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Why This Study

Nearly 1 in 5 U.S. students attend rural schools. Researchers report that at least half of public schools are rural in 12 states (i.e., Montana, South Dakota, Vermont, North Dakota, Maine, Alaska, Oklahoma, Nebraska, Wyoming, New Hampshire, Iowa and Mississippi) (Showalter et al., 2019). However, "Rural schools are largely left out of research and policy discussions, exacerbating poverty, inequity and isolation" (Lavalley, 2018).

Providing quality education to all rural students is a daunting task and needs the support of policy and research. In 2018, the Center for Public Education (CPE) of the National School Boards Association published a comprehensive report on the U.S. rural K-12 public education, titled "Out of the Loop." Today, the data and research presented in the report are about five years old, but the facts, together with the suggested policies and practices about rural education, are still valid and accurate. After a two-year pandemic, issues such as funding, teacher recruitment and retention, and serving disadvantaged students are becoming more serious in rural school districts.

Based on the 2018 report, the CPE conducted this follow-up, data-driven study to inform policymakers, school leaders, educators, and parents. Our main research goal was to examine <u>educational equity</u> for rural students. According to <u>the Educational Equity Project</u>, educational equity means that each student should receive what they need to develop to their full academic and social potential, regardless of who they are and where they go to school. With this goal in mind, in this series of reports we examined relevant data about the education conditions of rural students, and tried to answer the following research questions:

- Why should rural students be actively included in the discussion about educational equity?
- What are some unique challenges of rural education?
- · How can policies be more aligned with rural circumstances in terms of providing each student with equal access to all learning opportunities?
- · What practices have rural school districts adopted to provide quality education to all students?

The study includes an executive summary and five parts. In this section, we first present data about how the COVID-19 pandemic changed rural student behaviors and aggravated mental health issues in rural schools. Then, we focus on 3Ps, namely, preventing suicide in rural schools, preventing school violence in rural areas, and partnering with parents and communities to foster a safe and healthy school culture. Lack of research and funding hinders the ability of rural schools to provide all students with equal access to mental health services. To help school leaders and other stakeholders think about solutions, we also provide some examples of how rural districts partner with research institutes to tackle issues related to the shortage of counselors or social workers, and what strategies rural districts have used to integrate suicide prevention programs, as well as school safety plans, into an existing school-based mental health service system.

- Executive Summary
- Growing Diversity of Rural Students
- · An Urgent Need to Fix the Digital Divide
- Thinking Broadly and Deeply about Rural Student Achievement and Teacher Pipelines
- School Safety and Mental Health Matter for Rural Students
- Parent Support and Community Culture Are Assets of Rural Schools



School Safety and Mental Health of Rural Students: Things That Matter

During the pandemic, the population most impacted by the COVID-19 crisis from a mental wellness standpoint were teenagers between 11 and 17 years old, according to Mental Health America (MHA, 2021), a community-based nonprofit organization dedicated to "promoting the overall mental health of all." MHA screening data show that this age group scored positively for anxiety and depression more often and more severely than other age groups. Suicide and self-harm also increased significantly in 2020 for this age group. More than 35% of teenagers (11-17 years old) reported having thoughts of suicide more than half the days of the month.

Promoting mental health has become not only a critical part of overall wellness for students but also an urgent call for schools and communities to enhance the capacity to identify, prevent, and intervene in youth mental health concerns. According to the National Center for Rural School Mental Health, rural communities are often "incorrectly perceived as having fewer mental health needs given their small populations and low residential density." Due to their geographic isolation and scarce resources, many rural school districts can only provide limited mental health service options for rural youth and their families.

As youth increasingly report feelings of isolation and loneliness as the leading factor contributing to their further severe mental health issues, including suicidal thoughts and attempts, rural schools need to build more effective school-based mental health programs (<u>Capps et al., 2021</u>). In this section, we first present data about how the COVID-19 pandemic changed rural student behaviors and aggravated mental health issues in rural schools. We organize this section with 3Ps, namely, preventing suicide in rural schools, preventing school violence in rural areas, and partnering with parents and communities to foster a safe and healthy school culture.





What is Mental Health?

"Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood" (<u>U.S. Department of Health & Human Services (HHS)</u>, 2022).

When experiencing mental health problems, an individual's thinking, mood, and behavior can be affected and changed. According to HHS (2022), many factors contribute to mental health problems, including:

- · Biological factors, such as genes or brain chemistry
- · Life experiences, such as trauma or abuse
- · Family history of mental health problems

Youth Mental Health

According to the federal government (<u>Youth.gov</u>), it is normal for children and youth to experience various types of emotional distress as they develop and mature. For example, it is common for children to experience anxiety about school, or for youth to experience short periods of depression that are transient in nature. When symptoms persist, it may be time to seek professional assistance. While most youth are healthy, physically and emotionally, 1 in every 4 to 5 adolescents in the general population meet the criteria for a lifetime mental disorder and, as a result, may face discrimination and negative attitudes (Merikangas et al., 2010).

Student mental health issues are not only about a mental health disorder or other mental illness, but also about mental health factors that affect academic performance, including a student's emotional well-being, psychological well-being, and social well-being (Centers for Disease Control and Prevention (CDC), 2011). Students should develop skills that help them navigate the different environments they inhabit. With strong social and emotional skills, students will be able to build positive relationships with their peers and the adults in their life, adapt to changes, utilize appropriate coping mechanisms to achieve well-being without discrimination, and successfully navigate the complexities of life.

As such, social and emotional learning (SEL) is often included in school programs to promote the positive relationship between well-being and academic achievement. It should be pointed out that the Collaborative for Academic, Social, and Emotional Learning (CASEL) defines SEL as "the process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions."



Mental Health Challenges That Schools Are Commonly Facing

According to the National Association of School Psychologists (2021), 1 in 5 children and adolescents experience a mental health problem during their school years. Examples include stress, anxiety, bullying, family problems, depression, learning disability, and alcohol and substance abuse. Serious mental health problems, such as self-injurious behaviors and suicide, are on the rise, particularly among youth.

Hazel — a company directly working with school districts — reports that anxiety, depression, trauma (e.g., psychological, physical, or sexual abuse), Attention Deficit Hyperactivity Disorder (ADHD), and eating disorders are the five mental health challenges that K-12 students face most often (Hazel, 2022). Media survey data show that 73% of parents said that their children could benefit from mental health counseling, and among this parent group, 19% reported that their children had symptoms of anxiety, and 12% said that their children had symptoms of depression (Flannery, 2022).

Additionally, parents, educators, and school staff should be aware of Common Mental Health Warning Signs (HHS, n.d.). According to the National Institute of Mental Health (NIMH), young children may benefit from an evaluation and treatment, for example, if they are not interested in playing with other children or have difficulty making friends, struggle academically, or have experienced a recent decline in grades. Adolescents may need mental health help, for example, if they engage in self-harm behaviors (such as cutting or burning their skin), smoke, drink alcohol, use drugs, engage in risky or destructive behavior alone or with friends, or have thoughts of suicide.

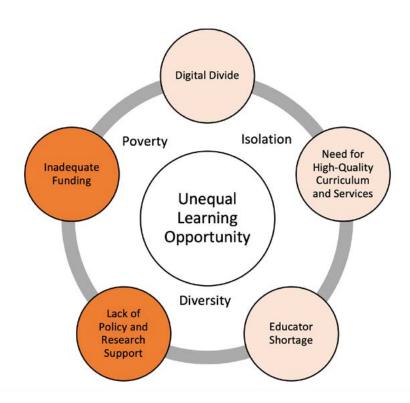
Before the COVID-19 pandemic, mental health was worsening among high school students (CDC, 2022). In 2021, more than a third (37%) of high school students reported they experienced poor mental health during the pandemic, and 44% reported they persistently felt sad or hopeless during the past year. More than half (55%) reported they experienced emotional abuse by a parent or other adult in the home, including swearing at, insulting, or putting down the student.

In summary, schools are facing challenges not only with providing timely and effective mental health services but also partnering with families and communities to foster a safe and healthy learning environment.





Unequal Learning Opportunities



A sound policy to support rural education should be research-driven and evidence-based. In this report's section about the digital divide, we examined how the COVID-19 pandemic exacerbated the digital divide when it comes to equal access to telehealth in rural areas. We also provided examples of how school districts partnered with communities and businesses to solve issues related to high-quality internet connections. In this section, we will focus on other issues (i.e., a lack of research and policy support and inadequate funding) that hinder rural schools' ability to provide all students with equal access to mental health services.

In a 2022 study, researchers pointed out that "Despite prevalent student mental and behavioral health needs in rural communities, school mental health systems have not been thoroughly examined in rural areas and lack the perspectives of individuals who often help implement and utilized these systems (i.e., educators and caregivers)" (Garbacz et al., 2022). For instance, when it comes to school safety and security, the U.S. Government Accountability Office (GAO, 2020) found no empirical research in the last 10 years (2009-2019) that directly examined the link between school discipline and school shootings.

Data and detailed information play a significant part in policymaking. For example, school-based virtual mental and behavioral health can increase students' access to professional services, especially for students who are less likely to access traditional community mental health settings due to a lack of transportation to distant sites, financial resources, and other barriers (Nelson et al., 2022). However, we need more empirical studies to examine the effectiveness of such school-based telehealth services in rural areas. Future research should continue monitoring rural student access to mental health, and identify underlying risks and protective factors for rural youth. With data and evidence, school leaders will be empowered to adjust policies, infrastructure, and prevention and intervention initiatives (Figas et al., 2022).



How to Define Rural

The term "rural" means different things to different people (<u>U.S. Census Bureau</u>, <u>2017</u>). In general, rural areas are sparsely populated, far from urban centers, and have low housing density. In the U.S., "97 percent of the country's land mass is rural, but only 19.3 percent of the population lives there" (<u>U.S. Census Bureau</u>, <u>2017</u>).

Federal agencies define rural slightly differently. According to the Census Bureau, rural is defined as all population, housing, and territory not included within an Urbanized Area (i.e., areas with 50,000 or more people) or Urban Cluster (i.e., areas with at least 2,500 but fewer than 50,000 people). In the 2021 Edition of "Rural America at a Glance" (Dobis et al., 2021), researchers from the U.S. Department of Agriculture (USDA) use nonmetropolitan (nonmetro) counties to refer to rural areas, and the terms "rural" and "nonmetro" are used interchangeably in their report.

In our study, we present data from multiple sources. Like the USDA researchers, we use "rural" and "nonmetro" interchangeably. Since most data used in our report are from the National Center of Educational Statistics (NCES) of the U.S. Department of Education (ED), we mainly use the NCES's definitions for rural areas.

The NCES rural locale assignments rely on the Census Bureau's designation of non-urban territory as rural (Geverdt, 2019). With more details about isolation levels, the NCES rural locale provides fringe, distant, and remote subtypes that differentiate rural locations based on the distance from and size of the nearest urban area. The following are definitions from the NCES:

- Rural Fringe: Census-defined rural territory that is less than or equal to 5 miles from an Urbanized Area, as well as rural territory that is less than or equal to 2.5 miles from an Urban Cluster.
- Rural Distant: Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an Urbanized Area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an Urban Cluster.
- Rural Remote: Census-defined rural territory that is more than 25 miles from an Urbanized Area and also more than 10 miles from an Urban Cluster.

Additionally, we use some regional terms in our study, such as Rural Appalachia and Mississippi Delta, to describe some unique features of rural students and their learning environments. These terms are often fuzzy and contextual, pertaining to culture, community characteristics, and local economy. Some states can be included in more than one region. For instance, Alabama, Kentucky, Mississippi, and Tennessee are in both the Appalachian Region and the Delta Region. We report some data about these rural regions in the hope of helping education leaders to develop new perspectives and strategies to advocate for rural students and rural schools.





The COVID-19 Pandemic Changed Rural Student Behaviors

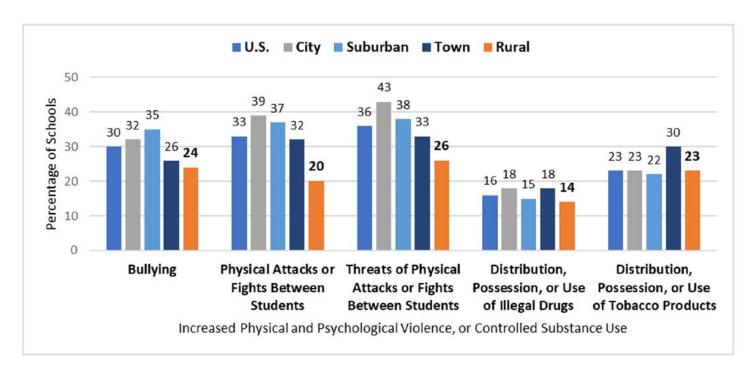
The <u>Cherokee County School District</u> is a small, rural school district in the northwestern part of South Carolina (<u>Gregory, 2022</u>). "Before the pandemic, there might have been one student in the entire district threatening to harm themselves or others each week," but in the 2020-21 school year, "staff were assessing multiple threats daily," and "one middle school principal said his school saw 10 years' worth of cases in one year" (Gregory, 2022).

In the fall of 2022, more than 8 in 10 public schools in the U.S. reported that the COVID-19 pandemic has negatively impacted student behavioral and socioemotional development (IES, 2022). At the same time, minor offenses, such as tardiness and classroom disruptions, are the most frequently cited illicit behaviors that have increased in part due to the pandemic, according to the School Pulse Panel information collected by the U.S. Department of Education. Among rural schools, 82% reported a negative impact of the pandemic on the behavioral development of their students, and 85% reported a negative impact of the pandemic on the socioemotional development of their students.

Rural schools, like their nonrural counterparts, witnessed changes in student behavior that could be attributed to the pandemic (Figure 4.1). For example, during the 2021-22 school year,

- About 1 in 4 rural schools saw an increase in unwanted behaviors such as bullying, threats of physical attacks, or fights between students.
- At least 1 in 5 rural schools reported that more students distributed, possessed, and used tobacco products in school.
- · At least 1 in 10 rural schools reported that more students distributed, possessed, and used illegal drugs in school.

Figure 4.1. Percentage of Public Schools that Reported an Increase in Physical/Psychological Violence or Controlled Substance Use Because of the Influence of the Pandemic, by School Location: 2021-22 School Year



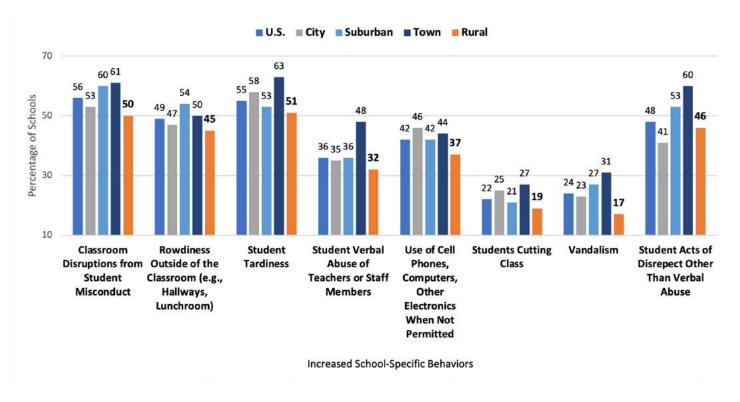
Source: School Pulse Panel (ed.gov)



Compared with nonrural schools, fewer rural schools have seen an increase in student disruptive behaviors in school. However, policymakers and school leaders should not ignore the negative influence of the pandemic on school culture and climate in rural areas. For example, some disturbing patterns of post-pandemic student behaviors can be found not only in urban and suburban schools, but also in rural schools.

- Half of rural schools reported that there was an increase in classroom disruptions from student misconduct and/or student tardiness.
- · Nearly half of rural schools saw an increase in rowdiness outside of the classroom (e.g., hallways, lunchrooms).
- More than one-third of rural schools reported an increase in students using cell phones, computers, or other electronic devices when not permitted.
- Nearly one-third of rural schools saw an increase in student verbal abuse of teachers or other staff members, and nearly half of rural schools saw an increase in student acts of disrespect for educators other than verbal abuse.

Figure 4.2. Percentage of Public Schools that Reported an Increase in Minor Offensive, School-Specific Behaviors Because of the Influence of the Pandemic, by School Location: 2021-22 School Year



Source: School Pulse Panel (ed.gov)

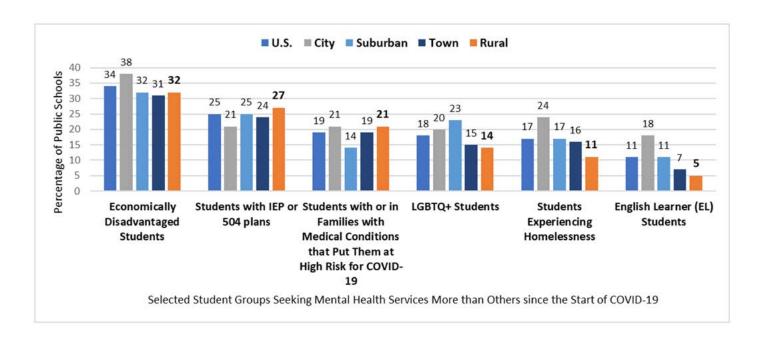


The Pandemic Affected the Mental Health of Rural Students

"Far more Cherokee students were diagnosed with depression or anxiety during the last school year than usual," a leader of the Cherokee County School District <u>said</u>. Educators in the district saw more younger students diagnosed with depression and anxiety. In April 2022, 70% of public schools reported that there was an increase in the percentage of students who had sought mental health services since the start of COVID-19. Among rural schools, 61% reported an increase in this percentage.

More students seeking counselors for their mental issues means increased needs for school-based mental health services. Both rural and nonrural schools saw increased needs for mental health services among disadvantaged student groups during the pandemic (Figure 4.3). More rural schools (27%) than city schools (21%) reported increased needs for mental health services, particularly among students with disabilities. Compared with suburban schools (14%), more rural schools (21%) saw urgent needs for mental health services among students who had medical conditions that put them at high risk for COVID-19 and students whose family members had underlying medical conditions associated with higher risk for severe COVID-19.

Figure 4.3. Percentage of Public Schools that Reported Different Student Groups Seeking Mental Health Services More Than Others Since the Start of the COVID-19 Pandemic, by School Location: April 2022



Source: School Pulse Panel (ed.gov)

Researchers (<u>Cao et al., 2020</u>) found that among young people from poor families, living in rural areas could be a risk factor for depression and add more anxiety to their worries about relatives or friends infected with COVID-19. According to the Rural Health Information Hub (<u>Mead, 2023</u>), rural teens had a higher prevalence of behavior problems, anxiety, and depression than their urban counterparts. In 2010, the suicide rate of rural teens was 6.3 per 100,000 people. This rate climbed to 8.8 in 2020. By contrast, the rate in metro areas was 3.4 per 100,000 in 2010; it climbed to 5.9 in 2020.



Preventing Suicides in Rural Schools

A suicide attempt is a clear indication that someone is struggling and needs immediate help, and most suicides are related to mental health disorders, such as depression, substance use, and psychosis (Mental Health America, 2023). According to the Rural Health Information Hub (2022), "The rate of suicide among rural youth age 15-19 is 54% higher that of their urban counterparts (15.8 vs. 9.1 per 100,000 people) and increased 74% over the past 12 years." During the pandemic, youth in rural areas faced additional challenges to participate in school or access mental health services (for example, due to limited internet connectivity), according to the U.S. Surgeon General (2021).

Early identification and intervention can prevent many tragedies. Educators are often the first to notice mental health problems, particularly when students return to school after the disruption of the pandemic. Parents, educators, and school staff should be aware of common mental health warning signs. When students have persistent anxiety, depression, and behavioral problems, schools and parents should work together to seek professional assessment, medical intervention, and treatment.

Anxiety, Depression, and Behavioral Problems Among Rural Children

In a 2022 study, researchers (<u>Figas et al., 2022</u>) studied 57,887 children, 3-17 years of age, whose parents or guardians answered questions regarding the child's physical and emotional health in the National Survey of Children's Health (<u>NSCH</u>). The survey specifically asked parents whether their children's doctors or other healthcare providers ever told them that their children had anxiety, depression, or behavioral problems. The study suggests that overall, rural children experienced greater mental health concerns prior to the pandemic, while urban children suffered greater declines in mental health in response to the pandemic.

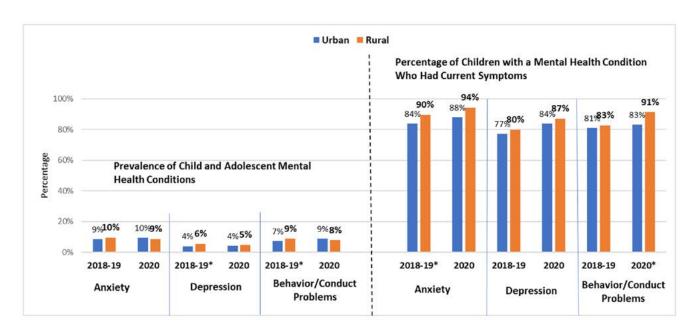
In this subsection, we present data from the NSCH and use the term "children" to refer to both children and adolescents. Compared with their urban counterparts, rural children had a higher prevalence of anxiety, depression, and behavioral problems prior to the pandemic. Figure 4.4 shows that before the pandemic, rural children were more likely than their urban peers to suffer from diagnosed depression (6% vs. 4%) and behavioral problems (9% vs. 7%).

Among those who have ever had anxiety, depression, and behavioral problems, rural children were more likely than their urban peers to continue suffering from those symptoms. For example,

- Before the pandemic, 90% of rural children who had previously suffered from anxiety still had anxiety problems, compared with 84% of their urban peers.
- Before the pandemic, 80% of rural children with depression were reported as continuously suffering from depression; during the pandemic, this rate increased to 87%.
- During the pandemic, 91% of rural children with behavioral problems prior to COVID-19 were reported still having the same issues, as opposed to 83% of their urban peers.



Figure 4.4. Prevalence of Child Mental Health Conditions, and Percentage of Children with a Mental Health Condition Who Had Current Symptoms, Prior to and During the COVID-19 Pandemic: 2018-19 vs. 2020



Note: *Statistically significant between rural and urban areas.

Source: Data from the National Survey of Children's Health (Eigas, Giannouchos, and Grouch, 2022)

Mental Health Screening for Rural Students

Mental health professionals typically categorize depression into three types: mild, moderate, and severe. When depression is moderate or severe, it could lead to self-harm, thoughts of suicide, or suicide attempts (Krouse, n.d.). Table 4.1 shows that among rural children with depression, 35% had moderate depression prior to the pandemic; during the pandemic, the percentage decreased to 26%. By contrast, the percentage of rural children with severe depression symptoms increased from 4% to 7%. At the same time, among children with behavioral problems, severe levels were more likely reported in the rural group (18%) than in the urban group (12%).

Table 4.1. Severity of Child Mental Health Symptoms Prior to and During the COVID-19 Pandemic: 2018-19 vs. 2020

| | | Anxiety | | Depression | | Behavior/Conduct Problems | |
|-------|----------|---------|------|------------|------|---------------------------|------|
| | | 2018-19 | 2020 | 2018-19 | 2020 | 2018-19 | 2020 |
| Urban | Mild | 49% | 48% | 44% | 43% | 44% | 45% |
| | Moderate | 42% | 43% | 45% | 47% | 45% | 45% |
| | Severe | 9% | 10% | 11% | 10% | 12%* | 10% |
| Rural | Mild | 42% | 49% | 61% | 67% | 37% | 45% |
| | Moderate | 49% | 44% | 35% | 26% | 45% | 36% |
| | Severe | 10% | 8% | 4% | 7% | 18%* | 19% |

Note: *Statistically significant between rural and urban areas. Percentages may not total 100 due to rounding. Source: Data from the National Survey of Children's Health (Figas, Giannouchos, and Grouch, 2022)

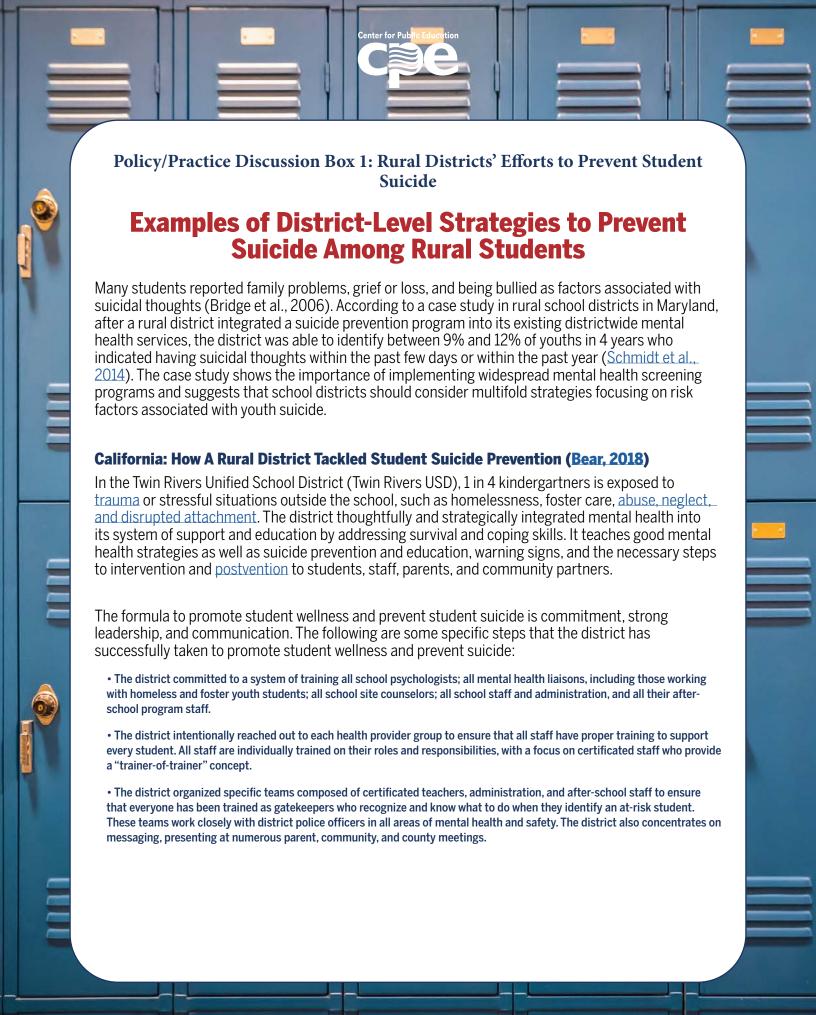


As the research points out, the findings highlight the need to improve mental health screening to accurately evaluate the impact of the pandemic on youth mental health and to facilitate early identification and intervention (Figas et al., 2022). With screening information, rural schools can connect students with potential suicide risk factors and their families as early as possible to the mental health services they need (Schmidt et al., 2014). Evidence shows that "Universal screening was particularly effective at detecting depression in adolescents who are traditionally underdiagnosed, such as those in racial or ethnic minority groups and those living in a rural setting" (Guo and Jhe, 2021).

Unfortunately, there is a lack of data to show the disparity in the number of students or percentage of students screened in rural vs. nonrural settings. In one study, researchers surveyed 428 principals in Midwestern schools, and more than half of them were from rural schools (<u>Wood and Ellis, 2022</u>). Most of the studied principals reported that their schools did not conduct universal mental health screening and cited barriers (e.g., money, time, lack of support system in place) to the practice of universal mental health screening. Most of the school leaders also reported little to no knowledge about the importance of this practice.

Despite a shortage of research on the disparity in mental health screening between rural and nonrural schools, the limited number of studies consistently suggest that challenges for rural school districts to implement widespread screening often include a lack of funding for adequate staffing and screening instruments, and a need for policy support and alignment to communicate the importance of screening and promoting sustainability (Capps et al., 2021; Henderson, 2022; University of Maine, 2022).







How can school boards prioritize student mental health? Bear (2018), who has worked with the Twin Rivers USD and developed the district mental health program, recommended the following strategies for local school boards:

- · Work with school community partners, county departments of mental health, and school leadership to begin conversations.
- Address mental health, suicide risk factors, suicide prevention, and <u>postvention</u> in Local Control and Accountability Plans (LCAP) and school safety plans.
- Do not be afraid to begin the difficult and necessary conversations. Talking about suicide does not increase the act of suicide. Rather, it is the opposite: such conversations point the way toward vital help and identify warning sign behavior.

Kansas: Suicide Awareness in the Auburn-Washburn School District

Located in a rural fringe area in Kansas, the Auburn-Washburn School District (USD 437) is part of the community-wide prevention initiative, according to the <u>district website</u>. The program, titled "Suicide: Talk about it. Save a Life," was created in cooperation with other Shawnee County schools and the Family Service & Guidance Center.

Wirestone (2018) reported that the USD 437 board encouraged dialogue with its communities on suicide awareness. According to the <u>local news report</u>, "School staff were on hand to detail programs that had been [put] into place to increase suicide awareness at elementary, middle school and high school levels. Those included programs such as a school pantry, a Make-a-Difference club, and 'mindful minutes' — a minute of meditation to begin the day to help students reset."

North Carolina: 3 Rural Districts Partner with Appalachian State University to Prevent Youth Suicide

The suicide rate in Watauga County was more than 30% higher than the North Carolina average (Kukes, 2020). In the rural counties of western North Carolina, many school counselors and school social workers have been "overburdened by large caseloads and responsibilities that have little to do with the mental health of their students, such as arranging student schedules" (Kukes, 2020). To help schools in these rural areas make greater efforts to prevent student suicide, Appalachian State University developed an Assessment, Support, and Counseling (ASC) Center.

The ASC Center collaborates with school districts in the rural counties and currently serves 4,000 K-12 students. As a connector and support system for students, the Center also collaborates with stakeholders other than schools, such as the departments of social services, law enforcement, and juvenile justice. To pay for the program, each participating district contributes \$20,000 to \$30,000 annually. The payments help cover the costs of research assistants, operational funds, and having the clinicians from the University reassigned to the program from university classrooms.



As a main ASC service that school districts receive, trainees from the Center help school counselors to manage their regular caseloads by taking on some cases of students who need counseling services urgently. The ASC Center's counseling services start with a referral. Upon receiving a referral, a school counselor or social worker coordinates between the student and the Center, managing intake and consent forms. After the ASC Center meeting with the student, a counseling trainee and a licensed clinician will be assigned to the case. The licensed clinician will oversee the trainee's work.

In 2019, the Center, in partnership with Ashe County Schools and RTI International, received a \$2.5 million, 5-year grant from the U.S. Department of Education. The grant will enable the Center to continue to expand mental health services and training in rural North Carolina. The ASC Center plans to expand services in the three counties it has been serving.

Kentucky: Rural Communities Lead Charge in Suicide Prevention in Schools (Minogue, 2021)

Suicide is the second leading cause of death in middle and high school-age children in Kentucky. For several decades, rural school district leaders have been working with their communities to promote mental health and prevent suicide. Their efforts have transformed school-based suicide prevention programs in the state.

The first breakthrough that rural communities made in suicide prevention was to "talk about it." More than two decades ago, there was a stigma about suicide — the individual who had suicidal thoughts did not want to talk about it, nor want anyone to know about it. Today, "that's completely changed," said a rural high school principal.

Like several other school districts, Larue County Schools (LCS), a district in a rural fringe, created a Sources of Strength group, which included middle and high schoolers who were appointed to take responsibility for helping their classmates. Sources of Strength is a program designed to harness the power of peer social networks to create healthy norms and culture, ultimately preventing suicide, violence, bullying, and substance misuse. Today, LCS schools continue appointing students whose mission is to save lives by encouraging anyone who may be struggling anywhere to reach out and initiate conversations about suicide.

The second breakthrough made by Kentucky rural schools like LCS was to take a proactive approach, teaching all students, instead of a select few, how to cope with adversity and crisis. "In the past ten years, a new emphasis has been placed on suicide education and teaching. Kentucky has a law in the state stipulating that prevention must be taught in all middle and high schools, which is a change from Stephanie Burba's high school days, just a decade ago." Burba is a biology teacher at LCS.



The Adair County School District (ACSD) is a small district located in a remote town with only 2,600 students. Being a small district in a remote area can be an advantage when it comes to school leaders, educators, students, parents, and local communities working together to create a positive and inspiring school culture. As the high school principal said, "You think, 'You don't have the best academic program' or 'You don't have the best athletic program' or what have you, but we try just as hard, and we care just as much about our students as any district does."

It is important for students to get the help they need and have adequate resources available for suicide prevention. More important is a good school culture. A good school culture means that "the student body is active with school spirit;" and "The teachers want to be here, they want to teach students." According to an ACSD sophomore who has been part of Sources of Strength since middle school, "If you see someone that just needs something to brighten their day, always go for it, never hesitate. It's just something you can do. It doesn't take anything out of your day to be kind to someone."

"It's very important," said the student.

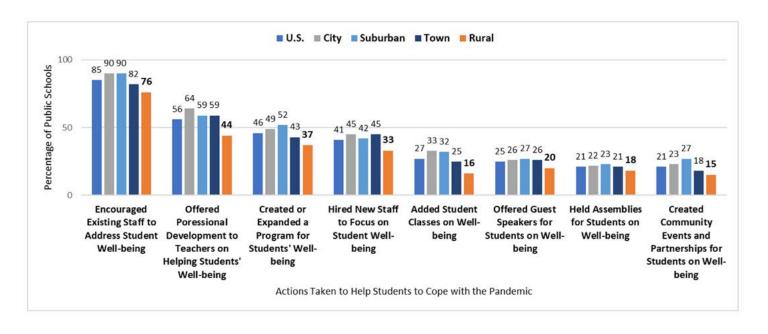




Limited Access to Mental Health Services for Rural Students

During the pandemic, "students in rural areas had higher levels of anxiety and depression, partially due to limited access to care," according to <u>Gao (2022)</u>. Data show that compared with city schools, rural schools were less likely to offer professional development to teachers on helping students to improve social, emotional, and mental well-being (44% vs. 64%), hire new staff to focus on student mental health (33% vs. 45%), and create community events and partnerships to improve student well-being (15% vs. 23%) (Figure 4.5).

Figure 4.5. Percentage of Public Schools, by Actions That Schools Have Taken to Help Students to Cope with the Pandemic, and by School Location: April 2022



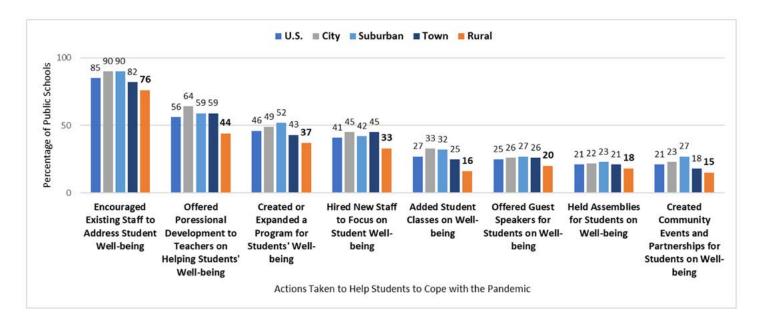
Source: School Pulse Panel (ed.gov)

Researchers (<u>van Vulpen et al., 2018</u>) have found that approximately 1 in 5 youths in schools has diagnosable mental health disorders, but nearly 70% do not receive the services they need. During the pandemic, data show that compared with nonrural schools, rural schools were less likely to provide students with various types of school-based mental health services (Figure 4.6). For example,

- More than half of rural schools did not have any external mental health provider for students.
- · Nearly half of rural schools could not conduct needs assessments for students who may have wanted mental health services.
- Approximately 2 in 5 rural schools did not have case management for students who needed mental health services.
- Approximately 1 in 5 rural schools did not have individual-based mental health intervention programs.
- Among rural schools, 5% did not provide any type of school-based mental health services.



Figure 4.5. Percentage of Public Schools, by Actions That Schools Have Taken to Help Students to Cope with the Pandemic, and by School Location: April 2022



Source: School Pulse Panel (ed.gov)

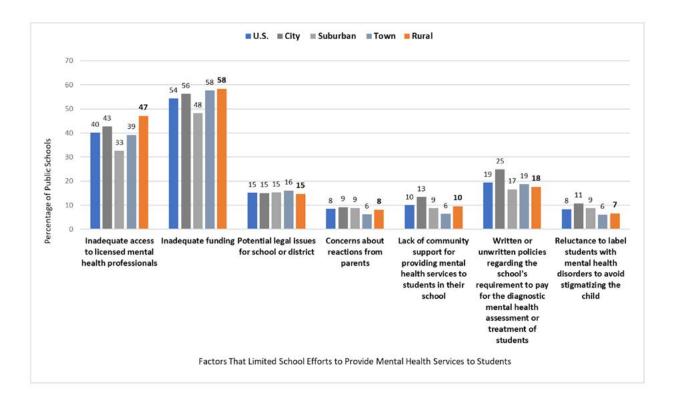
COVID-19 highlighted the key role of telehealth in rural areas. During the pandemic, approximately 1 in 4 rural schools provided students with mental health services through telehealth delivery methods (Figure 4.5). Some rural schools depend on telehealth because of provider shortages and transportation issues. Telehealth can effectively reduce barriers to the care that rural students need (Panchal et al., 2022). Unfortunately, not all rural schools have the adequate broadband infrastructure to support such services (Center for Public Education, 2023; Graves et al., 2021).

Inadequate Funding and Inadequate Access to Licensed Mental Health Professionals

"Many rural school districts barely have a school nurse and definitely don't have a mental health therapist on hand," <u>said</u> a researcher who is also a resident of rural northeastern Washington. Data show that compared with nonrural schools, more rural schools reported that inadequate funding (58%) and/or inadequate access to licensed mental health professionals (47%) were the main reasons why they could not provide students with school-based mental health services (Figure 4.7).



Figure 4.7. Percentage of Public Schools, by Reported Factors That Limited Their Efforts to Provide Mental Health Services to Students, by School Locale: 2019-2020

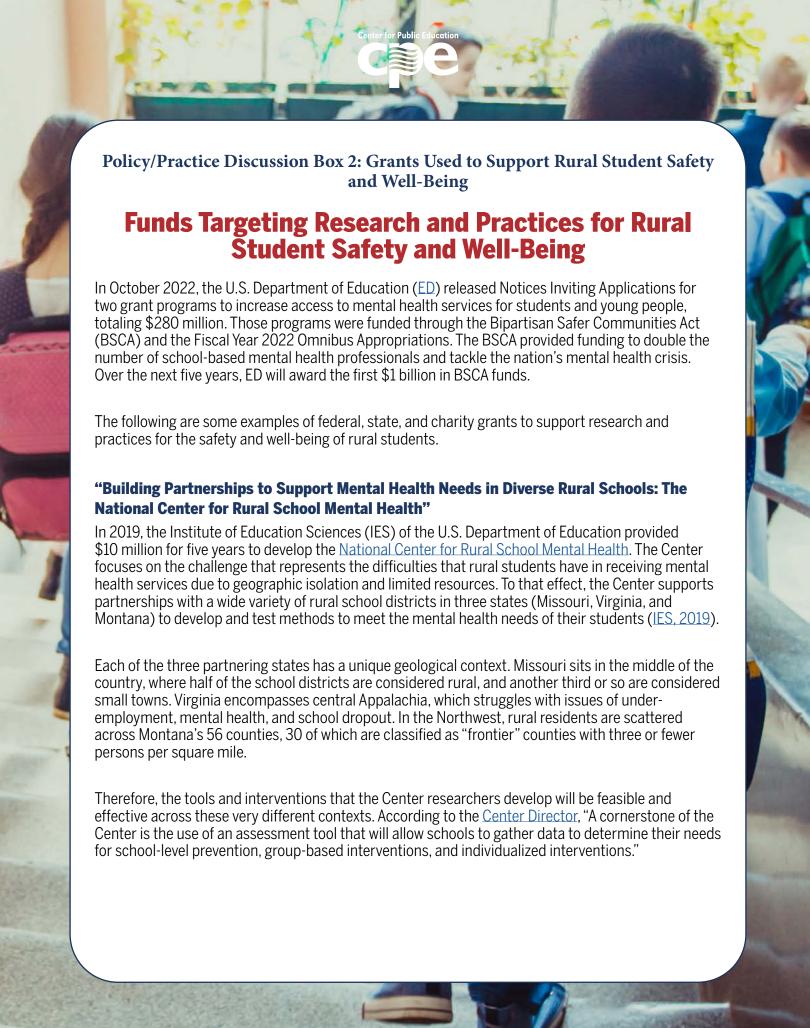


Source: U.S. Department of Education, National Center for Education Statistics, 2019-20 School Survey on Crime and Safety (SSOCS), 2020. <u>Table 233.69b</u> prepared in November 2021.

In many states, school funding is based on student enrollment, and small rural schools cannot receive adequate funding for a healthcare professional. In Washington state, for example, for a school to get funding for one full-time nurse, it would have to enroll around 5,000 to 7,000 students. "This means a small, rural school with only 150 students would receive funding for a tiny fraction of a nurse position" (<u>Van Dongen, 2022</u>).

Like many rural school districts, the Cherokee County School District saw greater needs for mental health services for students during the pandemic but has been struggling to fill positions to help students. Gregory (2022) reported that "Cherokee County has historically worked with the state Department of Mental Health, which fills the majority of school therapist positions around South Carolina," but "Low pay — a \$36,000 starting salary for positions that require a master's degree — has led to many vacancies."

Researchers (<u>DiMarco and Jordan, 2022</u>) found that schools in rural areas are less likely to use federal COVID-relief funds for school-based mental health services (e.g., social-emotional programs) than their counterparts in nonrural areas. One reason is that rural schools need to balance their budgets and invest in student transportation, classroom curriculum materials and textbooks, academic programs, and teacher recruitment and retention. Therefore, when it comes to equal access to mental health services for all rural students, more research is urgently needed for policymakers and education leaders to understand certain rural circumstances (<u>Weybright, 2023</u>).





"WSU Extension Boosts Mental Health Resources in Rural, Underserved Areas"

Washington State University (WSU) is part of a new program created to increase access to mental health treatment and recovery for students in rural and underserved school districts (Weybright, 2023). The program is called Project AWARE (Advancing Wellness and Resiliency in Education), and is funded by a grant from the U.S. Department of Health and Human Services' Substance Abuse and Mental Health Services Administration. The Northeast Washington Educational Service District is the lead organization on the grant, which will provide \$3.5 million over 4 years.

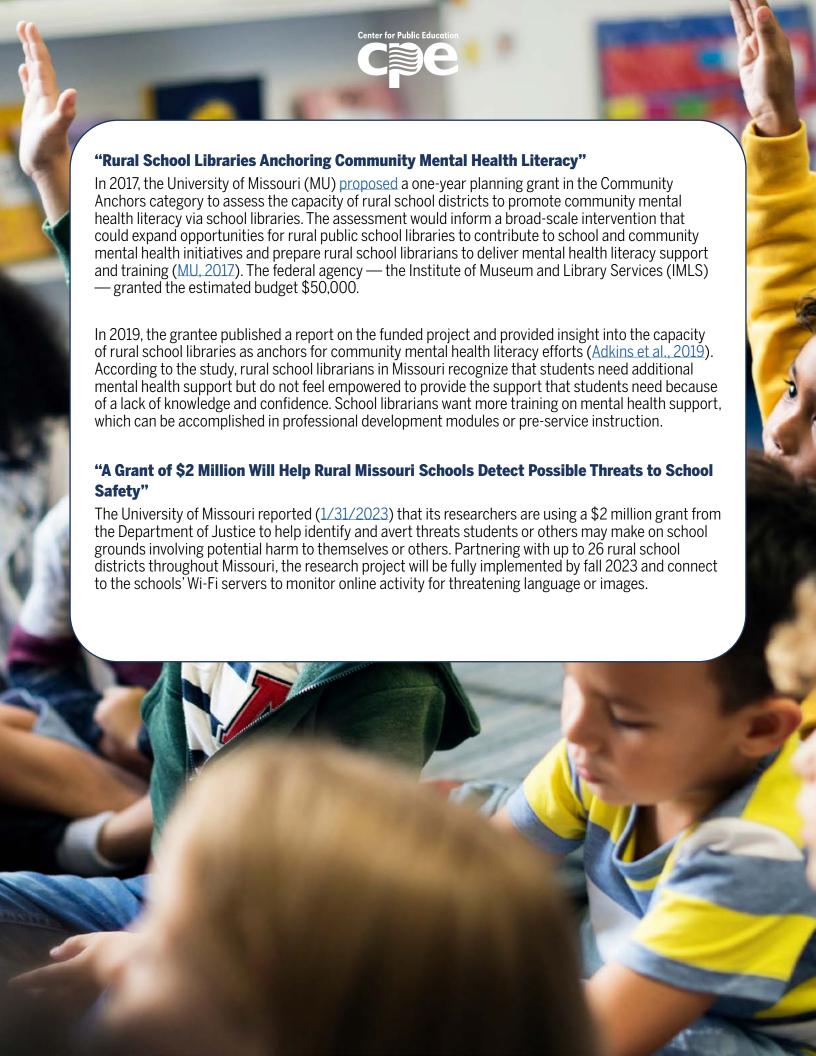
WSU's Children and Family Research Unit (CAFRU) will receive \$1.2 million of the grant and work in six districts where disadvantaged students have limited access to mental health services. The grantee will collaborate with teachers and educators, give them tools to help students, and offer students a path to healing and recovery. According to the grantee, CAFRU specialists will implement their Collaborative Learning for Educational Achievement and Resilience (CLEAR) curriculum into their partner schools, and the three-year program will go beyond training sessions to work with teachers in their classrooms.

"Expanding School Medicaid Programs"

On May 17, 2022, Georgetown University published an article titled "How Medicaid Can Help Schools Sustain Support for Students' Mental Health" (Jordan et al., 2022). In the article, researchers point out that states and school districts can leverage Medicaid to support mental health care for students through a variety of mechanisms, including school-based health centers and partnering with community providers.

An example of school Medicaid programs is the <u>Georgia Apex Program</u> (Apex), funded by the Georgia Department of Behavioral Health and Developmental Disabilities (DBHDD). The program promotes collaboration between community mental health providers and schools to provide school-based services and supports, including training for school staff to facilitate the right care at the right time for children, young adults, and families.

Currently, 16 states — Arkansas, Arizona, California, Colorado, Connecticut, Florida, Kentucky, Louisiana, Massachusetts, Michigan, Minnesota, Missouri, North Carolina, New Hampshire, Nevada, and South Carolina — have expanded their programs to allow qualified school providers to bill for covered behavioral health services for Medicaid-enrolled students beyond those with IEPs, according to the Healthy Schools Campaign. Another five states — Illinois, Indiana, New Mexico, Oregon, and Virginia — are in the process of expanding their programs but have not yet implemented them. (Jordan et al., 2022).





Preventing School Violence in Rural Areas

As an old saying goes, an ounce of prevention is better than a pound of cure. One way to prevent deadly school violence, including school shootings, is to promote student wellness and provide mental health services for students who need the service as early as possible. Scholars have studied school shootings for decades. Rocque (2012) summarized some earlier research on the relationship between mental health and school shootings:

"By far the most prevalent psychological theories developed to explain school shootings are those that involve mental illness. Case studies of school rampage shooters reveal very troubled youths. Some, perhaps most, suffer from severe depression (Harding et al., 2003; Langman, 2009; Sullivan & Guerett, 2003). Others have noted that while mental illness is rarely recognized prior to the shootings, many of the perpetrators are diagnosed after the fact (Newman et al., 2004). Newman et al. dismiss mental illness as a 'straightforward predictor' of school killings, however, because of the increasing number of youths diagnosed with psychological afflictions."

Recent Research on Promoting Mental Well-Being and Preventing School Shootings

A large body of recent studies has established the relationship between promoting positive mental health and preventing deadly school violence. For example,

- In a 2019 study, researchers (Lankford et al., 2019) examined the 15 deadliest public mass shootings (including school shootings) in the United States from March 1998 to February 2018. They suggested that "most incidents were indeed preventable based on information known about offenders in advance, and that the deadliest mass shooters exhibited more warning signs and were more often reported to law enforcement than other active shooters." Researchers (Mayer et al., 2021) point out, "Generally speaking, more individuals involved in mass shootings have a history of a diagnosable mental illness, compared to those engaged in other forms of violence."
- In 2019, the U.S. Secret Service National Threat Assessment Center (NTAC) published a report titled "Protecting America's Schools: A U.S. Secret Service Analysis of Targeted School Violence" (Alathari et al., 2019). The study supports past Secret Service research findings that indicate targeted school violence is preventable. Researchers point out that "Most attackers had experienced psychological, behavioral, or developmental symptoms: The observable mental health symptoms displayed by attackers prior to their attacks were divided into three main categories: psychological (e.g., depressive symptoms or suicidal ideation), behavioral (e.g., defiance/misconduct or symptoms of ADD/ADHD), and neurological/developmental (e.g., developmental delays or cognitive deficits)." According to the report, half of the attackers had received one or more mental health services prior to their attack. The study suggests that mental health evaluations and treatments should be considered a component of a multidisciplinary threat assessment, and mental health professionals should be included in a collaborative threat assessment process that also involves teachers, administrators, and law enforcement.
- A 2021 study titled "Guns, School Shooters and School Safety: What We know and directions for change" examined data on school shootings and other forms of gun violence at schools (Flannery et al., 2021). To reduce school shootings and improve school safety, researchers recommended three strategies for schools, namely, addressing the role of mental health in school shootings and violence perpetration, implementing multidisciplinary threat assessment protocols, and utilizing school resource officers.

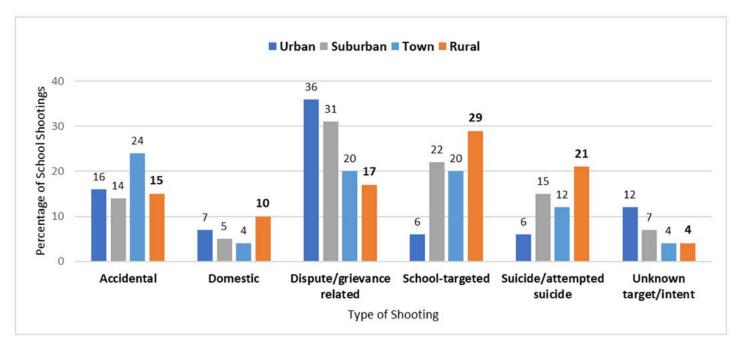




Characteristics of School Shootings in Rural Areas

In 2020, the U.S. Government Accountability Office (GAO) published a <u>report</u> on the characteristics of school shootings based on 318 incidents that occurred between the 2009-10 and 2018-19 school years. GAO found that shootings at K-12 schools most resulted from disputes or grievances, for example, between students or staff, or between gangs, although the specific characteristics of school shootings over the past 10 years varied widely. According to GAO's analysis, suburban and rural schools had the most school-targeted shootings — the deadliest type of shooting (Figure 4.8). Compared with nonrural schools, rural schools were more likely to experience school shootings that involved suicides or attempted suicides.

Figure 4.8. Percentage of School Shootings, by Locale and Selected Type of Shooting: School Years 2009-10 through 2018-19



Note: The total number of school shootings in this analysis is 292. Source: GAO analysis of the Naval Postgraduate School's K-12 School Shooting Database and Department of Education's Common Core of Data for school years 2009-10 through 2018-19.

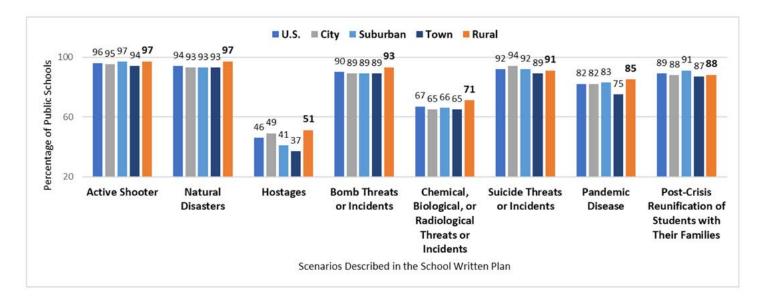
GAO-20-455, Accessible Version, K-12 EDUCATION: Characteristics of School Shootings

Safety and Security Plans of Rural Schools

"No one technology, school climate intervention, or other school safety strategy can guarantee school security or eliminate the underlying cause of school violence" (Ames, 2019). To keep students safe, schools should have a thoughtful safety plan describing procedures to be performed in various scenarios. Data (Figure 4.9) show that more than 90% of rural schools had a written plan that describes procedures to be performed when there is an active shooter on campus (97%), when there is a natural disaster (97%), when there is a bomb threat (93%), and when there is a suicide incident (91%). More than 85% of rural schools had a written plan that describes procedures to follow during a pandemic and/or post-crisis reunification of students with their families.



Figure 4.9. Percentage of Public Schools with a Written Plan That Describes Procedures to Be Performed in Various Scenarios and by School Location: November 2022



Source: School Pulse Panel (ed.gov)

While most rural schools have complete security plans, rural schools are less likely to take another precaution, namely threat assessment or "a formalized process of identifying, assessing and managing students who may pose a threat of targeted violence in schools" (NCES, 2018). A threat assessment team typically includes school staff, such as administrators and school psychologists. During the 2019-20 school year, about two-thirds of schools (64%) in the U.S. reported having a threat assessment team in place. "Schools in cities (67%) and suburbs (71%) more often had a threat assessment team than those in rural areas (56%)" (Schaeffer, 2022).

School Resource Officers (SROs) in Rural Schools

"To be effective, a security plan for schools in rural areas must consider the unique features of the locale" (Eadens et al., 2020). Nationwide, a quarter of rural students "have daily bus rides over one hour in length, and about 85% have rides of at least 30 minutes" (Lavalley, 2018). In rural settings, law enforcement responses often take much longer than in nonrural areas. According to a study funded by the U.S. Department of Justice, SROs in rural settings, compared with their colleagues working in urban schools, often "perceived their presence to be particularly important given that, due to their location, response times by other emergency responders would be substantially longer than those for schools located in the city settings" (Curran et al., 2020).

SROs are sworn law enforcement officers assigned to work in public schools by the police departments for which they work (NYSSA, 2019). According to NCES, "School Resource Officer (SRO) includes all career law enforcement officers with arrest authority who have specialized training and are assigned to work in collaboration with school organizations." School leaders, particularly principals, understand that "SROs can play an integral role in ensuring the physical safety of a school building and all inside, and these SROs can be an important resource to welcome, counsel, and mentor students" (National Association of Secondary School Principals, 2022).



In a research brief, the New York State School Boards Association (NYSSA) described the following incident: "A November 2019 plot to attack the middle school in Albion, a rural district near Rochester, was thwarted after a school resource officer was notified about the threat. Three students were subsequently arrested and charged with planning to attack Albion Middle School using explosives and guns. Albion is one of an increasing number of school districts in New York that utilizes school resource officers (SROs) to protect the health and safety of their students."

Different school communities may have different opinions on SROs and various experiences with law enforcement officers on campus. Data show that half of rural schools had sworn law enforcement officers; nearly 2 in 5 rural schools employed full-time school resource officers (Figure 4.10). In 2022, among rural schools with SROs, 77% said that their SROs have made a positive impact on their school communities, as opposed to 51% of city schools.

■ U.S. ■ City ■ Suburban ■ Town ■ Rural 70 62 60 Percentage of Schools 46 21 20 10 **Have Any Sworn Full-time School Full-time Security** Part-time School Part-time Security Part-time Sworn **Full-time Sworn** Law Enforcement Resource Officer(s) Law Enforcement Resource Officer(s) Law Enforcement Officers Officer(s) Officer(s) Officer(s) Officer(s) Among Schools with Security Personnel

Figure 4.10. Percentage of Schools That Reported Having Security Personnel, by School Location: November 2022

Source: School Pulse Panel (ed.gov)





Partnering with Parents and Communities to Foster Safe and Healthy Schools

Despite a lack of research on rural student mental health and school safety, a growing body of literature emphasizes the importance of partnerships between schools and families. Researchers recommend that rural schools effectively communicate with their communities and student families, and develop a structure to support students, parents, and mental health care providers (<u>Garbacz et al., 2022</u>). As rural communities have a distinct culture and face unique challenges, innovative ideas are needed to overcome barriers to rural mental health care (<u>Jensen et al., 2020</u>).

- One study (Murry et al., 2011) examined perceptions about mental health care and help-seeking among rural African American families of adolescents. Researchers surveyed 163 parents and interviewed 21 of them. The survey found that most of the mothers expressed confidence in mental health care providers' help, but preferred family, church, and schools to be their sources of support. The studied parents also expressed concerns about community stigma towards their children with mental health issues. A big takeaway from this study is that schools should connect and communicate with all stakeholders, including parents, family-trusted community groups, and service providers.
- In another exploratory study, researchers (van Vulpen et al., 2018) surveyed 607 rural parents and guardians and found that parents overwhelmingly supported schools to address the mental health needs of students. Parents reported that anxiety, depression, and bullying were the top emotional and behavioral issues and challenges for their children. A key message from this study is that school-based mental health programs are important, but such programs need parent involvement and school support to help parents understand the mental health issues of their children.
- In a study on parents' perception of school violence and awareness of risk factors safety, researchers (Soliman et al., 2018) surveyed 403 parents living in the southern part of Illinois. They found that parents who have experiences with and knowledge about violence were more likely to train their children how to socialize with other children without being victimized. These parents also were more likely to communicate with their children's educators about how to promote safety in schools. While parents play a significant role in promoting school safety, schools need to help parents understand school security plans and school safety programs. School leaders may keep meaningful dialogues with parents and inform parents and other stakeholders how school safety programs are developed and implemented and who is responsible for what parts of the safety plans and activities.
- In another exploratory study, researchers (<u>Huscroft-D'Angelo et al.</u>, 2018) interviewed 16 special education administrators and student services personnel representing several rural regions and examined their perspectives on supporting parents and students with Emotional and Behavioral Disorders (EBD) in rural settings. The interviewed administrators reported that there was minimal direct support for parents of children with EBD within the school setting. Since it was difficult for parents to find relevant supports in rural areas, the interviewed school leaders said that they had tried to provide parental support groups and training sessions within school buildings. However, the parent participation rate was very low because of challenges in transportation, child care, and time. One solution that the participants proposed was to implement a phone-based parent-to-parent support program that might help parents to engage in this type of support.



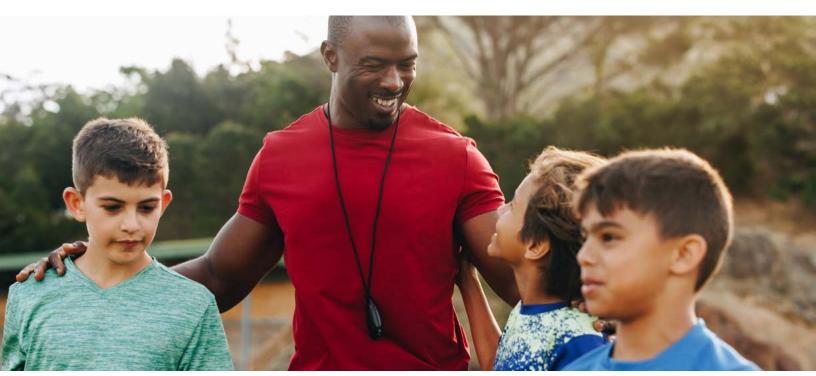


Connectedness can reduce the risk of suicide and emotional disorders for youth (<u>The HHS Center for Faithbased and Neighborhood Partnerships, 2022</u>). The Centers for Disease Control and Prevention (<u>CDC, 2022</u>) defines connectedness as "a sense of being cared for, supported, and belonging, and can be centered on feeling connected to school, family, or other important people and organizations in their lives." Beyond parents or caregivers, faith communities can help youth to connect with a network of adult support that is trusted, safe, and supportive, according to the U.S. Department of Health and Human Services (HHS).

Faith communities can nurture a sense of connectedness by recognizing the people and organizations that are important in the lives of youth and young people. In fact, faith communities can provide something that other communities may not be able to when it comes to connection (HHS, 2022).

- A 2017 study found that religion is an outlet that provides stability, support, and guidance for young people in the U.S. (Shafer, 2017). According to this study, "schools could make their curricula accessible to churches and mosques that run homework programs so that adults helping with homework can ensure students are completing multiplication problems the way their teacher has shown them. If districts let faith organizations know which schools are the lowest performing, faith leaders could organize volunteers to visit these schools and assist with reading help, behavioral support, or extra play and supervision during recess."
- According to the Congressional Black Caucus Emergency Task Force on Black Youth (2019), in recent years, suicide rates among Black children (below age 13) have been increasing rapidly, with Black children nearly twice as likely to die by suicide than White children. The suicide death rate among Black youth has been found to be increasing faster than any other racial/ethnic group. The Pew Research Center (2021) reported that most Black adults say they rely on prayer to help make major decisions, and 60% of Black adults who go to religious services whether every week or just a few times a year say they attend religious services at places where most or all of the other attendees, as well as the senior clergy, are also Black. As Gresham remarks, "When addressing and assessing our youth (particularly those of color) the intersection of faith and mental health cannot be ignored."

In summary, parents play a critical role in promoting student mental health and well-being. Faith and community leaders have an important opportunity to help youth feel connected to their community, as well as to their families and to their schools.





Key Findings

- 1. In the fall of 2022, 82% of rural schools reported a negative impact of the pandemic on the behavioral development of their students, and 85% reported a negative impact of the pandemic on the social and emotional development of their students. During the 2021-22 school year, about 1 in 4 rural schools saw an increase in unwanted behaviors such as bullying, threats of physical attacks, or fights between students. Half of rural schools reported that there was an increase in classroom disruptions from student misconduct and/or student tardiness.
- 2. More students seeking counselors for their mental health means an increased need for mental health services during the pandemic. More rural schools (27%) than city schools (21%) reported increased needs for mental health services, particularly among students with disabilities. Compared with suburban schools (14%), more rural schools (21%) saw urgent needs for mental health services among students who had medical conditions that put them at high risk for COVID-19 and students whose family members had underlying medical conditions associated with higher risk for severe COVID-19.
- 3. During the pandemic, data show that compared with nonrural schools, rural schools were less likely to provide students with various types of school-based mental health services. More than half of rural schools did not have any external mental health provider for students. Nearly half of rural schools could not conduct needs assessments for students who may have wanted mental health services. Among rural schools, 5% did not provide any type of school-based mental health services.
- 4. According to the survey conducted by the U.S. Department of Education, compared with nonrural schools, more rural schools reported that inadequate funding (58%) and/or inadequate access to licensed mental health professionals (47%) were the main reasons why they could not provide students with school-based mental health services.
- 5. According to the U.S. Government Accountability Office (GAO, 2020), suburban and rural schools had the most school-targeted shootings the deadliest type of shooting. Compared with nonrural schools, rural schools were more likely to experience school shootings that involved suicides or attempted suicides.





Technical Notes

In this report, we used multiple data sources to conduct a comprehensive and thorough research review. Most of the data are selected from recently published tables prepared by the National Center for Educational Statistics (NCES), federal reports published by the Census Bureau, the U.S. Department of Agriculture (USDA), and the Federal Communications Commission (FCC), as well as some academic research papers. We provide links to data sources for readers who are interested in the methodology of our data collection and estimation.

While data used in this study are from reliable sources, our research has limitations. First, in the section "How to Define Rural," we explain how federal agencies define rural. It should be noted that in some studies, rural may be combined with small towns. For example, in a study about rural Michigan (<u>Arsen et al., 2022</u>), researchers combine all districts that NCES classifies as "rural" or "town" as rural, while defining "nonrural" as NCES's urban and suburban districts. They believe that their definition of "rural" is more reflective of the shared challenges experienced by the "rural" districts and, importantly, is consistent with the perceptions of people who live in rural places. If we cite such studies, we remind readers of the difference.

Second, in many parts of our study, we report both the count of students and the percentage of students by group. When comparing populations that have a large difference in size, reporting percentages or counts only can lead to ambiguous and even misleading interpretations. For example, a 0.3% increase in students with disabilities represents more than 20,000 students; a 0.8% increase in English language learners means more than half a million students. For students who attend rural schools with more than 75% of students eligible for free or reduced-price lunch, 8.2% of White students means approximately 546,000 students, while 37.6% of Black students represents nearly 339,000 students.

Lastly, while we use different algorithms when searching qualitative data and cite various examples in our study, it does not necessarily mean that we endorse the product, researcher, or organization cited. The views of cited research do not necessarily represent our views. Our purpose in this study is to provide a wide range of data and information for readers to examine and consider. We encourage our readers to exercise their own, sound judgment when assessing and using the information we provide in this study.





Adkins, D., Brendler, B., Maras, M., & Townsend, K. (2019). Rural school libraries anchoring community mental health literacy. Retrieved from https://www.ggml-journal.net/index.php/ggml/article/view/520/534.

Ames, B. (2019). Making schools safe for students. Retrieved from https://www.ojp.gov/pdffiles1/nij/252729.pdf.

Arsen, D., Delpier, T., Gensterblum, A., Jacobsen, R., & Stamm, A. (2022). Educational opportunities and community development in rural Michigan: A roadmap for state policy. Retrieved from https://www.dropbox.com/s/z2v8yg197g8alwo/Rural%20School%20Report_web-final.pdf?dl=0.

Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. Retrieved from https://www.sciencedirect.com/science/article/pii/S0165178120305400?via%3Dihub.

Center for Faith-based and Neighborhood Partnerships, U.S. Department of Health and Human Services. (2022). Youth mental health and well-being in faith and community settings: Practicing connectedness. Retrieved from https://www.hhs.gov/sites/default/files/youth-mental-health-and-well-being-in-faith-and-community-settings.pdf.

Curran, F. C., Fisher, B. W., Viano, S. L., & Kupchik, A. (2020). Understanding school safety and the use of school resource officers in understudied settings. Retrieved from https://www.ojp.gov/pdffiles1/nij/grants/254621.pdf.

DiMarco, B. & Jordan, P. W. (2022). COVID-aid spending trends by city, suburban, rural school districts. Retrieved from https://www.future-ed.org/covid-aid-spending-trends-by-city-suburban-rural-school-districts/.

Eadens, D. W., Walker, L., & Yurin, V. (2020). School safety in rural settings. Retrieved from https://stars.library.ucf.edu/cgi/viewcontent.cgi?article=2015&context=ucfscholar.

Figas, K., Giannouchos, T., & Grouch, E. (2022). Rural-urban differences in child and adolescent access to and receipt of mental health services prior to and during the COVID-19 pandemic: Results from the National Survey of Children's Health. Retrieved from https://www.sc.edu/study/colleges_schools/public_health/research/research_centers/sc_rural_health_research_center/documents/mhservicesbriefrevised.pdf.

Flannery, D. J., Fox, J. A., Wallace, L., Mulvey, E., & Modzeleski, W. (2021). Guns, school shooters, and school safety: What we know and directions for change. Retrieved from https://www.tandfonline.com/doi/full/10.1080/2372966X.2020.1846458.

Gao, N. (2022). Commentary: How rural schools survived the pandemic. Retrieved from https://www.ppic.org/blog/commentary-how-rural-schools-survived-the-pandemic/.



Garbacz, S. A., Im, S., Young, K., et al. (2022). Promoting youth mental health in rural communities. Retrieved from https://eric.ed.gov/?id=EJ1356478.

Huscroft-D'Angelo, J., January, S. A., & Hurley, K. L. D. (2018). Supporting parents and students with emotional and behavioral disorders in rural settings: Administrator perspectives. Retrieved from https://files.eric.ed.gov/fulltext/EJ1179773.pdf.

Jensen, E. J., Wieling, E., & Mendenhall, T. (2020). A phenomenological study of clinicians' perspectives on barriers to rural mental health care. Retrieved from https://psycnet.apa.org/record/2020-02631-004.

Jordan, P., Dwyer, A., DiMarco, B., & Johnson-Green, M. (2022). How Medicaid can help schools sustain support for students' mental health. Retrieved from https://ccf.georgetown.edu/2022/05/17/how-medicaid-can-help-schools-sustain-support-for-students-mental-health/.

Lankford, A., Adkins, K. G., Madfis, E. (2022). Are the deadliest mass shootings preventable? An assessment of leakage, information reported to law enforcement, and firearms acquisition prior to attacks in the United States. Retrieved from https://ir.ua.edu/bitstream/handle/123456789/8642/Are_the_Deadliest_Mass_Shootings_Preventable_postprint.pdf?sequence=1.

Lavalley, M. (2018). Out of the loop: Rural schools are largely left out of research and policy discussions, exacerbating poverty, inequity, and isolation. Retrieved from https://nsba.org/-/media/NSBA/File/cpe-out-of-the-loop-report-january-2018.pdf.

Mayer, M. J., Nickerson, A. B., & Jimerson, S. R. (2021). Preventing school violence and promoting school safety: Contemporary scholarship advancing science, practice, and policy. Retrieved from https://www.tandfonline.com/doi/pdf/10.1080/2372966X.2021.1949933?needAccess=true&role=button&.

Mead, A. (2023). A rural therapist and school program address teen mental health. Retrieved from https://www.ruralhealthinfo.org/rural-monitor/teen-mental-health/.

Mohamed, B., Cox, K., Diamant, J., & Gecewicz, C. (2021). Faith among Black Americans. Retrieved from https://www.pewresearch.org/religion/2021/02/16/faith-among-black-americans/.

Murry, V. M., Heflinger, C. A., Suiter, S. V., & Brody, G. H. (2011). Examining perceptions about mental health care and help-seeking among rural African American families of adolescents. Retrieved from https://link.springer.com/article/10.1007/s10964-010-9627-1.

National Association of Secondary School Principals. (2022). School resource officers and law enforcement in schools. Retrieved from https://www.nassp.org/school-resource-officers-and-law-enforcement-in-schools/.



National Center for Education Statistics. (2018). What are threat assessment teams and how prevalent are they in public schools? Retrieved from https://nces.ed.gov/blogs/nces/post/what-are-threat-assessment-teams-and-how-prevalent-are-they-in-public-schools.

New York State School Boards Association. (2019). Armed security in schools: What the research says. Retrieved from https://www.nyssba.org/clientuploads/nyssba_pdf/Reports/armed-security-report-12032019.pdf.

Panchal, N., Cox, C., & Rudowitz, R. (2022). The landscape of school-based mental health services. Retrieved from https://www.kff.org/other/issue-brief/the-landscape-of-school-based-mental-health-services/.

Rocque, M. (2012). Exploring school rampage shootings: Research, theory, and policy. Retrieved from https://scottbarrykaufman.com/wp-content/uploads/2012/12/Rocque_2012_SSJ.pdf.

Schaeffer, K. (2022). U.S. school security procedures have become more widespread in recent years but are still unevenly adopted. Retrieved from https://www.pewresearch.org/fact-tank/2022/07/27/u-s-school-security-procedures-have-become-more-widespread-in-recent-years-but-are-still-unevenly-adopted/.

Schmidt, R. C., Iachini, A. L., George, M., Koller, J., & Weist, M. (2014). Integrating a suicide prevention program into a school mental health system: A case example from a rural school district. Retrieved from https://www.researchgate.net/profile/Melissa-George/publication/282469647_Integrating_a_Suicide_Prevention_Program_into_a_School_Mental_Health_System_A_Case_Example_from_a_Rural_School_District/links/574c59a208ae4cada7ea8556/Integrating-a-Suicide-Prevention-Program-into-a-School-Mental-Health-System-A-Case-Example-from-a-Rural-School-District.pdf.

Shafer, L. (2017). A bridge between school and faith. Retrieved from https://www.gse.harvard.edu/news/uk/17/10/bridge-between-school-and-faith.

Soliman, H. H., Koran, J., & Gomaa, A. (2018). Parents' perception of school violence, awareness of risk factors, and school safety: An ecological perspective. Retrieved from https://newprairiepress.org/cgi/viewcontent.cgi?article=1033&context=ijssw.

The Centers for Disease Control and Prevention. (2022). School connectedness helps students thrive. Retrieved from https://www.cdc.gov/healthyyouth/protective/school_connectedness-important-protective-factor-for-health-well-being.htm.

The Congressional Black Caucus. (2019). Ring the alarm: The Crisis of Black youth suicide in America. Retrieved from https://theactionalliance.org/sites/default/files/ring_the_alarm-the_crisis_of_black_youth_suicide_in_america_copy.pdf.

United States Government Accountability Office. (2020). K-12 education: Characteristics of school shootings. Retrieved from https://www.gao.gov/assets/710/707717.pdf.



U.S. Department of Homeland Security, United States Secret Service, National Threat Assessment Center. (2019). Protecting America's schools: A U.S. Secret Service analysis of targeted school violence. Retrieved from https://www.secretservice.gov/sites/default/files/2020-04/Protecting_Americas_Schools.pdf.

Van Dongen, J. (2022). Study identifies mental health disparities in rural schools. Retrieved from https://news.wsu.edu/press-release/2022/11/15/study-identifies-mental-health-disparities-in-rural-schools/.

Van Vulpen, K. S., Habegar, A., & Simmons, T. (2018). Rural school-based mental health services: Parent perceptions of needs and barriers. Retrieved from https://academic.oup.com/cs/article-abstract/40/2/104/4866395.

Weybright, S. (2023). WSU extension boosts mental health resources in rural, underserved areas. Retrieved from https://news.wsu.edu/news/2023/02/02/wsu-extension-part-of-grant-to-boost-mental-health-resources-in-rural-underserved-areas/.



About CPE

The National School Boards Association (NSBA) believes that accurate, objective information is essential to building support for public schools and creating effective programs to prepare all students for success. As NSBA's research branch, the Center for Public Education (CPE) provides objective and timely information about public education and its importance to the well-being of our nation. Launched in 2006, CPE emerged from discussions between NSBA and its member state school boards associations about how to inform the public about the successes and challenges of public education. To serve a wide range of audiences, including parents, teachers, and school leaders, CPE offers research, data, and analysis on current education issues and explores ways to improve student achievement and engage support for public schools.

About NSBA

Founded in 1940, the National School Boards Association (NSBA) is a non-profit organization representing state associations of school boards and the Board of Education of the U.S. Virgin Islands. Through its member state associations that represent locally elected school board officials serving millions of public school students, NSBA advocates for equity and excellence in public education through school board leadership. We believe that public education is a civil right necessary to the dignity and freedom of the American people and that each child, regardless of their disability, ethnicity, socio-economic status, or citizenship, deserves equitable access to an education that maximizes their individual potential.

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