Rural community stress: Understanding risk and building resilience

University of Minnesota Extension

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CHILDREN'S MENTAL HEALTH eREVIEW

The Children's Mental Health eReview summarizes children's mental health research and applications for practice and policy.

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EDITORS COMMENTS

I am pleased to share this issue of the Children's Mental Health eReview, which addresses stress and resilience in rural communities. This issue presents timely research and recommendations for intervention as rural communities recognize their unique stressors and build on their many strengths.

Extension Children, Youth & Family Consortium 2020 Scholar in Residence Dr. Sarah Beehler served as research author for this issue along with Scholar Student Frederique Corcoran. They are joined by Community Authors Monica McConkey, who shares expertise as a rural mental health specialist working with farmers and farm families; Jeri Jasken, who addresses the application of this research for Tribal communities; and Alison McIntyre, who shares specific interventions currently underway in rural Cook County, MN.

The Children's Mental Health eReview provides a free and accessible look at research that addresses the social determinants of children's mental health. The publication process engages both research and community authors in writing and reflecting on research application within various communities. It addresses the gap between what we know from the literature and what we experience working with families and children. Each issue explores a specific topic area and reflects the expertise of a group of people working in various research and practice settings.

I want to thank our authors for sharing their expertise and being part of this important discussion. I hope this eReview issue offers a foundation for rural communities as they build on their resilience. I also refer readers to the University of Minnesota Extension's Coping with Rural Stress webpage for related resources.

Cari Michaels

RESEARCH SUMMARY

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Rural communities and families show remarkable resilience despite substantial levels of stress. Stressors result from conditions that uniquely or disproportionately impact rural areas, including population loss associated with city expansion, employment instability, healthcare workforce shortages, systematic disinvestment, and isolated geography (Pender et al., 2019; Ajilore & Willingham, 2018; Hamilton et al., 2008; Hansen, 1987). For example, COVID-19 is overwhelming resources and creating stress throughout the country, but especially in rural communities. Further, many rural residents feel their local governments are unable to deal effectively with important problems (Hamilton et al., 2008). Over time, these community conditions lead to cumulative stress that can tax even the strongest communities and produce a variety of negative emotional, behavioral and health related consequences, including increased rates of obesity, nonmedical prescription opiate use, suicide, and interpersonal violence (Lobley et al., 2004). Community stress is experienced differently by different subgroups (e.g., Native Americans, elderly, children), and many solutions have focused on reducing individual and family stress or improving coping skills among individuals living under stressful conditions. Although helping individuals manage stress is important, it does not alter a community's long-term ability to manage stress or prevent additional stressors from accumulating. A growing body of research shows that building community capacity to handle and prevent stress decreases individual stress as well (Chandra et al., 2018).

The purpose of this eReview issue is to present an overview of research on rural community stress and to identify potential community-level solutions that reduce and prevent stress in rural areas. First, community-level stress is defined and differentiated from individual-level stress and trauma. Then, a summary of the literature on community stress is presented with a focus on how it manifests in rural areas, identifying what is known about rural community stressors and protective factors. Finally, community-level interventions known to date are reviewed, and those that show promise in either managing existing stressors, bolstering protective factors, and/or preventing the accumulation of community stressors are highlighted. Because research on community-level stress is nascent and largely focused on urban communities, we draw from several different models and areas of research to characterize the nature of rural community stress.

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What is rural?

The research literature contains varied definitions of what constitutes rural, complicating comparisons across studies and slowing development of a solid evidence base. For this review, we use the Office of Management and Budget (2010) designation of *nonmetropolitan* when describing rural communities, which excludes counties having one or more densely settled urban areas with 50,000+ population as well as outlying counties where 25% of the population commutes to or from a metropolitan county. This definition excludes all urban and suburban areas with populations of 50,000+, and

it includes over 90% of North America's land mass but only 14% of the US population (Cromartie, 2019; Hales et al., 2014).

What is community stress?

Community-level stress has been defined as widespread disturbance generated from a series of stressful events and circumstances that impacts the majority of a community (Hobfoll et al., 1995; Jerusalem et al., 1995). Community stress can be acute (e.g., after a natural or man-made disaster) or chronic (e.g., intergenerational poverty). It is not the aggregation or sum of individual stress but occurs through the interaction of preexisting community contextual conditions (e.g., housing policies) with stressors at the community level (e.g., economic instability, poor health, population loss; Chandra et al., 2018). Community stressors fall into three main categories: economic, physical/natural, and sociocultural (Chandra et al., 2018; Prevention Institute, n.d.). These stressors impact communities directly (e.g., financial stress from job loss) and indirectly by affecting the opportunity structures (i.e., pathways to success) and mental health of adults, children, and families. Stressors interact with one another, creating heightened risk for emotional, behavioral, and substance use disorders and impacting a community's ability to respond to disasters and acute shocks (e.g., natural disasters, health crises). The impact of stressors on a community depends in large part on the resources available to mitigate them.

Each community possesses strengths that allow it to alleviate stress, collectively adapt, and build resilience (Chandra et al., 2018). Community strengths that contribute to effective stress management and prevention include social cohesion, shared experience, organized and responsive NGOs and government agencies, communication, and education. For example, some communities are socially cohesive and interconnected, providing social networks that offer support and buffer the negative effects of stress. Others have ties to strong and responsive governmental agencies or access to unique resources (e.g., services, local businesses, nature) that actively help alleviate chronic stress and respond to acute shocks. Nonetheless, when stress accumulates, community assets may be overwhelmed and basic community functioning damaged (Pinderhughes et al., 2015).

"Each community possesses strengths that allow it to alleviate stress, collectively adapt, and build resilience (Chandra et al., 2018)."

Additionally, community stress may or may not be traumatic. *Community trauma* disrupts social networks and decreases efficacy and capacity to collectively identify and address structural problems (Pinderhughes et al., 2015; Weinstein et al., 2014). This stress does not have to directly affect every community member; trauma affects many in the community indirectly through impacts on individuals and institutions over time. This can lead to high levels of trauma in a community and eventual erosion of social relationships and prosocial norms (Pinderhughes et al., 2015). Borrowing from research on "adverse childhood experiences," researchers have framed community trauma as the result of "adverse community experiences" (Pinderhughes et al., 2015). Symptoms of community trauma fall into the same three categories mentioned above (economic, physical, sociocultural), and rural communities have less capacity for addressing community trauma than urban areas. It is crucial, however, that community trauma be examined and treated before intervention strategies are implemented (Weinsten et al., 2014). Communities must first be provided with the support and tools to heal and rebuild a sense of community before additional stressors can be addressed (Falkenburger et al., 2018; Weinsten et al., 2014). For Native communities, it may be important to identify and address historical trauma or widespread, cumulative

trauma experienced across generations (Brave Heart, 2003; Duran & Duran, 1995; Michaels, 2010). Native American experiences of genocide, forced migration, colonization, and cultural decimation have produced stress and trauma that increase risk for adverse mental health outcomes.

What is rural community stress?

The primary difference between rural and other community-level (e.g., urban, suburban) stress is the degree of stress experienced and the resources available to cope with, reduce, and prevent it. For example, rural and urban communities both experience unemployment and poverty, but unemployment in rural areas is higher and occurs for different reasons. Rural unemployed also have fewer resources available and may cope differently with life stress (e.g., less disclosure, more internalization) due to stigma and shame. Further, the unique interactions between stressors in rural areas can undermine community strengths, lessening the buffering effects of protective factors. For instance, rural communities economically dependent on the natural environment are particularly vulnerable to financial stress, especially during extreme weather conditions and natural disasters. High levels of stress as well as fear or trauma from acute shocks (e.g., natural disasters) can disrupt family functioning (Gewirtz et al., 2008; Pinderhughes et al., 2015) and undermine community social cohesion (Chandra et al., 2018; Pinderhughes et al., 2015). Rural communities also experience significant stress during public health crises like COVID-19 for several reasons, including: greater vulnerability to illness and economic downturn, limited access to quality healthcare, and isolation and quarantine that prevents communities from coming together for support and education (Peters, 2020; Lakhani, 2020). Children may be particularly affected as they require additional support during stressful times. Below we present an overview of stressors that affect rural communities in the three categories mentioned above: economic, physical/natural, and sociocultural.

Economic rural environments. Rural areas face unique economic challenges. Poverty has been higher in rural versus urban U.S. counties since the 1960s and rates are highest in the most isolated, rural communities (Pender et al., 2019). Further, the poorest rural communities are clustered in regions with long histories of rapidly changing and burdened economies (Farrigan & Parker, 2012) and are more likely to be home to racially and ethnically diverse populations (Cromartie, 2018; Hamilton et al., 2008). Economic and environmental shifts (e.g., recession, commodity prices) may strongly impact rural communities that depend on natural resources and rely more on occupations that do not require higher level education. Unemployment has been higher for decades in rural versus urban and suburban areas, with the greatest numbers in the most rural communities (Pender et al., 2019). Rural counties have experienced no employment growth since 2008 and saw a 0.4% decline in employment throughout the past decade (Pender et al., 2019). Lack of job opportunities is a primary concern among rural residents (Hamilton et al. 2008). Economic conditions that contribute to community stress strongly impact Native communities, where limited employment opportunities exist (Ulrich-Schad, 2013) and poverty is high (23.7% vs. 13.1% across the country; United States Census Bureau, 2018: table 1701).

Local employment markets and population loss partly explain rural unemployment trends. The rural workforce is largely dependent on environmental conditions and natural resources, and many jobs are based in agricultural, mining, and forestry industries

industries (U.S. Bureau of Economic Analysis, 2019). For example, agriculture accounts for the greatest share of employment in rural areas (around 17%) (Economic Research Service, 2019; Ajilore, O., & Willingham, Z.; 2019. These jobs tend to be unstable, however, as they are heavily impacted by unpredictable weather and market conditions. Farming and mining incomes peaked in 2013 but are now at an all-time low (Pendler et al., 2019; Newton, 2019). Manufacturing, another industry important to the rural economy, has seen job losses due to globalization and economic restructuring (Low, 2017). Complicating this are mixed patterns of migration. For example, even as many rural counties see an influx of 30- to 49-year-olds (Asche, 2020), high levels of out-migration among younger residents leave behind older and more vulnerable individuals who are less likely to participate in the labor force or invest in the economy (Pendler et al., 2019; Hamilton et al., 2008). These economic conditions create and exacerbate community-level stress in rural areas.

Educational opportunities also affect rural community stress as education is a key determinant of health and economic outcomes. School environments are particularly important for children, who are heavily impacted by community stress. The percentage of rural adults with a high school diploma is high and similar to urban adults (85% vs. 87%; Marre, 2017). However, fewer rural than urban adults pursue higher education (19% vs. 33% have a bachelor's degree or higher), and this gap has been growing throughout the past decade (Marre, 2017). In addition, rural communities comprise 79% of "low education" counties (i.e., >20% population without high school degree) and appear to be disproportionately at risk for associated problems. For example, compared to similar urban counties, rural counties with reduced educational attainment have relatively higher poverty (adult and child) and unemployment rates (Marre, 2017).

Rural economic environments are shaped by the nature of the workforce, longstanding economic policies, and long-term underinvestment in education and employment infrastructures. The level of community stress depends on how well communities build on local strengths to target underlying structural factors and build community capacity to offer quality educational and employment opportunities.

Physical/natural rural environments. The low density and remote nature of rural areas can result in geographic isolation and disconnection from larger infrastructures such as public transportation, road quality, health care, and support services. Community members often have to travel long distances to meet basic needs like healthy food, prescription medication, and quality education (Skoufalos et al., 2017). Quality health care is another barrier, and it requires even longer travel to find specialized care. In comparison to urban areas, which have over 30 physicians and 26 health specialists per 10,000 people, rural areas only have 13 physicians and three specialists for the same number of people (National Rural Health Association, 2020). In a crisis, emergency response times are significantly lengthened in most rural areas, with rural residents having to wait for double the response time of urban residents (Mell et al., 2017). These and other challenges associated with rural geographies contribute to disparities in health, decreased well-being, and increased community stress. For Native Americans, who report strong ties to the natural environment (Ulrich-Schad, 2013), forced migration and land loss resulted in historical trauma and loss of cultural identity (Hemenway, 2017).

Rural communities are often viewed as being socially interconnected, but many residents experience isolation from others as well as mainstream institutions. Rural social isolation can result from the structure of communities and related allocation of available resources (Lanier & Maume, 2009). For example, urban areas are more likely to have restaurants, bars, and recreation centers (e.g., movie theaters, bowling alleys). Rural residents might have to drive long distances in order to access social and health-related services that link them to the outside world. Isolation is intensified by limited access to internet and telephone services. Approximately 50%

of rural residents live without high-speed broadband access, compared to only 4% of urban residents (Federal Communications Commission, 2015). This type of isolation due to inequitable internet access can lead individuals to feel hopelessness and despair, inhibiting community cohesion and exacerbating community stress (Chandra et al., 2018).

Although rural areas are known for natural beauty, access to rural outdoor activities is minimal and rural public space is rarely well-defined (Meyer et al., 2017). For instance, public parks, clearly defined trails, sidewalks and bicycle paths are limited in rural areas (Carter et al., 2019). More rural than urban residents feel unsafe from traffic while walking or biking due to poorer quality sidewalks and high traffic speeds (Boehmer et al., 2006). Access to nature supports the development of social connections, physical activity, and positive health outcomes because residents have more opportunities to build healthy lifestyles. For example, obesity is around 10% higher in rural areas, where it is more difficult to exercise outdoors safely and access to high quality grocery stores is limited (Meit et al., 2014).

Weather conditions, including climate change and natural disasters, can increase stress disproportionately in rural communities. Rural areas account for the majority of US landmass (Hales et al., 2014), and rural economies tend to rely on natural resources and industries (e.g., farming, mining, forestry) vulnerable to extreme weather (e.g. droughts, winter storms) and climate change. Even though both rural and urban areas experience climate change, climatic processes manifest and impact different areas differently (Houghton, 2017). For example, heavy rainfall can flood rural areas faster than urban areas because of low rural water basins and underinvestment in quality drainage systems. Flooding creates additional transportation challenges as rural areas have fewer alternative routes. Climate change appears to be accelerating, and thus climate-related stress in rural communities will likely continue to increase (Hales et al., 2014). Separate policies and community interventions are necessary to address specific impacts of climate change on different communities (Houghton, 2017).

Socio-cultural rural environments. Rural America is increasingly diversifying, and thus caution is required when generalizing across rural areas as it may perpetuate stereotypes that contribute to rural stress (Bostrom, 2003). Nonetheless, there are social trends that contribute to community stress. For example, rural communities are aging, which has led to demographic shifts in labor force participation (Pender et al., 2019; Weirich & Benson, 2019). This can also result in high concentrations of residents with disabilities and chronic illnesses who are dependent on services (Chandra et al., 2018). Vulnerable populations are often at a disadvantage in terms of available services, resources, and even social activities, contributing to the accumulation of rural community stress (Skoufalos et al., 2017). In addition, Native American communities have sustained deep loss of cultural identity due to genocide, forced migration, and forced assimilation (e.g., through forced attendance at boarding schools designed to eliminate traditional Native ways of life; Duran & Duran, 1995).

The histories and cultures of rural communities give rise to stigma and (often warranted) distrust of institutions, which means that social problems common across the US may be particularly challenging to address. For example, abuse of prescription opioids has led to community-wide epidemics that have unique manifestations in rural

areas (Young et al., 2012). Access to prescription opioids is increasing in rural communities and residents do not have the same resources (e.g., rehabilitation centers for addiction) to deal with widespread opioid epidemics (Rosenblatt et al., 2015). The risk for domestic violence is also higher in rural households and may be heightened by limited social support networks (Lanier & Maume, 2009) and longer geographical distances between neighboring houses (Averill et al., 2007). Deaths by suicide are consistently higher in rural versus urban communities, particularly in the most isolated communities that rely on the agricultural industry (Hedegaard et al., 2018). This is partly because firearms are more frequently used in rural versus urban suicide deaths (Mohatt et al., 2020), and gun ownership and community norms around gun use contribute to this. Substance misuse, domestic violence, and suicide at high levels all cause psychological distress on individual, family, and community levels.

Rural community protective factors/strengths. Research on rural communities tends to highlight problems and deficits rather than strengths. However, rural communities are resilient and possess a number of strengths that can be leveraged to reduce community stress. A recent report identified a number of these assets (Meit, 2018) at individual (e.g., civic and community engagement, entrepreneurism), organizational (e.g., small businesses, schools, faith-based organizations) and community levels. At the community level, resources located in rural areas – even when not controlled locally (e.g., system-owned hospitals) – can be local assets if they contribute to community development, economic development, and social connection. In addition to being places of natural social interaction, schools, businesses, and places of worship often serve as central gathering places for local action.

Another powerful rural strength is the natural environment. Natural resources support agriculture, tourism, and industry, bolstering rural economic vitality (Meit, 2018). Native Americans have especially strong ties to the land and view stewardship and protection of natural resources as critical to preservation of Native culture (Ulrich-Schad, 2013). Although no research has examined how natural environments alleviate community-level stress, time spent in nature predicts psychological and physical well-being (Kaplan, 1973) and can buffer the impact of life stress on children (Corraliza et al., 2012; Wells & Evans, 2003). Related to natural resources, land-grant institutions and cooperative Extension educators are viewed as rural assets (Meit, 2018). Extension educators, who often live and work in the same rural community, understand the needs and goals of the community and provide useful information.

Rural community culture and history shape existing strengths as well as how they can be harnessed to reduce community stress and promote wellness (Meit, 2018). For example, culture and history give rise to values (e.g., strong family support systems and sense of community, self-reliance and independence) that can be rural community strengths. For Native Americans, unique cultures and value systems provide a number of strengths and opportunities for positive youth development through connection with their culture, language, and history (Ulrich-Schad, 2013). In addition, limited resources often spark innovation and creativity in rural communities. Many rural residents feel deep ties to where they grew up and have a strong sense of pride in their rural communities. This supports a culture of cooperation and social cohesion, in which rural residents are

willing to help one another and take pride in the community. Social cohesion and shared experience are "two powerful mitigating or mediating factors that determine how well a community handles acute shocks" (Chandra et al., 2018). Socially cohesive communities with strong networks have been shown to recover in the face of stress and disaster while exhibiting lower levels of community stress. Because of their small size, many rural areas are homogenous, foster similar values, and are comprised of extended family members (Rigg et al., 2018). Rural residents report keeping in touch with extended family members for longer as well as feeling more connected and trusting towards members of their social networks (Costa & Kahn, 2003). This type of social cohesion helps normalize healthy behaviors (e.g., physical activity) while discouraging risky behaviors (e.g., substance abuse, violence, suicide; Dew et al., 2008). Rural communities therefore have potential to create strong social networks that can buffer the negative effects of stress.

Community approaches to reducing rural stress

Most strategies to reduce community-level stress focus to some degree on building "resilience." Community resilience is defined in different ways in the literature but generally includes aspects of disaster preparedness/recovery and community development (Rural Community Development Corporation of California, 2020; Kaye-Blake et al., 2019). Disaster preparedness/recovery involves reacting to and recovering from external shocks while community development suggests a proactive, planful, strengths-based, and adaptive approach. Both are important functions of community resilience; however, research to date tends to focus more on how communities react to external events and shocks relative to how communities actively adapt and build capacities over time (Skerratt, 2013). This emphasis runs the risk of encouraging communities to cope with adverse conditions rather than to address root causes (e.g., disinvestment, racism) of such conditions. Given such concerns, we borrow the following definition of *community resilience* from the Rural Community Development Corporation of California (2020):

Resilience describes the capacity of communities to function, so that the people living and working in the community – particularly the poor and vulnerable – survive and thrive no matter what stresses or shocks they encounter.

Resilience depends not only on a community's physical assets, but also its policies, its capacity to meet community needs, the extent of the community's active involvement, its institutions, and the community's local available resources. (What is Community Resilience section, para. 1–2).

This definition reflects a strengths-based view of community resilience that does not target stress directly. Instead, strategies aim to reshape community conditions and resources, including those that promote community healing. Community resilience is multidimensional and dynamic. Because it is not an end state but an ongoing series of adaptations, responses, and adjustments, community resilience is a form of prevention. When communities are able to actively adapt to circumstances, they will likely thrive and minimize lasting harm in response to external stressors. Building community resilience does not assume low resilience to start but rather asks, "In which ways is this community resilient right now, and what are the goals and priorities for enhancing resilience going forward?" Rural communities engaging in this process may experience substantial capacity gaps that hamper resilience-building and planning, including funding, social capital, staffing, and local knowledge (Rural Community Development Corporation of California, 2020). It is also important to consider how much trauma is present because communities experiencing high levels of trauma are unlikely to benefit from traditional development or resilience building efforts (Pinderhughes et al., 2015). Since community trauma disrupts social networks and decreases a community's ability to take collective action, trauma informed approaches to building community

resilience (e.g., TICB) may be necessary to restore a sense of community, ensure positive interpersonal interactions, and develop a shared long-term vision (Pinderhughes et al., 2015; Weinstein et al., 2014).

There are no one-size-fits-all programs to build community resilience because successful, sustainable efforts need to be tailored to meet local needs, fit available resources, and build on existing strengths. However, the literature describes common features across different approaches: collaborative assessment, planning, implementation, and sustainability of strategies or initiatives to enhance community resilience along one or more dimensions. We identified four approaches to building community resilience (see Table 1). One comes from disaster prevention and recovery (Pfefferbaum et al., 2013), one aims to build health equity (Prevention Institute, n.d.), and two were specifically designed for rural communities (Hegney et al., 2008; Rural Community Development Corporation of California, 2020). They each have different toolkits, materials, and frameworks to help communities make structural change and build resilience.

Conclusion

Rural communities and families experience high levels of stress. Although the literature emphasizes rural deficits, these communities possess a myriad of strengths that can be leveraged to overcome chronic stress, build resilience and recover from stressful events. These strengths may be particularly important to vulnerable sub-groups who are disproportionately impacted by historical trauma (e.g., Native Americans) or high levels of community stress (e.g., children). Every community has its own unique stressors and strengths. Thus, efforts to ameliorate and prevent rural community stress will require strategies that identify local stressors as well as existing and potential strengths that can be harnessed to build community capacity and resilience. As community resilience increases, communities will be better equipped to handle stressors and acute shocks (e.g., COVID-19), and support physical, mental and emotional health of rural individuals and families.

"Building community resilience does not assume low resilience to start but rather asks, 'In which ways is this community resilient right now, and what are the goals and priorities for enhancing resilience going forward?'"

Table 1
Frameworks for Building Rural Community Resilience to Reduce Stress

Framework	RCDCC (Rural Community Development Corporation of California, 2020)	CART (Pfefferbaum et al., 2013)	THRIVE (PI; Davis et al., 2015)	BRRC (Hegney et al., 2008)
Background	Rural resilience planning framework adapted from work on urban resilience planning.	Toolkit and integrated system developed to aid disaster prevention and recovery.	Framework and tools to help communities improve health and promote health equity.	Toolkit resulting from 3-year study of resilience in a rural Australian community.
Resilience domains	NA	Four domains: 1. Connection & caring 2. Resources 3. Transformative Potential 4. Disaster management	Twelve determinants of health and safety in three interrelated environment clusters: People (sociocultural) Social networks & trust Participation & willingness to act for common good Norms & culture Place (physical/built) What's sold & how it's promoted Look, feel & safety Parks & open space Getting around Housing Air, water & soil Arts & cultural expression Equitable opportunity (economic/educational) Education Living wages & local wealth	Eleven concepts most commonly reported to enhance community and individual resilience: 1. Social networks & support 2.Positive outlook 3. Learning 4. Early experience 5. Environment & lifestyle 6. Infrastructure & support services 7. Sense of purpose 8. Diverse & innovative economy 9. Embracing differences 10. Beliefs 11. Leadership

Framework	RCDCC (Rural Community Development Corporation of California, 2020)	CART (Pfefferbaum et al., 2013)	THRIVE (PI; Davis et al., 2015)	BRRC (Hegney et al., 2008)
Process	Six phases that include multiple tasks led by different groups of stakeholders: 1. Groundwork 2. Getting started 3. Assessment 4. Determine goals & objectives 5. Plan 6. Implement	Four stages that include different activities led by different groups of stakeholders: 1. Generate community profile 2. Refine the profile 3. Develop Strategic Plan. 4. Implement Plan	Five steps to improve health through a comprehensive, multisector approach: 1. Engage & partner 2. Foster shared understanding & commitment 3. Assess 4. Plan & act 5. Measure progress	No specific process outlined. For each concept, assessment questions and related action steps are provided to enhance resilience at three levels (individual, group, community)
Tools/Resources	RCDCC website with information on the phases and tasks within them: https://rcdcc.org/the-process/	Toolkit with sample data collection tools: https://medicine.ouhsc.edu/Academic-Departments/Psychiatry-and-Behavioral-Sciences/Terrorism-and-Disaster-Center/CART-Community-Resilience-Toolkit	THRIVE website with background materials, community assessment worksheet, and detailed examples of prevention activities: https://www.preventioninstitute.org/tools/thrive-tool-health-resilience-vulnerable-environments	Toolkit with case study examples: https://learningforsustainability.net/pubs/Building%20Resilience%20in%20Rural%20Communities%20Toolkit.pdf

IMPLICATIONS FOR PRACTICE AND POLICY

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As a rural mental health specialist with experience in both direct service and agency administration in rural areas, I found that the research presented in this eReview mirrors what I have experienced in multiple diverse communities. This issue highlights the importance of community-level resilience to positively impact individual resilience and the development of protective factors.

As indicated, each community is diverse regardless of similarities in demographics. Therefore, each community's approach to devSeloping strategies to build resilience and deal with stressors in their unique setting is important. In my experience, members of rural communities have often focused on the deficits within their area rather than the utilization and development of strengths. This is a critical component as the answers, supports, and knowledge lie within the community itself.

This eReview points out the significance of engaging in ongoing assessment and proactive engagement from a prevention stance. This moves beyond being solely reactive in addressing community stressors and traumas. This is a challenge as grants and other funding opportunities are often developed after a disaster or community trauma has occurred. It is up to the community to be proactive to sustain programs that are valuable and produce positive outcomes.

A strategy that has been effective in rural communities highlighted in this eReview is a collaborative, community-wide approach to wellness initiatives. This typically looks like a multiagency effort with the common goal of building community resiliency. The most effective collaborative efforts include involvement from local government agencies, faith-based communities, youth serving programs (including schools), private industry, medical providers, and other key stakeholders which represent the community demographics. These types of established collaborative programs can implement ongoing strategies to prevent community risk factors and are also poised to address acute stressors and traumas such as natural disasters. When the community members feel they are represented and supported in initiatives, it alleviates individual stressors.

Addressing stigma and shame in rural areas is key to reducing stress. In my work with farmers and farm families, stigma is a real barrier that often keeps individuals from seeking help. "Everyone knows everyone" is a fact of growing up in small communities that are often multigenerational in nature. This complicates reaching out for help when coping with the stigma and shame of appearing vulnerable. Community initiatives that promote wellness and normalize physical and mental health issues play a key role in removing that stigma and the barriers that go along with it. People are more apt to seek help when they have the assurance that others are dealing with common stressors.

Developing creative educational opportunities in rural communities is a challenge given population density, workforce, and something as simple as inadequate broadband access. The Minnesota Farm Business Management (FBM) program, under which the Rural Mental Health Specialist program is based, is a unique example of an educational

program for farmers. Practicing farmers can enroll in the program and become "students." The FBM instructors travel to the farms to meet with their students, provide instruction, and "go over the numbers." Through this program, farmers can earn college credits while operating their own farms. Also unique is the continuity of the FBM program through multigenerational operations; families often stay with the program through transition of the farm to the younger generation. This program not only provides the opportunity for farmers in rural areas to earn college credits but strengthens the farm operation, thereby doing its part to maintain a rural economy. The Rural Mental Health Specialist (RMH) program, funded by the Minnesota State Legislature, is also unique in its ability to provide mental health outreach services in rural communities to farmers, farm couples, and farm youth. This program successfully addresses another common barrier in rural communities – the inability of individuals to travel substantial distances to receive mental health care. Rural community programs that offer home visiting services are critical to building resilience.

Another example of what makes the RMH program successful in addressing community stress and resilience is the partnerships with other community organizations, both public and private. We are all familiar with the quote "It takes a village." Nowhere is that as true as in rural areas where stress is high and resources are low. RMH has partnered with mobile mental health crisis teams, crop insurance agencies, soil and water conservation offices, health care providers, mental health providers, extension offices, agricultural financing institutions, and others in rural communities to participate in initiatives and events. Through these collaborations, community members were reached that normally may not have participated in discussions about building resiliency and protective factors.

As stated in this eReview "Community resilience is multidimensional and dynamic. Because it is not an end state but an ongoing series of adaptations, responses, and adjustments, community resilience is a form of prevention." This is critical as next steps are taken to research and define resilient rural communities and the forces that make them function as they do. From my experience, the key is intentional, ongoing collaboration by a wide range of community stakeholders. It absolutely does take a village to address rural community stress and resilience.

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Introduction

This eReview identifies potential community-level solutions that reduce and prevent stress in rural areas. This research is helpful in conceptualizing community-level stress as well as community resilience. Rural tribal communities face unique challenges in addition to the commonalities identified as rural community stress. Tribal communities face both acute as well as chronic stress in the three main categories identified in this eReview: economic, physical/natural, and sociocultural. These stressors also overlap with one another, creating compounded community stress and heightened risk. Tribal communities face challenges with underfunding, inadequate number of providers, and shifting federal or state rules or policies while state and federal governments ignore tribal voices. These all compound rural tribal community trauma and stress. While tribes possess the strength and knowledge of how to mitigate their own community stress, it is always challenging to not be heard or

acknowledged by the larger government systems that create policy and distribute funding. The challenges of these implications will be discussed.

First, I will provide an example of how the findings in this eReview can be utilized in policy development, specifically as it impacts rural tribal communities. Second, I will speak to the experience of rural tribal community resiliency, including an example of a rural-tribal system that incorporated culturally based community healing into programs and services as well as tribal assumptions of health, behavioral health, and human services programs. Last, I will conclude with the possible challenges of this research when applied to rural-tribal communities.

Informing policy development

The World Health Organization (WHO) defines social determinants of health as "conditions in which people are born, grow, work, live, age" and states that American Indians have collectivist views of health, meaning they consider the health of the environment, housing, family, and much more when examining their own health and stressors. This collectivist view includes community; it is about being in balance in life, community, and environment. In that sense, American Indians living in rural tribal communities, where there exists this connection to a rural tribal land base, experience common rural community stressors as well as those created by historical trauma. Loss of land, loss of food sovereignty over traditional foods, or nutricide (interview: Nicole Buckanaga, 2019), and other historic attacks on family systems, cultural systems, and governance have created an additional layer of stress for American Indian nations. This eReview examines how communities possess strengths to mitigate stress while building resiliency.

This is the strengths-based perspective that is most applicable to rural tribal communities. In spite of history, rural tribal communities demonstrate strong social cohesiveness, interconnectedness, and support for their people. Therefore, utilizing a community resilience definition that is strength-based seems to fit well for rural tribal communities, and this research may help inform policy at both tribal and state levels.

It is important to note that health care is severely underfunded in rural tribal communities, and there are provider shortages for both health care and behavioral health services. This eReview addresses how community stress in rural communities is impacted by the resources available to cope with, reduce or prevent it. In tribal communities, behavioral health and health programs are significantly underfunded, with the need to access multiple funding streams often resulting in a fragmented service delivery system. This weakens their ability to respond to both acute and chronic tribal community stress. Federal Indian healthcare policy has a complex interplay of federal and state policies. Policies such as the "four walls" restriction, wherein tribal services must be rendered within the four walls of a medical facility under a medical model, is detrimental policy to rural tribal communities. It neither reflects nor values tribal approaches. It places emphasis on the medical model for treatment, which eliminates traditional healing components in rural tribal systems. Healing in tribal communities occurs collectively at a community level. When the focus on healing is shifted from community to purely health care professionals, without honoring the components of the culture/community, we further marginalize tribal communities.

> " Tribal nations know how to implement services that mitigate risk to compounded rural community stress, but policies at the federal and state level often complicate deliverables."

As noted in this eReview, a lack of access to community-based resources or services due to

distance, transportation, or poverty negatively impacts rural community stress. Rural tribal communities provide community-based services to their membership. Acknowledging tribal policies and strategic approaches to stress mitigation could lead to federal or state policy development that is reflective of communities. Community members should not have to withstand further harm caused by government policies. There is a sense of collective responsibility in tribal communities that aligns with a more strategic approach to rural community resilience. Tribal nations know how to implement services that mitigate risk to compounded rural community stress, but policies at the federal and state level often complicate deliverables.

The implication reflected in this eReview that rural tribal communities face compound and complex community trauma and stress is accurate. However, this research also highlights that tribal nations possess rural community protective factors and strengths as well. The implication for this research is that federal and state policy decision makers need to hear tribal experts and then consider the impacts of their policies on rural tribal communities, who are often not considered, included, nor consulted.

Learning how to mitigate rural community stress in rural tribal nations

Tribal communities have experienced widespread impact of colonization, but also bring their own traditional understanding of health and wellness to create systems of care that are effective for community healing. Most rural tribal communities have the ability to incorporate traditional healing into health and behavioral health programs. Self-determination of programs effectively provides rural tribal communities the ability to structure programs in a culturally based manner while dealing with complex community trauma and stress. For example, community stressors such as poverty are addressed through employment and training as well as job search programs, tribally constructed position investment, and advancement opportunities for members. Tribes address historic and current federal/state destructive child welfare policies with tribal practice models rooted in strengths-based, empowerment beliefs. Tribes address mental health and substance use disorders through culturally and community based healing programs. An example of this is the White Earth Nation's Maternal Outreach and Mitigation Services (MOMS) program, a holistic, culturally based behavioral health program that incorporates traditional healing modalities into mental health and substance abuse treatment plans. Program staff collaborate with child welfare family preservation programming to simultaneously address mental health, substance abuse and child welfare stressors – all while building and solidifying tribal identity. Tribal self-governance and self-determination is a pathway toward tribal community wellness.

Challenges of this research when applied to rural tribal communities

The research in this eReview sheds light on an important area and identifies factors that contribute to rural community stress. However, the reference to community trauma disrupting social networks and decreasing a community's ability to take collective action should not be broadly applied to tribal communities. Despite having experienced significantly high levels of trauma, tribal communities have strong social networks and the

ability to take collective action. Due to the unique cultural, historical, and political status of tribes, the application of the research summary to rural tribal communities should be done with caution. There is no one-size-fits-all program to build community resilience, as identified in the research, and rural tribal communities possess very unique factors. The implication of this research that strengths can be leveraged to mitigate rural community stress is especially applicable to tribal nations. The frameworks identified in Table 1 for building rural community resilience to reduce stress did not demonstrate validity in rural tribal communities and therefore should be applied with caution.

"Despite having experienced significantly high levels of trauma, tribal communities have strong social networks and the ability to take collective action."

Alison McIntyre
Director
Cook County Public Health and Human Services

This research on rural community stress and resilience suggests that despite our many challenges, rural communities are uniquely equipped to prevent and reduce community stress. Stressors that impact rural communities like Cook County include limited support services and providers as well as social and economic stressors including poverty, intergenerational stress, and trauma. Individual and community level stress are amplified due to the COVID-19 pandemic; however, protective factors inherent in these communities can also make rural areas more resilient to stress. Implications for practice in rural public program service delivery involves a fundamental shift from a regulative to a generative model through capacity building and directing resources towards fostering the resilience that already exists in rural communities.

Cook County is located in the northeast corner of Minnesota's arrowhead region, bordered to the north by Ontario, Canada, to the south by Lake Superior, and the west by rural Lake County. Cook County also includes the Grand Portage Band of Lake Superior Chippewa reservation. State and federal wilderness and public lands comprise 85% of the county, and our remote location and sparse population qualify Cook County as one of Minnesota's few frontier-status counties. With an estimated population of 5,393, Cook County is among the least populous counties in the State of Minnesota. The year-round population of the county's only city, Grand Marais, is just 1,351. However, as a popular tourist destination, the number of people in the county can reach upwards of 75,000 during in the summer months. Cook County reflects rural status in each of the three domains mentioned in this eReview: economic, physical/natural, and sociocultural. Compared to the seven-county Twin Cities region, Cook County has significantly lower median household income, a larger percentage of households with income less than $35,000, and a larger percentage of people in poverty (mncompass.org). Cook County's remote location means that residents often need to travel great distances for medical care. Within the last 5 years alone, the local hospital stopped providing labor and delivery services, the regional community mental health provider closed their local office, and the county's two retail pharmacies shut down. Our community is also undergoing demographic changes consistent with other rural areas. Cook County has the second highest percentage of population aged 65 or older at 29.3%, and 16% of the population have a disability (mncompass.org).

The Cook County Public Health and Human Services (PHHS) department completed a community health assessment in 2019 that included a 2-year engagement process of reviewing local heath indicators, conducting community surveys, and convening meetings with citizen advisory council members and health care and other service

providers. The resulting community health improvement plan identifies goals to improve health outcomes in Cook County in the areas of behavioral health and healthy living access. Behavioral health care access was identified as a priority issue, particularly following the closure of the county's only community mental health care clinic in late 2018.

Despite the challenges facing the community in access to services, Cook County has many of the assets mentioned in this eReview that support health and well-being: a high-quality primary health care system including a critical access hospital and federally qualified community health care clinic as well as various other public and private health and service providers. The community is also home to a comparatively large practice of complimentary health and wellness practitioners and community service groups. At our initial meeting in November 2017, the Cook County community health assessment stakeholder group also identified many community strengths and assets in answering the question:

"What makes you proudest of your community?" Responses included the following:

- People care about each other.
- Breadth of talents and willingness to pitch in for the community.
- Partnerships – we work together and help each other.
- Independent, creative people.
- Coming together for solutions.
- Willingness to fix what isn't working.

The community health assessment and improvement planning process is an example of community resilience as a form of prevention. Cook County PHHS is a small agency with limited resources, and the challenges we face in delivering public services and improving community health and well-being are complex, interconnected, and often have deep, underlying causes that span across generations. A strength of our health assessment and improvement planning work is the development of networks across sectors through the involvement of a core group of citizen advisory council members and representatives from local health and service agencies. Furthermore, the framework of a health improvement plan provides greater engagement, involvement, and accountability through the development of a shared vision and strategies for health improvement.

Cook County PHHS has been involved in several initiatives under the health improvement plan that aim to bring partners together across sectors in the area of behavioral health improvement:

- Forming a citizen advisory council for children's and adult mental health.
- Convening a multidisciplinary mental health crisis response team that includes representatives from county and tribal human services, law enforcement, health care, and domestic violence advocacy agencies to share information and debrief incidents.
- Participating in a community cohort of Adverse Childhood Experiences (ACES) training with the goal of developing trauma-responsive and self-healing community interventions.

Our complete community health assessment and improvement plan is available on the Cook County website. The Cook County health assessment process reflects many of the themes summarized in the research in this eReview. The THRIVE framework is based on promotion of health equity and an understanding of the social determinants of health. Like Cook County's health assessment process, this framework aims to improve health through a comprehensive, multisector approach of engagement, shared understanding and commitment, assessment, planning/acting, and measurement. The research presented here also points out the need for moving beyond root cause analysis and social determinants of health to cocreate

healthy communities. THRIVE's "focus on community determinants through a health equity lens places communities at the center of action" (Davis et al., 2015). In the context of our health assessment work, this means continuing to prioritize collective action and centering the experiences of the people and communities we serve in designing interventions for improving health outcomes.

This willingness to work across sectors and find innovative solutions to complex problems is also evidenced in our community response to COVID-19. Key to our emergency response efforts in public health are partnerships with emergency management, medical providers, tribal public health, the chamber of commerce, tourism bureau, schools, and many others. In addition to cross-sector partnerships, our response efforts are also dependent on a large network of community volunteers. In recognizing the importance of whole-person and community health and well-being and the unique features of our community, response efforts have also prioritized economic and behavioral health alongside (and as deeply interconnected with) physical health. Below is a summary of key features of Cook County's public health and community response to COVID-19:

Partnering with the media and business community:

- Formation of key linkages with hospital and primary care clinic through the medical and county emergency operations structures.
- Coordination with Grand Portage Health Services staff to align and support local response efforts, including case investigation and contact tracing, and provision of essential services.
- Providing technical assistance to businesses including on-site assistance with safety planning and weekly meetings to share information and updates between public health and local business owners.

Community-led support:

- Development of a community support line, staffed by trained local volunteers, to provide confidential phone support and referral and connection to resources.
- Creation of an online perinatal peer support group to provide support to childbearing families who are at increased risk of isolation due to COVID-19.
- Volunteer coordination through the County Emergency Operations Center providing curbside and local delivery services while each of the three grocery stores in Grand Marais were closed to the public during the statewide stay at home order.
- Leveraging Cook County's tourism and creative economy through visual campaigns and messaging about the importance of slowing the spread of the virus in our community:
    - Cook County Visitor Bureau's "one moose apart" campaign and "visitor's pledge."
    - Hand-painted, Burma Shave-style, signs designed and crafted by local residents, that promote social distancing and other public health best practices.

Cook County's community health assessment and improvement plan and COVID-19 response illustrate

the complex challenges and opportunities faced by rural communities. As of this writing, Cook County has the lowest number of confirmed positive COVID cases in the state of MN. Our ability to maintain this designation is dependent on many factors that are outside our control; however, by continuing to support community-based, locally driven solutions to build resilience, we are better equipped to prevent and treat chronic and acute stressors. This is a critical time for individual and collective trauma healing during a global pandemic and national reckoning with racial injustice. Future interventions in practice for rural public health and human services agencies include redirecting funding and efforts from treatment of individual problems to building community-based resilience.

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