



# Team 5

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## **Adolescent Firearm Suicide Poster**

This poster focuses on adolescent suicide by firearms in rural North Carolina, exploring its connections to broader public health issues like firearm injury and mental health resource accessibility.

Emphasizing the impact of stigma in rural areas, the collection of information invites viewers to reflect on the challenges surrounding mental health care access and potential interventions.

## Assessing the Risk of Suicide by Firearms Among Adolescents in Rural North Carolina

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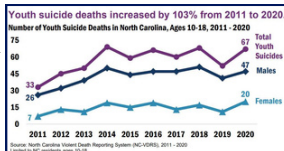
### Background

Suicide has steadily risen among the adolescent population.<sup>1</sup>

Rural-residing adolescents are at an increased risk for suicide by firearms.<sup>2</sup>

Determinants such as environment, genetics, socioeconomic status, and behavior carry significant impacts on adolescent mental health outcomes.<sup>3</sup>

Current state and federal gun ownership and storage policies do not protect the adolescent population in the United States, especially those located in rural communities.<sup>4</sup>



### Risk Factors

- Stigma around service seeking in rural communities due to the **lack of privacy** accessing services, **conservative religious values**, and gendered structures that reinforce **toxic masculinity**.<sup>5,7</sup>
- Environmental factors including **terrain and lack of transportation** in rural areas create barriers to care.<sup>8</sup>
- The rate of **low SES** in rural NC contributes to toxic stress, inability to access resources, and a lack of community investment in the mental healthcare system.<sup>9</sup>
- Cultural norms, hobbies, and laws influence firearm ownership, including **hunting and gender structures**.<sup>10</sup>
- Federal law allows adolescent firearm access if being used for **farming or ranching employment**.<sup>10</sup>

### Interventions

Intervene in primary care settings to **improve firearm safe storage practices**.<sup>13</sup>

- Require primary care pediatrician and adolescent physicians to inquire about firearms in the household<sup>13</sup>
- Train physicians on how to discuss firearms and counsel families on safe storage practices<sup>14</sup>
- Offer gunlocks free of charge to all families with firearms in the household in all primary care settings<sup>15</sup>

Increase **access to mental health care in rural NC**.<sup>16</sup>

- Provide mental health professionals incentives to practice in rural areas<sup>17</sup>
- Expand Telehealth mental health services<sup>18</sup>

### Health Outcomes



**Higher Rates of Rural Suicide Deaths**  
Rural Adolescents in North Carolina experience higher rates of suicide deaths than urban adolescents.<sup>1</sup>



**Majority of Suicide Deaths by Firearm**  
Among North Carolinian adolescents aged 10-18 during 2020, 60% of suicide deaths occurred by firearm.<sup>1</sup>



**Untreated Adolescent Depression**  
In North Carolina, two out of three adolescents with depression are not receiving mental health care.<sup>5</sup>



**Perpetuated Cycles of Stigma**  
The more stigma parents have received throughout their experiences, the less willing they are to seek services for their children.<sup>6</sup>



70% of rural gun owners received their first gun before 18 y/o<sup>11</sup>



50% of rural firearm owners hunt often/sometimes<sup>10</sup>



80% of households in rural NC contain at least one firearm<sup>12</sup>



32% of youth firearm suicide and unintentional deaths could be prevented by safe firearm storage.<sup>19</sup>

Studies show that people are open to accessing telehealth, when opportunities are available to do so.<sup>18</sup>



### Limitations

- Accessing healthcare in rural areas can be challenging<sup>16</sup>
- Interventions in the primary care setting require adolescents to attend primary care appointments
- It can be challenging to enforce a new screening program<sup>20</sup>
- This is just the first step. Also need policy that advocates for the expansion of firearm violence prevention within all health care settings<sup>13</sup>

### References



1. Suicide Among School Aged Youth in North Carolina Ages 10-18: 2020, Published online July 28, 2022, <https://injuryfreenc.zptu.cdphs.gov/DataSurveillance/SIED/School-Aged-Youth-Suicide.pdf>
2. Brasas CC, Nance ML, Elliott MR, Richmond TS, Schwab CW, Urban-Rural Shifts in Intentional Firearm Death: Different Causes, Same Results, Am J Public Health, 2004;94(10):1750-1755, doi:10.2105/AJPH.94.10.1750
3. Bilsen J, Suicide and Youth: Risk Factors, Front Psychiatry, 2018;9, Accessed November 6, 2023, <https://www.frontiersin.org/articles/10.3389/fpsy.2018.00540>