COVID-19 Rural Vaccination Success Story: Leflore and Jefferson Counties, MS



Percentage of total population that have completed a primary COVID-19 vaccine series (November 2022)

Leflore County: 63.7% Jefferson County: 72.8%

Population (U.S. Census Bureau)

Leflore County: 28,339 Jefferson County: 11,321

Demographics (U.S. Census Bureau)

American Indian and Alaska Native (non-Hispanic): Leflore County: 0.0% Jefferson County: 0.2% Asian (non-Hispanic): Leflore County: 0.6% Jefferson County: 0.6% Black (non-Hispanic): Leflore County: 74.2% Jefferson County: 79.0% Hispanic or Latino: Leflore County: 2.6% Jefferson County: 7.2% White (non-Hispanic): Leflore County: 22.2% Jefferson County: 13.0%

Health Department Governance Centralized

Key Vaccination Strategies



Background

Located in the Delta Region of western Mississippi, Leflore and Jefferson counties have populations of 28,339 and 11,321, respectively. A large majority of residents in both communities are non-Hispanic Black persons. Approximately one-third of Jefferson County's population resides in the county seat of Fayette, which serves as the county's economic and social center. Leflore County's economic and social center is Greenwood.

Both counties are close to the Mississippi River, and have experienced declining populations and economic hardship over the last several decades. While geographically distant, both were included in this case study as they serve similar rural populations and had successful vaccination efforts.

Both counties also have community non-profit and faith-based organizations that provide significant community leadership, working to meet the health and social needs of residents. Those organizations include Head Start, Mississippi State Cooperative Extension offices, food pantries, faith-based institutions, and chain pharmacies. When COVID-19 arrived, they formed an ad-hoc coalition that received much-needed pandemic-related funding and guidance, a COVID-testing infrastructure, vaccines, and supplies from the Mississippi State Department of Health (MSDH).

Methods

We conducted seven in-depth interviews with organizations involved in COVID-19 vaccination efforts in Jefferson and Leflore Counties. These organizational interviews included representatives from MSDH, Walgreens Pharmacy, Vessels of Mercy Church, the Institute for the Advancement of Minority Health, Mississippi State University Cooperative Extension, and Jefferson County Hospital. We also interviewed 18 residents—nine from each county—to learn about their COVID-19 vaccination experiences.

Core Partners

The following partners worked together to vaccinate the greatest possible number of residents:

- MSDH
- Walgreens Pharmacy
- The Institute for the Advancement of Minority Health
- Federally Qualified Health Center Jefferson Comprehensive Health Center
- Jefferson County Hospital
- Vessels of Mercy Church
- Mississippi State University Cooperative Extension

Key Strategies



MSDH coordinated with various traditional and non-traditional partners in Leflore and Jefferson counties, pairing vaccine providers with community-based organizations to host state-sponsored vaccine events. These partners included faith-based organizations, Head Start Centers, Historically Black Colleges and Universities, community coalitions, sororities, fraternities, and other community-based organizations.

MSDH also launched a "Shots at the Shop" initiative, which invited barbers and stylists to volunteer as lay health educators, equipping them with resources to promote COVID-19 vaccination to their clients as well as access to a vaccine provider, so that they could set up vaccination opportunities in their shop or salon.

Walgreens Pharmacy was among the first providers to contract with the U.S. Department of Health and Human Services, to vaccinate residents of long-term care facilities, making it possible for it to quickly ramp up its COVID-19 vaccination efforts by repositioning existing infrastructure and staff. In Mississippi, it deployed Walgreens pharmacy staff to vaccinate people most at risk for serious COVID-19 complications, and others, when eligibility criteria for vaccination expanded.

For counties like Jefferson and Leflore, which had minimal vaccination infrastructure in place, this support was essential to their COVID-19 vaccination efforts. Pharmacists, and later pharmacy technicians, coordinated with community organizations to provide off-site COVID-19 vaccinations when more age groups became eligible. Once the demand for vaccinations grew, local Walgreens staff scheduled on-site clinics at their pharmacy locations.

When residents expressed concern that vaccine side effects would cause them to miss work, local Walgreens stores established Friday afternoon clinics. As the pandemic progressed, local Walgreens stores began collaborating with churches in the smaller, more rural communities of both counties. Walgreens scheduled its vaccination clinics at these faith-based organizations so that they would coincide with other outreach events, such as food-box distributions.

Walgreens stores in Leflore and Jefferson heavily promoted the Walgreens online scheduling tool, and provided technical assistance to those who had difficulty navigating it. One of the benefits of the tool was that once you booked your first vaccination appointment, it automatically scheduled follow-up appointments to encourage you to complete the series.

Additionally, local Walgreens staff made personalized follow-up calls to patients eligible for second doses and booster shots, if those individuals did not schedule them via the website. Walgreens also texted or emailed COVID-19 vaccination reminders, as part of routine care and health education efforts. This multi-pronged approach led Walgreens to distribute over 10,000 doses in Leflore and Jefferson counties in the first year of vaccination efforts, alone.

Conducting Community Outreach & Engagement

The State Health Officer acted as a source of information across Mississippi, and held a daily televised update throughout the early phase of the pandemic, providing COVID-19 information, case numbers, and later vaccine availability. The State Health Officer also led efforts to create a comprehensive network of providers and partners, as well as task forces focused on the needs of specific populations and sectors.

Using funds from the CDC Foundation, The Institute for the Advancement of Minority Health (the Institute) carried out a multifaceted vaccination effort across the Mississippi Delta, including in Leflore county. It entailed:

- Training locals to become community health workers (CHWs), so that they could administer vaccines in communities with very little existing health infrastructure
- Hosting pop-up vaccine clinics for populations at higher risk for severe COVID-19 infections
- Going door-to-door
- Using radio, television, print, and social media ads and posts
- Encouraging vaccinated community members to speak to their friends, family, and neighbors about getting vaccinated (a.k.a. word-of-mouth messaging)

The Mississippi State University Extension Service (the Extension in Jefferson County acted as a COVID-19 information hub. The Extension helps a wide variety of

"Leadership matters! Early in the pandemic, health equity—COVID equity—was made a priority by the State Health Officer, who was leading the state health department's response. It was elevated in incident command to more of a leadership role, and a priority for COVID vulnerable populations outreach and COVID equity efforts were realized. Let me say that prioritizing this cannot be understated.

- Mississippi State Department of Health

clients, from people seeking agricultural assistance to those needing primary clinical care. During the pandemic, regardless of the purpose of the visit, Extension staff began sharing information on COVID-19 and vaccinations with their clients, through one-on-one messaging, targeted fliers, and handouts.



To gather information on common vaccine concerns, and identify trusted messengers, the MSDH and the Institute conducted a series of community listening sessions and a vaccine confidence survey. Their findings were essential to the development of strategies and tactics to reach vulnerable and other populations. For instance, the listening sessions revealed that—especially in the most rural areas—using existing trusted partners to promote vaccination was key to engaging communities. This finding helped drive the choice of local organizational and business partners. The Institute also discovered that locally tailored messages featuring community celebrities were a useful audience-engagement tool.

"We'll bring the vaccine clinic to you. You'll do it in partnership with an organization that you trust. You may not know the Institute, but you know your church or you know your local NAACP branch."

- The Institute for the Advancement of Minority Health

U Offering Mobile, Off-Site & Drive-Through Clinics

The Jefferson County Hospital served as a main hub for COVID-19 vaccination, monoclonal antibodies, and Remdesivir treatments for a large segment of the Delta Region. The Jefferson Comprehensive Health Center, a Federally Qualified Health Center and the largest health care provider in the county, worked with the hospital to host multiple drive-through vaccination events in their service areas, often serving hundreds of vehicles per day.

In Leflore County, to boost vaccination numbers, leaders staged drive-through vaccination and pop-up testing sites in convenient, easy-to-access locations, and did not require appointments. Schools often served as ideal vaccination sites, as their parking lots are empty on weekends.

Community and faith-based organizations—like the Vessels of Mercy Church—coordinated with the mayors of smaller communities across multiple Mississippi Delta counties, including Leflore, bringing mobile MSDH units to more remote areas. These local organizations typically operated mobile clinics on Saturdays, so that residents with traditional Monday through Friday work schedules did not need to miss work in order to get vaccinated.

Community Member Vaccination Experiences

We conducted 18 in-depth interviews with nine residents from each county. Many of them reported that COVID-19 myths and misinformation were prevalent in their communities. Misinformation was particularly widespread on social media platforms and other online sources, making it difficult for some community members to distinguish fact from fiction. Vaccinated community members said that they had extensive conversations with family and friends about this misinformation—as well as perceived dangers of the vaccine—and that they encouraged those who had concerns to seek facts from medical professionals.

Interviewees shared that their primary motivation for vaccination was to protect friends, family, and their community from COVID-19 harm. Interviewees also reported that receiving COVID-19 information from a trusted messenger, like a local physician, was essential to the higher vaccination rates observed in these counties.

Even community members who expressed concern that the vaccine was rushed, or had concerns about side effects, were often persuaded once they saw a close friend or family member who was vaccinated with few or no side effects.

Interviewees said that the following factors helped convince them to get vaccinated:



Getting encouragement and reassurance from their primary care providers, who—in many cases—disclosed their personal motivation for vaccinating themselves and their own families, which increased patient trust



Seeking to serve as examples of vaccine compliance to close friends and family



Experiencing a close friend or family member dying or facing serious complications from COVID-19

Takeaways for Other Rural Communities

1. Deploy community-based organizations, as trusted agents.

In the Mississippi Delta Region, community-based organizations—like The Institute—were key vaccination partners and leaders. Their use of listening sessions early in the pandemic positioned them well to meet the specific needs of those at greatest risk for COVID-19 complications, and others. By collaborating closely with local community and faith-based organizations—and using the capacity of a newly trained cadre of CHWs—the Institute's reach extended into even the most rural parts of Leflore and Jefferson counties.

2. Draw upon state-level guidance and resources.

Recognizing that they did not have adequate pandemic-response infrastructure, the leaders of Leflore and Jefferson counties turned to the MSDH for leadership and assistance with coordinating vaccine distribution. MSDH leveraged its statewide presence to convene task forces to inform vaccination rollout. The department also worked to empower community and faith-based organizations to organize vaccination events, and provided COVID-19 education. Finally, MSDH offered targeted information on where mobile-vaccination efforts were most needed. Another state-level entity, the Extension, used its trusted local offices to provide health education and COVID-19 vaccination information to all clients.

3. Utilize the existing infrastructure of national corporations.

Leflore and Jefferson residents greatly benefitted from the presence of Walgreens in their small counties, as the national corporation used its infrastructure to quickly scale up COVID-19 testing and vaccination efforts through its local pharmacies. The Walgreen's vaccine locator and registration tool was particularly helpful, as it provided easy access to COVID-19 vaccination resources and appointment scheduling. The company's deployment of pharmacy staff as vaccine administrators was essential to expanding local reach by providing both on- and off-site vaccination.

Methodology

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 vaccine demand and access barriers to increase COVID-19 vaccination rates; individual-level perspectives on COVID-19 vaccination in rural areas; and lessons learned related to COVID-19 vaccination efforts for rural communities. The qualitative study included case studies in six rural communities. Between April and July 2022, 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, MS; Marshall County, IA; North Country Region (Carroll, Coos, and Grafton Counties), NH; Perry County, KY; Rio Arriba County, NM; and Starr County, TX.