VERMONT
DEPARTMENT OF HEALTH

Youth Emergency Department (ED) Visits for Suicidal Ideation and Self-Directed Violence

May 2021

Emergency Departments (ED's) are an important setting for monitoring self-harm related behaviors, including suicidal ideation and self-directed violence. Understanding healthcare seeking behaviors related to suicide is important for suicide prevention efforts. Based on previously published data, Vermont's youth (aged 10 to 19 years) have the highest rate of all age groups.[2] This data brief examines monthly rates of ED visits for suicidal ideation and self-directed violence among Vermont youth 10 to 19 years, with a specific focus on visits during the COVID-19 pandemic.

KEY POINTS

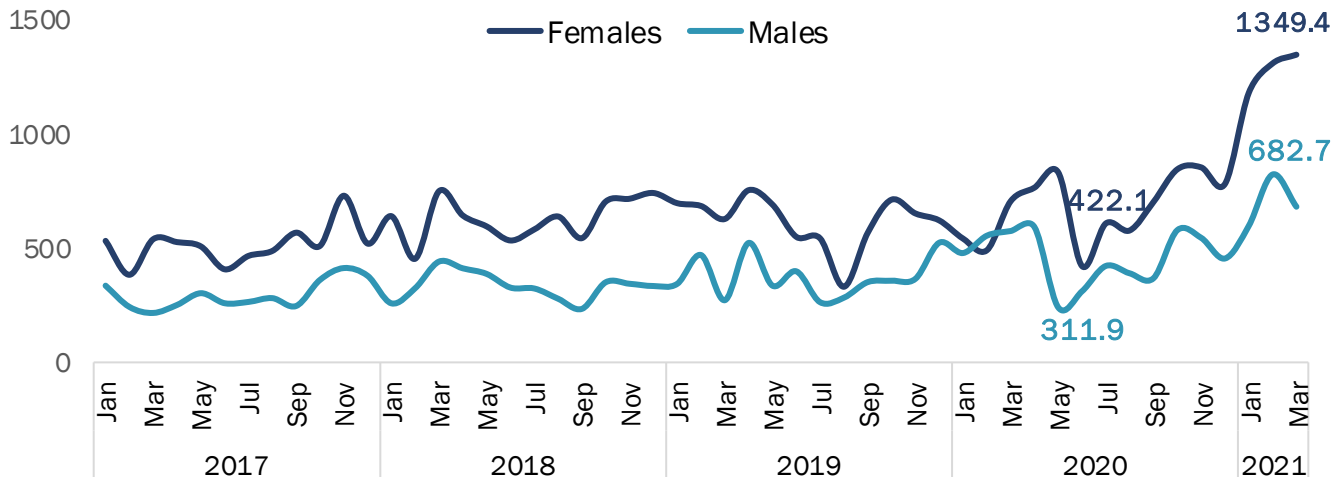
- **From June 2020 to March 2021, the number and rate of suicide-related ED visits have increased among youth.**
- **Suicide-related visits are higher for high school aged students compared to middle school aged students.**
- **White non-Hispanic youth have higher ED visit rates compared to BIPOC Vermonters, which contrasts pre-pandemic data.**

The rate of suicide-related ED visits in youth are increasing.[i]

During the first quarter of 2021, the rate of suicidal ideation and self-directed violence in young people increased significantly, and rates were the highest since 2017 for both females and males. Starting in June 2020, rates began increasing and remain elevated through the end of March 2021. For females, rates more than tripled (219% increase), from 422.1 per 10,000 female youth visits in June 2020 to 1349.4 in March 2021. For males, rates doubled (119% increase), from 311.9 per 10,000 male youth visits in June 2020 to 682.7 in March 2021. Also, important to note is that from March 2020 to February 2021, overall youth ED visit volumes were down about 33% from the previous year. Reduced youth ED visit volume may explain why the rates are higher than previous years but does not explain the increase in the rate and number of suicide-relate visits seen from June 2020 to March 2021. The number of suicide-related visits increased from 40 visits in June 2020 to 130 visits in March 2021.

From June 2020 to March 2021, youth ED visit rates for suicidal ideation and self-directed violence have tripled for females and doubled for males.

Rate per 10,000 female/male youth ED Visits



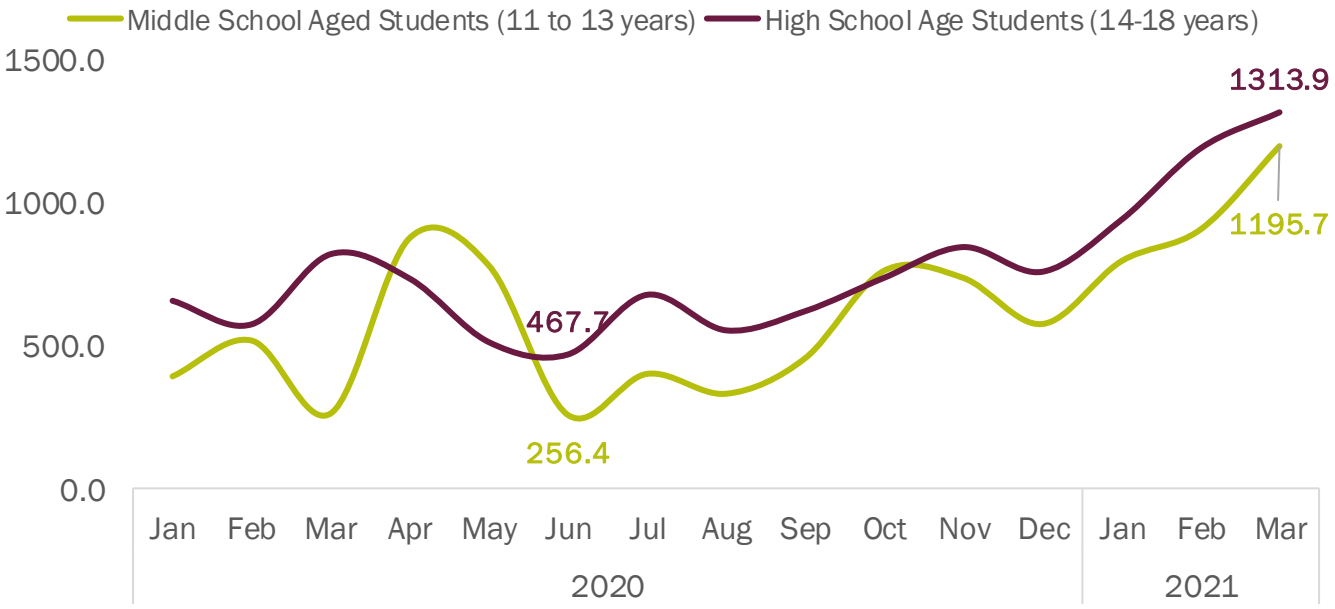
The higher rate and number of visits may be due to several factors including pandemic-related stress, isolation, unintended consequences of the stay home to stay safe order and more youth visiting the ED for crisis treatment, mental health and well-being related factors.

Visit rates are higher for high school aged students.

From the 2019 Vermont Youth Risk Factor Surveillance System, high school students have higher self-reported rates of self-harm and suicidal thoughts compared to middle school students.[3] This finding is consistent with emergent care seeking behaviors, where rates were higher for high school aged students compared to middle school students for most months of 2020 through March 2021. This data suggests that more high school students sought emergent care for suicidal ideation and self-directed violence compared to their younger counterparts. From June 2020 to March 2021, rates quadrupled for middle school aged students (366% increase), from 256.4 per 10,000 visits in June 2020 to 1195.7 in March 2021. For high school students, rates nearly tripled for high school aged students (180% increase), from 467.7 per 10,000 visits in June 2020 to 1313.9 in March 2021.

From June 2020 to March 2021, ED visit rates for suicidal ideation and self-directed violence have quadrupled for middle school aged students, and nearly tripled for high school aged students.

Rate per 10,000 Middle/High School Aged Youth ED Visits



Visit rates for White non-Hispanic youth are higher than BIPOC youth since the start of the COVID-19 pandemic.

From 2017 to 2019, Black, Indigenous, and people of color (BIPOC) youth had significantly higher ED visit rates of suicidal ideation and self-directed violence compared to white non-Hispanic youth aged 10 to 18 years.[3] However, the inverse is true since the start of the COVID-19 pandemic. Rates from March 2020 through April 2021 are significantly higher for white non-Hispanic youth compared to BIPOC youth (678.2 vs. 517.1 per 10,000 White non-Hispanic and BIPOC youth visits, respectively). These findings suggest that fewer BIPOC youth sought emergency room care for suicidal ideation and self-directed violence compared to white non-Hispanic youth.[ii] Further research is needed to understand the change in visit rates among BIPOC youth in Vermont.

Key Takeaways

During the first 3 months of 2021, 1 in every ten youth visits to the ED were for suicidal ideation or self-directed violence.

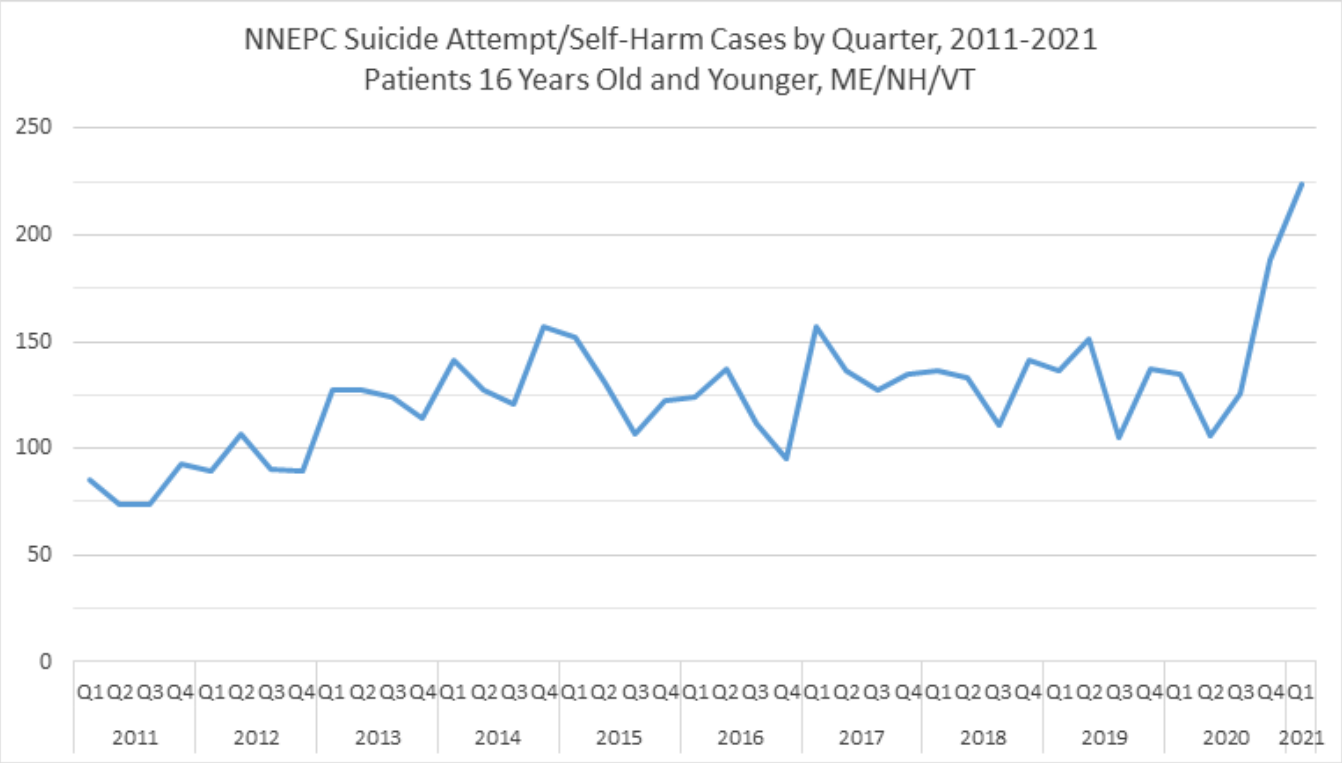
Historically, ED visit rates for suicidal ideation and self-directed violence have been highest among Vermonters 10 to 19 years of age and have significantly increased since the start of Vermont's ED syndromic surveillance program in 2017.[1] Newer data suggests that ED's continue to have a high burden of suicide-related visits in youth and that this burden has accelerated throughout the COVID-19 pandemic, specifically for high school aged Vermonters and female youth. These findings are also congruent with increase in youth intentional self-harm poisonings from the Northern New England Poison Control Center (NNEPC), the national certified poison control center serving Vermont, Maine and New Hampshire. From October 2020 through March 2021, NNEPC saw a significant increase in self-harm related poisonings among youth 16 years and younger. Taken together, these data highlight the need for support and services for youth with suicidal ideation and self-directed violence.

Limitations

There are limitations with syndromic surveillance data. First, the number of ED's participating, data completeness, and data quality varies over time. To help control for this limitation, suicidal ideation and self-directed violence are expressed as a rate of ED visits. Second, these findings are not representative of ED's not participating, or Vermonters who seek care out of state. Third, syndromic surveillance data is a near-real time, ever changing data system, as such this data should not be considered final. Fourth, there is a chance for under-or-over estimation of suicidal ideation and self-directed violence due to the limitations mentioned above. Lastly, these data are not representative of suicidal ideation and self-directed violence experienced outside of the emergency department. To understand the full scope of suicide-related thoughts and behaviors in youth, these data should be used in conjunction with other sources.

References:

1. Trends in ED Visits for Suicidal Ideation and Self-Directed Violence, 2017-2019.
2. 2019 Vermont Youth Risk Behavior Survey Report
3. Northern New England Poison Control Data. The graph below shows the number of poison center calls for self-harm related poisonings among youth 16 years and younger by calendar year and quarter. For more information, please contact Gayle Finkelstein, Gayle.Finkelstein@uvmhealth.org



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

For more information on suicide prevention programming: Stephanie Busch, Stephanie.Busch@vermont.gov

See the Vermont Department of Health Suicide Prevention webpage here

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.

[i] 2017 is the start Vermont's NSSP/ ESSENCE system.

[ii] Please note that from March 2020 to April 2021, 8% of ED visits among Vermont youth are missing race/ethnicity and are excluded.