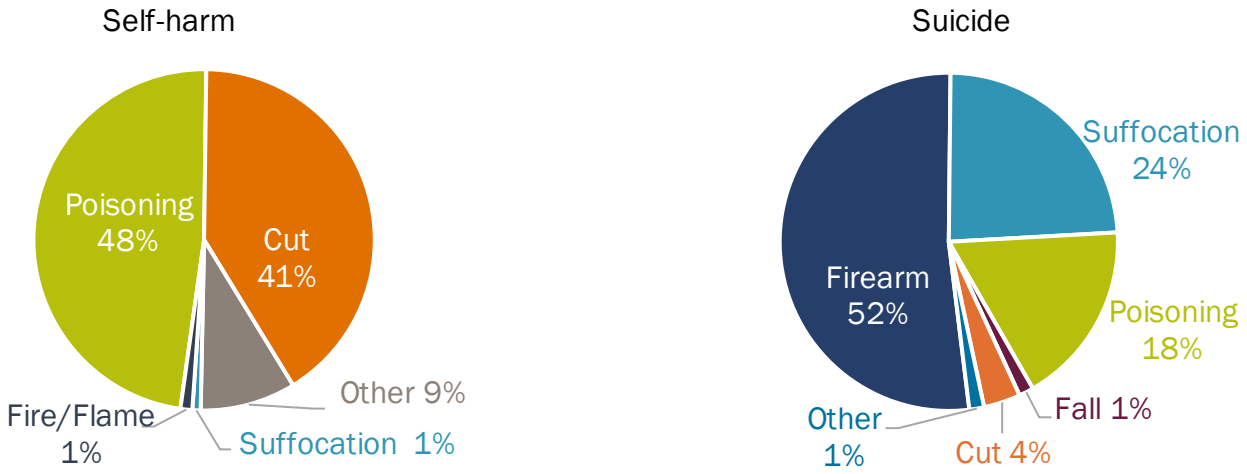
Cause

Poisonings account for 48% of intentional self-harm hospital visits. Following poisonings, the leading causes are cutting (41%), and other (9%). Fire-related and suffocation account for 1% of hospital visits each. Females are more likely than males to visit the hospital for intentional self-harm by cutting or poisoning*.

Among suicides, firearms account for 52% of deaths. The proportion of suicides due to hanging or suffocation account for 24% of deaths, poisonings 18%, cutting 4%, falls and other 1%. The number of poisoning deaths is nearly 2 times higher than previous years. Males are more likely than females to die by suicide using a firearm.

Vermont Population at Risk for Intentional Self-Harm and Death by Suicide

Most hospital visits for self-harm are poisonings. Most suicide deaths are due to firearms.



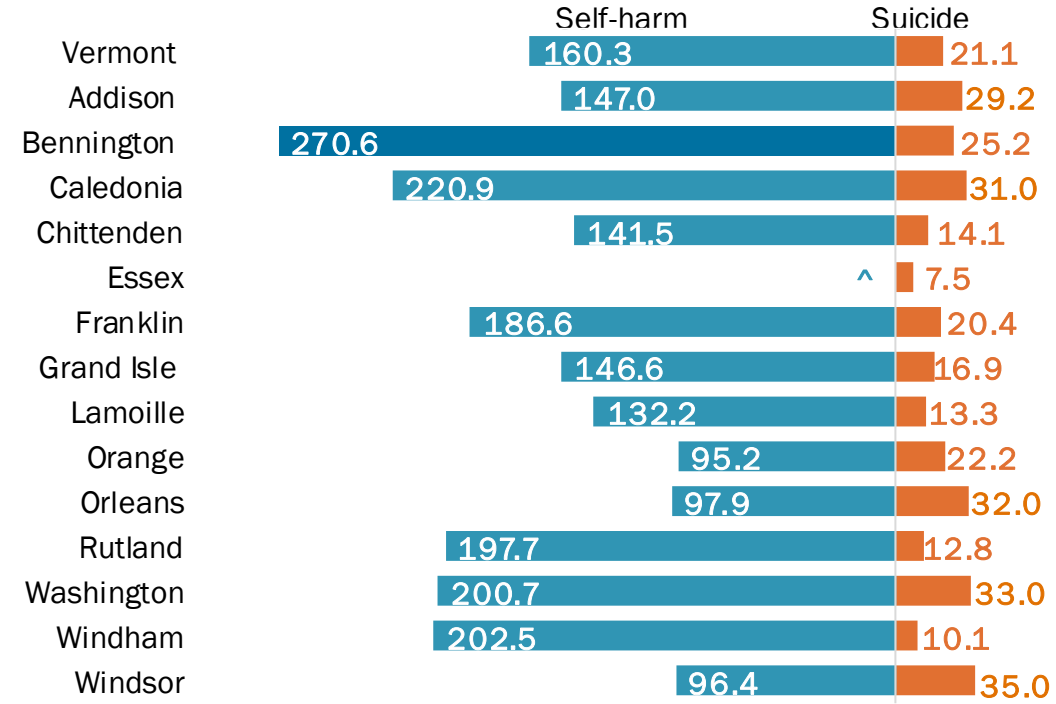
Source: Vermont Vital Statistics 2021, Vermont Uniform Hospital Discharge Data Set 2020
2021 data are preliminary

County of Residence

Compared to the statewide rate of 185.4 per 100,000, intentional self-harm rates are higher in Bennington County* and lower in Windsor County.* While suicide death rates by county are similar to the state rate, suicide deaths are higher in rural counties and account for 82% of suicide deaths. For death counts by county, sex, age, and cause of death, please refer to: Vermont Suicide Deaths, 2017-2021.

Rates of intentional self-harm and suicide by county of residence.

Rates per 100,000 Vermonters



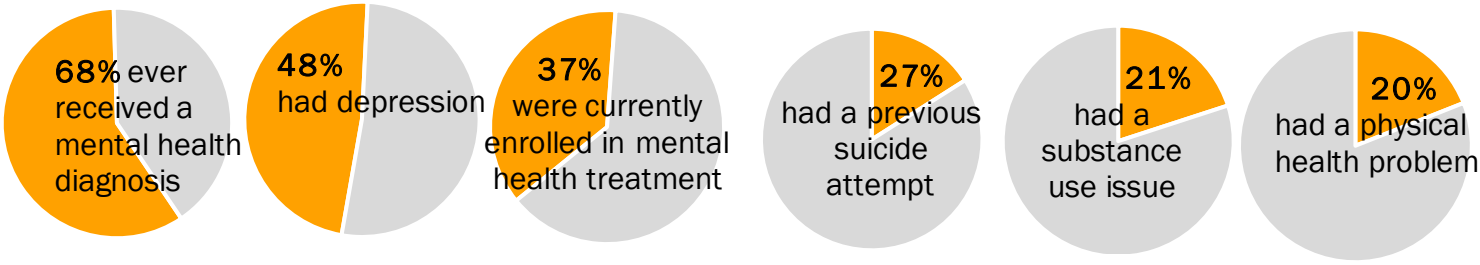
Source: Vermont Vital Statistics 2021, Vermont Uniform Hospital Discharge Data Set 2020; 2021 data are preliminary
^Data supressed

Vermont Population at Risk for Intentional Self-Harm and Death by Suicide

Most deaths by suicide had noted risk factors.

Research suggests there are several risk factors for suicide, including: individuals with a family history of suicide, personal history of suicide attempts, a mental health diagnosis, feelings of hopelessness, isolation, history of alcohol and substance use, having experienced maltreatment as a child, easy access to lethal means, and stigma around seeking mental health treatment.[4] The following information is from Vermont's Violent Death Reporting System (VTVDRS), which collects information from death scene investigation reports.

Risk Factors Reported Among Vermont Deaths by Suicide



Source: Vermont National Violent Death Reporting System (NVDRS), 2017-2018

Populations at risk for intentional self-harm and suicide.

LGBT students are more likely to feel sad or hopeless, make a suicide plan, or attempt suicide (sad 63% vs. 25%, plan 36% vs. 9, attempt 19% vs. 4%). LGBT adults are significantly more likely to have suicidal thoughts (12% vs. 4%).

Adults with a disability are 5 times as likely to report suicidal thoughts (10% vs. 2%).

Black, Indigenous, and People of Color (BIPOC) students are more likely to feel sad or hopeless, make a suicide plan, or attempt suicide (sad 34% vs. 30%, plan 17% vs. 13%, attempt 10% vs. 6%). BIPOC adults are more likely to have a depressive disorder (30% vs. 21%). BIPOC Vermonters represent 2% of suicide deaths.

Vermonters who served in the U.S. armed forces represent 20% of suicide deaths.

Social isolation is a risk factor for suicide. 9% of adults rarely or never get social and emotional support, with rates highest for those 65 years and older (13%).

Source: Vermont Behavioral Risk Factor Surveillance System 2018, Vermont Youth Risk Behavior Survey 2019, Vermont Vital Statistics, 2021; 2021 data are preliminary

Vermont Population at Risk for Intentional Self-Harm and Death by Suicide

Key Takeaways

Suicide and intentional self-harm are preventable public health problems. They are both are priorities in the Vermont State Health Improvement Plan. Based on the data, there are several populations and counties to work with in expanding suicide and intentional self-harm prevention efforts. For intentional self-harm this includes 15 to 24-year-olds, females, and residents in Bennington County. For deaths by suicide, working with males could help reduce the number of suicide deaths in Vermont.

The Vermont Department of Mental Health and the Vermont Department of Health support multiple evidence-based suicide prevention programs to help increase public awareness, train providers, develop treatment networks within schools and communities, and increase prevention outreach. Through continued collaboration with our partners, we can work to reduce the burden of intentional self-harm and suicide within Vermont's communities. The Vermont Department of Mental Health and the Vermont Department of Health support multiple evidence-based suicide prevention programs.

Resources to get help

If you or someone you know is thinking about or planning to take their own life, there is help 24/7:

- Call the National Suicide Prevention Hotline at 800-273-8255.
    - Veterans' crisis line: press 1 when prompted
- Text the Crisis Text Line – text "VT" to 741741 anywhere in the U.S. about any type of crisis
- Trevor Lifeline: LGBTQ Crisis Lifeline: 1-866-488-7368

References

1. Olfson, M., et al. (2017). Suicide following deliberate self-Harm. American Journal of Psychiatry, 174(8), 765-774.
2. United States rates of intentional self-harm and suicide: https://www.cdc.gov/injury/wisqars/facts.html
3. For more information on the issues of comparing ICD-9 and ICD-10 injury indicators used in this brief, see the CSTE Injury Toolkit: https://resources.cste.org/Injury-Surveillance-Methods-Toolkit
4. Suicide risk factors from CDC: https://www.cdc.gov/violenceprevention/suicide/riskprotectivefactors.html
5. Vijayakumar, L. (2016). Suicide among refugees – A mockery of humanity. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 37*(1), 1-4.

Methodology

Intentional self-harm is defined using hospital billing (ICD-10) codes from emergency department visits and hospitalizations. Suicide is defined using ICD-10 codes. The death statistics in this brief are among Vermont residents in 2021, intentional self-harm statistics are among Vermont residents treated at Vermont hospitals in 2020. Please note that 2021 death data are preliminary, and at the time of publication the rate denominators reflect 2019 population estimates. Overall rates, and rates by biological sex, and county are age-adjusted. Significant differences in data comparisons are noted with an asterisk.

For more information about data: Caitlin Quinn, Caitlin.Quinn@vermont.gov

For more information about suicide programs: Nick Nichols, Nick.Nichols@vermont.gov