### A Rural Community-Based Collaboration to Reduce COVID-19 Vaccine Hesitancy Using a Health Belief Model Framework

Elizabeth Luke, MS, MPH<sup>1</sup>; Sean Harney, MD<sup>2</sup>; Christina Flint<sup>2</sup>; Gerald Cayer, MPH<sup>2</sup>; Daniel Cameron<sup>1</sup>; Leah Caldwell<sup>1</sup>; Telisa Stewart, DrPH, MPH<sup>1</sup>

(1) SUNY Upstate Medical University, (2) Lewis County Health System (LCHS)/Lewis County General Hospital (LCGH)

Submitted 30 August 2023, revised 24 July 2024, accepted 21 October 2024.

#### ABSTRACT

**Background:** Rural communities experience increased barriers to vaccination and have limited resources to combat the COVID-19 pandemic compared to their urban counterparts. Community-based strategies to improve access, encourage uptake and compliance, and reduce COVID-19 vaccine hesitancy are essential to reduce disparities, illness, and death in rural populations.

**Objectives**: The aim of our project was to develop a long-lasting partnership with a rural community health system in upstate New York to improve COVID-19 vaccine hesitancy.

**Methods:** The collaboration designed, implemented, and evaluated culturally appropriate behavioral messaging mapped to the Health Belief Model.

**Lessons Learned:** The community-university partnership was successful because of a bidirectional exchange of information, a strong foundation of trust, equitable involvement of all partners in all phases, and community empowerment and ownership of the process and the materials.

**Conclusions:** This project highlighted the importance of collaborating with community partners to create unique, culturally appropriate materials for rural audiences.

**KEYWORDS:** Community health partnerships, Community health research, Health disparities, Health outcomes, Health promotion, Great Lakes Region, Rural Population, COVID-19, Vaccine hesitancy

#### INTRODUCTION

Accounting for 46 million people in the U.S.<sup>1</sup>, individuals in rural communities face increased health challenges and disparities compared to their urban counterparts<sup>2-6</sup> that have been exacerbated during the COVID-19 pandemic<sup>2,7</sup>. Specifically, rural populations face increased barriers to vaccination<sup>2,7–13</sup>. A 2021 study examining barriers to COVID-19 public health measures found that common critiques of public health responses were conflicting information, politicization of vaccination, and lack of trust in government or medical authorities<sup>14</sup>. Participants suggested that COVID-19 messaging could be improved by tailoring content to specific populations<sup>14</sup>. The aim of this project was to develop a sustainable community-academic partnership with a rural community health system in upstate New York to reduce COVID-19 vaccine hesitancy. This was achieved by applying the Health Belief Model (HBM) framework to tailor messaging to a rural audience.

One of the most important factors in creating pro-vaccine messaging is that messages need to be evidence-based, context specific, and culturally appropriate and tailored to the target population<sup>13</sup>. Factors such as social context, community culture, beliefs, and values must be carefully considered when creating messaging materials. The Health Belief Model framework was chosen in order to create evidence-based but culturally appropriate and sensitive messages regarding COVID-19 vaccines tailored to the target population. The Health Belief Model is a theory of behavior comprised of six main constructs that influence an individual's decision-making in regard to health behaviors<sup>15</sup>. These six constructs include: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cue to action, and self-efficacy<sup>15</sup>. Several health messaging campaigns targeting vaccination behaviors have been designed and/or evaluated using the Health Belief Model framework<sup>16–19</sup>. For example, a 2022 study in Thailand

utilized the HBM to predict vaccination intention among individuals who were not vaccinated for COVID-19, showing that this theory was useful in understanding individual vaccination behaviors to target when developing messaging campaigns<sup>17</sup>.

Developing strong partnerships between communities and academic institutions to leverage the resources and relationships that these partnerships provide can be used to reduce vaccine hesitancy in communities when paired with evidence-based messaging strategies. Community-academic partnerships that are sustainable can help to create resources in communities<sup>20–25</sup>, such as increased access to vaccination, which has a long-term impact on health behaviors and outcomes. The community-academic partnership formed for this project leveraged both academic and local community expertise, as well as several existing resources such as knowledge of public health theories and behavioral messaging, in-kind creation of campaign images by media and design experts at both the academic and community organizations, and social capital, to create and implement an educational campaign targeting COVID-19 vaccination.

#### **METHODS**

#### **Description of Community**

For the scope of this project, the community is defined at the county level. Lewis County is a rural county in northern NY state with a population of 26,187 people, with 86.8% of the population living in a low population density area<sup>26</sup>. 96.0% of the population identify as non-Hispanic white, 91.0% of adults (age 25 or older) have a high school degree or equivalent, and 59.0% of adults (age 25-44) have completed some post-secondary education<sup>26</sup>. The median

household income in Lewis County is \$57,900, compared to \$73,400 across New York state<sup>26</sup>. According to data from the COVID Collaborative, as of February 2022 vaccine hesitancy in Lewis County was 5% ("some hesitancy") compared to 27% in February 2021<sup>27</sup>. Lewis County has a large farming community and rich agricultural history dating back to the 1800s<sup>28</sup>. Lowville, the town in Lewis County where the community partner is located, features a cow statue outside of the Lowville Producers Cheese Store (owned by 220 dairy farming families in upstate New York) that is a beloved mascot of the community and celebrates the history of dairy farming in the region<sup>29</sup>.

#### **Description of Community Partner**

Lewis County Health System (LCHS)/Lewis County General Hospital (LCGH) is a rural critical-access hospital in northern New York state. The hospital has 4 beds and services the 26,000 residents of the county. Stakeholders from LCHS/LCGH who collaborated with the Department of Public Health and Preventive Medicine at SUNY Upstate include the hospital Chief Executive Officer (CEO), Chief Medical Officer (CMO), and the hospital's head of Public Relations (PR). As they service a small rural county, the partners at LCHS/LCGH are very engaged in the local community and were especially active during the onset of the COVID-19 pandemic. All three individuals described above have resided in Lewis County for most of their careers or lives and are themselves a part of the community and highly knowledgeable of community needs and culture.

#### Development of Community-Academic Partnership

The partnership with LCHS/ LCGH and SUNY Upstate Medical University Department of Public Health and Preventive Medicine was established through initial meetings in October

2021. Stakeholders from each institution, including the CEO, CMO, and head of Public Relations at LCHS/LCGH as well as a professor in the Department of Public Health and Preventive Medicine at SUNY Upstate and a graduate assistant, met weekly via Zoom to discuss potential projects to target COVID-19 vaccine hesitancy in the community. Following initial discussions, a COVID-19 vaccine educational campaign was decided on, which would be created and tailored specifically to the Lewis County community.

Before creation of the campaign materials, the community partner and public health experts from SUNY Upstate met frequently to review various public health methods and frameworks, particularly an introduction and overview of evidence-based messaging and the Health Belief Model framework. This was accomplished through several informal presentations and resources shared digitally with partners detailing examples of previous projects.

Additional correspondence throughout the project was achieved through weekly Zoom meetings and frequent email correspondence to deliver project progress and updates, as well as to facilitate collaboration on the creation and refinement of campaign materials.

#### **Development of Campaign Materials**

The design and implementation of campaign materials was achieved through a bidirectional exchange of information and extensive involvement and feedback from the community partner. Content addressing COVID-19 vaccine hesitancy was drafted with the partner to target community concerns and common misconceptions they were aware of through engagement with community members, such as concerns about vaccine side effects and personal choice to get vaccinated. This content was then mapped to each Health Belief Model construct (see Appendix 1. 'COVID Vaccine Messaging Campaign Mapping Document').

#### Rural Community-Academic Partnership COVID-19

6

The community partners at LCHS/LCGH reviewed the mapped campaign content repeatedly and worked with the SUNY Upstate team to refine the messages and ensure they were culturally appropriate for Lewis County. They also helped to review and refine all campaign images that were created by the SUNY Upstate Medical University Marketing and Communications Department (see supplemental material 'Digital Media Package'). Specifically, the partners at LCHS/LCGH guided the design process of the campaign images including the colors, banners, images and photos, and also provided the picture of the local cow mascot Lady LeWinDa MilkZalot who is depicted in the top banner of each image. Any feedback that the partners provided regarding the mapping document content or the campaign images was used to revise both the messages and images for the campaign.

The entire process of project planning, creation of materials, and implementation of the campaign were undergone with ongoing feedback and collaboration with LCHS/LCGH. Campaign materials were disseminated through various community platforms according to a tailored timeline encompassing a 10-week period.

#### **Dissemination of Information**

Following the campaign, the community partner was notified of the ongoing evaluation and analysis of the campaign and impact on COVID-19 vaccination. Partners at LCHS/LCGH have been involved in the development and refinement of all materials, including this publication. Additionally, the project outlined here was presented at the American Public Health Association (APHA) annual meeting in November 2022.

#### Manuscript Development

All authors from the SUNY Upstate Medical University Department of Public Health and Preventive Medicine and the community partner LCHS/LCGH were involved in all phases of manuscript development. Once an initial draft was created, authors from LCHS/LCGH were asked to review the draft and provide any feedback or comments to incorporate into the manuscript. The first author additionally met with each co-author from LCHS/LCGH to review the updated manuscript and incorporate any additional perspectives specific to their experience that should be further expanded on or incorporated into the manuscript. All authors reviewed and approved the final manuscript before submission for publication.

#### **IRB** Review

This project was reviewed by the SUNY Upstate Medical University Institutional Review Board (IRB). The project intended to implement a health communication program plan and evaluation. The project did not intend to test a hypothesis, nor create generalizable data. The IRB determined the project did not meet the definition of human subjects research (IRB #2031129-1).

#### RESULTS

#### **Completed Campaign Materials**

The community-academic partnership led to the successful creation of a 10-week campaign targeting COVID-19 vaccination behaviors in Lewis County. Messaging for each week, including a main theme, main message, and supporting messages, were mapped to each health belief model construct at least once across the 10-week period (Table 1). Subsequent campaign materials were created based on the mapping document (Appendix 2. COVID Vaccine Messaging Campaign Mapping Document, Digital Media Package) and posted to LCHS/LCGH

social media pages each week that the campaign ran. A script for speakers recruited from the local community by LCHS/LCGH was also created to accompany each week of campaign images (Appendix 1. COVID Vaccine Messaging Campaign Mapping Document).

#### DISCUSSION

As a result of this project, the Department of Public Health and Preventive Medicine at SUNY Upstate Medical University has maintained an ongoing partnership with LCHS/LCGH. The partnership has now expanded to include several future project ideas and plans for future campaigns targeting other important topics in public health. Additionally, this partnership and COVID-19 vaccination campaign led to the creation of a second campaign targeting rural audiences across the region, and the development of several more community partnerships with various rural-based institutions.

This project demonstrates the value of community-academic partnerships to create and utilize existing resources and relationships across institutions in order to improve community health. Through the creation, dissemination, and evaluation of this COVID-19 vaccination campaign, we have put into practice and provided further evidence of the need for sustainable partnerships between universities and community institutions previously described in the literature <sup>20,21</sup>. The lessons learned throughout this process have further enabled the sustainability of the partnership and future projects going forward. This project was only made possible by leveraging both the expertise of SUNY Upstate public health and communications professionals, the expertise of the community partner, and a strong foundation of trust and support.

Additionally, the successful development and implementation of the COVID-19 vaccine messaging campaign and the creation of the community-academic partnership between SUNY Upstate Public Health and LCHS/LCGH reflect the successes of other community-academic partnerships that have benefited from a collaborative and inclusive approach to community involvement <sup>22–25</sup>. Practicing open communication, co-learning, and encouraging full engagement and participation with the community partner allowed for the creation of culturally sensitive and

#### Rural Community-Academic Partnership COVID-19

appropriate materials for dissemination. For example, the main message 'Protect the Herd' and use of the local cow mascot Lady LeWinDa MilkZalot in campaign images reflects and incorporates the themes inherent to the county's culture and heritage of generational farming and the dairy industry<sup>28,29</sup>. The resulting materials benefitted from many conversations that united the public health model and ideas from the community partners, with an editorial and visual approach that reflected and respected the core audience and the aims for the campaign.

Although successful, this project was not without limitations. Time constraints due to the increased urgency for accessible and reliable health information allowed for less time to develop, implement, and evaluate a health messaging campaign than would normally be utilized. Future work aims to plan and evaluate additional projects more thoroughly.

#### CONCLUSIONS

The community-university partnership described here was successful because of multiple factors. Firstly, a consistent bidirectional exchange of information and equitable involvement of all partners in all phases was necessary to build community empowerment and ownership of the process and the materials developed. Secondly, a strong foundation of trust was vital to the success of this work. This project also highlighted the importance of creating unique, culturally appropriate materials for rural audiences and further highlights the need for resources such as these that are tailored to rural communities. This partnership has also led to further collaboration on a bigger campaign involving several rural community partners to address COVID-19 vaccination rates. Overall, this project provides support for the increased

11

development of sustainable and collaborative partnerships between academic institutions and communities.

#### ACKNOWLEDGEMENTS

The authors would like to thank the Lewis County community for their support and

insight on this project. The authors would also like to thank the Lewis County Public Health

Department for their feedback and guidance on the educational campaign materials created.

#### REFERENCES

- 1. Davis JC, Cromartie J, Farrigan T, Genetin B, Sanders A, Winikoff JB. *Rural America at a Glance: 2023 Edition (Report No. EIB-261).*; 2023. doi:10.32747/2023.8134362.ers
- Murthy BP, Sterrett N, Weller D, et al. Disparities in COVID-19 Vaccination Coverage Between Urban and Rural Counties — United States, December 14, 2020–April 10, 2021. MMWR Morb Mortal Wkly Rep. 2021;70(20):759-764. doi:10.15585/mmwr.mm7020e3
- 3. Rural Health Information Hub. Chronic Disease in Rural America. https://www.ruralhealthinfo.org/topics/chronic-disease.
- 4. Rural Health Information Hub. Healthcare Access in Rural Communities. https://www.ruralhealthinfo.org/topics/healthcare-access.
- 5. Rural Health Information Hub. Rural Health Disparities. https://www.ruralhealthinfo.org/topics/rural-health-disparities.
- 6. Rural Health Information Hub. Social Determinants of Health for Rural People. https://www.ruralhealthinfo.org/topics/social-determinants-of-health.
- 7. Albers AN, Thaker J, Newcomer SR. Barriers to and facilitators of early childhood immunization in rural areas of the United States: A systematic review of the literature. *Prev Med Rep.* 2022;27:101804. doi:10.1016/j.pmedr.2022.101804
- Saelee R, Zell E, Murthy BP, et al. Disparities in COVID-19 Vaccination Coverage Between Urban and Rural Counties — United States, December 14, 2020–January 31, 2022. MMWR Morb Mortal Wkly Rep. 2022;71(9):335-340. doi:10.15585/mmwr.mm7109a2

- Hudson A, Montelpare WJ. Predictors of Vaccine Hesitancy: Implications for COVID-19 Public Health Messaging. Int J Environ Res Public Health. 2021;18(15):8054. doi:10.3390/ijerph18158054
- Mann S, Christini K, Chai Y, Chang CP, Hashibe M, Kepka D. Vaccine hesitancy and COVID-19 immunization among rural young adults. *Prev Med Rep.* 2022;28:101845. doi:10.1016/j.pmedr.2022.101845
- Hernandez I, Dickson S, Tang S, Gabriel N, Berenbrok LA, Guo J. Disparities in distribution of COVID-19 vaccines across US counties: A geographic information system–based cross-sectional study. *PLoS Med.* 2022;19(7):e1004069. doi:10.1371/journal.pmed.1004069
- 12. Terry R, Asrar A, Lavertue S. COVID-19 Vaccine Hesitancy in a Rural Primary Care Setting. *Cureus*. Published online July 24, 2022. doi:10.7759/cureus.27196
- 13. Yale Institute for Global Health, UNICEF Demand for Immunization. Vaccine Messaging Guide. *https://www.unicef.org/media/138031/file/Vaccine%20Messaging%20Guide.pdf*. Published online December 2020.
- Benham JL, Lang R, Kovacs Burns K, et al. Attitudes, current behaviours and barriers to public health measures that reduce COVID-19 transmission: A qualitative study to inform public health messaging. *PLoS One*. 2021;16(2):e0246941. doi:10.1371/journal.pone.0246941
- 15. U.S. Department of Health and Human Services, National Institutes of Health. *Theory at a Glance: A Guide For Health Promotion Practice* . 2nd ed. National Institutes of Health; 2005.
- Vatcharavongvan P, Boonyanitchayakul N, Khampachuea P, Sinturong I, Prasert V. Health Belief Model and parents' acceptance of the Pfizer-BioNTech and Sinopharm COVID-19 vaccine for children aged 5–18 years Old: A national survey. *Vaccine*. 2023;41(8):1480-1489. doi:10.1016/j.vaccine.2023.01.029
- Seangpraw K, Pothisa T, Boonyathee S, et al. Using the Health Belief Model to Predict Vaccination Intention Among COVID-19 Unvaccinated People in Thai Communities. *Front Med (Lausanne)*. 2022;9. doi:10.3389/fmed.2022.890503
- Donadiki EM, Jiménez-García R, Hernández-Barrera V, et al. Health Belief Model applied to non-compliance with HPV vaccine among female university students. *Public Health*. 2014;128(3):268-273. doi:10.1016/j.puhe.2013.12.004
- Ibrahim FM, Fadila DE, Elmawla DAEA. Older adults' acceptance of the COVID-19 vaccine: Application of the health belief model. *Nurs Open*. 2023;10(10):6989-7002. doi:10.1002/nop2.1954

- Noel L, Phillips F, Tossas-Milligan K, et al. Community-Academic Partnerships: Approaches to Engagement. *American Society of Clinical Oncology Educational Book*. 2019;(39):88-95. doi:10.1200/EDBK 246229
- 21. Haidar A, Khoei A, Alex SE, et al. Community-Academic Partnerships to Promote Health Literacy and Address Social Needs Among Low-Income Families During COVID-19. J Nutr Educ Behav. 2021;53(1):75-78. doi:10.1016/j.jneb.2020.10.003
- 22. Lewis EY, Sadler RC. Community–academic partnerships helped Flint through its water crisis. *Nature*. 2021;594(7863):326-329. doi:10.1038/d41586-021-01586-8
- Skizim M, Harris N, Leonardi C, Scribner R. Academic-Community Partnership Development to Enhance Program Outcomes in Underserved Communities: A Case Study. *Ethn Dis.* 2017;27(Suppl 1):321. doi:10.18865/ed.27.S1.321
- Abdul-Mutakabbir JC, Granillo C, Peteet B, et al. Rapid Implementation of a Community–Academic Partnership Model to Promote COVID-19 Vaccine Equity within Racially and Ethnically Minoritized Communities. *Vaccines (Basel)*. 2022;10(8):1364. doi:10.3390/vaccines10081364
- 25. Brown AF, Morris DM, Kahn KL, et al. The Healthy Community Neighborhood Initiative: Rationale and Design. *Ethn Dis.* 2016;26(1):123. doi:10.18865/ed.26.1.123
- 26. University of Wisconsin Population Health Institute. County Health Rankings & Roadmaps: Lewis, NY. https://www.countyhealthrankings.org/explore-health-rankings/new-york/lewis?year=2022.
- 27. The Institute for Health Metrics and Evaluation, COVID Collaborative. COVID-19 vaccine hesitancy in the US by county and ZIP code. https://vaccine-hesitancy.healthdata.org/.
- 28. Cornell Cooperative Extension Lewis County. History of Lewis County Agriculture. https://ccelewis.org/agriculture/history-of-lewis-county-agriculture.
- 29. Lowville Cheese Store. https://gotgoodcheese.com/.

Week Number	HBM Construct Mapped	Messaging		
		Main Theme	Main Messages	Supporting Messages
1	Perceived benefits		Protect your family and friends!	<ul> <li>COVID-19 vaccines help protect you from getting COVID-19</li> <li>COVID-19 vaccines help protect others from getting COVID-19</li> </ul>
2	Perceived susceptibility		Build your body's protection	<ul> <li>Most people experience mild side effects, such as a sore arm</li> <li>Mild side effects are a sign that your body is building immunity</li> </ul>
3	Perceived severity		<i>The COVID-19 vaccine is safe</i> <i>Millions of people have gotten it</i>	<ul> <li>Side effects go away after a couple of days</li> <li>Most people can continue their daily activities</li> </ul>
4	Perceived benefits	Protect the Herd! Get the COVID-19 Vaccine.	Keep life going	<ul> <li>COVID-19 vaccines can protect you from serious illness</li> <li>COVID-19 vaccines can help protect you from death</li> <li>COVID-19 vaccines can help keep our schools</li> </ul>
5	Perceived barriers		Find a COVID-19 Vaccine	open • Call Us: 315-376-5453 • Search: lewiscounty.org/vaccine-registration • Vaccines are also available at Kinney Drugs and Walmart
6	Perceived barriers		Vaccination is Fast, Easy, and Free!	<ul> <li>Make your appointment</li> <li>Visit your vaccination site</li> <li>Takes 20-30 minutes</li> </ul>
7	Self-efficacy		You can do it!	<ul> <li>Take control of your health by getting vaccinated</li> </ul>
8	Cue to action		It's your choice	• You can choose to get vaccinated for COVID-19

### **Table 1.** Mapping of content to COVID-19 vaccination campaign materials using the Health Belief Model

9	Cue to action	Take charge of your health	<ul> <li>Register for an appointment today: lewiscounty.org/vaccine-registration, 315-376- 5453</li> <li>Get vaccinated for COVID-19</li> <li>Register for an appointment today:</li> </ul>
10	Cue to action	Everyone ages 12+ should get a booster shot	<ul> <li>lewiscounty.org/vaccine-registration, 315-376- 5453</li> <li>At least 5 months after second Pfizer shot</li> <li>Those ages 18+ who are 6 months after second Moderna shot or 2 months after J&amp;J shot</li> </ul>

Appendix 1: COVID	Vaccine Messaging	Campaign Mapping
-------------------	-------------------	------------------

Topic for Each Week	Message	Associated Image	Script for Speakers
<ul> <li>Week 1</li> <li>Focus on Health Belief Model construct: Perceived benefits</li> <li>Definition: An individual's beliefs about the effectiveness of a given action to reduce risk of a specific condition</li> </ul>	<ul> <li>Main theme: "Protect the Herd! Get the COVID-19 Vaccine."</li> <li>Main message: Protect your family and friends!</li> <li>Supporting messages: <ul> <li>COVID-19 vaccines help protect you from getting COVID-19</li> <li>COVID-19 vaccines help protect others from getting COVID-19</li> </ul> </li> </ul>	<section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header>	COVID-19 vaccines help to protect against getting COVID-19 and passing it to others. You can help protect yourself and the community by getting vaccinated. [Speaker talks about their personal experience: why they chose to get vaccinated for COVID-19] The vaccines for COVID-19 are safe and effective.
Week 2 Focus on Health Belief Model construct: Perceived susceptibility Definition: An individual's beliefs about the likelihood of getting a disease or condition	<ul> <li>Main theme: "Protect the Herd! Get the COVID-19 Vaccine."</li> <li>Main message: Build your body's protection</li> <li>Supporting messages: <ul> <li>Most people experience mild side effects, such as a sore arm</li> <li>Mild side effects are a sign that your body is building immunity</li> </ul> </li> </ul>	<image/> <section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><text></text></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	Most people who get vaccinated for COVID-19 will experience some side effects. They're usually mild, like having a sore arm, feeling achy or having chills. [Speaker talks about their personal experience: if they had any side effects from COVID-19 vaccination and, if so, what they were]

			Side effects mean that your body is building protection.
Week 3 Focus on Health Belief Model construct: Perceived severity Definition: An individual's beliefs about the seriousness of contracting a disease or condition, including consequences	<ul> <li>Main theme: "Protect the Herd! Get the COVID-19 Vaccine."</li> <li>Main message: The COVID-19 vaccine is safe</li> <li>Millions of people have gotten it</li> <li>Supporting messages: <ul> <li>Side effects go away after a couple of days</li> <li>Most people can continue their daily activities</li> </ul> </li> </ul>	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	If you do have side effects from the COVID-19 vaccine, they should go away after a few days. Side effects after a second shot of an mRNA vaccine may be more intense than after the first shot. [Speaker talks about their personal experience: if they had side effects from COVID-19 vaccination, how severe were they and how long they lasted] You can relieve side effects by staying hydrated and getting plenty of rest.

Week 4	Main theme: "Protect the Herd!		Getting vaccinated against
Focus on Health Belief Model construct: Perceived benefits Definition: An individual's beliefs about the effectiveness of a given action to reduce risk of a specific condition	<ul> <li>Get the COVID-19 Vaccine."</li> <li>Get the COVID-19 Vaccine."</li> <li>Main message: Keep life going</li> <li>Supporting messages: <ul> <li>COVID-19 vaccines can protect you from serious illness</li> <li>COVID-19 vaccines can help protect you from death</li> <li>COVID-19 vaccines can help keep our schools open</li> </ul> </li> </ul>	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	COVID-19 can protect you from getting seriously ill. You might still get COVID-19 even if you're vaccinated, but the vaccines help you to avoid going to the hospital or dying. [Speaker talks about their personal experience: why they chose to get vaccinated for COVID-19] You can't get sick with COVID-19 from the vaccines.
Week 5	Main theme: "Protect the Herd!		Getting your COVID-19
Focus on Health Belief Model construct: Perceived barriers Definition: An individual's beliefs about obstacles to performing a behavior	Get the COVID-19 Vaccine." Main message: Find a COVID-19 Vaccine Supporting messages: • Call US: 315-376-5453 • Search: lewiscounty.org/vaccine- registration • Vaccines are also available at Kinney Drugs and Walmart	<image/> <section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	<ul> <li>vaccination is easy and free. You can go online to the Lewis County Health Department website to schedule a vaccination appointment. Or if you don't have internet access, you can call 315-376-5453 and make an appointment easily.</li> <li>[Speaker talks about their personal experience: how they overcame barriers to vaccination]</li> <li>You can also get vaccinated at your local Kinney Drugs or Walmart pharmacy.</li> </ul>

<ul> <li>Week 6</li> <li>Focus on Health Belief Model construct: Perceived barriers</li> <li>Definition: An individual's beliefs about obstacles to performing a behavior</li> </ul>	Main theme: "Protect the Herd! Get the COVID-19 Vaccine." Main message: Vaccination is Fast, Easy, and Free! Supporting messages: Make your Appointment Visit your Vaccination Site Takes 20-30 minutes	<image/> <section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	Getting vaccinated for COVID-19 was easy and fast. You can make an appointment online through the Lewis County Health Department or call 315-376-5453. You can also schedule an appointment at your local Kinney Drugs or Walmart pharmacy. [Speaker talks about their personal experience: how they overcame barriers to vaccination] Appointments only take 20-30 minutes.
Week 7 Focus on Health Belief Model construct: Self-efficacy Definition: An individual's beliefs that one can perform the recommended behavior (confidence)	<ul> <li>Main theme: "Protect the Herd! Get the COVID-19 Vaccine."</li> <li>Main message: You can do it!</li> <li>Supporting messages: <ul> <li>Take control of your health by getting vaccinated</li> </ul> </li> </ul>	<image/> <section-header><section-header><section-header><section-header><section-header><section-header><text><text></text></text></section-header></section-header></section-header></section-header></section-header></section-header>	We can all do our part to protect ourselves from COVID-19. You can take control of your health by getting vaccinated today. [Speaker talks about their personal experience: their confidence about getting vaccinated] Schedule your appointment online, by phone, or through your local pharmacy.

Week 8 Focus on Health Belief Model construct: Cue to action	Main theme: "Protect the Herd! Get the COVID-19 Vaccine." Main message: It's your choice	Protect The Herd! Get the COVID-19 Vaccine	It's your choice to get vaccinated against COVID-19. Schedule your appointment today.
<b>Definition:</b> Internal or external factors that activate or motivate a person to take action	<ul> <li>Supporting messages:</li> <li>You can choose to get vaccinated for COVID-19</li> <li>Register for an appointment today: lewiscounty.org/vaccine- registration 315-376-5453</li> </ul>	<section-header></section-header>	[Speaker talks about their personal experience: why they made the choice to get vaccinated] You can schedule a vaccination appointment online, by phone, or through your local pharmacy.
Week 9 Focus on Health Belief Model construct: Cue to action Definition: Internal or external factors that activate or motivate a person to take action	Main theme: "Protect the Herd! Get the COVID-19 Vaccine."Main message: Take charge of your healthSupporting messages:• Get vaccinated for COVID-19• Register for an appointment today:lewiscounty.org/vaccine- registration 315-376-5453	<image/> <section-header><section-header><section-header><image/><section-header><section-header><section-header><text></text></section-header></section-header></section-header></section-header></section-header></section-header>	By getting vaccinated against COVID-19, you can take charge of your own health. You can help protect yourself and others from serious illness. [Speaker talks about their personal experience: why they made the choice to get vaccinated] Schedule your vaccination appointment online, by phone, or through your local pharmacy today.

#### Week 10

Focus on Health Belief Model construct: Cue to action

**Definition:** Internal or external factors that activate or motivate a person to take action

#### *Main theme:* "Protect the Herd! Get the COVID-19 Vaccine."

Main message: Everyone ages 12+ should get a booster shot

#### Supporting messages:

- At least 5 months after second Pfizer shot
- Those ages 18+ who are 6 months after second Moderna shot or 2 months after J&J shot



#### EVERYONE AGES 12+ SHOULD GET A BOOSTER SHOT



VACCINATION IS FAST AND FREE! UBLIC HEALTH - (315) 376-5453 | WALMART - (315) 376-6174 | WINHEV DRUGS - (315) 376 www.iBwiscounty.org/VaccineRegistration Provided by Levis County Health System Everyone 12 years or older who is at least five months out from a second Pfizer vaccine, or anyone 18 years or older who is at least 6 months out from a second Moderna vaccine or two months out from the J&J vaccine should get a booster.

[Speaker talks about their personal experience: why they made the choice to get their COVID-19 booster shot]

Schedule your booster appointment online, by phone, or through your local pharmacy today. Appendix 2: Digital Media Packag



# PROTECT YOUR FAMILY AND FRIENDS



### **COVID-19 VACCINES**

Help **PROTECT YOU** from getting COVID. Help **PROTECT OTHERS** from getting COVID.

### **VACCINATION IS FAST AND FREE!**

CALL: PUBLIC HEALTH - (315) 376-5453 | WALMART - (315) 376-4174 | KINNEY DRUGS - (315) 376-7551

www.lewiscounty.org/VaccineRegistration



# BUILD YOUR BODY'S PROTECTION



# MOST

people experience mild side effects, such as a sore arm.

# MILD

side effects are a sign that your body is building immunity.

### **VACCINATION IS FAST AND FREE!**

CALL: PUBLIC HEALTH - (315) 376-5453 | WALMART - (315) 376-4174 | KINNEY DRUGS - (315) 376-7551

### www.lewiscounty.org/VaccineRegistration



# THE COVID VACCINE IS SAFE

### **MILLIONS OF PEOPLE HAVE GOTTEN IT**



### **VACCINATION IS FAST AND FREE!**

CALL: PUBLIC HEALTH - (315) 376-5453 | WALMART - (315) 376-4174 | KINNEY DRUGS - (315) 376-7551

### www.lewiscounty.org/VaccineRegistration



# **KEEP LIFE GOING**



### **COVID-19 VACCINES**

- Help PROTECT YOU from serious illness.
- Can help PROTECT YOU from death.
- Can help keep our SCHOOLS OPEN.

### **VACCINATION IS FAST AND FREE!**

CALL: PUBLIC HEALTH - (315) 376-5453 | WALMART - (315) 376-4174 | KINNEY DRUGS - (315) 376-7551

### www.lewiscounty.org/VaccineRegistration



## FIND A COVID-19 VACCINE. VISIT A VACCINATION SITE AT YOUR LOCAL PHARMACY OR SPONSORED LOCATION.





### **BOOK ONLINE**

www.lewiscounty.org/vaccineregistration

**Lewis County Public Health** (315) 376-5453

CALL

**Walmart** (315) 376-4174

Kinney Drugs (315) 376-7551 VISIT YOUR VACCINATION SITE

at your local pharmacy or sponsored site.

	22
	22
	22
- <b>m</b> - I	ייין

### **VACCINATION IS FAST AND FREE!**

CALL: PUBLIC HEALTH - (315) 376-5453 | WALMART - (315) 376-4174 | KINNEY DRUGS - (315) 376-7551

### www.lewiscounty.org/VaccineRegistration



# VACCINATION IS FAST, EASY, AND FREE!



### **VACCINATION IS FAST AND FREE!**

CALL: PUBLIC HEALTH - (315) 376-5453 | WALMART - (315) 376-4174 | KINNEY DRUGS - (315) 376-7551

### www.lewiscounty.org/VaccineRegistration



# YOU CAN DO IT!



Take control of your health by getting vaccinated.

### **VACCINATION IS FAST AND FREE!**

CALL: PUBLIC HEALTH - (315) 376-5453 | WALMART - (315) 376-4174 | KINNEY DRUGS - (315) 376-7551

### www.lewiscounty.org/VaccineRegistration



# IT'S YOUR CHOICE!



# **CHOOSE** to get vaccinated for COVID-19.

### **VACCINATION IS FAST AND FREE!**

CALL: PUBLIC HEALTH - (315) 376-5453 | WALMART - (315) 376-4174 | KINNEY DRUGS - (315) 376-7551

www.lewiscounty.org/VaccineRegistration



# TAKE CHARGE OF YOUR HEALTH!



## **GET VACCINATED FOR COVID-19.**

### **VACCINATION IS FAST AND FREE!**

CALL: PUBLIC HEALTH - (315) 376-5453 | WALMART - (315) 376-4174 | KINNEY DRUGS - (315) 376-7551

www.lewiscounty.org/VaccineRegistration



# EVERYONE AGES 12+ SHOULD GET A **BOOSTER SHOT**

### **COVID-19 Booster Doses**

### **Everyone ages 12+ should** get a booster shot



At least 5 months after second Pfizer shot

> Those ages 18+ who are 6 months after second Moderna shot or 2 months after J&J shot

### **VACCINATION IS FAST AND FREE!**

CALL: PUBLIC HEALTH - (315) 376-5453 | WALMART - (315) 376-4174 | KINNEY DRUGS - (315) 376-7551

### www.lewiscounty.org/VaccineRegistration