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Attitudes & Roles Regarding Firearm Access and Suicide Prevention in Vermont Middle & High Schools

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Introduction

- Adolescent suicide is a serious public health concern in Vermont, and the presence of firearms in the home is a known risk factor during crisis.
- Suicide attempts with firearms are more likely to be completed than attempts with other means, with an 85% mortality rate of suicide with firearms compared to 5% with other means.
- According to the Vermont Youth Risk Behavior Survey (YRBS) of 2017, 11% of students reported making a suicide plan in the past 12 months. Attempted suicides were reported by 5% of students.
- Schools are a setting in the community in which adolescents could have conversations around suicidality and access to firearms.

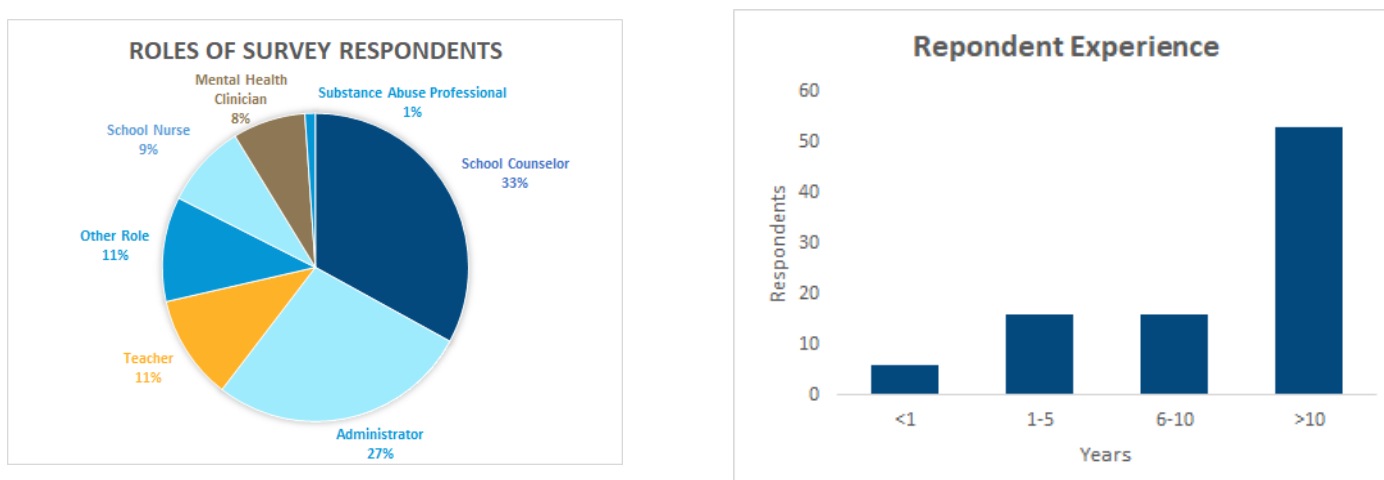
Objective

- To assess attitudes, comfort and perceived roles among school personnel in addressing gun safety and access to firearms with Vermont students and parents.
- To identify areas of opportunity for schools to better address suicide prevention through firearm storage training and the best personnel to undertake this role.

Methods

A needs assessment survey was created in REDCap to address the attitudes, comfort, and roles of school administrators regarding lethal means restriction. The survey was emailed to principals of 152 schools from grades 7 to 12 in all 14 counties in the state of Vermont. Principals were instructed to distribute the survey to at least five school personnel who were thought to be involved in suicide prevention. Results were analyzed with Microsoft Excel and Stata. Fischer's exact and Chi squared tests were used to test for differences in responses between groups of respondents.

Demographics



Results

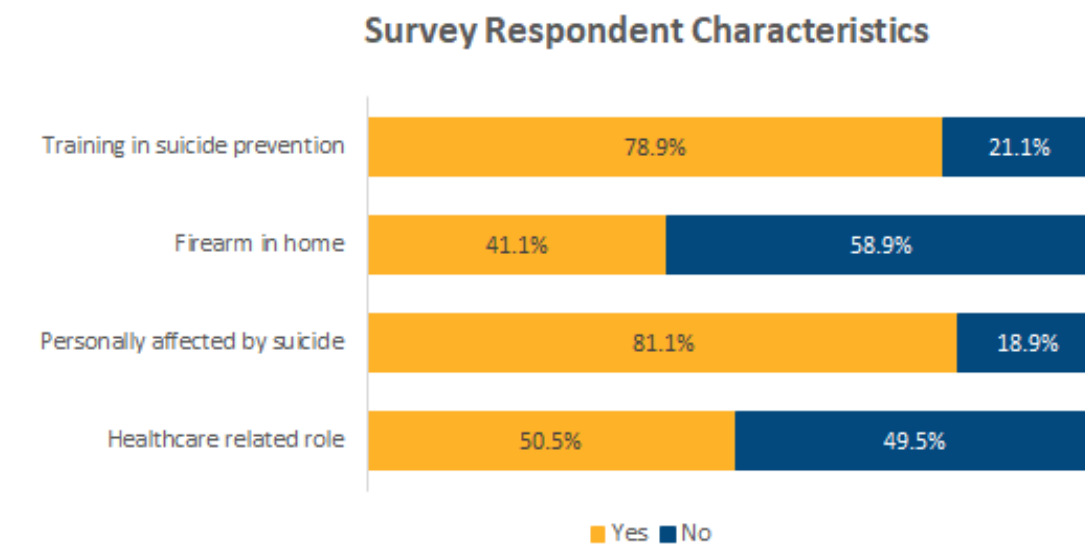


Figure 1. Characteristics of survey respondents. Healthcare related roles include nurses, counselors, mental health, and substance abuse clinicians.

- Respondents in healthcare related school roles (nurses, counselors etc.) were more likely than those in administrative or teaching roles to believe it was their role to talk with students about their access to firearms ($p=0.023$) and that preventing suicide is part of their job ($p=0.005$).
- 77.2% either agreed or strongly agreed that access to firearms is an important topic for schools to discuss with students, with 80.9% of these respondents believing that this should apply to all students, not just those who may be high risk for suicidality.

Attitudes, Comfort, and Roles

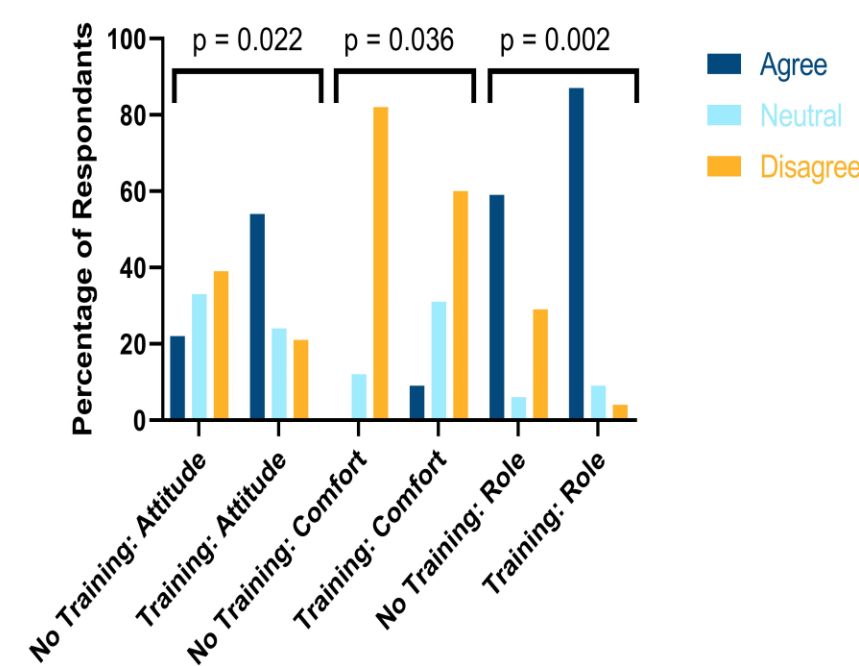


Figure 2. Comparison of Attitudes, Comfort, and Role regarding lethal means restriction between school personnel with and without prior suicide training.

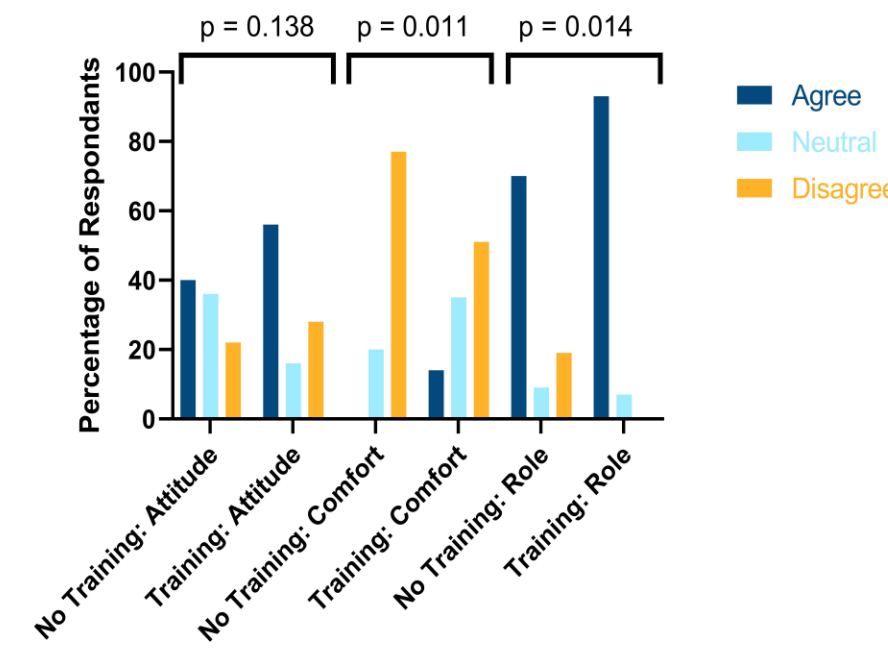


Figure 3. Comparison of Attitudes, Comfort, and Role regarding lethal means restriction between school personnel with and without prior suicide training that included firearms training.

In their own words: survey respondents on addressing gun safety and firearm access

"It appears that schools become increasingly tasked with responsibilities to prevent public health crises and rarely get more resources and never get more time with students or teachers."

"I would be more comfortable discussing access to firearms with clear direction from my district/school administrators."



"Schools already take on so much, adding another thing is starting to tip the scale. We need help and can't keep doing everything. Families have to start taking responsibility."

Discussion

- School personnel with training on suicide prevention and safe firearm storage are more likely than those without training to agree that they have a role in addressing these topics with students.
- Respondents in healthcare related school roles are more likely to agree that preventing suicide and firearm access is part of their job. More research is needed to understand why employees in other roles were less likely to agree that suicide prevention is part of their job.
- Only a minority of respondents stated that they would be comfortable distributing gun locks to students or families. This could be a future priority for suicide and firearm safety training programs.

Recommendations

- Development of a standardized, validated screening tool for use in the school setting to address adolescent suicidality in Vermont should include a method for assessing access to firearms.
- A statewide evidence-based protocol should be developed for in-school assessment of youth access to firearms to specify/clarify processes, roles, and responsibilities regarding youth suicide prevention in the educational setting.
- Suicide prevention training should include firearm-specific education, including safe firearm storage training and use of gun locks. Training should be offered to all school personnel.

References

- Nonfatal and Fatal Firearm-Related Injuries -- United States, 1993-1997. Centers for Disease Control and Prevention. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm4845a1.htm>. Accessed December 19, 2019.
- Delaney T. Current Suicide Data in Vermont Tom Delaney, PhD. Vermont Suicide Prevention Center. http://vtspc.org/wp-content/uploads/2018/10/Delaney-9_27_18-VT-recent-suicide-data.pdf. Published October 2018. Accessed December 19, 2019.
- Youth Risk Behavior Survey (YRBS). Vermont Department of Health. <https://www.healthvermont.gov/health-statistics-vital-records/population-health-surveys-data/youth-risk-behavior-survey-yrbs>. Published November 26, 2019. Accessed December 19, 2019.
- Miller M, Lippmann SJ, Azrael D, Hemenway D. Household firearm ownership and rates of suicide across the 50 United States. J Trauma. 2007 Apr;62(4):1029-34.

Acknowledgements

Rebecca Bell, MD, Pediatric Critical Care Physician
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Officer Kit Hansen, School Resource Office
 St. Albans Town Educational Center