

COVID-19 Vaccine Education Development for Rural Ohio Audiences

Amelia Meehan, MPH¹; Myriam Shaw Ojeda, RPh, PharmD²; Sarah Overstrom, MPH³

(1) Formerly of Ohio State University Extension, Family and Consumer Sciences, now FHI 360; (2) The Ohio State University College of Pharmacy; (3) The Ohio State University College of Public Health (MPH Program)

INTRODUCTION

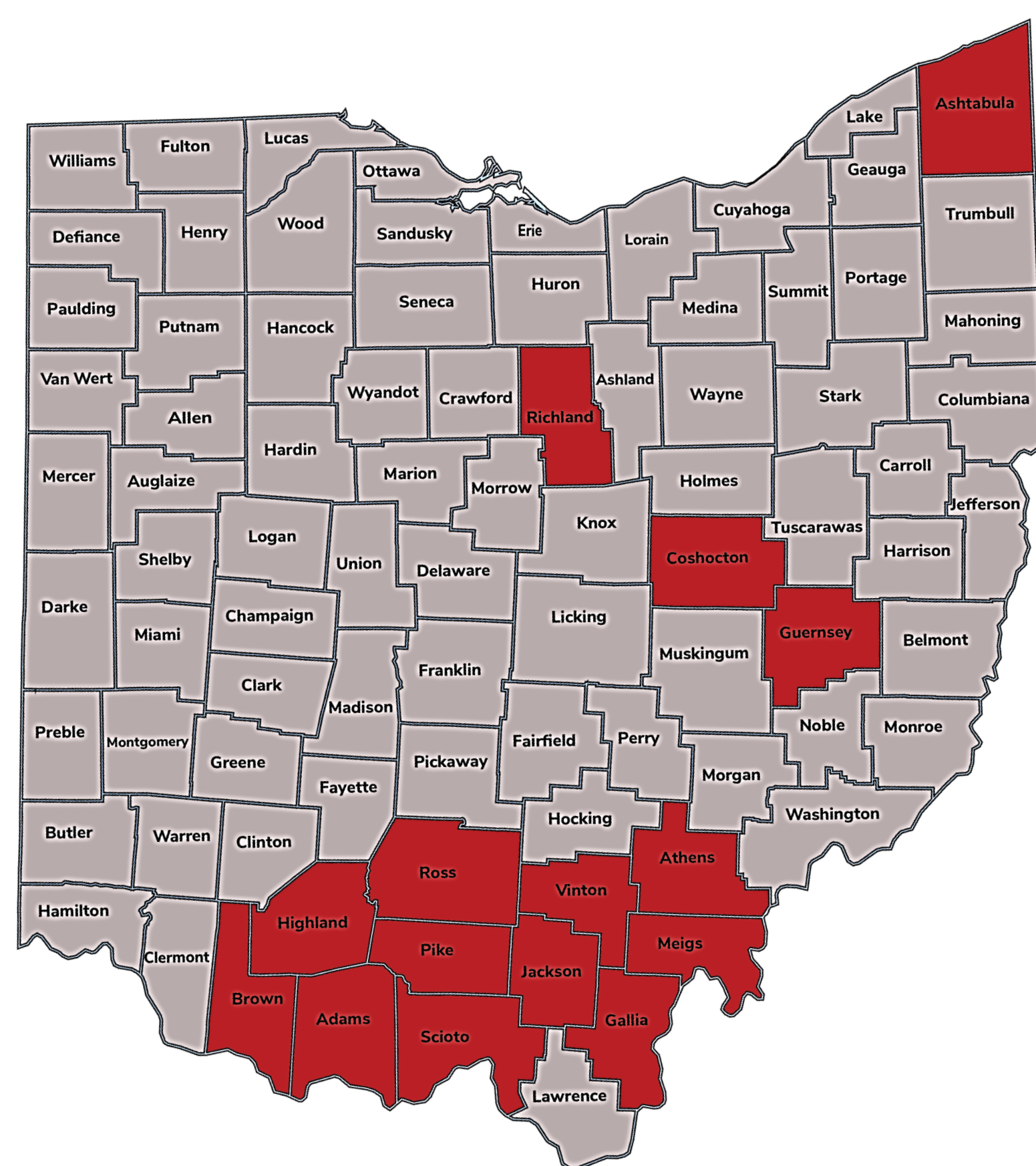
Extension Collaborative on Immunization Teaching and Engagement (EXCITE) provided grant funding opportunities, funded by the CDC and USDA-NIFA, for state and local Cooperative Extension programs to develop and provide education focused on increasing confidence for the uptake of the COVID-19 vaccine. The Ohio State University Extension (OSUE) chose to prioritize 15 rural Ohio counties, primarily in Appalachian Ohio.

AIM

To describe the process of reaching out to selected, health-vulnerable, rural communities to understand their perceptions of vaccines in order to develop appropriate vaccine education communications to meet their needs:

- Survey results to inform vaccine education needs.
- Collaboration with the College of Pharmacy to create appropriate and accurate vaccine messaging.
- Pilot-testing messages and designs with representatives from our target demographic.
- Every-Door-Direct-Mailing campaign to disseminate finalized communications.

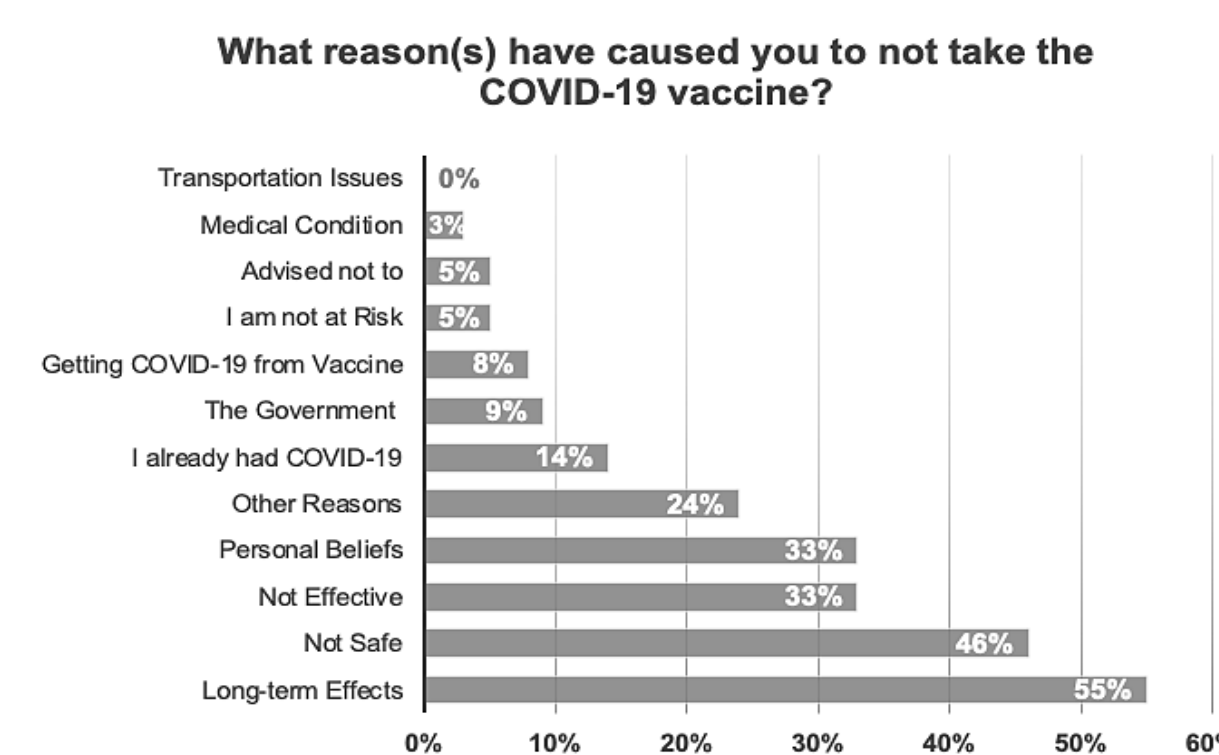
15 Rural Ohio Target Counties



METHODS

OSUE conducted two IRB-protected surveys and IRB-protected key informant interviews to assess perceptions of vaccine hesitancy and to conduct asset mapping of resources and trusted community organizations. The collected data from over 350 respondents was analyzed using chi-squared tests to compare the responses of vaccinated versus unvaccinated respondents. Statistical significance was noted in several categories.

Survey Results



Public health and pharmacy practitioners from The Ohio State University Extension (OSUE) were able to meaningfully engage with 529 community members about vaccine attitudes and to pilot FAQ-style vaccine education at the 2022 Farm Science Review (FSR). Our team prioritized the value of community input for the creation of tailored vaccine education, and FSR presented an opportunity to engage with our targeted rural clientele.

Pilot-Testing Vaccine Messaging



From these community conversations, our team learned valuable insights from this audience, like concerns about impacts on fertility and the belief that receiving the COVID-19 vaccine will cause Monkeypox infection. Our analysis of this community-engaged qualitative data allowed us to identify common themes for reported reasons for vaccine hesitancy among this population. This data was then used to inform tailoring of our piloted FAQ-style vaccine education so that these materials would address the concerns that mattered most to our clientele in a way that would be most accessible to them.

FAQ-Style Vaccine Education Materials



Postcard designs and messages created by The Ohio State University MPH student, Sarah Overstrom

RESULTS

These vaccine education materials were developed in a simple, colorful, eye-catching FAQ-style format.

The 18 unique FAQ designs each addressed a priority reason for vaccine hesitancy, as reported by our targeted community members, including vaccine development, vaccine safety, side effects, and booster-specific concerns.

The vaccine education materials were written at a primarily 4th – 6th grade reading level. The materials were also carefully phrased in an effort to preserve personal autonomy in health decision-making.

Messages were reviewed for content accuracy by our pharmacist liaison.

FSR Pilot Testing Results:

- 27 Respondents
- 100% reported that the vaccine education materials were written clearly
- 96.3% reported that the materials were respectful
- 55.56% reported that the materials improved their knowledge of COVID-19 vaccines
- 59.26% reported that the materials were perceived as effective, using a Likert scale

OSUE opted to use an Every-Door-Direct-Mailing (EDDM) campaign in November and December 2022 to distribute 30,798 pieces of the piloted vaccine education materials directly to people's homes, with the option to provide feedback on each mailer.

Using zip code data to track COVID-19 infection rates, three zip codes in each of the 15 target counties, for a total of 45 mail routes, were selected to be included in the EDDM campaign. Primarily residential mail routes were prioritized.

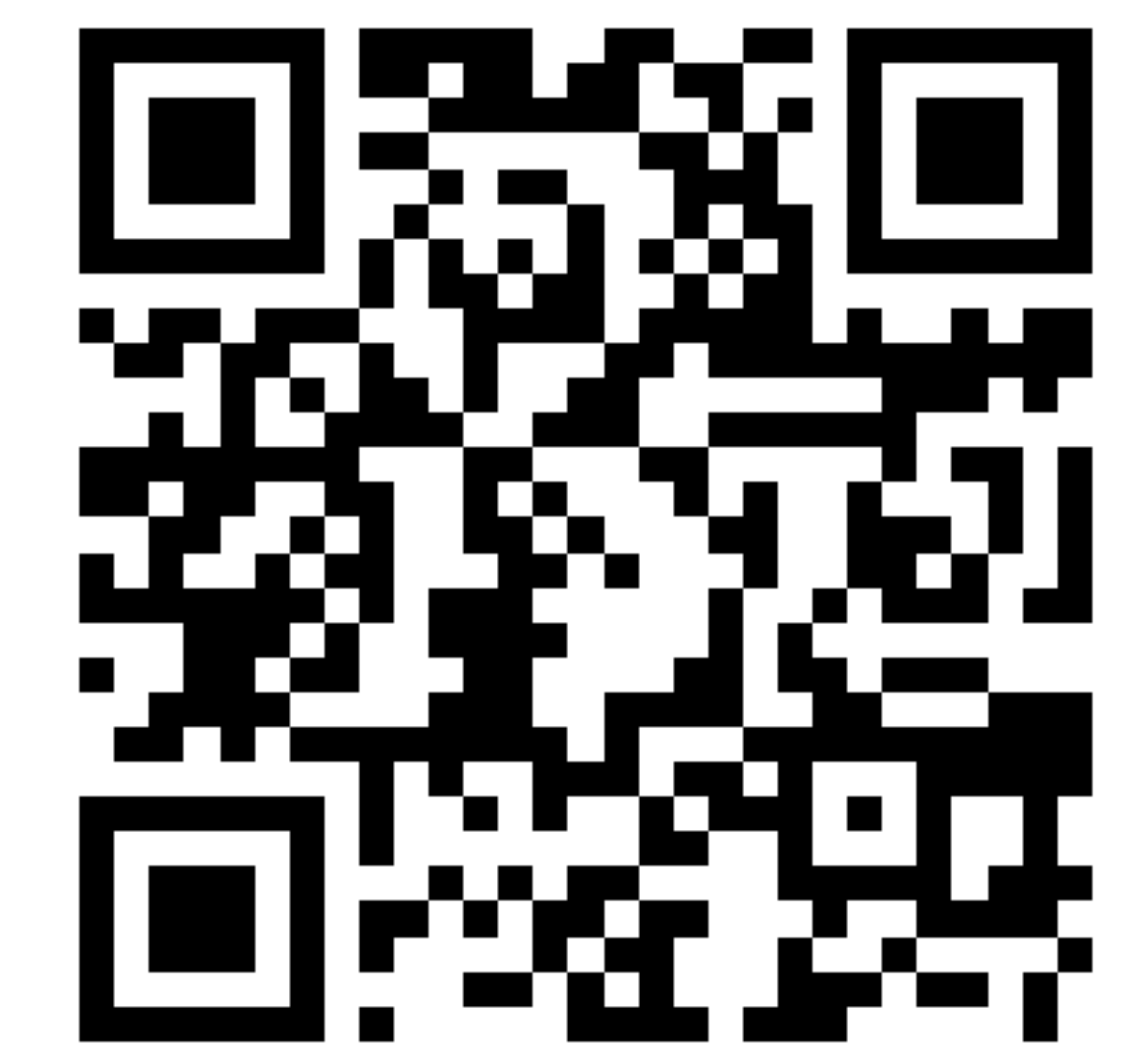
Response rates from the survey link provided on the postcards was meager, with only 5 recorded responses via Qualtrics. Most notable response to the mailed messages: "Honorably truthful."

- Anonymous respondent

CONCLUSIONS AND FUTURE RESEARCH

- Simple, colorful, and clear communication that preserved autonomy in personal health decision making was well-received by the targeted, rural clientele.
- Collaboration between public health and pharmacy was critical to ensure reaching rural community members with accurate health information.
- Grant-funded programming and research is ongoing, as part of a new EXCITE grant, to address vaccine hesitancy, beyond COVID-19, in rural Ohio.
- New partnerships have emerged with Texas A&M AgriLife Extension to combat vaccine hesitancy in a coordinated effort across similar rural communities in both states.
 - Additional partners include: The Ohio State College of Pharmacy and Generation Rx, the Ohio Department of Health, Ohio Pharmacists Association, Walk with a Doc, Adena Health, and Texas Department of State Health Services

MESSAGING RESOURCES



go.osu.edu/vaccineresources

ACKNOWLEDGEMENTS

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