

Commentary

## **Strategies for Disseminating and Implementing COVID-19 Public Health Prevention Practices in Rural Areas**

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The rapid spread of COVID-19 across the United States (US) demands a similarly rapid scientific response to mitigate the impact. While the initial scientific discourse about the virus appropriately focused on virology, clinical features, and therapeutics, there is now equal, if not greater, attention on the public health practices that are immediately needed to slow the spread as the response shifts from “containment” to “mitigation.”<sup>1</sup> To mitigate the spread of the virus, numerous states have enacted policies that restrict their residents statewide, such as closing all schools, limiting gatherings over a certain amount, or issuing “shelter in place/stay at home” orders for all non-essential activities. These “social or physical distancing” practices are seen by many public health experts as the most effective tools currently available to slow the transmission of the virus.

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At the time of writing, the majority of COVID-19 cases in the US are located in urban areas, with relatively few cases found in rural areas. This is, of course, not due to an inherent immunity found in rural areas, but rather due to characteristics of urban areas such as high population density and the frequency of travel in and out of urban areas. This stark contrast in COVID-19 prevalence between urban and rural areas is potentially problematic in the context of public health prevention measures that are implemented statewide, across both highly affected urban areas and largely unaffected rural areas. There is the potential for residents of rural areas to, understandably, not perceive themselves at high risk of COVID-19 and thus not heed the warnings and follow the recommended prevention practices.

While limited in number, COVID-19 cases are occurring in rural areas and that will certainly continue, likely increasing over the coming weeks and months. Furthermore, given the limited access to critical care resources such as intensive care units and ventilators,<sup>2</sup> there is the possibility—and time will tell—that rural residents with COVID-19 may experience greater mortality rates. Because rural areas are currently seeing fewer cases, the opportunity to mitigate further spread in these areas is particularly salient and imperative. Prevention efforts exercised now have the potential for a greater return-on-investment in rural areas. Due to the juxtaposition mentioned above between what rural residents are currently experiencing—relatively low prevalence and risk coupled with aggressive prevention practices mandated statewide—local health and civic leaders will be critically important in these efforts, communicating the risk posed to rural residents and the importance of adopting prevention practices.

Previous research looking at how to communicate public health information in rural areas offers concrete strategies local health and civic leaders can use in their efforts. These strategies are discussed below.

### **Contextualizing Risk and Prevention**

Although the infection control practices recommended at the national and state levels are the best practices for both urban and rural areas, their implementation in rural areas requires an understanding

of the unique context. Communicating these practices and the risk associated with ignoring these practices should be done with attention paid to this unique context so that residents understand the message's relevance to them and the importance of adopting the practices.

First, with many states implementing statewide school closures, many families find themselves faced with childcare needs. In rural areas, grandparents play a significant caregiving role for children—whether they are primary or supplementary caregivers. Previous research on rural, low-income, single mothers found that 90% looked first to their family for childcare support, often to the child's grandparent or great-grandparent.<sup>3</sup> While this may normally be seen as a strength to rural communities—and it is—in the face of COVID-19, which disproportionately affects older adults, the reliance on them as caregivers during the pandemic may be putting them at risk and increasing the spread of the virus in the community. Acknowledging and communicating this circumstance to rural residents is important. Even if rural residents recognize that children should not be cared for by their older adult relatives, acknowledging that this is likely creating an additional, and unprecedented, burden on parents will help engender trust in the message and reinforce that protecting older adults is both for their own good and that of the community.

Similarly, the closure of schools and most other businesses have undoubtedly put many rural residents either permanently or temporarily out of work and without a source of income. Even for residents working at businesses that are deemed essential and thus exempt from many closure orders, rural residents are less likely to have paid sick leave,<sup>4</sup> which could have numerous negative consequences during the pandemic. If employees get sick (or someone in their household gets sick), they may have to choose between losing their jobs or continuing to work and exposing others and furthering the spread. When rural residents do not feel particularly at risk of COVID-19, this significant economic hardship may seem especially unnecessary and frustrating. In addition to acknowledging these circumstances similar to the childcare issue mentioned above, local leaders should utilize any available resources to help rural residents during this difficult economic time, which will benefit not only individuals but the community as well.

### **Importance of Community Leaders**

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The importance of community leaders—elected officials, religious leaders, business leaders, etc.—cannot be overstated. Given that the messaging around COVID-19, and in many states the restrictions placed on rural residents’ lives, is coming from a state or national level, there is a strong possibility that rural residents may be dismissive or distrustful of that message. Previous research has shown that public health messages delivered to rural residents from urban messengers, even if those messengers are from the same state, have been considered suspect.<sup>5</sup>

Involving local business leaders is also an important, yet often overlooked, strategy for disseminating health information. The business sector is often cited as a source of local leadership but does not routinely engage with the community on health-related issues.<sup>6</sup> Encouraging business leaders to take a proactive stance in communicating COVID-19 risk and prevention information may be particularly important in the current pandemic because of the significant impact on the economy. Rural residents may be especially attuned to business leaders’ messages, as they may signal reassurance that staying home and not going to work is the right thing to do. Similarly, with restrictions on gatherings of more than a certain number of individuals, many religious services have been canceled, which may be particularly distressing to some residents. Reassuring messages from religious leaders have the potential to calm those concerns and encourage physical distancing practices.

Community leaders are also important in disseminating COVID-19-related information because they have the potential to reach residents who may not receive messages through other media such as online news or social media. Rural residents are, on average, older than urban residents<sup>7</sup> and may not routinely use these other news sources. Furthermore, in remote areas, lack of broadband access is a well-documented issue<sup>8</sup> and may also limit residents’ ability to access information through these sources.

### **Strengths-Based Messaging**

While the above discusses ways in which rural areas may be uniquely hard-hit by COVID-19, there are opportunities to communicate the resilience and strength that rural residents can offer during the pandemic.

First, rural communities have a strong sense of community and resilience.<sup>9,10</sup> The concept of helping your neighbor or acting in the best interest of the community is often ingrained in rural areas. This characteristic could serve as a protective factor for rural communities, if activated in the face of the COVID-19 pandemic. Calling upon rural residents' sense of community and highlighting how their actions, such as physical distancing and hand hygiene, can protect their neighbors and their local economy could prove an effective messaging strategy. Indeed, community capital was found to be associated with resilience for rural areas after a disaster.<sup>9</sup>

In the face of the social and physical distancing measures, people all across the country are having to adapt their previous ways of life to meet this "new normal." One prominent adaptation for health and mental health care is the move to more telehealth practices. The development and use of telehealth has, in large part, been conducted in rural areas. To this point, rural health care providers and patients may be able to lead the telehealth efforts across the country by sharing what they have learned in implementing this practice already. Similarly, a great deal of research on social isolation has taken place in rural and frontier communities and lessons learned through this work could now be applied to more urban settings. Communicating the unique leadership role rural residents could take in this global crisis is an important, strengths-based message to deliver.

### **Conclusion**

Rural areas will not escape the COVID-19 pandemic in the US. Using strategies tailored to the rural context to effectively communicate and implement public health prevention practices, many of which are enacted statewide and impact rural areas with relatively low risk, has the potential to mitigate the spread of the virus in rural areas at a time when its prevalence is still relatively low.

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