

## PREVENTING SUICIDE IN RURAL AMERICA

### THE DATA

Suicide is one of the top ten leading causes of death in the United States and was responsible for almost 45,000 deaths in 2016.<sup>1</sup> Many more people are hospitalized as a result of nonfatal suicidal behavior (i.e., suicide attempts) than are fatally injured, and an even greater number are either treated in ambulatory settings (e.g., emergency departments) or not treated at all.<sup>1,2</sup> Among adults aged 18 years and older, for each suicide there are about 30 adults who reported making a suicide attempt.

Suicide and nonfatal self-directed violence result in an estimated \$69 billion in combined medical and work loss costs.<sup>1</sup> However, because that estimate does not include other societal impacts (like those on families), the true cost of suicide is likely much higher.

During 2001-2015, suicide rates were consistently higher in rural areas than in metropolitan areas for both sexes.<sup>3</sup> Although rates for all racial/ethnic groups typically increased in all counties, non-Hispanic American Indian/Alaska Natives had the highest rates in rural counties and non-Hispanic whites had the highest rates in metropolitan counties. Rates also increased for all age groups across all counties, with the highest rates and greatest increases in more rural areas.

### ISSUE OVERVIEW

There are both traditional and rural-specific factors that increase risk of suicide. Because rural populations are not all the same,<sup>5</sup> these factors can simultaneously increase risk for some groups while reducing it for others.<sup>6</sup> For example, the traditionally protective factor of living in a tight-knit community—which can increase one’s sense of connectedness—can also increase suicide risk for marginalized groups of people, such as LGBTQ youth and racial/ethnic minorities.<sup>6</sup>

Policy options and other strategies for addressing factors leading to suicide in rural areas include:

-  **Improve Access to Mental and Behavioral Health Services**
-  **Reduce Stigma in Communities**
-  **Increase Connectedness with Peer Norm Programs**
-  **Work with Communities to Reduce the Risks for Suicide**

Suicide is preventable.<sup>4</sup> This brief will explore policy options for suicide prevention and provide examples of programs used in or that can be adapted for rural settings.



Important risk factors for suicide in rural areas include:<sup>5-7</sup>

- Living in an isolated location, which may reduce one's sense of connectedness
- Difficulty obtaining mental and behavioral health services due to high cost, lack of transportation, and other distance-related issues
- Socioeconomic factors, such as unemployment and being in persistent poverty
- Sociocultural factors that increase mental illness stigma and prevent help-seeking, including a culture of stoicism (particularly for males)

The rate of suicide with a firearm is almost two times higher among rural than urban residents.<sup>3</sup> Additionally, providing life-saving medical care after an attempted suicide can be more challenging because of the isolated residences of some people and the limited number/sparse distribution of rural trauma centers, hospitals, and emergency medical services.<sup>5</sup>

## POLICY OPTIONS



### **Improve Access to Mental and Behavioral Health Services**

Rural residents with mental health conditions often can't get treatment. Rural areas have fewer mental health professionals than urban areas, and their geographic distribution can make them hard to reach.<sup>8,9</sup> Over 6 in 10 areas with a mental health provider shortage are partially or entirely rural, and over half of U.S. counties don't have a single social worker, psychologist, or psychiatrist.<sup>9,10</sup>

Mental health care may also be difficult to afford for many rural residents.<sup>7,10</sup> Household financial insecurity and having poor insurance coverage of mental health treatments can all contribute to problems with affordability of and access to care. The following is a selection of policies that may improve access to mental and behavioral care.

## CASE STUDY

### **North Dakota Sources of Strength**

Sources of Strength began in 1998 with a number of rural communities and Northern Plains tribes.<sup>30</sup> It was designed as a universal suicide prevention program and focuses on developing protective factors among youth. Peer leaders were trained to change the norms and behaviors of their fellow students with messaging activities and adult mentoring.<sup>31</sup>

Research in both rural and urban settings found that Sources of Strength improved norms regarding suicide, connectedness to adults, and school engagement.<sup>31</sup> Peer leaders were also more likely to refer a suicidal friend to an adult. For students, the program resulted in more positive perceptions of adult support for suicidal youths and the acceptability of help-seeking. Finally, there was a decrease in poor coping attitudes.

## POLICY OPTIONS (CONTINUED)

### ***Integrate Primary Care and Mental Health Care***

Rural residents receive nearly all of their health care from primary care physicians, nurse practitioners, and physicians' assistants, and the most common specialty in rural areas is family practice.<sup>10,11</sup> Over half of people who die by suicide contact their primary care provider in the preceding month.<sup>12</sup> This combination of factors suggests that integrating primary care with mental health care could be a promising method of expanding treatment.

The Agency for Healthcare Research and Quality (AHRQ) found that care integration improved some mental health and other related outcomes—especially symptoms of depression.<sup>13</sup> Another review of care integration showed that it can increase the early identification of self-directed violence, timely interventions, and better monitoring of people at high-risk.<sup>5</sup>

There are no universal or best ways to integrate care, as each community's situation can face different obstacles related to: regulations, reimbursement, practice and culture, and patient characteristics.<sup>5,11</sup> Regardless, some standard frameworks exist and can be adapted to unique contexts. For example, the Substance Abuse and Mental Health Services Administration (SAMHSA) proposed a framework with different types and levels of integration that could be adapted for rural areas.<sup>10</sup>

### ***Increase Access to Telehealth Services***

Telehealth services refer to the use of telephone, video, and web-based technologies for providing health care at a distance.<sup>15</sup> Telehealth can be used to treat a wide range of mental health conditions in a variety of settings, such as outpatient clinics, hospitals, and military treatment facilities. It can improve access to care for patients living in isolated areas as well as reduce travel time, expenses, and delays in receiving care.<sup>10,15</sup> However, the expansion of telehealth services can be hindered by poor access to broadband internet (a common problem in rural regions), medical licensing regulations, and other factors.<sup>10</sup>

Evidence shows that telehealth used to provide mental health services can be effective in treating conditions that are risk factors for suicide, such as depression, anxiety, and substance abuse.<sup>15,16</sup> Some evidence shows that telephone and face-to-face psychotherapy are equally effective at reducing symptoms of depression.<sup>15,16</sup> Telehealth may also help ensure continuous, stable treatment, further reducing the risk for suicide. For example, some research shows that patients receiving psychotherapy via telephone continue therapy for as long as patients receiving it in person.<sup>16</sup>

## CASE STUDY

### ***Oregon: The Rural Telemental Health Program***

In 2014, veterans accounted for 18% of all suicides among U.S. adults while only being 8.5% of the U.S. adult population, making them a high-risk population.<sup>32</sup>

Nearly half of veterans of the Iraq and Afghanistan Wars live in rural areas,<sup>10</sup> and the suicide rates among veterans in four predominantly rural states (Montana, Utah, Nevada and New Mexico) was almost twice that of the national veteran suicide rate.<sup>33</sup> Rural veterans may have difficulty obtaining mental health treatment, often because traveling long distances to obtain care can be difficult due to factors like poor public transportation infrastructure.<sup>7,34</sup>

The Rural Telemental Health (RTMH) program started at the Portland Veterans Administration (VA) Medical Center, and now reaches rural veterans in Idaho, Oregon, and Washington.<sup>34</sup> The program helps veterans get a wide range of mental healthcare services outside of VA facilities. They can access telehealth care via VA outpatient clinics—or in their homes, if resources allow.<sup>35</sup>

## POLICY OPTIONS (CONTINUED)

### **Increase Health Insurance Coverage of Mental Health Services**

In 2015, about 6 million rural residents lacked health insurance.<sup>17</sup> Providing insurance via employer benefits or public programs can improve access to health care by making it more affordable.<sup>18</sup> However, even when someone is insured, mental health services are often not covered at the same level as other kinds of care.<sup>19</sup> The 2008 Mental Health Parity and Addiction Equity Act provides national protections against this disparity for large-group plans and programs like Medicare and Medicaid.<sup>19</sup> Complementary state laws that require and ensure equal coverage of mental health services may lower suicide rates. Research found that between 1990 and 2004, there was 5% reduction in suicide rates in states that passed such laws.<sup>20</sup>

### **Reduce Stigma in Communities**

The stigma surrounding mental health conditions can sometimes be stronger in rural areas,<sup>5,6</sup> making it less likely that those in need of care will seek help.<sup>21</sup> For example, in small communities, residents may be more likely to be seen by a provider they know when they are seeking care from mental health providers. Also, because rural communities are often tight-knit, awareness of a person's mental health condition is more likely to spread.

This stigma has roots in rural cultural values of individualism and stoicism, which are especially common among males.<sup>5,6</sup> Reducing stigma in communities may increase help-seeking and develop environments that can reduce the risk of suicide.

### **Increase Connectedness with Peer Norm Programs**

Peer norm programs try to make protective factors more normal and common in communities by encouraging help-seeking and peer connectedness. By leveraging the leadership and social influence of peers, these programs can change group beliefs and promote positive social and behavioral change. These programs usually target youth and are typically delivered in schools, but they can also be implemented with different groups in other settings.<sup>4,22</sup>

## CASE STUDY

### **New Mexico: Adolescent Suicide Prevention Program**<sup>36</sup>

This Adolescent Suicide Prevention Program involved one tribe in New Mexico, and was created in 1990 by a collaboration between The Indian Health Service (IHS) and the tribal council and community. It has since been expanded. The program focused on adolescents, the group in this community at the highest risk of developing symptoms of suicidal behaviors. It was designed using community input regarding what might prevent or help its success, and it integrated a wide range of activities related to the tribe's specific risk factors for suicide in an unconventional but culturally-appropriate manner. For example, there was a strong focus on family history of trauma, which occurred among 95% of people showing suicidal behavior.

An evaluation of the program showed a significant reduction of suicidal gestures and attempts. There was also a 75% drop in the total number of self-destructive acts (some of which were not suicidal). While the number of suicide deaths did not fall, this was likely due to the aging population, which usually leads to a growing number of suicides. However, the number of deaths did not increase like they had in past years. The program was also noted for its longevity and growth, as prevention programs often end prematurely due to limited resources and waning interest.

## POLICY OPTIONS (CONTINUED)



### **Work With Communities to Reduce the Risks for Suicide**

Some means of suicidal behavior, such as firearms and hanging/suffocation, are more likely to result in death.<sup>5,6</sup> Suicide rates for different mechanisms can also vary by area. For example, the overall rate of suicide by firearm in rural areas is almost two times higher than in urban areas.<sup>3</sup>

Research shows that the amount of time between deciding to engage in suicide and attempting it can be as short as 5 to 10 minutes,<sup>23,24</sup> and people usually won't substitute a different method when a highly lethal means is unavailable or difficult to access.<sup>25</sup> Therefore, increasing the length of this critical period through efforts, such as safe storage of firearms and medications such as opioids, can be lifesaving.

Safe storage of firearms, medications, and other potentially dangerous household products can reduce the risk of suicide by separating at-risk individuals from easy access to lethal means.<sup>26</sup> Evidence shows that storing firearms unloaded, separate from ammunition, and in a locked place (or secured with a safety device) reduces the risk of attempted suicide among adolescents.<sup>27,28</sup> Research also suggests that actively providing safety devices leads to better safe storage practices than counseling alone or giving people money or discounts to buy safety devices for themselves.<sup>29</sup> Finally, storing medications such as opioids in locked cabinets and only keeping smaller amounts of them on hand can also reduce risk of suicide by poisoning.<sup>27</sup>

### **Resources**

[Preventing Suicide: A Technical Package of Policy, Programs, and Practices](#)

[CDC's Division of Violence Prevention](#)

[National Action Alliance for Suicide Prevention](#)

[National Strategy for Suicide Prevention](#)

[National Suicide Prevention Lifeline](#)

[Suicide Prevention Resource Center](#)



*CDC policy briefs provide a summary of evidence-based best practices or policy options for a public health issue. They also include information on the background and significance of the issue as well as current status and potential next steps. This policy brief is part of a series accompanying **CDC's Morbidity and Mortality Weekly Reports on rural health.***

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