

# Lessons Learned from COVID-19 Vaccination Efforts in Rural Communities

January 2023

## Introduction

On behalf of the Centers for Disease Control and Prevention (CDC), NORC at the University of Chicago (NORC) and East Tennessee State University (ETSU) conducted a qualitative study to better understand vaccine confidence and demand in rural communities. The study explored the following topics related to COVID-19 vaccination in rural communities:

- Factors influencing COVID-19 vaccine confidence
- Strategies implemented to address barriers and increase COVID-19 vaccination rates
- Rural community members' perspectives about COVID-19 vaccination efforts
- Lessons learned related to COVID-19 vaccination efforts in rural communities

## Methods

The qualitative study included three components:

1. An environmental scan to explore factors influencing COVID-19 vaccine confidence in rural areas and strategies implemented to address vaccine confidence and demand
2. An analysis of social media data to understand common messengers and content of posts related to COVID-19 vaccination, with a focus on rural areas
3. Case studies in six rural communities to understand successful strategies and lessons learned to increase COVID-19 vaccination

The environmental scan included peer-reviewed studies, grey literature publications—including reports developed by government agencies and philanthropic and private sector organizations—and news stories. The social media analysis included posts from Twitter, Facebook, Instagram, and Reddit which were identified using search terms about COVID-19, vaccinations, rural communities, and hesitancy.

In each of the six rural case study sites, NORC/ETSU interviewed organizations involved in COVID-19 vaccination efforts and community members who had received the COVID-19 vaccine. Organizations and community members were recruited from the following study sites:

- Leflore and Jefferson Counties, Mississippi
- Marshall County, Iowa
- North Country Region (Carroll, Coos, and Grafton Counties), New Hampshire
- Perry County, Kentucky
- Rio Arriba County, New Mexico
- Starr County, Texas

# Factors Influencing Vaccine Hesitancy & Strategies to Address Vaccine Confidence and Increase Uptake of COVID-19 Vaccination

The World Health Organization identified **confidence**, **complacency**, and **convenience** as the three major factors influencing vaccine hesitancy and acceptance.<sup>1</sup> This qualitative study found that rural communities implemented various strategies that address these factors to increase COVID-19 vaccine uptake.

	Common Attitudes or Barriers	Strategies Implemented
<b>Confidence</b>	<ul style="list-style-type: none"> <li>Concerns about the novelty of the COVID-19 vaccine</li> <li>Mistrust in government and/or medical providers</li> <li>Concerns about side-effects of the COVID-19 vaccine</li> <li>Experiences with friends and family who died from COVID-19 despite getting vaccinated</li> </ul>	<ul style="list-style-type: none"> <li>Leveraging trusted messengers</li> <li>Developing messages tailored to community culture, beliefs, or values</li> <li>Disseminating education and messaging through multiple channels</li> </ul>
<b>Complacency</b>	<ul style="list-style-type: none"> <li>Perceived low risk of infection and/or severity of COVID-19 infection</li> <li>Apathy, fatalism, or belief that religious faith will be more protective than vaccination</li> </ul>	<ul style="list-style-type: none"> <li>Providing incentives for receiving COVID-19 vaccine (e.g., cash prizes or raffles)</li> <li>Implementing vaccine mandates</li> </ul>
<b>Convenience</b>	<ul style="list-style-type: none"> <li>Lack of transportation</li> <li>Lack of internet access to obtain vaccination information or to schedule appointments</li> <li>Language barriers</li> </ul>	<ul style="list-style-type: none"> <li>Implementing off-site clinics in familiar locations and at various times and dates</li> <li>Providing vaccine appointment and scheduling assistance</li> <li>Addressing transportation barriers</li> <li>Developing educational resources and outreach in multiple languages</li> </ul>

A prominent theme was the importance of engaging **trusted messengers** for community outreach, education, and one-on-one conversations about the COVID-19 vaccine. The trusted messengers identified through the case studies in rural communities included:

- Family and friends
- Recognizable community members and leaders (e.g., community health workers, prominent representatives from faith-based organizations or school districts, local radio station DJs, firefighters)
- Local health care providers (e.g., doctors, nurses, pharmacists)
- Local and state government (e.g., health department staff and elected officials)

<sup>1</sup> World Health Organization. Report of the Sage Working Group on Vaccine Hesitancy [Internet]. Geneva: World Health Organization; 2014. Available from [https://www.asset-scienceinsociety.eu/sites/default/files/sage\\_working\\_group\\_revised\\_report\\_vaccine\\_hesitancy.pdf](https://www.asset-scienceinsociety.eu/sites/default/files/sage_working_group_revised_report_vaccine_hesitancy.pdf)

# Motivations for COVID-19 Vaccination

In case study site interviews, community members discussed their motivations for getting vaccinated. The two most frequently reported motivations were related to family and personal health concerns. Examples of motivations for COVID-19 vaccination included:

- Importance of protecting family or community members, including vulnerable older adults and minor children
- Family members encouraged them to get the vaccine
- Friend or family member experienced health issues or a hospitalization related to COVID
- Pre-existing conditions that made them more susceptible to COVID, including diabetes and cardiovascular disease
- Workplace required or encouraged it

Family-related factors were similarly critical to helping community members overcome initial fears or hesitations to vaccinate. Across the case study sites, community members with hesitations about being vaccinated reported that it was important to see their friends and family members getting vaccinated without any significant side effects. Some overcame their hesitation because they wanted to serve as a role model for family members with similar fears, protect their family members, or visit family members in settings that required vaccination, such as nursing homes.

## Lessons Learned for Other Rural Communities

Through this qualitative study, we identified lessons learned that are important considerations for other rural communities in ongoing COVID-19 vaccination efforts and in preparation for new public health threats.

### Identify Local Partners to Support the Response

Leveraging existing partnerships and identifying new local partners in a public health emergency response is critical. Every community has specific

challenges and barriers that local partners will be best equipped to mitigate. Case study sites used established networks of partners to quickly mobilize and coordinate vaccination efforts. Local partners involved in vaccination efforts included local government, health care organizations, health councils, schools and universities, local businesses, pharmacies, local media, first responders, religious leaders, and community-based organizations.

### Engage Trusted Messengers

Engaging trusted messengers to communicate with community members is crucial for both increasing confidence in the COVID-19 vaccine and lessening feelings of complacency around vaccinating. Frequent communication using consistent, factual messages is essential. These trusted messengers can engage in respectful one-on-one conversations to reduce hesitation and address concerns. Engaging trusted community leaders like health care providers, recognizable community members, and local leaders—such as prominent representatives from school districts or faith-based organizations—can help rural communities deliver a unified message. Identifying a combination of communication channels that will reach the whole community is equally important, including social media, radio, and press conferences.

### Maximize Convenience and Access

Maximizing convenience and access to the COVID-19 vaccine helped rural communities overcome cost and transportation barriers. Successful strategies included:

1. Providing vaccinations at clinics in familiar locations, such as schools, pharmacies, public libraries, grocery stores, or places of worship
2. Assisting with appointment registration
3. Offering home visits or partnering with ride-sharing services to overcome mobility limitations

*This brief was developed by NORC at the University of Chicago (NORC) and East Tennessee State University (ETSU) with funding from the Centers for Disease Control and Prevention.*