RAO | COMMUNITY HEALTH

UNCG

# VACCINE CONFIDENCE & MEDIA MESSAGING IN AFRICAN AMERICAN COMMUNITIES

Vaccine Confidence and Media Messaging in African American Communities

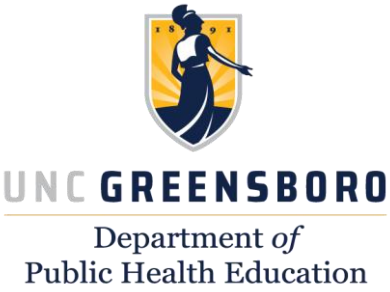
RAO Community Health Needs Assessment


Prepared by:

UNC Greensboro Center for Housing and Community Studies

UNC Greensboro Department of Public Health Education

On behalf of RAO Community Health




# CONTENTS

# EXECUTIVE SUMMARY

## Introduction and Purpose

A needs assessment is a process used by organizations to determine priorities, make improvements, or allocate resources. As part of a grant from the Centers for Disease Control and Prevention (CDC), RAO Community Health engaged UNCG in conducting a needs assessment in Mecklenburg and Cabarrus Counties, North Carolina. The purpose of this needs assessment is to identify drivers of COVID-19 and flu vaccine hesitancy; identify influential messengers, partners, and community gatekeepers in communities of color; and develop culturally appropriate and community-acceptable approaches to improving vaccination availability, accessibility, and confidence in these communities.

## Approach

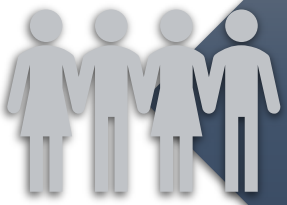
Our community needs assessment included 5 phases: 1) Refine purpose and scope, 2) Specify design and instruments, 3) Data collection, 4) Analysis and Interpretation, and 5) Report and Presentation. Are data collection consisted of both quantitative (community survey) and qualitative (community stakeholder interviews and focus groups) and secondary data sources (i.e. vaccination and COVID infection rates). The positionality of the research team was revisited throughout the need assessment process (research design, data analysis and reporting).

## Major Findings

1. The **main reasons** for getting vaccinated were family and friends, work and travel requirements, wanting to feel safe, fear of getting sick, and protecting loved ones.
2. **Institutional distrust** negatively impacts perceptions of medical and public health interventions to addressing the COVID19 pandemic.
3. Medical and public health organizations and well known in the community leaders were likely to perceived as trusted messengers and trusted sources **but this opinion varied**.

Recommendations

Acknowledge the Role of Institutional Racism



Implement Community Engaged Approaches

Create and Disseminate Influential Messaging that actively involves trusted community messengers

Incorporate Theoretical Frameworks that Examines the Role of Racism on Health

# BACKGROUND

This needs assessment was conducted by the UNCG Department of Health Education and the UNCG Center for Housing and Community Studies in response to a request from Ashley Carmenia, RAO Community Health, REACH Program Director and Candace Butler, RAO Community Health, Data Analyst. This community health needs assessment focuses on improving flu vaccination coverage rates and COVID-19 vaccination coverage rates among Black/African American adults in Cabarrus and Mecklenburg counties in North Carolina. The purpose of this needs assessment is to identify drivers of COVID-19 and flu vaccine hesitancy; identify influential messengers, partners, and community gatekeepers in communities of color; and develop culturally appropriate and community-acceptable approaches to improving vaccination availability, accessibility, and confidence in these communities.

## RAO Community Health

RAO Community Health, formerly Rosedale Assistance and Opportunities, was formed to provide support for medical, social, education, mental health, and HIV/ STI prevention needs of diverse and underserved populations within the Charlotte-Metro, and surrounding counties. The mission of RAO Community Health is to educate, advocate, and support diverse and underserved populations including the LGBTQ+ community, through compassionate and quality care.

## Vaccine Hesitancy in BIPOC Communities

January 21, 2019 marked the first diagnosed case of coronavirus in the United States (AMJC, 2021). Coronavirus is a highly infectious disease and respiratory illness caused by the newly discovered severe acute coronavirus type 2 (SARS-CoV-2) (WHO, 2021). Only nine months after the first confirmed case, the United states had over 8 million reported COVID cases and over 200,000 deaths (CDC, 2020). During the same time frame, North Carolina had over 250,000 reported cases and over 4,000 deaths from COVID-19 (NCDHHS, 2020). As of February 25, 2021 , there are 28.8 million cases, and over 500,000 deaths in the United States (CDC, 2021), and 849,630 cases and 11,000 deaths in North Carolina (NCDHHS, 2021).

The rates of COVID morbidity and mortality are the highest among people of color. According to the Center for Disease Control and Prevention, Non-Hispanic African Americans, Hispanics, and Indigenous people are almost four times more likely to be hospitalized and nearly three times more likely to die of COVID-19 than white people. These racial and ethnic disparities also exist in North Carolina. Non- Hispanic African American and Hispanic individuals are overrepresented in COVID-19 deaths in North Carolina, and inequities in housing, transportation, food access, and educational opportunity contribute to these disparities (Corbie- Smith et al, 2021).

After a vaccine was discovered and approved, vaccine administration began in the United States on December 14, 2020 and the first 3 million doses were distributed throughout the 50 states (BBC News, 2020). Vaccine shortages, inadequate healthcare infrastructures (i.e., health care personnel and facility shortages) and lack of a national communication plan led to major challenges to the vaccine administration rollout in the United States (Harvard Business Review, 2021). Despite higher rates of COVID cases and deaths among BIPOC, the vaccination rates are lower. According to Kaiser Family Foundation's February 1, 2021 statistics, Non-Hispanic African American and Hispanic people have received disproportionately fewer vaccine doses. In 20 of the states, the percentage of Non-Hispanic African American people who received COVID vaccines was half or less than the proportion of Non-Hispanic African American COVID cases (KFF,2021). Vaccine hesitancy is described as a delay in acceptance or refusal of vaccines despite availability of vaccine services (MacDonald, 2015). Vaccine hesitancy is complex and context specific and is influenced by several factors including complacency, convenience, and confidence (MacDonald, 2015).

African Americans are faced with many barriers that contribute to vaccine hesitancy. These factors include medical mistrust due to systemic racism and unethical medical treatment, misinformation about the vaccine and accessibility (i.e. lack of transportation or care giver care) and availability issues (i.e. proximity to vaccine clinics) (CDC, 2021). Recommendations for addressing vaccine hesitancy among African Americans includes inclusive community approaches that acknowledges the historical medical mistreatment of African Americans by listening to African Americans perceptions and concerns and working with trusted community sources and

influential community members and leaders (i.e. local radio, faith leaders, local healthcare providers barber and beauty shops) to tackle disinformation and misinformation about the COVID vaccine (CIDRAP, 2021; Goldblum, Thompkins, & Brown, 2020; Kodidela S, Kumar A, Gerth K, Walker C , & Kumar S, 2020, WebMed, 2021). In this proposal we seek to assess current attitudes, and knowledge of the COVID vaccine and COVID vaccine hesitancy among African Americans in Cabarrus and Mecklenburg counties in North Carolina.

## Project Context

### Cabarrus County

Cabarrus County has a total area of 364 square miles and a population of 213,273 (USDC, 2018). Interstate 85 passes southwest to northeast across the county's northern portion, and several U.S. and state highways serve the city. It ranks as the 11$^{th}$ most populated county in NC and has experienced a population increase of 16.53% since 2010 and 38.55% since 2000. The median age was 37.3 years old with 13.95% of the population 65 years or older and 25.98% being children under 18. The population was mostly White (71.5%) and Black/African American 17.43%. About 7.39% of the population are veterans (ACS 2019) and 7.98% of the population 18 years old and older are disabled (Experian Simmons 2018).

According to Data USA, the largest industries in Cabarrus County, NC are Health Care & Social Assistance (12,495 people), Retail Trade (11,892 people), and Manufacturing (9,007 people), and the highest paying industries are Management of Companies & Enterprises ($78,672), Utilities ($75,747), and Finance & Insurance ($67,226).

Prior to the COVID-19 pandemic, the unemployment rate was 3.1% in Cabarrus County. Now the unemployment sits at 5.6% after peaking at 12.4% in May 2020 (Bureau of Labor Statistics). According to the 2019 American Community Survey, the median household income in Cabarrus County was $74,709. Nearly one-in-ten (11.93%) were in poverty (ACS 2019). An estimated 7.84% of the people in Cabarrus County had no health insurance (ACS 2019). Educational attainment in Cabarrus County was 27.22% of adults completing at least high school or a GED and 60.50% of adults have a higher education degree (bachelor's, master's, or doctorate; ACS 2019). The

average freshman high school graduation rate in the 2009-2010 school year was 79.1% (National Center for Education Statistics). There are 3 head start centers in the county (Head Start 2019).

The major hospital in Cabarrus County is Atrium Health Cabarrus. There are 4 mental health facilities and 8 drug and alcohol treatment facilities in this area (SAMHSA, 2016). In addition, nearly half of the census tracts in Cabarrus County have been designated as Medically Underserved Areas for having too few primary care providers, high infant mortality, high poverty, and/or a high elderly population by the Health Resources and Services Administration (HRSA 2019). About a quarter of residents (22.11%) self-report poor physical health and a fifth (19.0%) report poor mental health in the past 30 days (CDC BRFSS, 2013).

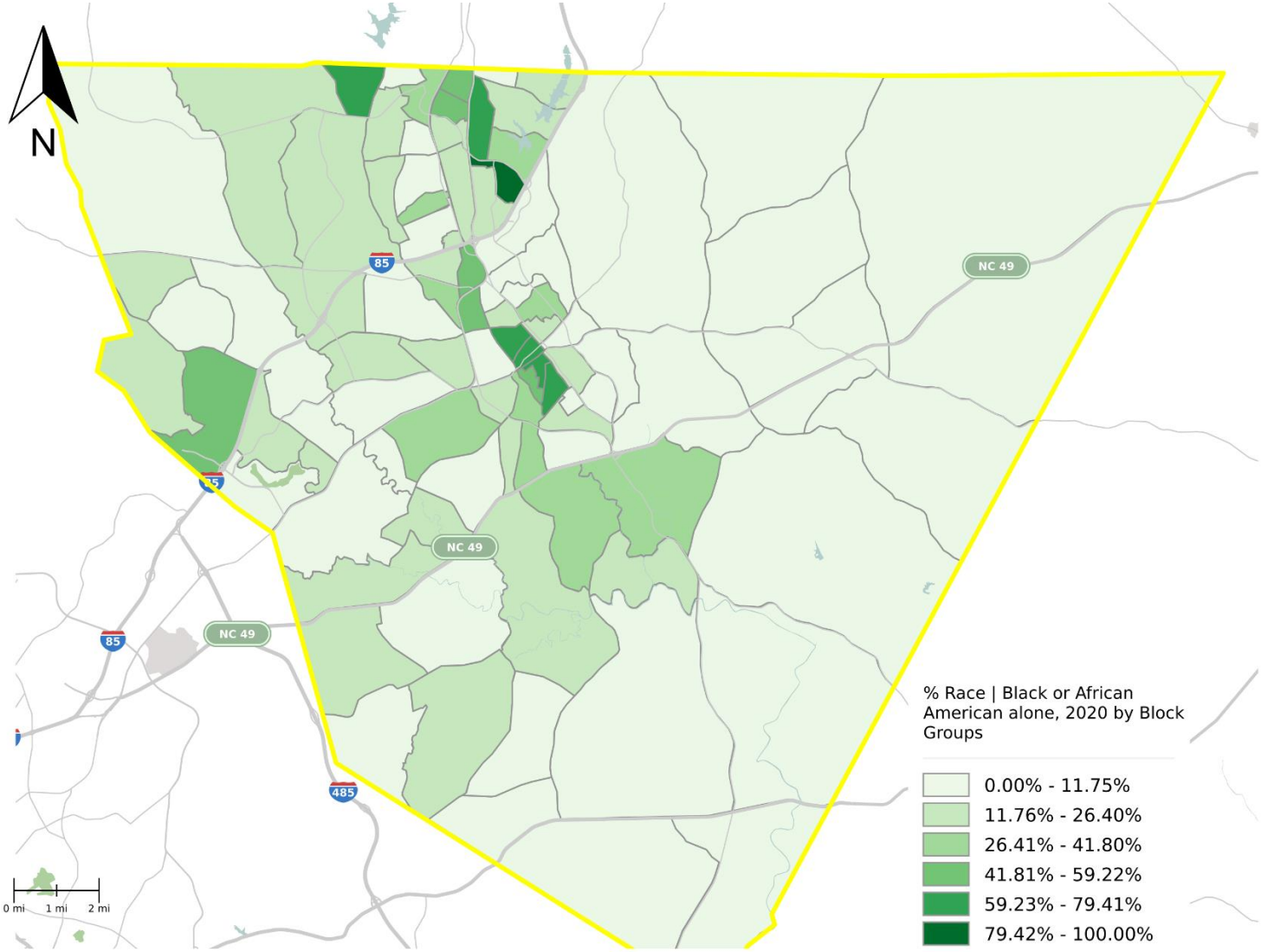



**Figure 1 - Cabarrus County - Black or African American Population (ACS 2020**

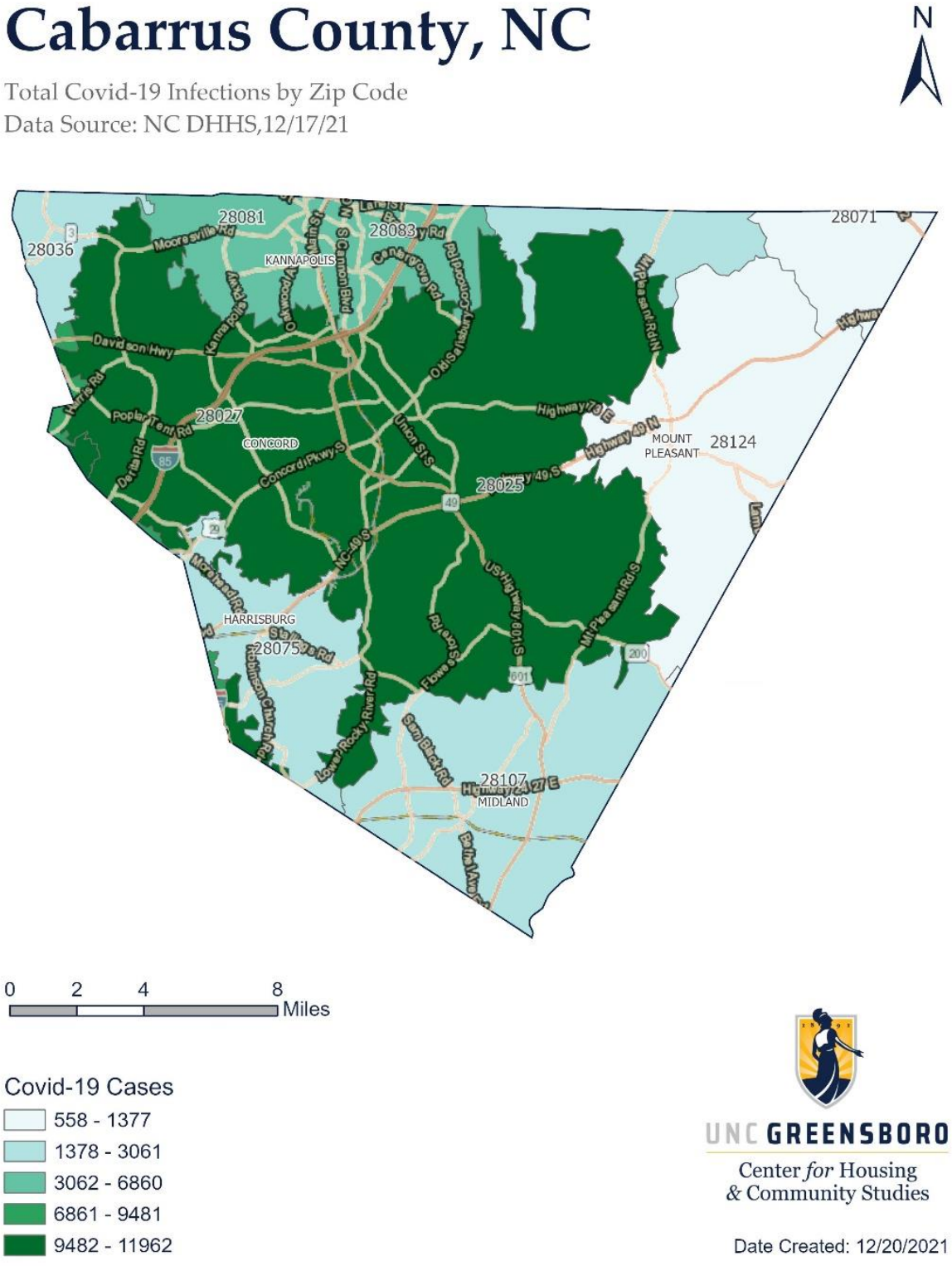



**Figure 2 - Cabarrus County Total COVID-19 Infections by Zip Code (NC DHHS 2021)**

# Cabarrus County, NC

Percent of Population Age 5 and Over that have been Fully Vaccinated Against Covid-19 by Census Tract (n=99,949)
Data Source: NC DHHS,12/10/21

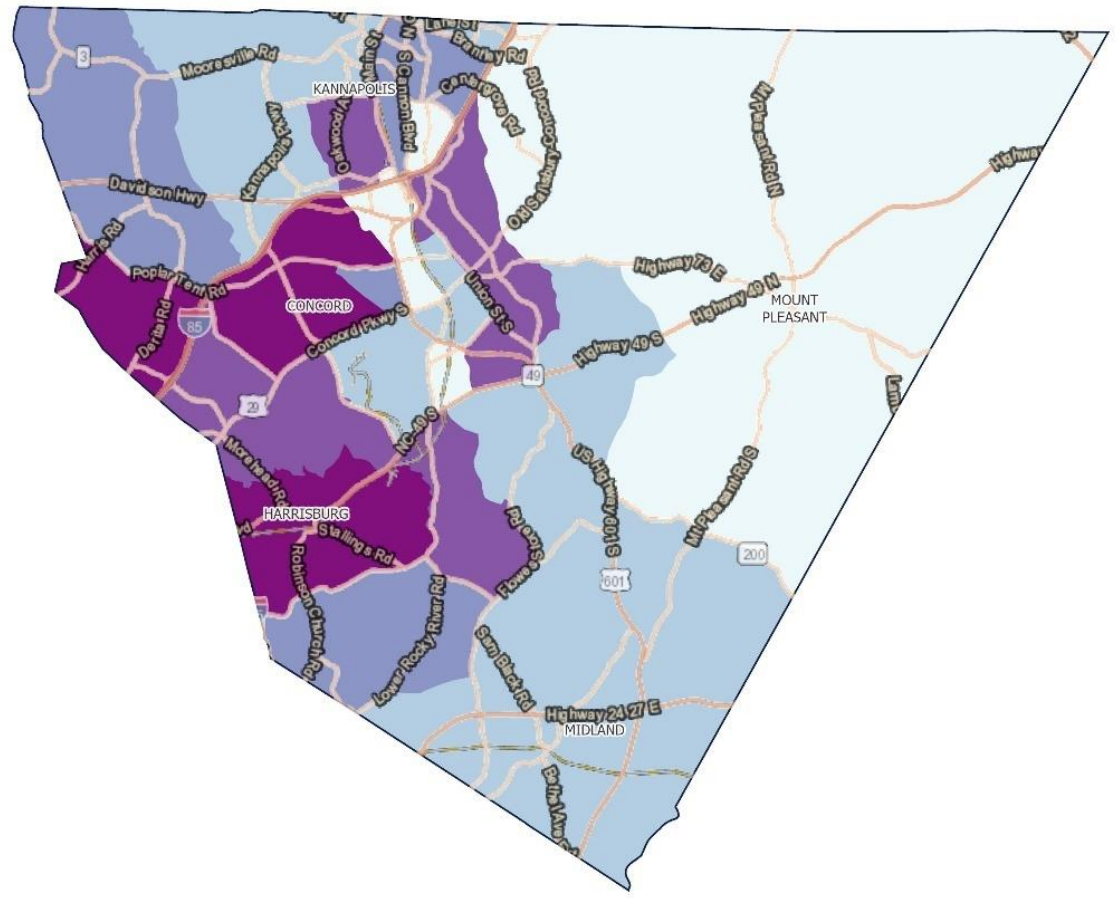



**Figure 3 - Cabarrus County Percent of Population Age 5 and Over that have been Fully Vaccinated Against COVID-19 by Census Tract (NC DHHS 2021)**

## Mecklenburg County

Mecklenburg County has a total area of 546 square miles and a population of 1,097,952 (USDC, 2018). It ranks the 2nd most populated county in NC and the population has increased 16.24% since 2010 and 36.66% since 2000. The median age was 34.6 years old with 10.96% of the population 65 years or older and 23.78% being children under 18. The population was mostly White (51.94%) and Black/African American (32.38%). About 5.31% of the population are veterans (ACS 2019) and 5.99% of the adult population are disabled (Simmons 2018).

According to Data USA, the largest industries in Mecklenburg County, NC are Finance & Insurance (67,513 people), Health Care & Social Assistance (63,027 people), and Retail Trade (59,355 people), and the highest paying industries are Management of Companies & Enterprises ($87,045), Finance & Insurance ($75,592), and Utilities ($71,542).

The unemployment rate was 3.1% in Mecklenburg County (Bureau of Labor Statistics, Dec 2019). According to the 2019 American Community Survey, the median household income in Mecklenburg County was $76,624. Nearly one-in-seven (14.70%) were in poverty (ACS 2019). Between 2014 and 2018, there were an estimated 11.87% of the people in Mecklenburg County had no health insurance (ACS 2019). Educational attainment in Mecklenburg County was 18.55% of adults completing at least high school or a GED and 71.01% of adults have a higher education degree (bachelor's, master's, or doctorate; ACS 2019). The average freshman high school graduation rate in the 2009-2010 school year was 70.3% (National Center for Education Statistics). There are 21 head start centers in the county (Head Start 2019).

The major hospitals in Mecklenburg County are Atrium Health University City, Novant Health Charlotte Orthopedic Hospital, and Atrium Health Mercy. There are 14 mental health facilities and 25 drug and alcohol treatment facilities in this area (SAMHSA, 2016). In addition, there is one census tract in Mecklenburg County have been designated as Medically Underserved Areas for having too few primary care providers, high infant mortality, high poverty, and/or a high elderly population by the Health Resources and Services Administration (HRSA 2019). About one-in-five residents (21.4%) self-report poor physical health and a fifth (19.61%) report poor mental health in the past 30 days (CDC BRFSS, 2013).

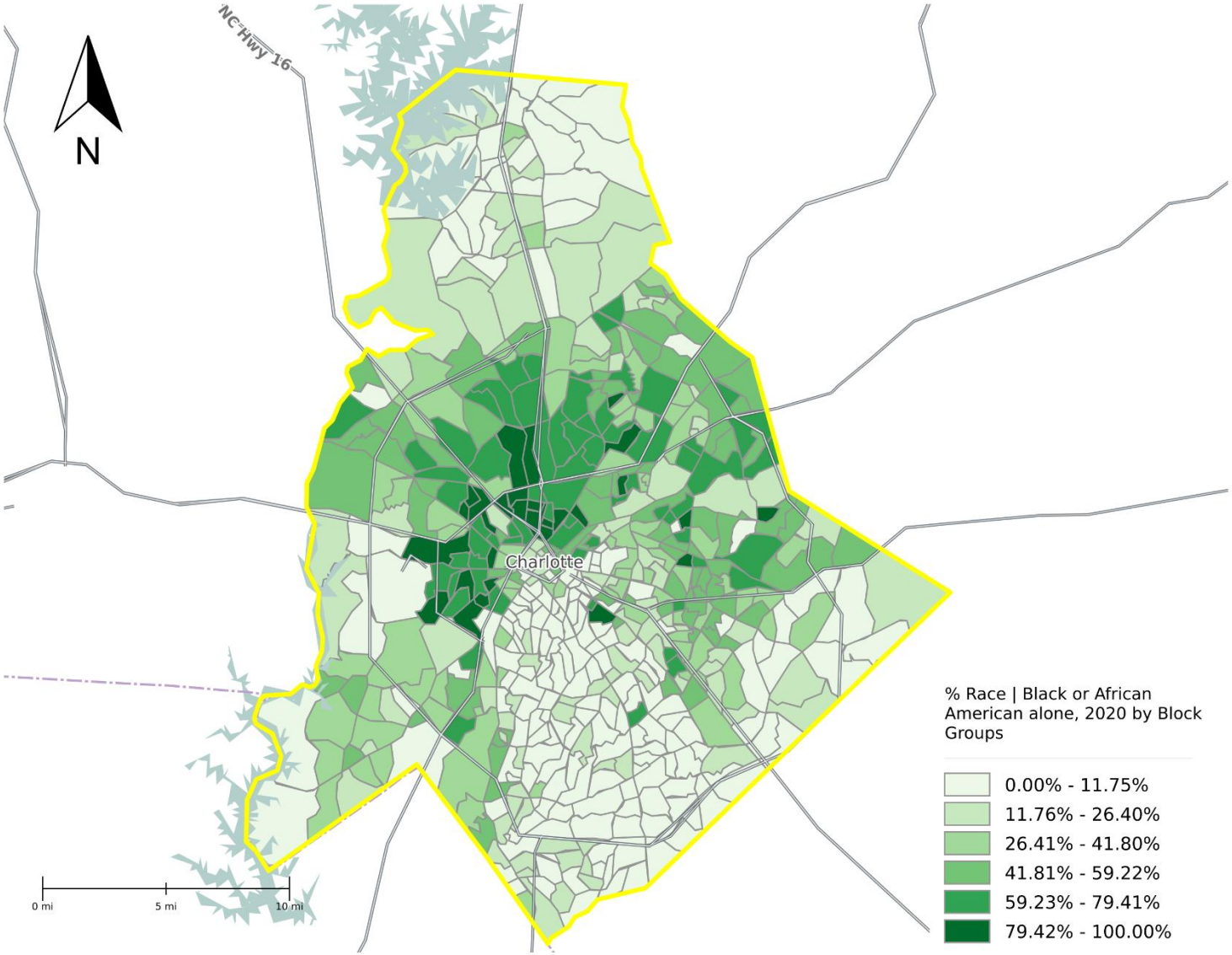



**Figure 4 - Mecklenburg County - Black or African American Population (ACS 2020)**

# Mecklenburg County, NC

Total Covid-19 Infections by Zip Code
Data Source: NC DHHS, 12/17/21

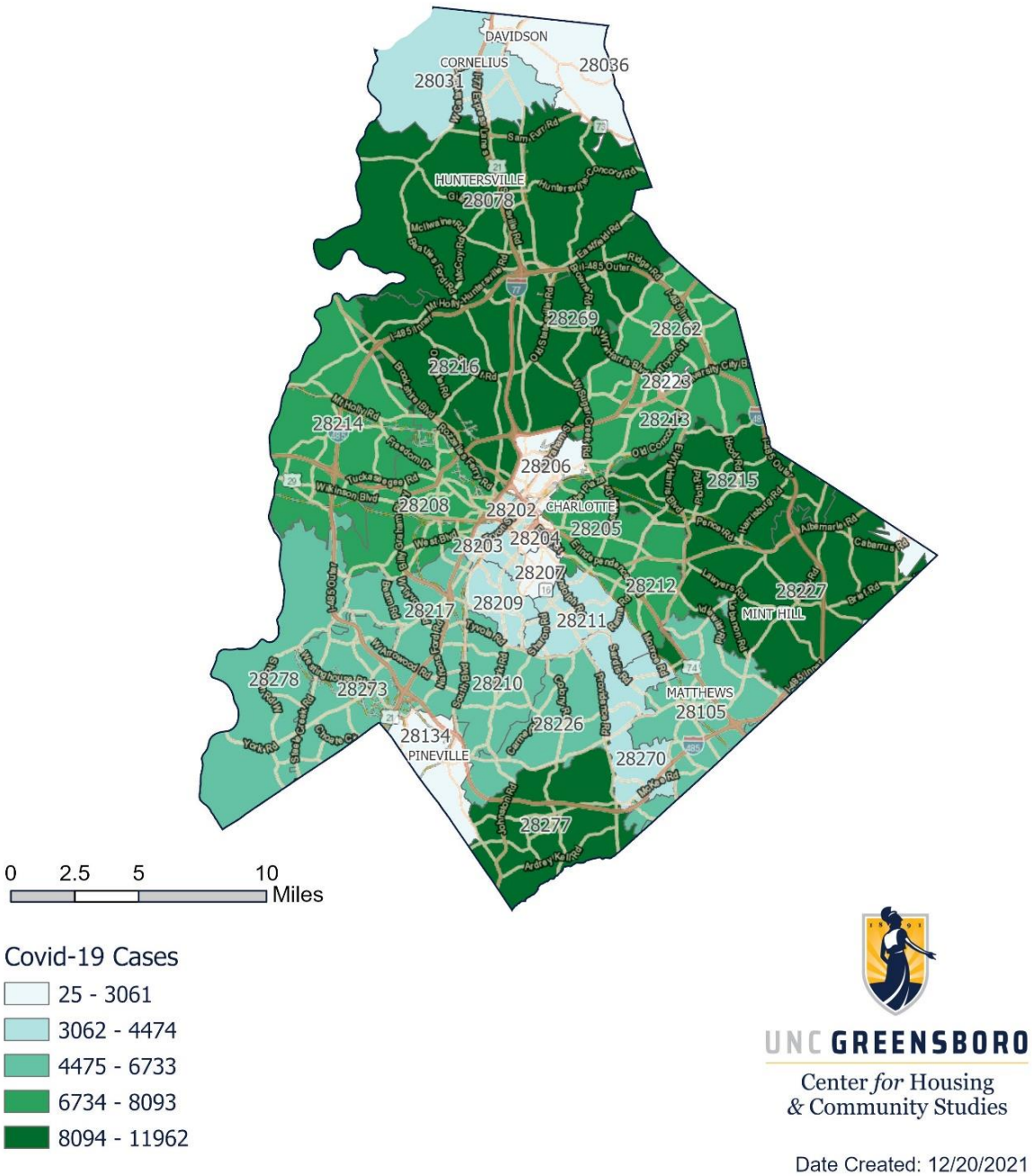
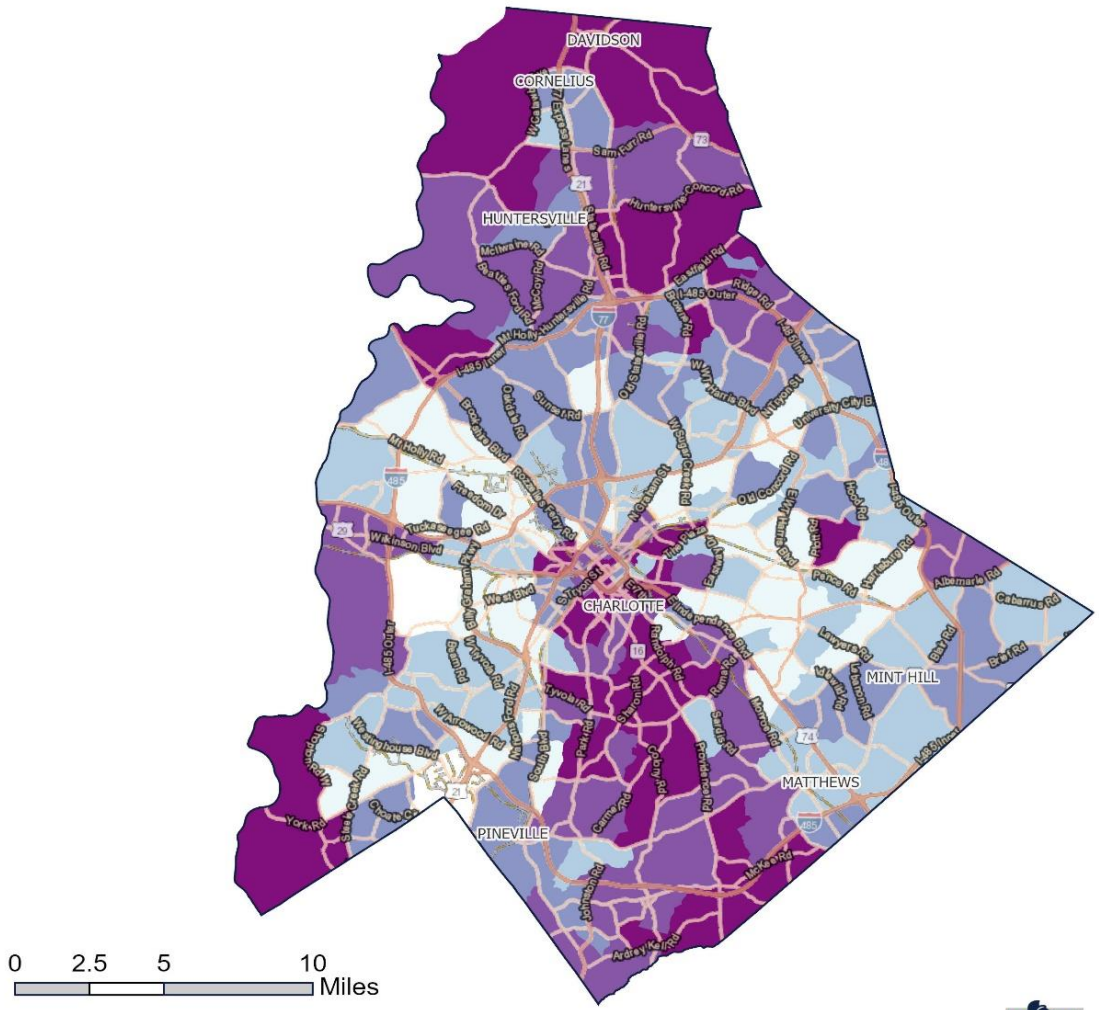



**Figure 5 - Mecklenburg County Total COVID-19 Infections by Zip Code (NC DHHS 2021)**

# Mecklenburg County, NC

Percent of Population Age 5 and Over that have been Fully Vaccinated Against Covid-19 by Census Tracts (n= 1,074,475)
Data Source: NC DHHS, 12/10/21




UNC GREENSBORO
Center *for* Housing & Community Studies

Date Created: 12/20/2021

**Figure 6 -Mecklenburg County Percent of Population Age 5 and Over that have been Fully Vaccinated Against COVID-19 by Census Tract (NC DHHS 2021)**

## Project Approach

The needs assessment involved a modular, mixed-method design combining qualitative and quantitative data. These complementary qualitative and quantitative methods allowed for "triangulation" or increased reliability and validity of findings. Qualitative data was collected from clients, constituents, and stakeholders through Community Stakeholder Interviews and Focus Groups This rich data provided validity and depth of understanding to the issues. Quantitative data was also collected from clients and constituents using an online survey delivered through listservs, email databases, client contact list, as well as through direct solicitation at point-of-contact agencies such as DSS, social service agencies, health departments, housing authorities, homeless services, courts, churches, other non-profits. This quantitative data provided breadth and stronger generalizability to the findings.

In addition to the data collection and analysis, the UNCG Principal Investigators also provided technical support and advising to RAO Community Health. We met monthly with the project sponsors and principal beneficiaries, presented progress reports on the status of data collection, and produced a final report identifying community needs and recommendations for enhancing current services and developing new resources to address needs as they relate to vaccinations for COVID-19 and the seasonal flu.

## Researchers Positionality

"Positionality refers to the stance or positioning of the researcher in relation to the social and political context of the study—the community, the organization or the participant group. The position adopted by a researcher affects every phase of the research process, from the way the question or problem is initially constructed, designed and conducted to how others are invited to participate, the ways in which knowledge is constructed and acted on and, finally, the ways in which outcomes are disseminated and published." "Reflexivity generally refers to the examination of one's own beliefs, judgments and practices during the research process and how these may have influenced the research." The positionality of the research team was revisited throughout the need assessment process (research design, data analysis and reporting) by incorporating practices such as discussing reflection prompts and conducting a social identity

mapping activity during debriefing after meetings through the community needs assessment process.

## Specific Project Activities

### Public/Stakeholder Meetings ~ Focus Groups

The focus group is a common methodology that has been used as a means of data collection in the social sciences for at least a century. Focus groups gained popularity in the 1930s and 40s with Robert K. Merton who used them as a tool for gauging reactions to wartime propaganda materials (Morgan, 1988; Hollander 2004). Since then, the methodology has been employed in a wide variety of research setting that call for a deep understanding of a groups' perspective on a particular issue. It is through the synergistic, collaborative, and interactive atmosphere of the focus group that participants are influenced to express many ideas that may have been more difficult to express individually (Morgan, 1988).

There are many advantages to using focus groups in evaluation and needs assessments as they provide an effective method for identifying need and barriers, framing appropriate messaging, and designing relevant strategies for outreach (Garfield, Malozowski, Chin, Narayan, Glasgow, Green, Hiss, and Krumholz 2003). Vincent, Clark, Zimmer, and Sanchez (2006) note that focus groups are an "efficient method of obtaining information about an underserved population's experience" (96). Focus groups produce more in-depth information than quantitative research methods, yet the value of focus group research is largely dependent on how well the focus groups are designed and executed and how carefully the data are collected and analyzed.

Six focus groups (four in Mecklenburg and two in Cabarrus) will be held via zoom. Community recruitment will target underserved communities of color and populations where vaccine hesitancy has already been identified. The focus group protocols were developed by the Public Health Research team. The sessions were facilitated by Dr. Erica Payton Foh and were digitally recorded for the purposes of providing a reliable record of the sessions. Recordings were

analyzed for key findings using a Grounded Theory[1] approach. These sessions explored issues and experiences related to the themes that emerged from the community stakeholder interviews.

### Community Stakeholder Interviews

Community stakeholders in this needs assessment included people with a diverse set of health education experience, key community leaders and cultural brokers, and related professionals across the counties who serve BIPOC communities. Community stakeholders were assured that the information they shared would be kept completely confidential, so they could feel free to speak openly and honestly about their observations and concerns. In order to honor this commitment, all reports were aggregated results and use quoted material only attributed by agency type or position. An interview guide or protocol was developed by the Public Health Research team prior to starting interviews. To identify the appropriate community stakeholders to interview, the research team in conjunction with RAO, created a list of professionals who, because of their position, would be knowledgeable about health needs and services within the areas they served. The research team sent emails each potential community stakeholder requesting cooperation for an interview. A time was then set for zoom interviews. Mr. Bruce Rich of the UNCG CHCS research team conducted all interviews. Interviews were recorded and transcribed by the CHCS research team. Transcripts were thematically coded and analyzed by CHCS staff.

### Public Multi-Modal Surveys

To supplement these data sources, we also designed an online and paper survey of clients and community residents in English. An ideal survey manages to control for error by ensuring that each member of a population has an equal chance of being included in the sample, that sample members are randomly selected in large enough numbers to assure that they are representative and that everyone who is included in the sample responds. Surveys, whether distributed by postal mail, telephone, or Internet, seldom achieve these ideal conditions. Similar to postal mail surveys prior to the 1970s, most email and internet-based surveys have not had response rates

[1] Noble H, Mitchell G. 2016. "What is grounded theory?" *Evidence-Based Nursing*.19:34-35. http://dx.doi.org/10.1136/eb-2016-102306

consistently high enough to be generalizable to any population. None-the-less, internet surveys have the potential to be a practical and valuable resource for social science and planning studies. The design flexibility, geographic reach, anonymity, and minimized interviewer error of internet-based surveys are superior to telephone and mail delivery methods. In attempts to maximize the survey response rate, the community survey was publicized through stakeholder groups, direct emails, community listservs, government websites, media outreach and through online groups (Facebook, Twitter, etc.). As incentive, ten $100 gift cards were made available through a drawing.

## Proposed Timeline

We proposed that the project would be conducted over a 6-month (April 2021 - September 2021). The actual timeline was from May 2021 to December 2021. Project team members scheduled re-occurring monthly check in meetings. The need assessment consisted of five stages: Refine Purpose and Scope, Specify Design and Instruments, Data Collection, Analysis and Interpretation, Report and Presentation.

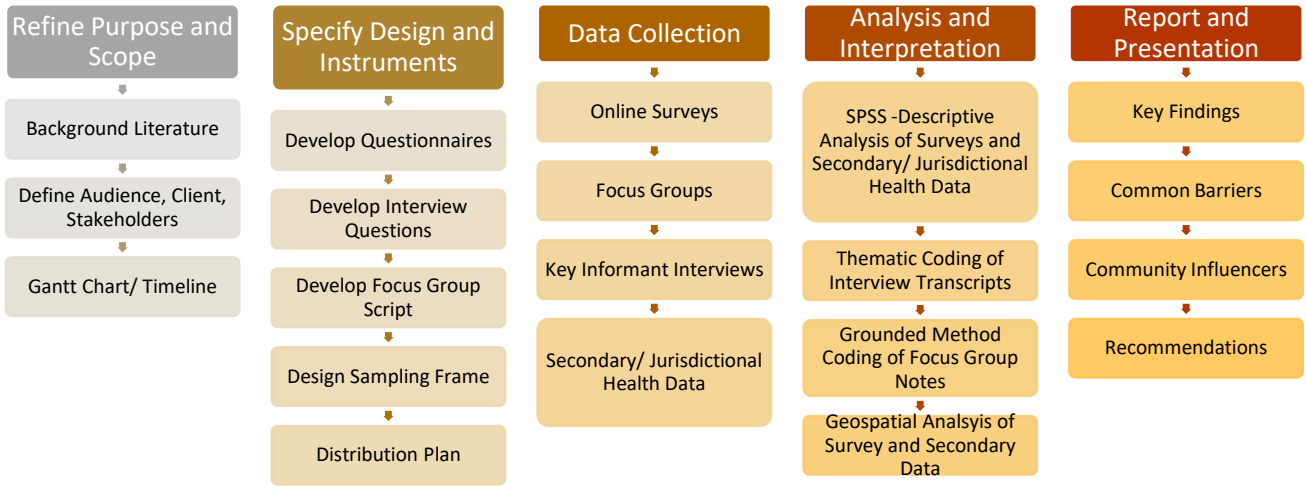



**Figure 7 - Project Stages**

### Stage 1: Refine Purpose and Scope

An initial step in any needs assessment is to refine the purpose and scope. In this stage, we provided a review of the literature on vaccination coverage rates for BIPOC communities and vaccine hesitancy and confidence. This review searched the current scholarly and professional literature, summarized the current findings, and synthesized studies into recommendations of best practices that may be adapted to help refine this project.

### Stage 2: Specify Design and Instruments

During this stage, recruitment strategies for key community stakeholders and participants in focus groups was developed. Likewise, the sampling frame and strategies for survey distribution were created and all instruments were developed during this stage.

### Stage 3: Data Collection

Our initial plan for data collection included surveys of community members (Sills, Gruber), interviews with community stakeholders, and focus group sessions. Data collection began in June and continued throughout the project timeline.

### Stage 4: Analysis and Interpretation

Interview and focus group sessions were digitally recorded and transcribed. Transcripts were coded and analyzed using a grounded thematic approach. Interviews were analyzed to identify recurring themes and unique insights, and then compared to the data collected through survey, focus groups, secondary data, and literature analysis. Survey responses were coded and entered into IBM Statistical Package for the Social Sciences (SPSS). Simple descriptive and bivariate analysis were conducted with the survey data using the statistical software package.

### Stage 5: Report Results and Recommendations

The final report provides descriptive and bivariate analysis of survey and quantitative data, and content analysis of all data collected. Findings were meant to be presented in an easy-to-read, straightforward manner without technical jargon and with the assistance of figures, charts, maps and diagrams to clarify important findings. The reports include an executive summary, methodological overview, narrative summary of findings, conclusions and recommendation, and appendices with additional reference tables, survey and interview instruments.

# LITERATURE REVIEW

## Background

January 21, 2019 marked the first diagnosed case of COVID-19 illness in the United States.[1] COVID-19 illness (sometimes called coronavirus disease) is a highly infectious respiratory illness caused by a virus, severe acute respiratory syndrome coronavirus type 2 (SARS-CoV-2).[2] In the U.S., rates of COVID-19 morbidity and mortality are the highest among people of color. According to the Centers for Disease Control and Prevention (CDC), Indigenous people are nearly 4 times as likely and non-Hispanic African Americans and Hispanics/Latinos are nearly 3 times as likely as non-Hispanic whites to be hospitalized due to COVID-19.BIPOC (Black, Indigenous, and People of Color) are 2 times as likely as whites to die from COVID-19.[3] These racial and ethnic disparities are mirrored in North Carolina. Non- Hispanic African American and Hispanic/Latino individuals are overrepresented in COVID-19 deaths in North Carolina, and inequities in housing, transportation, food access, and educational opportunities contribute to these disparities.[4] Racial/ethnic inequities in chronic diseases that place people at higher risk for COVID-19 illness complications also contribute to racial/ethnic inequities in COVID-19 severity and death.

Since the first vaccine for the COVID-19 illness was developed, major vaccine distribution and administration efforts have been implemented nationally and internationally to promote vaccine uptake. Major efforts to distribute the free vaccines in the United States were implemented at mass vaccine clinics at large sites such as coliseums and malls, smaller venues including local pharmacies, and community events including vaccine clinics in neighborhoods and at local churches. Yet vaccination rates remain relatively low. Overall, North Carolina's vaccination rate is 52% with vaccination rates lower in Cabarrus county (46%), about the same in Guilford County, (51%) and slightly higher in Mecklenburg (54%).[5,6]

Additionally, despite higher rates of COVID-19 cases and deaths among BIPOC compared with whites, vaccination rates among BIPOC are lower. According to Kaiser Family Foundation's October 26, 2021 national statistics, Non-Hispanic African American and Hispanic people have received vaccine proportionate to their share of the population. However, there are differences at the state level. . In 20 of the states, the percentage of non-Hispanic African American people

who received COVID-19 vaccines was half or less than the proportion of non-Hispanic African American COVID-19 cases.[7]

Increasing vaccination rates as a method to effectively reduce the spread of coronavirus has been recommended from health agencies including the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO). CNBC reported that Dr. Paul Offit, a voting member of the Food and Drug Administration's Vaccines and Related Biological Products Advisory Committee, stated, "We need to have at least 80% of the population vaccinated to truly have some form of herd immunity."[8] Herd immunity can occur when enough of the population are become immune, either through previous infection or vaccination, and as a result the risk of infection for people who lack immunity is greatly reduced.[9] Different diseases require different levels of vaccination in order to achieve herd immunity, generally based on the infectiousness of the disease. The Delta variant (the SARS-CoV-2 variant dominant in the US since July 2021) is more highly infectious than previous variants, and so the level of vaccination estimated to reach herd immunity is higher than previous estimates.

The purpose of this literature review is to define terms associated with vaccine hesitancy and identify the contributing factors for vaccine hesitancy. We will also provide an overview of promising strategies to addressing vaccine hesitancy particularly among Black, Indigenous and People of Color (BIPOC).

## Methods

We conducted a search of the literature on vaccine hesitancy and uptake using Google Scholar and academic databases (i.e., PubMed and EBSCO Academic Search Complete) for published peer-reviewed scientific articles and we used the Google Search engine to locate current and credible news reports and statistics on the topic. This review includes articles that provides definitions for vaccine hesitancy, identifies determinants and contributing factors for vaccine hesitancy, and identifies current approaches to addressing vaccine hesitancy.

### Terminology and Definitions

In 2014, the World Health Organization (WHO) Strategic Advisory Group of Experts (SAGE) Vaccination Work Group published a report on strategies to addressing vaccine hesitancy and

included a systematic review on the topic.[10] The following definitions were taken from this report:

*Vaccine hesitancy* is "a behavior, influenced by a number of factors including issues of confidence (do not trust vaccine or provider), complacency (do not perceive a need for a vaccine, do not value the vaccine), and convenience (access)."

*Vaccine confidence* means "trust in the effectiveness and safety of vaccines and in the system that delivers them, including the reliability and competence of the health services and health professionals and having trust in the motivations of the policy-makers who decide which vaccines are needed and when they are needed. Vaccination confidence exists on a continuum, ranging from zero-to-100% confidence. Vaccination confidence is only one of a number of factors that affect an individual's decision to accept a vaccine."

*Vaccine complacency* exists "where perceived risks of vaccine-preventable diseases are low and vaccination is not deemed a necessary preventive action. Besides perceptions of the threat of disease severity and/or transmission, complacency about a particular vaccine or about vaccination in general can be influenced by under-appreciation of the value of vaccine (effectiveness and/or safety profile) or lack of knowledge."

*Vaccination convenience* pertains to "the quality of the service (real and/or perceived) and the degree to which vaccination services are delivered at a time and place and in a way that is considered appealing, affordable, convenient and comfortable, also affects the decision to vaccinate. Vaccination convenience and complacency are also determined by the priority that an individual places on vaccination."

Recently, an article published in the *Journal of the American Medical Association* (JAMA) introduced a newer term, *vaccine apathy* which is a term that can be used to distinguish vaccine hesitant individuals from vaccine apathetic ones. Vaccine apathy is "disinterest characterized by weak attitudes and little time spent considering the vaccination".[8] Unlike vaccine hesitant populations, those who might be described as apathetic are not delaying receiving a vaccine due to weighing out the benefits versus the risk of the vaccine. They are, for the most part, just not interested.

Prior literature on vaccine hesitancy and vaccine confidence indicates that non-vaccination results from low confidence, poor convenience, complacency, and/or utility calculation.[11] Utility calculation, known as the “fourth C," involves weighing the pros and cons of vaccination, or the risks of vaccination versus risk of infection.[11]

**Determinants and Contributing factors for Vaccine Hesitancy**

There are multiple factors or determinants for vaccine hesitancy across the social ecological levels. The SAGE Working Group on Vaccine Hesitancy uses three distinct categories:[12,13]

- Contextual/Structural – economic, political, social and cultural, environmental, health systems and institutional factors
- Individual or Group - individual perceptions, peer influences and social norms regarding vaccines
- Vaccine Specific - Directly related to vaccine or vaccination including availability, administration, cost, delivery, and design of the vaccination program

People may refuse vaccines for religious, scientific, and/or political reasons. While this has been the case since the 19th century, the current conversation around vaccines is different because of characteristics of vaccines (e.g., combination vaccines) and characteristics of public communication about them (e.g., fast, global, and not centered solely on experts).[14] The causes of vaccine hesitancy vary around the world by population and vaccine, as well as whether the vaccine behavior is that of adults acting for themselves or making decisions for their children. In the past 10-15 years, two changes--the development of HPV vaccines and the rollout of pandemic influenza vaccines (e.g., 2009 H1N1) vaccines--have led to an increase in scientific study of vaccine hesitancy.[14] Most studies on childhood vaccines examine vaccines in general rather than focusing on one vaccine. Studies have shown mixed results for socioeconomic status and education as determinants of vaccine hesitancy, finding that both low and high SES and education can be barriers to vaccine acceptance. There is also some indication that education may have different effects in different contexts: in some settings low education (and specifically illiteracy) is associated with low knowledge about vaccines, but in others, low education is linked to anti-vaccination attitudes.[14]

A systematic review of literature from 2007-2012 (Larson et al. 2014) uncovered several key findings:

- Exposure to vaccine-promoting mass media or community messages is associated with greater vaccine acceptance in a number of studies. On the other hand, negative news stories can act as a barrier to vaccination.[14]
- Costs including money and time, transportation distance and difficulty, and administrative hassles are frequently-cited barriers to vaccination. One study showed that for vaccines that require multiple doses, logistical and time barriers explained partial immunization, while attitudes and norms explained non-immunization.[15]
- Common factors associated with vaccine acceptance include social norms from friends and family, coworkers, government, and health care professionals; health knowledge and belief in evidence-based medicine; and engaging in other health-seeking behaviors such as prenatal care and having a hospital-based birth. Awareness of vaccine-preventable diseases and perception of these diseases as severe were also associated with vaccine acceptance.[14]
- "A variety of factors were identified as being associated with vaccine hesitancy but there was no universal algorithm; the independent and relative strength of influence of each factor is complex and context-specific - varying across time, place, and vaccines," (Larson et al. 2014, p. 2155).[14]

The Kaiser Family Foundation is leading an ongoing national research project to track the public's attitudes and experiences with the COVID19 vaccinations. The June 2021 article "The KFF COVID-19 Vaccine Monitor"[16] discussed how awareness of FDA approval of vaccines impacts perceptions and decision making regarding the COVID-19 vaccines. The authors reported that "three in ten unvaccinated adults, rising to about half of those in the 'wait and see' group, say they would be more likely to get vaccinated if one of the vaccines currently authorized for emergency use were to receive full approval from the FDA." However, the article also suggested that FDA approval may be a proxy for general safety concerns, as two-thirds of adults (including a large majority of unvaccinated adults) either believe the vaccines currently available in the U.S. already have full approval from the FDA or are unsure whether they have full approval or are authorized for emergency use. The article also noted that other incentives and interventions, such as a million-dollar lottery could motivate about a quarter of the unvaccinated to get a shot, while mobile vaccine clinics motivate about one in six overall, but notably higher likelihood

among Black and Hispanic adults. This suggests community outreach could be advantageous in reducing racial and ethnic disparities in vaccination rates.[16]

## Main Findings for Approaches to Addressing Vaccine Hesitancy

Three overarching strategies to increasing vaccine confidence include applying communication and messaging strategies, establishing partnerships through collaboration, and implementing interventions that are multi-component to address multi-level barriers to vaccine uptake.

### Communication Strategies and Messages

Vaccine messages should be tailored to specific populations and the communication of these messages should be facilitated through authentic community engagement.[17] This means including parents, guardians, and children in communication strategies and identifying and centering the voices of trusted messengers in the community.[18,19] These messages should also promote equity and acknowledge systemic racism as a contributing factor for mistrust.[20,21]

Additionally, as noted in the literature, the framing of vaccines messages is important and within certain contexts there is a need to reframe vaccine hesitancy to vaccine confidence.[19]

### Partnerships through Collaborations

Partnerships should be established with local and state public health officers, healthcare professionals and academics and these partnerships should apply community engagement approaches to engage community organizers, activists, faith-based and other influential community leaders in developing and implementing vaccine awareness campaigns and dissemination programs.[17,22,23] Also, as a collaborative and inclusive partnership, efforts should be implemented that promote health equity and improve convenience and access to vaccines in community settings.[24]

### Multi-component Strategies

Partnerships should be established to apply multi-component approaches to addressing multi-level barriers.[13] These strategies should be tailored to address determinants for specific sub-populations and communities, and should address perceived knowledge and efficacy regarding the vaccines. These interventions should also be implemented at the individual, interpersonal, community, and structural levels. Vaccine behaviors are at least as much about what one feels

as what one knows. Often times, individuals weigh their feelings and information about risk of infection with their feelings and knowledge about the risk of vaccine adverse events.[11] Those "who lack confidence [in the safety or efficacy of vaccine] and have a negative attitude are the hardest to convert,".[11] An article published by Betsch et al, 2015, suggest that different types of non-vaccinators have different sets of 'active determinants' that influence their decisions and therefore, interventions should be targeted to these differences." Interventions implemented at the individual level should focus on increasing access to accurate information, changing risk perceptions and self- efficacy.[11]

Informational interventions can shape risk perceptions and support positive attitudes. The public needs to hear the social--not just individual--benefits of vaccination (e.g., those who can, should get vaccinated to protect those who can't-- those who are too young or have conditions that preclude vaccination or make it less effective.) Believing misinformation may also be connected to a desire to maintain a certain identity (citing Sobo 2015).[11] Therefore, debunking misinformation should be done in ways that uphold or increase an individual's self-worth.

Interventions that address attitudes and social norms should also be implemented. With vaccination behavior, researchers observe that strong anti-vaccination attitudes are sometimes associated with particular social identities or worldviews; these identities and perspectives can "impede rational decision making" citing Fazio & Olson 2014].[11] "Norms can be counterproductive if the social norm is to refuse vaccination," -- and this may be true in some subgroups around COVID19 vaccination.[25] Understanding the vaccination decision making process and determinants should aid the development of specific strategies and points of the process to target with interventions. Two recent studies included theoretical constructs from the Health Belief Model and Theory of Planned behavior to assess intentions towards receiving a COVID-19 vaccine.[26,27] Structural interventions can increase vaccination by disrupting "known biases and behavioral habits" (Betsch et al 2015 p. 65).[11] Other interventions can increase follow-through on intentions, by facilitating steps to complete vaccination or providing reminders.

## Conclusion of Literature Review

Vaccine hesitancy and confidence is a complex and multi-faceted issue. Vaccine hesitancy as described by the SAGE Working group is a continuum where individuals vary in their degree of acceptance or hesitancy. Given the additional racial and ethnic disparities, the historical marginalization of ethnic minorities and the historical context of medical mistrust, reframing and using terminology such as vaccine confidence or acceptance is recommended for tailored messages. Additionally, given the complexity of the issue, community engaged interventions should be implemented at all ecological levels and trusted community leaders should be involved in communicating these efforts.

## COMMUNITY STAKEHOLDER INTERVIEWS

For the first phase of our data gathering, we conducted semi-structured, in-depth one-on-one interviews of community stakeholders with experience, insight or opinions on the vaccine administration process, including neighborhood leaders, educators, administrators and health care providers. Our interviews were conducted between mid-June and the end of August of 2021. Interviews were conducted remotely. The interview subjects were assured their comments would not be reported in a manner that would identify the person speaking by name or by affiliation. The comments directly quoted in this report are lightly edited for clarity. Interview duration ranged from thirty to forty-five minutes.

These organizations vary widely in their purposes and their outlooks. Often within the same sector and even within the same organization, we encountered a variety of opinions and ways of thinking about vaccine acceptance. Our promise of confidentiality elicited frank discussion. The level of knowledge and expertise proved, not surprisingly given the professional stature of our community stakeholders, high across the board. Despite the markedly different roles they play in health care, they agreed on many things. Their echoed the findings of others across the nation – a consensus which has been developing rapidly at the same time as our study proceeded. They agreed that over time it's become more difficult to expand vaccine acceptance; that while access to the vaccine has been eased considerably the list of reasons not to get vaccinated seems to get longer every day; that mistrust rooted in historical inequities is a continuing obstacle to vaccine acceptance in parts of the African American community; and that education and outreach methods are getting more effective and more targeted.

In this report, we'll review many facets of COVID-19 vaccine administration and acceptance in Mecklenburg and Cabarrus communities: best practices in vaccine delivery, the cacophony of conflicting vaccine information, what barriers to access still remain, the prospects for vaccine mandates, and other topics. But we'll start with a look at some basics. According to our community stakeholders, what are the reasons people give for why they decided to get vaccinated – and why they didn't.

We conducted sixteen interviews, representing the following fifteen organizations:

- Atrium / Community Care Partners
- Avita Pharmacy
- Cabarrus Health Alliance
- Charlotte Community Health Clinic
- Freedom Fighting Missionaries
- Global Bridge Pharmaceutical
- Lakeview Neighborhood Alliance
- Lionel Lee Jr. Center for Wellness
- NAACP Charlotte Branch
- Novant Health Care
- Premier Pharmacy and Wellness Center
- Roof Above Men's Shelter of Charlotte
- Seversville Community Organization
- St. Marks United Methodist Church
- West Boulevard Neighborhood Coalition

## Why get vaccinated?

In the introduction, we mentioned that when we talked to our stakeholders, we found agreement on a number of topics. One very substantial agreement was on the subject of why people choose to get vaccinated. "People want to stay alive," one person told us. "It's very simple, you know, I see people dying, I don't want to die, I don't want anybody in my family to die, so I'm going to take the vaccination." People are concerned about their own health, and just as often, our experts said, they are concerned about the health of their families. "They believe that it's going to protect them and their families," we were told. Another person said, "People were getting vaccinated to protect themselves and their loved ones."

*"People want to stay alive. It's very simple, you know, I see people dying, I don't want to die, I don't want anybody in my family to die, so I'm going to take the vaccination."*

Of particular worry are family members at greater risk because of age or health condition. Many said older relatives were the most vulnerable. “There’s someone in their family who's older who they don't want to put at risk,” said one stakeholder.

Even some of those who were resistant to the vaccine are persuaded by this fear. “A lot of people also choose to get vaccinated,” according to one interview subject, “not because they want to, but because they have loved ones who are older, who they are getting vaccinated for.” They were persuaded by concerns above and beyond their own opinion of the vaccine, an element of persuasion that we will see more frequently when we talk about vaccine hesitance in the later sections of this report.

These concerns about one’s own and one’s family members’ safety are magnified when we take into account the increased risks arising from preexisting conditions. People started to understand that obesity, heart disease and other conditions put people in greater jeopardy. One person told us, “They feel like ‘I already have these preexisting conditions. If I get COVID, I'm gonna get sick, or I can get worse.’ So that was their reasoning behind that.”

There were other reasons, according to our stakeholders. Some got the vaccine because they’d already seen the ravages of COVID-19 up close. “They get the vaccine because there's somebody in their life who has been negatively impacted by COVID-19, be it they contracted it early on, and got really sick, or you know, or died.” And beyond the immediate circle of family and friends, some people also had concern for the well-being of the larger community. This has been a core component of the vaccine messaging put forth by public health authorities across North Carolina and the nation – that each person owes a responsibility to the society as a whole. In our interviews, it wasn’t a major theme, but we heard this from time to time. “There was a consistent message of loving our neighbors and doing no harm,” said one community leader. “And I think that has reverberated and has been a part of our consistent communication, has been a part of our ethic, has been part of the way we've done things throughout the pandemic.” Said another person, “People wanted to do it to protect the community.”

> *"There was a consistent message of loving our neighbors and doing no harm, And I think that has reverberated and has been a part of our consistent communication, has been a part of our ethic."*

In addition to health concerns, practical issues come into play. People want to get on with their lives, travel again, mollify their family members, comply with job requirements. "They wanted to do it to stay safe and get back to normal," said one person. "My whole family was on my case about it," said another, describing what they'd heard in the neighborhood. "They just all kept telling me I needed to get it." A third person said, ""If they are vaccinated, it's because they have to go back to work. And some of their jobs are requiring that they get vaccinated."

And as time went by, some of those who hesitated were persuaded by people they trust and were close to. They were encouraged by friends, family members, pastors and health care professionals, and they saw that no harm came to those who got the vaccine. Celebrity endorsements had some effect, we were told. One person said, describing this decision process, "The people in my circle that did get the vaccine that had very positive outcomes was the turning point. For me. It wasn't so much what I was hearing on the news, it was what I was seeing on the ground, that made the difference for me."

### Why not get vaccinated?

We heard many more reasons not to get the vaccine than to get it. They range from the tentative, suggesting the possibility that in time they could change, to the practical, to understandable fears borne of fast-changing pandemic developments, to simple misunderstanding through confusion and misinformation, and finally to hardened opposition rooted in political or religious cross-currents having little to do with COVID-19 itself.

#### Wait-and-See

Some people are on the fence. They want to wait and see what happens to the people who took the vaccine. One person told us, "A lot of people who came in on the later end, after the initial rush, they were waiting." Others agreed. "They wanted to get it," said one, "but they just wanted to see, you know, what information will come out." With the massive amounts of COVID-19 information available, some still say they want more.

We were told there's too much uncertainty. People worry the vaccine was developed too quickly, without FDA approval. "The vaccine was pushed through too fast," said one stakeholder. "FDA hasn't approved it." The speed of development was a recurring theme. "Just the quick turnaround of having a vaccine out the blue," as one person put it. "And just honestly, the unknown, they don't know what they're getting. They're just scared."

*"Just the quick turnaround of having a vaccine out the blue, and just honestly, the unknown, they don't know what they're getting. They're just scared."*

But some think the FDA issue is only an excuse. "Now it sounds like we're looking at the fall for full FDA approval on the Pfizer one," one person observed. "Are we going to see a huge increase in people that are going to go get it that have been waiting? Or is that just something people have been using as an out?"

Practical Problems

Some of the reasons we heard about why people don't get vaccinated had to do with the practical issues of daily living and working. Whether or not they wanted the vaccine, they thought it would be difficult, or cause trouble, or be unnecessary.

Several of our stakeholders said some people they spoke to are worried about missing time from work. One framed the issue this way: "They were afraid that well, 'if I take the vaccine, which I really don't want to take in the first place and then get sick, I can't take time off of work.'" They aren't thinking about down time from COVID-19 as much as possible side effects from the shot itself. Rumors of a day or two of feeling under the weather are magnified into weeks. "They have heard so much on the internet," said one person, "that people that have been vaccinated get sick after the vaccination, and that it takes them weeks, out to one to two weeks to get back and get their cells back into gear feeling like themselves again."

*"They were afraid that well, 'if I take the vaccine, which I really don't want to take in the first place and then get sick, I can't take time off of work.'"*

Undocumented people, even those who wanted the vaccine, worry they could come under government scrutiny. “Because of their status,” one person reported, “they thought that if they got the vaccine, they would risk, you know, having higher, I guess, profiles and then possibly getting shipped back to their home countries.”

Some whose lives don’t put them into contact with large groups of people think they don’t need the protection of a vaccine. One of our interview subjects described this way of thinking: “I work from home, I work at the neighborhood office, I'm not around people like that. So, I can have a better chance of protecting myself wearing a mask and stuff like that.”

These exaggerated or distorted ideas begin to reveal the outlines of misinformation, which we’ll talk more about in later sections.

### Understandable Fears

The COVID-19 pandemic is frightening, and understandably sometimes fear influences decision-making. We found that some of the fears reflected legitimate questions that a prudent person might well ask about. “You have all different types of fears and safety concerns about the vaccine,” said one person.

The people we talked to spoke of various things that they worry about, or that the folks they talk to worry about. These seemed to reflect responses to the sometimes-overheated public reporting about side effects. “I did have one person who just said she wasn't interested because she had a friend who got the vaccine, and then was sick for a couple days afterwards.” Would they have an allergic reaction? One of our informants, describing a frequently-heard concern, said, “I think she's just had that fear of some kind of allergic reaction.” From allergies, the talk moved on to even more dire risks. Should the talk of infertility be taken seriously? Will the vaccine make me sick? One person described to us these kinds of fears. “Just the misinformation that would they get sick, or they would become infertile, which was one of the things that I kept hearing is that the vaccine causes infertility.”

> *“There were people who were like, ‘I'm not going to get the COVID vaccine, because then I'll get COVID because that's what happened when I got the flu.’”*

Some went so far as to say the vaccine might give them COVID-19. Said one stakeholder, “There were people who were like, ‘I'm not going to get the COVID vaccine, because then I'll get COVID because that's what happened when I got the flu.’”

Clearly, lay people often have a poor grasp on fast-breaking scientific data. The lack of hard information has from the early days been a persistent reason to be afraid. Sensational word-of-mouth conversations don’t help, and people are buffeted by half-formed, conflicting reports. “You have mainstream media fear-mongering,” we were told, “I think it pushes people to either want to get it, or it pushes people to not want to get it.”

### Stubbornly Misinformed

These understandable fears are sometimes based on fragments of real facts that are incomplete or taken out of their proper context. But more often the root of the reasons not to get vaccinated is just bad information – and in many cases recklessly bad information. As one person said, “There's misinformation out there all over the internet about what's in it.”

Our community stakeholders told us that some people aren’t making serious efforts to have their doubts and questions answered. “Some people probably have just made up their minds,” said one, “they're just not going to get it for whatever reason.” Said another, “They're not really interested in talking to me further about it. ‘I just, you know, I am not interested.’” Even some health care workers are resisting the vaccine. About one worker, we were told, “She wants more research, like she's in the medical field, she knows, like, just very, like, I know it all.”

We heard about people who think the pandemic isn’t that serious because it hasn’t affected anyone close to them. “Until it really happens to you,” one person said, “sometimes things don't, aren't real, or it’s hard to really wrap your mind around it.”

From stubborn misinformation, it's a small step to the kind of claims that we call "conspiracy theories," and these were shared to a surprising degree within Black communities. One community stakeholder told us, "You have persons in the African American community talking about their DNA can be damaged, the genes being changed, things of that nature and microchips being placed inside." The microchip was a surprisingly common theme in our conversations. "There's a chip in in the vaccination that's going to monitor them. They said, that is the mark of the beast. They said that government is going to be monitoring them. They said that they think that the vaccine can kill Black people."

> *"Some people probably have just made up their minds, they're just not going to get it for whatever reason."*

## Politics and Religion

Two areas that are fertile grounds for misinformation and conspiracy theories are politics and religion. Our stakeholders spoke about this often. "This is healthcare," one said. "It never should have been politicized at all."

Politics engendered vaccine resistance, in some instances because the political system mismanaged the early rollout. "It didn't help when you had President Trump in office," another person said, "like he did a terrible job. He lied about the vaccine, he admitted he tried to downplay it, so he lost people's trust right there." In other cases, the decision whether to be vaccinated had itself been politicized. "The people who are staunchly against it are traditionally white Republicans," said one person (not entirely accurately, considering the numbers of African American people who we found are not accepting the vaccine). "They are not doing it, because this is now a political thing and they don't agree with who's in office and they're not getting the vaccine"

Religious belief also shaped people's responses to the vaccine. Religious ideas, combined with misinformation and mistrust, make a volatile mix. One of our informants described someone he'd encountered. "He thought he wasn't gonna get vaccinated. And I said why? He said because he believes in God. He believes that all things can be solved naturally." Sometimes, scripture and belief are interpreted to prohibit the taking of vaccines. Said one person, describing a conversation he'd had, "He actually became hostile at the mention of taking the vaccine. And his thing was, my body is fearfully and wonderfully made – he resorted to some religious scripture – and I don't believe in vaccine, God's got me." Said another, "Your religious purposes sometimes don't allow them to put certain things, you know, into their bodies."

*"He actually became hostile at the mention of taking the vaccine. And his thing was, my body is fearfully and wonderfully made – he resorted to some religious scripture – and I don't believe in vaccine, God's got me."*

## The Vaccine Through the Lens Of Black History

In the last section we reported about fears, misinformation, conspiracy theories, and the effect of politics and religion. Perhaps such vaccine resistance can be remedied through better outreach and education, and we will discuss just that in a later section. But we also found significant elements of opinion that weren't simply based on misinformation, but rather derived from a much larger and more serious framework of Black history and political thought. This serious discourse will have to be engaged before vaccine acceptance will be achieved in these communities.

### History of Mistrust

Our stakeholders said that as a background, one must understand that Black people have historically received worse health care than white people. "History," said one, "just going back and to think within our, you know, demographic, just what has happened in the past with medicine and healthcare, and how we were affected, even though

*"We know the historical facts that took place in the healthcare industry that has impacted Black communities in a negative way."*

it's been so long ago, so history plays a big part." Said another, "We know the historical facts that took place in the healthcare industry that has impacted Black communities in a negative way." And a third commented, "Historically, we have health care concerns, because of many challenges." This widely-shared sense of the historical sources of vaccine resistance was a major theme of our research. We concluded that, unless this history is taken into account, "misinformation" and "conspiracy theories" alone will lead to a simplistic analysis of vaccine attitudes.

If we want to enumerate the reasons why some people don't get the vaccine, we have to include that they simply lack trust. This extends to the health care system, as one person told us. "That's the kind of things I've heard, you know, just people don't have a tremendous trust in the healthcare industry." Another put it in terms of past exploitation. "We will continue to have people, especially in the Black community, who are skeptical of health care, and rightfully so, insurance has exploited us, the health care industry has exploited us, medical industry has exploited us."

This culture of mistrust extends beyond health care to the government as well. One of our informants described the attitude this way. "'I don't trust the government.' That's almost the very first thing that I hear. 'I don't trust the government.'" Another said the same. "Number one reason is just don't trust the government."

Even ease of access became a red flag for some. As one person described it, "When it comes to getting the vaccine, even though it's free, in most places, what does that mean? It's almost like if something is free, people asking, 'okay, you're going to give me that. What you want to return?'" This wariness is widespread. "There's a level of suspicion," we were told, "even with those who have been vaccinated."

When understood in these terms, we realized that the entire pandemic response could appear as just another system deployed by a white power structure that would inevitably harm Black people. In this light, it might seem unreasonable to expect someone to take the vaccine, no questions asked. Said one person, "So, the thing is, people can't just expect you to just shove things in their arm."

Pharmaceutical companies are also mistrusted. “Corporate greed!” one person said. ‘The pharmaceutical companies are just making money off of us.’ I've heard that a lot.” The vaccines are clearly branded with the names of these companies, and our stakeholders told us that people associate the vaccines with the high prices they pay for medications, with profiteering, and with highly publicized product liability lawsuits. “The high cost of those medications,” one person told us, “has really turned people off against the pharmaceutical companies that are making billions of dollars every year.” Said another, “Hey, your reputation supersedes you. I know that you do a lot of bad things.”

*“‘I don't trust the government.’ That's almost the very first thing that I hear. ‘I don't trust the government.’”*

### Tuskegee

These simmering issues of equity and trust have seemed to find a new focus and intensity on the subject of the vaccine. And with that, the subject of “Tuskegee” keeps coming up. “Tuskegee Institute and the syphilis debacle,” said one person. “I think that's the one that most people bring to light whenever we have a conversation.” As we have reported, many think of the vaccine as experimental, with much still unknown, and the Tuskegee reference seemed to invoke a generalized apprehension about “experiments.” One person described the attitude this way: “I don't want to be one of your experiments.” Another said, “The minority communities were scared because like, ‘Why do they want to be with us first, why are we guinea pigs?’” Community leaders told us we can’t assess vaccine attitudes without taking account of this history. “It was extraordinarily, exceptionally condescending,” observed one, “to say that African Americans have vaccine hesitancy, when African Americans have studied the Tuskegee experiment.”

*“Tuskegee Institute and the syphilis debacle, I think that's the one that most people bring to light whenever we have a conversation.”*

We heard varying descriptions of just what happened at Tuskegee, some of it accurate. “The Tuskegee experiment, of course,” said one person. “They were promised treatment but didn't

receive it." Some of it was inaccurate, one person telling us, "They basically injected these men with syphilis," but even then, the narrative power was as strong.

Our stakeholders expressed willingness to talk through the history respectfully. Some pointed out the difference between then and now. One said, "Literally, Tuskegee was refraining from treating people and now we have something that is saving us." Others suggested that, just as with vaccine information more broadly, the Tuskegee issue must be address in a culturally sensitive manner, one of our informants saying, "Because I look like my patients, you know, the Tuskegee conversation might be received differently depending on who it's coming from." All agreed that the Tuskegee conversation stands for a bigger set of issues, and could be a historical teachable moment for all sides of the discussion.

### The History Isn't Even Past

The history of mistreatment in general and of the Tuskegee case in particular were sometimes phrased as things that happened "so long ago," but our community stakeholders said clearly that these issues have not gone away. One person said the disproportionate rate of COVID-19 illness and death in African American communities was evidence of this. "Even in the midst of the pandemic, how many Black people died? The belief is that Black people died because white health care folks did not see our lives as having worth." Maternal health outcomes and prevalence of cancer are evidence of this, said another. "We know that Black women with PhDs and Master's degrees have worse birth outcomes than white women with GED and high school diplomas." Moreover, he continued, "Black women are more likely to die from breast cancer."

The discussion of the vaccine and the health care system, which our interviews prompted, opened up into wider discussions of race and society. Health care, we were told, is only one of an array of challenges faced by the Black community. "Healthcare," said one community leader, "is definitely one of those things that we say in our top six problems that plague the Black

> *"We look at the history of a lot of systems, healthcare system being one, criminal justice system, policing system, housing systems, schooling system, a lot of different systems were not developed and established with African Americans in mind."*

community. Number one, mis-education, number two, gentrification, number three, police genocide, police brutality, number four, access to wealth, and wealth building opportunities, and then number five, you got health care." As in health care, struggles for food security, for housing, for education and for fairness in policing are part of a larger narrative of inequity. Another person told us, "We look at the history of a lot of systems, healthcare system being one, criminal justice system, policing system, housing systems, schooling system, a lot of different systems were not developed and established with African Americans in mind."

Several community stakeholders told us that some community members aren't receptive to arguments about their COVID-19 responsibilities. They link their responsibility to be vaccinated to these larger issues of social equity. Said one, "This health care goes beyond COVID. We know you'll still have diabetes afterwards, high blood pressure afterwards, vision afterwards, need to get your teeth fixed afterwards, there was obesity afterwards, needs housing afterwards, all of these things afterwards." They won't be solved by the vaccine, and so these leaders won't accept and promote the vaccine without significant concessions in other areas. One person who had held a vaccine event in his neighborhood said there would not be another. "I'm not promoting the COVID vaccine," he said, "without additional services. Right? So, if you want me to take the vaccine, well give me health insurance." This was by no means a majority view, but we found it represents a meaningful segment of Black political thought.

*"This health care goes beyond COVID. We know you'll still have diabetes afterwards, high blood pressure afterwards, vision afterwards, need to get your teeth fixed afterwards, there was obesity afterwards, needs housing afterwards."*

The vaccine narrative, for many of the people we spoke to, is one of getting everybody as quickly as possible back to normal life. But some took exception to that, saying normal is not necessarily where Black people want to go back to. "Normal represents a great day for white people," one said, "because it's back to business as usual. Black people is like, okay, we get back to normal

when we get back to being overlooked and not seen and not having these tough conversations about what's going on in our communities."

### Equity in Vaccine Research

As our interviews with neighborhood organizers strayed into controversial political topics, even our role as researchers was not off limits.

Several stakeholders, as we mentioned, saw racism in various aspects of the pandemic and the pandemic response. "There is a lot of racism and white supremacy rooted in what's happening right now," said one, "even in COVID." To the extent funding for vaccine programs was flowing disproportionately to white organizations, they would be ineffective in Black communities. One neighborhood leader pointed out, "White led organizations, and white people are getting a lot of money to do outreach for Black and marginalized people to get vaccinated. Black people don't trust them." They wondered why grassroots, Black-led organizations were not sharing in this kind of funding. "You know," said one, "there's people right now in our community who don't have any money, who's been unemployed for two or three years, why aren't we getting paid to do the work? Because people know what's in our own community."

*"White led organizations, and white people are getting a lot of money to do outreach for Black and marginalized people to get vaccinated. Black people don't trust them."*

The researchers themselves were the subject of several hinted criticisms. "Why would you even be on the phone with someone who doesn't even receive any funds, but I'm using my time for you for nothing? Why?" asked one person and, describing our research process, said, "They just take my information and jot it down and run away with it." Studies like ours, and vaccine programs more broadly, are well-funded, and some said that funding is not benefiting the communities affected by the pandemic. "So no," said one person, "not no resources are here. They're not coming. They're not coming."

### Best Practices in Vaccine Outreach and Administration

We asked our stakeholders about the activities they've engaged in, from education, to outreach, to the administration of the vaccine itself. Here we will report on the wide variety of methods,

the insights that have been gained, and the best practices that have been developed through trial and error.

### Information and Trust

We've described a rich and complex informational background, featuring lots of data and some confusion, misinformation, painful history and suspicion. Our stakeholders described an equally rich variety of outreach and education approaches they use to address these things. "I think it just takes a multi-pronged approach," said one, expressing the consensus view. At the center of the approach is the effort to provide accurate information and educate the local residents. Said another person, "I think the most concerns that we have is just making sure that we educate the people, I think we need to shine the light."

To go where the people are, they have to be nimble and flexible. They try various formats and locations. One administrator told us, "That is one of our big pushes, we have a community education, kind of sub department within our COVID department, that is doing outreach and education in every location possible." To promote the vaccine, our stakeholders told us they have to speak, and equally importantly to listen, to all kinds of audiences. One said, "We've been to a few small businesses and had listening sessions. We've gone to a local community college and had a listening session."

As we've already said in previous sections of this report, as important as any national message or media campaign are people bringing the message in person. To that end, our stakeholders told us, personal relationships are more influential than distant corporate or governmental ones. "That's another thing that we have figured out," one said, "is boots on the ground is going to be far more effective." When they go into the neighborhoods, they have to be ready for one-on-one engagement and be ready with answers. We were told, "My goal has been to just try to make people comfortable, so that they can ask whatever their burning questions are." Another person emphasized the people doing the

> *"It should really be individuals who can truly connect with people on a personal level, that's going to be very, very important."*

work have to have great people skills. “It should really be individuals who can truly connect with people on a personal level, that's going to be very, very important.”

We were told the education mission is not one of persuasion but of patient conversation. “I don't push it on anyone to receive it,” one person said, “I try to more so educate.” Said another, “I don't push it, I just educate. I say, ‘Hey, this is why you should get it. Go do your research. And you come back to me and ask me a question. And I'll give you my perspective of it.’” And our stakeholders made clear people don’t want to have their arms twisted. One told us, “We don't want that to be misconstrued as being, you know, forcing people into doing something they don't want to do.” The main thing is to be respectful and empathetic. “We have to really be honest and direct and loving with people,” one person said. “And people can sense when you really care about them.”

*“Health care providers who look like and who represent the communities that that they're trying to reach, I felt like I had more credibility or that they would trust me more.”*

In Black communities, we heard, it makes a big difference if the person doing the educating is a part of that community. Said one person, “Health care providers who look like and who represent the communities that that they're trying to reach, I felt like I had more credibility or that they would trust me more.” Said another, “Just having someone who looks like them, understands, you know, kind of like what they're going through.” And a third person summed it up, “People feel comfortable with someone who looks like them.”

It helps, too, we were told, if those providing information acknowledge there’s much we don’t know and that an element of uncertainty is part of pandemic life. “How can we educate them,” one community leader asked, “on something that we really don't know anything about ourselves, right? So, what we have to do is really get the true education to it, right?”

### Wrong and Inadequate Information

Education and outreach can provide information and clear up confusion, but some of the people we spoke to said the problem is even deeper than we realize. They said the Black communities were the targets of deliberate disinformation campaigns. Said one person, “You can target who

you want to target with a certain message." Another referred to media sources that intend harm to Black communities, saying, "There's organizations that do and there's foundations that do, and they are doing, right? With only one intention, right? To cause mischief and misinformation for their message, which has nothing to do with the health of the Black community." People who get their information from social media and other unreliable or malicious news sources are at a real disadvantage. "They're getting their messages out," we were told, "and people believe in them, because that's their source of information."

Some said that even now, not enough of the correct information has reached them. One person said, "They're not explaining to me all of the benefits and telling it to me in a story that I understand." Even after the widespread dissemination of COVID-19 and vaccine information over the past months, some of our stakeholders told us it still isn't enough. Said one, "Is it really going to prevent us from having these worse outcomes we continue to have in our health care system? Those questions have not been answered yet, at least to my knowledge in a credible way."

*""They need to present more data, the data that shows what the vaccine does. What are the pros, right? What are the benefits? And what are the cons? What are the risks, you know? Be transparent."*

Thus, the problem stems in part from the manner in which information is presented. The same mistrust toward institutions that makes people unwilling to get the vaccine, is also aimed at the media. It leads people to doubt its veracity and transparency. We were told, "They need to present more data, the data that shows what the vaccine does. What are the pros, right? What are the benefits? And what are the cons? What are the risks, you know? Be transparent. That's the key thing. A lot of people don't trust media because there's not a lot of transparency."

### Calling Out the Black Community

Another theme that emerged, not as prominently as the adequacy of information but still notable, is the sense that the Black community has been singled out for blame. One person explained it this way: "Some African Americans will say, 'I feel like we're being picked on as African Americans, that they identify us, my race, saying that we're having a high outbreak in the

African American community. So African Americans feel like there was a negative, a knock against African Americans."

At least some people disliked news reports saying that too many Black people are unvaccinated or that Black neighborhoods have high outbreaks of COVID-19. "That's a negative slant," one person told us. "That's the first thing that doesn't help out with people getting vaccinated. You're gonna chastise someone. They're going to call them out and be negative like, no, you're not going to get my buy-in." It sounded like blame to some, and it led some yet-unvaccinated people to avoid outreach efforts altogether. According to one person, "They're not wanting to admit they don't have a vaccine or they're not going to take it, because they think they're going to publicly shamed or ridiculed."

### Taking the Vaccine to Where the People Are

Our stakeholders explained that in the early days of the vaccine rollout, mass vaccinations were held at Bank of America Stadium. Those who wanted the vaccine were motivated to go to where the vaccine was. "Initially there was significant interest," explained one of our community stakeholders, "whether it be from the majority population or others, you know. When the vaccine first came out, we were fielding a vaccine clinic that had a thousand appointments in a matter of a couple of hours." But that won't work for those who had concerns or didn't yet know about the vaccine. Now, vaccines have to be delivered in the neighborhoods. Said one person, "We're finding that we're able to reach more people by going to where they are."

> *"It will take our grassroots organizations to come together to plan and implement, and roll out these pop-up clinics, to be present at community events, where our people gather."*

Nimble, targeted local clinics are needed now, and over recent months, the vaccine administrators and community leaders have held numerous pop-up clinics, drive-throughs, and clinics in parking lots, at sports events and at schools. We heard many reports from our community stakeholders about such efforts. "We started with our first vaccination clinic," one said, "in partnership with the Health Department in February." Another said, "We've been

providing vaccination clinics almost at least a couple of times a month, on the weekends. For example, today, we will be providing a vaccination clinic at a large soccer event." Said a third person, "We have vaccination clinics every Friday out there. And so that's where we see a higher percentage of our African American patients in West Charlotte." They are willing to do whatever is necessary to get more people vaccinated. "It will take our grassroots organizations to come together to plan and implement, and roll out these pop-up clinics, to be present at community events, where our people gather."

> *"They're going into the communities, going into the homes, the churches, also your primary care providers. I think that's the best thing that they do."*

Just as the mass vaccination numbers declined over time, the local clinics will yield less and less, we were told. The administrators say they will continue to be inventive, going to as many locations as possible, even in a few cases right into people's homes. We were told, "They're going into the communities, going into the homes, the churches, also your primary care providers. I think that's the best thing that they do."

### The Communities Decide

We close this section with a brief word on the importance of community empowerment. Many of the people we spoke to were engaged in some capacity in the effort to bring the vaccine to the communities, but we also spoke to those on the receiving end, leaders representing those communities. One neighborhood leader said neighborhood organizations provide a forum for neighbors to decide whether to hold a vaccine event or to participate in outreach activities. "I didn't want to impose my view on people," he said, "I want to just hear what they think." He continued, "I'm going to take it to them first, get some feedback, get a sense of how many people want it, how many people don't want it, how many people on the fence."

To some, whether to participate may seem obvious, but in this environment, any agenda, even a pro-public health agenda, is being subjected to careful scrutiny. "I don't want to make a decision for the community," one person said. "I'm their leader, but a good leader, in my view, knows how to understand what the community wants."

The people and their leaders still search for an elusive objective truth that will answer all their questions. As one put it, “I'm an advocate for the truth, not my truth, not your truth.”

## Who to trust?

Our discussion of vaccine attitudes has already touched at several points on questions of trust – of the vaccine, of the system – but here we will confront directly the question of vaccine messaging. We asked our stakeholders who they think are trusted sources of health and vaccine information. The answers were numerous and varied, but community leaders and medical professionals were mentioned most often.

### Community Leaders

Even within the category of “community leader,” there is great variety. One of our community stakeholders told us, “If they see the information coming from individuals who hold a higher regard, or esteem in the community, they’re liable to trust that.”

*“If they see the information coming from individuals who hold a higher regard, or esteem in the community, they’re liable to trust that.”*

One person told us about a volunteer lady who encourages her neighbors to be vaccinated. She said, “We had a woman who has worked with our call center, and she's gotten over fifty people in the African American community vaccinated by herself, like, she talks to them about it, she tells them why they should get it, she educates them, and she calls our call center with them and makes an appointment. And that that is how this is going to get done.”

There was a congressman who stayed close to the neighborhood. “He was so active in the community,” we were told, “I felt like his advocacy and kind of wanting to join the fight, to me there was a sense of authenticity.” We heard that parents and elders are trusted, one person commenting, “I would say the elderly, their parents if they have them, or your community, faith, your churches, those type of people, but definitely from someone that they're close by your family. I think those are the best messengers, because you can get both sides of the story.” And we heard that people congregate at the barber shop and the hair salon, where often good health

information is available. As one put it, “I definitely see that the patrons listen to the barber or to the hair stylist, and they have conversations about health and about healthcare and COVID-19.”

Who is the most trusted in the community will depend on the community. One of our informants enumerated the different trusted messengers. “It was the Asian Association,” she said, “it was the Latino organization, and you say, this is a trusted group, you know, get vaccinated, this is for you, for your life. So, the voices were coming from individuals that were trusted in the community.”

### The Church

Our stakeholders mentioned the church leaders at least as often as any other category of trusted messenger. “I think faith leaders,” one of our stakeholders noted, “so preachers, definitely, I feel like have that kind of influence.” In any litany of community leaders, among the organizers, the business people and the politicians, the pastors are prominent, trusted leaders in the Black communities we studied.

> *“Nine times out of ten, if your pastor takes the vaccination, the pastor encourages the vaccination, most likely the members will follow because he's the leader, and the sheep follow.”*

We heard several times that a person in doubt changed their mind because they learned that the pastor got the vaccine, and encouraged others to get it. One person related the story of someone whose neighbors tried to discourage her. “She was a 70-year-old Black woman. And what she was facing in her community was that her neighbors didn't want to get it. And it was her pastor came out and said, ‘I've gotten it.’” Said another, “Nine times out of ten, if your pastor takes the vaccination, the pastor encourages the vaccination, most likely the members will follow because he's the leader, and the sheep follow.”

We heard about pastors who have gone beyond counseling individual parishioners and included vaccine information in their sermons. One said, “We have a weekly message where we talk about vaccines, we talk about community health, we talk about the pandemic.” Others weren’t sure that was a good idea, one saying, “If you make an announcement at the beginning of the service, or you say something during a sermon that doesn't leave any room for conversation, and so he

doesn't find that to be a valuable use of his efforts." But another significant way churches have supported the vaccine effort is by hosting pop-up vaccine clinics. As one said, "They're going into churches, set amount of hours throughout the week, and they're giving them the option to get the vaccine as well."

### Health Care Professionals

Also frequently mentioned were medical professionals. They are widely trusted. (If they were universally trusted, the percentage vaccinated would be much higher, but we found they are widely trusted.)

Our stakeholders told us that they trust their family doctors, and they tell people they meet that if they have doubts, speak to a doctor. They said we trust those in the closest circle around our families. "So let me go to my doctor," one person said, "someone who knows me, knows my health risk, knows my diseases, and let me hear from them first." Another person agreed, "Most definitely, I always recommend to the patient, if I'm speaking with them, and they're negative or have doubts about the vaccine, not to, per se, listen to a an individual. Always get medical professional advice."

*"So let me go to my doctor," one person said, "someone who knows me, knows my health risk, knows my diseases, and let me hear from them first."*

People trust their own doctors more than the medical professionals they see on the news. "Speaking for myself," one said, "I will trust individual professionals and my family physician over what I see on the news." But another added that the TV talking heads are more likely to be trusted if they're racially diverse. As one put it, "There should be diversity amongst the medical team, amongst the CDC, the FDA and the media, the administration, everybody presented, you know, so – people don't see anybody looks like them."

Pharmacists are trusted by many, and we were told, again, that trust will be greater in Black communities if the pharmacist is a member of the community. "There's a different level of trust," one person said, "when you can walk in the door, and seeing the desk is manned by someone that looks like you, someone that speaks your language." Pharmacies are among the most

important local, accessible vaccination sites, but not all of them are trusted equally. We were told, "I know that there are there are pharmacies like CVS and Walgreens that are doing the vaccinations, and Walmart. But most people are not going there because they're not – I want people to understand this – it's about trust. The Black community does not trust these entities."

### Who Not to Trust?

The problem with trusted messengers, we found, is that the trusted messenger may be delivering the wrong message. Our stakeholders spoke often about this. If, for example, someone trusts the vaccine information they get on social media, more than what they get from the doctor, that can be a problem. As one community stakeholder observed, "People are almost more trusting, you know, of social media, versus, you know, what they're hearing from the providers."

Social media provide a platform for athletes and other celebrities who have been prominent vaccine resisters, and they can persuade people. "I was at the post office once," said one person, "and people behind me were talking about what they read on Twitter, and how some of these professional athletes were against it." Similarly, neighbors and others who are close are among the most trusted figures, but some of them do not support the vaccine. "For every population, it's going to be the conversations with your neighbor. Like, I have a neighbor who's very against the vaccine." And the barber shops, though cited by many as places for the exchange of information, aren't perfect. As one person said, "I went to the to the barber shop just last month, and to hear some of the conversations that go on there, unfortunately, some of it was misinformation."

*"People are almost more trusting, you know, of social media, versus, you know, what they're hearing from the providers."*

### Barriers to Access

The shift of vaccine administration from the centralized vaccine clinics to mobile, pop-up, pharmacy and other neighborhood sites, which we have discussed, lessened many of the obstacles that people had previously encountered in gaining access to the vaccine, according to our stakeholders. One told us, "I think everybody pretty much who wants it has found a way to get it. I'm not personally seeing an issue with access at this moment."

Many of them told us that they were hearing few reports of the kind of access problems that were common in the early days, when transportation and child care were significant barriers. We heard that the vaccine now is available much closer to where people live. “Maybe the past month or so,” one said “I have not heard any comments around ‘I can't get to the vaccine’ or ‘the vaccine can't get to me.’ Because I'm telling you in this area, they have pop-up clinics almost every day. And at the local drugstores and pharmacies.”

*“I think everybody pretty much who wants it has found a way to get it. I'm not personally seeing an issue with access at this moment.”*

The wide availability of information about the vaccine, the clinic locations and transportation to get there also makes it easier to reach the vaccine. According to one community stakeholder, “Information is available everywhere. I don't think there's anyone that has not heard about the messaging of the vaccine and the impact that it has on communities.” (Still, it’s worth noting that, as we have discussed, when information is not of good quality it can raise instead of lower barriers).

Some said transportation was available to those wishing to travel to a vaccine site. One person commented, “We can connect them. And they can go, they have transportation or we can get them the transportation needed.” Transportation remained an issue in some cases, we were told, one person telling us, “A lot of individuals do not have transportation.” But for the most part, there are options. While the clinics aren’t necessarily within walking distance, a clinic can pop up where it’s needed. For example, one person mentioned an area where homeless people congregate. “They're hanging out in the area quite frequently, so if a vaccine clinic was set up there, they could just set up and they would have easy access.” And, vaccine workers often can provide transportation services, and they will, in limited circumstances, even bring the vaccine to the homes of elderly and shut-in people. “I feel like those opportunities, where the EMT or the paramedics can go to the actual patient's home and give them the vaccine is a great opportunity. I think they should do more of it.”

> *"It's at Walgreens, it's at CVS, it is available everywhere. It may not be available 24 hours a day, but it is available everywhere right now."*

The vaccine also became available at pharmacies, a local site convenient for many. One person told us, "It's at Walgreens, it's at CVS, it is available everywhere. It may not be available 24 hours a day, but it is available everywhere right now." Another said, "It's available in drugstores. And we do have some drugstores, maybe not immediately in the community, but not too far away. I think that anybody who wants the vaccine can get the vaccine."

Not everyone agreed that access was as good as it should be. Some of the same critical voices we have cited in earlier sections, also questioned whether the vaccine process had yet become as frictionless as some claim. "No, no," said one person. "It's not easy to go get a vaccine in Charlotte, there's vaccine sites all over Charlotte, right. But that doesn't mean when you get there that it's going to be an easy process for you to get it."

## Afterword

During our study period, and in the weeks since the interviews were completed, many aspects of the pandemic and of the vaccine administration have changed rapidly and then changed again. We continually adjusted our questions as events required, in hopes that the comments made by our community stakeholders would stay up to date.

Most of the key themes did remain relevant and current throughout the study period and remain so at the date of this report. We've focused our reporting on those topics. We've given less space to a few topics that changed the most, where the information we'd gathered seemed obsolete almost as soon as we wrote it down. These include the Delta variant and the vaccine mandates, which didn't exist when we started, and which only gradually came into focus as we proceeded. These two, and indeed all the topics we've addressed, continue to be important topics for further research.

## FOCUS GROUPS

Focus groups are small group discussion led by at least one facilitator to learn more about a community issue by solicitating the opinions and thoughts of community members and stakeholders. Information from these focus group sessions can be used to identify community priorities and next steps for future action. Focus groups are also conducted to include the perspective of various community members to increase the likelihood that interventions are reflective of the needs and concerns of the community. Prior to conducting the focus groups an interview guide was created for semi-structured focus group sessions (See appendix. A review of the literature on the topic of COVID-19, vaccines including COVID19 and the flu, and community engagement approaches to conducting needs assessments and findings from community stakeholder interviews were used to develop the interview guide. The main questions included in the interview guide focused on reasons for getting vaccinated, reasons for delaying getting vaccinated, reasons for not getting vaccinated, defining and identifying trusted sources including messengers for information about the COVID-19 vaccines, and the role of incentives.

To reach the ideal number of focus groups, a total of 25 focus group sessions were advertised and promoted from July 2021 until November 2021. Ultimately a total of 4 focus groups were held virtually through the Zoom application. Following best practices for virtual focus groups these sessions were small and consisted of 3 to 4 participants per session with a total of 12 participants across all 4 focus groups. Each session lasted on average for about an hour. All participants identified as either Black or African American and were adults ages 18 and up. The majority of the participants were female and were Mecklenburg County residents. The sessions were audio-recorded and transcribed to identify the major themes related to the primary goals of the community needs assessment. Each participant also received a $20 gift card as an incentive for their participation. An additional two focus groups were conducted by Chinue Hazelwood, RAO REACH Communications Manager, that focused on current vaccine messages disseminated by RAO Community Health.

**Summary of Key Points of Discussion**

Impact of COVID-19

- Large in scope – (i.e. everyone has been impacted)
- Impacted family and economic opportunities – money and employment
- Disrupted social life
- Forced adaptability
- Discomfort (living in a pandemic – fear of the
- unknown, unsettling)
- Increased Miscommunication/Misinformation
- Conspiracy theories
    - Mistrust/Distrust

All participants in the focus groups described the impact of the COVID-19 pandemic to be major. Personally becoming sick or knowing of loved ones to become sick with the coronavirus was described as a direct impact of the pandemic. Other areas that were discussed as examples of ways the participants were impacted by the pandemic included negative impact on economic and employment opportunities, not being able to spend time with family and friends, managing feelings of confusion, discomfort and fear, and having to adapt quickly and often to meet changes in CDC recommendations and local mandates. Additionally, many participants discussed throughout the focus group sessions how the pandemic led to an increase in miscommunication and misinformation about COVID-19. Many noted how a lot of the discussion around COVID-19 included conspiracy theories based on historic mistrust and distrust of the government and health care system in the United States. The exploitation and historical and unethical medical research of African Americans during the Tuskegee experiment was most often referenced as reasons for mistrust and distrust in the Black/African American community.

**Direct Quote from selected participants**

"My grandparents got affected, and this led them into terrible things like losing appetite. And also they stopped having walks. It was something hard coping up with it mentally because I felt like I was going to lose them. But I think the Almighty because

**Direct Quote from selected participants**

> "Especially at this point in the timeline (it) has virtually affected everyone. So it's not nice to know that the effect of everyone but we're all kind of together in a sense in that regard. Everybody has a certain perception. Everybody's had different experiences, but just generally speaking, it's touched all of us in some way, in some form."

Reasons for getting vaccinated

- To keep people (i.e. family and yourself) safe and healthy
- To get back to "normal" "Sick and tired of the pandemic"
- Fear of getting COVID
- To protect those that are more vulnerable (i.e. elderly or those with chronic illnesses)
- To avoid weekly COVID testing (work policies)
- Already testing positive for COVID19 in the past
- Wanting to be able to be around family (i.e. travel for holidays, see new baby in the family, etc.)

Social responsibility, that is wanting to protect loved ones especially those who may be at a greater risk for developing more lethal or debilitating symptoms from COVID-19, was a major reason expressed by participants for getting vaccinated. Participates also expressed being fatigued and stressed from living in a pandemic and hoping that by more people becoming vaccinated there could be reduction in COVID-19 cases and thus a "return to normal." The emerging policies related to travel and work requirements around either being vaccinated or taking a COVID-19 test(s) was also a motivating factor for some to get vaccinated.

Reasons to Wait and See

- The novelty of the vaccine
- Waiting for more information
- Waiting for FDA approval
- Limited trust
- Concerns of possible side effects and their immune systems

A consistent concern discussed among focus group participants was the perceived swiftness of how quickly the vaccine was made and the initial lack of FDA approval of the vaccines. Limited trust in the government and health care system, only exasperated these concerns. Subsequently, some focus group participants expressed a desire to wait on additional research to alleviate some of their concerns related to the potential side effects of the vaccines.

**Direct Quote from selected participant**

> "Even when you look at studies in the past of men, the Black community, of course, the syphilis study is the biggest one that most people talk about. Is it a you know, are they testing it on us? Is it's more questions around? You know, are we actually getting the dose? Are we more of the control group? Or, you know, what is it that we're actually getting in it? What are the long term effects of it, since it's so new, a lot of times, like, you know, some of my family members don't even, you know, get the flu shot. So I think that's one of the things too, is if I don't get the flu shot, and that's something that's been tested, years, you know, why would I get something that's just coming out, especially if they're not, we're not seeing a large group of people in our immediate circle that are getting COVID, you know…especially now finding out that people who are vaccinated could also still spread it. So it's, now it's more like, okay, so if I just wear my mask, you know, sanitize, keep myself protected. What's the difference between needing to and wanting to get the vaccine? So I think that's also the conversations that myself and my family are having now."

Reasons for choosing not to get vaccinated

- Lack of trust – the vaccine, healthcare, government
- Not concerned about getting COVID
- Conspiracy Theories/misinformation

Reasons for changing one's mind and getting the vaccine

- Wanting to be around family members and family members and close friends getting the vaccine
- Work policies requiring COVID vaccinations or weekly testing
- FDA approval

Participants felt that additional information about the benefits of taking the COVID-19 vaccine, learning about the recent FDA approval of the vaccine (Pfizer-BioNTech COVID-19 Vaccine) and additional work and travel requirements may be reasons for some to change their minds and decide to get the vaccine However, participants felt that there would still be individuals who would be opposed to receiving the vaccine because of deep rooted mistrust of the government and health care system and for others a limited concern about getting sick with the coronavirus and having any dire health impacts.

Trusted Sources

- Categories include local and national sources, organizations and individuals
- The CDC and the local health department was the most often stated trusted source of information on the COVID19

- However, social media sources were mentioned the most for where people get the majority of their information because social media is more easily accessible, and the information is easily shared among friends and family members
- It was also perceived that some information from social media can be trusted and some information cannot be
- Local community leaders and faith-based leaders were mentioned as local trusted sources but who you trust varies widely on who is in your social network. In other words – every community leader or faith-based leader is not trusted if that individual is not in one's immediate social network
- Family members were discussed the most often as someone participants discussed the COVID19 vaccines with and their thoughts on getting vaccinated.
- Trusted sources like pastors, school board members, barbers may not always have the scientific background

Discussion around who or what are trusted sources for information on COVID-19 elicited the most variety in responses. Perceived sources of trusted information varied by participants age, personal health and personal experience with the health care system. For example, younger participants cited social media more often as a place they go for trusted information on COVID-19 and the vaccines. They also expressed more confidence in navigating credible sources on social media. Whereas older participants included more traditional media outlets as well as some sources of social media to be venues for trusted sources. Based upon participants comments there was an emphasis on local sources whether it be from local community leaders or local health organizations as perceived trusted sources for COVID-19 information. Trusted sources were often perceived to be individuals or organizations that participants had a positive relationship with. These trusted sources included individual with medical backgrounds like primary care physicians and individuals without medical backgrounds from faith-based organizations and service providers like barbers. Established trust prior to the pandemic was key in whether or not participants identified sources as trusted.

**Direct Quotes from selected participant**

> "I think people are comfortable with what they know. And that familiarity. So, you know, why would I listen to a scientist, he owes me nothing. He gets paid by this larger corporation or he is paid by the government. And, you know, the government hasn't been good to me. But my preacher, preacher prays for me, my barber shop you know, my barber has my lineups… always have a fresh cut when I go to him. So it's like, you know, you're comfortable. He trusts you, you know, and who's always shown favorite towards you."

**Direct Quotes from selected participant**

> "I think social media is a big place where people go, Facebook in particular, because there are some credible resources on there. But there are a lot of fallacies that can push people in a direction that they really (don't) need to go as far as understanding and learning more. And we all know the CDC is not the most favorite organization right now as far as information goes. But they are credible resource. So that's another place. Actually, I can't remember if it was, it might have been a couple days ago when somebody called our location. And they wanted to speak to me about COVID. And I have a lot of expertise in that field. So I actually really admired and love that somebody took the time to pick up the phone and call a trusted resource that was in their community, to just learn more, because the internet's big place, and not everything out there, sure. But being able to speak with somebody who is representative of a community member and someone who's knowledgeable on COVID, I love that it really shows effort, and the will to learn and kind of empower themselves from a knowledge standpoint, to you know, make a decision moving forward as far as COVID is concerned, or getting vaccinated or even just disseminating whatever message I gave to them, to their peers and their family. So that

Specific Information from trusted sources

- Success stories that discuss how the vaccines are preventing deaths (using statistics)
- Giving the facts more clearly that is digestible and easy to understand
- Letting people know who discovered the vaccines especially Moderna – Dr. Corbett (African American)

All participants describe the overabundance of inaccurate information on COVID-19 and the vaccines to be a major challenge in decision making around receiving the vaccine. The majority of participants felt that specific information that was clear, informative but concise and relatable would be the most beneficial information to communicate. Relatable information was described as information that included personal success stories, along with using statistics to show how the vaccines are working to reduce the cases and COVID-19 deaths. Specific to the Black/African American community, some participants felt it should be emphasized that the Moderna vaccine was developed by an Black/African American woman.

**Direct Quotes from selected participant**

"When we talk about the basics, we you know, it's how you give that information that you make it simple and straightforward. And digestible, for folks who do not have a science background….the digestibleness of the information is key. Because if I don't understand it right off the bat, I've already turned off my ear. And so I can kind of understand it myself. But once it's observable, observable or comprehensive, I'm here, I'll buy it. You know, I always listen to you more so than if I don't understand what the world's going on. "

**Direct Quotes from selected participant**

"Consistency, like you said, and their compassion and they're not trying to be secret, right, having secrecy going on. It is kind of out there for everybody to see… this is what we're doing. And this is how, if we were to see a lot more of that, over time, that it could possibly sway some people in the African American community to begin to trust, the health, the health care field. A little bit more. I know, again, I'm gone back to the conversation with Dr. XXX. And my coworker she was one that was, you know, you know, kinda like unsure, like, but when she heard him talk about why it's so important and for the African American community, to be vaccinated she was listening because the way he was answering questions, …the lack of trust that we have, you know, because of that experiment, and a couple of other things that people brought up, So what about any type of healing? It happens over time, not overnight. And I think like I said, they just began to just lay themselves there, you know, and not hide anything from African American community. That was a good thing."

Logistics

- COVID19 vaccines are perceived to be accessible and readily available
- Favors more community locations and community campaigns

The vast majority of participants felt that the COVID-19 vaccines are easily accessible and the majority of Blacks/African Americans in the participants communities know were to get a COVID-19 vaccine. However, participants felt continued efforts to provide local events in neighborhoods to provided continued education on the COVID-19 vaccines is important in increasing awareness and opening up more conversation about COVID-19.

Flu vaccine vs COVID19 Vaccine

- Similarities and differences in perceptions
- Some participants stated that many of the friends and family members they know do not consistently get the Flu vaccine.

- Most are more comfortable with taking the flu vaccine because it has been around longer than the COVID19 vaccines.
- Similar concerns around Flu vaccine side effects, although the concerns are less severe and are related to more acute side effects like feeling sore or under the weather for a couple of days, or actually getting the flu or bronchitis
- Majority felt those who do not trust the flu vaccine will not take the COVID19 vaccines.

Overall, participants felt that although there are similarities in perceptions about the COVID-19 vaccines and the seasonal flu vaccines, more Blacks/African Americans are comfortable with the seasonal flu vaccine because it has been around longer than the vaccines for COVID-19. However, for those who are opposed to vaccines in general, they reference many of the same reasons for choosing not to get either of these vaccines. These reasons stem primarily from having limited trust in vaccines promoted by the government or health care and having concerns about the side effects of all vaccines including both the seasonal flu and COVID-19 vaccines.

Incentives

- Positive and negative views
- Cash incentives were favored the most
- Increased cashed amounts were perceived to be the most motivating
- Some were opposed to cash incentives – felt that people would only come for the money, they may not come back for their final dose, believed you should get vaccinated because you want to do it, not because you are being paid to do it.
- Cash incentives seemed slightly more favorable among younger participants.
- Comfort as an incentive – making people more comfortable with getting vaccinated vs financial incentive

Many participants expressed mixed views on incentives. There were varied responses on what seemed to be an adequate cash incentive amount and want seemed to be a cash amount that would be coercive. Incentives may work for some individuals who were already more open to the idea of receiving the vaccine. Yet, there was concern by some participants that some individuals would only take the vaccine to receive the incentive. When discussing non-cash incentives many of the participants discussed having opportunities for community members to openly discuss their concerns and feel assured of the benefits as the most encouraging approach to incentivizing getting vaccinated.

## Media Messaging Focus Groups

Two focus groups dedicated to receiving feedback on current vaccine media messaging were conducted by Chinue Hazelwood, REACH Communications Manager for RAO Community Health. These sessions included two parts. The first part was a polling activity to solicit participants feedback on current vaccine media messaging used by RAO Community Health and the second part consisted of open discussion on key questions. A total of 11 participants participated across the two focus groups.

### Results of Poll questions

1. Select your top three choices, starting with the one you like best.
    - Responses varied greatly but the least selected choice was media message F. Only one participated reported F as a top three choice.
2. Which element most grab your attention out of the ones you like best?
    - Pictures and the messages were consistently stated as the elements that grab participants attention across both focus groups.
3. Do you find any of these unclear or difficult to understand? If the answer is “no”, please select the letter “F”.
    - Only four participants stated that they found at least one of the media messages to be difficult to understand. Of those participants they found media messages E, B, A, and C difficult to understand.
4. Do any of these make you feel uncomfortable or cause any negative emotions? If the answer is “no”, please select the letter “F”.
    - Only two participants across both focus groups stated that at least one of the media messages made them feel uncomfortable or caused any negative emotion.
5. Which post would you engage – meaning share/repost, like, or click – if you saw them on social media?
    - These responses varied across all options, however, only one participated stated that F would be a post they would engage with, making media message F the least likely media message post participants would engage with on social media.


**Figure 8 - Sample Vaccine Media Messages***

## Questions Posed During Open Discussions

1. We've seen and heard media reports on the number of positive cases, the unvaccinated, hospitalizations, and deaths related to COVID-19. Do you believe taking a serious tone is effective versus a light-hearted approach to increase vaccinations?
    - There was a consensus across both focus groups that there should be multiple approaches to how deliver messages about COVID-19. Sometimes the messages should have a tone but not always. The tone should vary depending on the audience and the specific message.
2. If you were on the fence about getting vaccinated and changed your mind, was it influenced by something you watched, read, or heard?
    - Continuing to watch the news, read reports and FDA approval of the vaccines were often stated as information that changed participants minds who were on the fence about getting vaccinated.

3. The first part asks, with the recent changes and new information surrounding COVID-19 vaccines, new variants, and mask wearing, do you trust messaging coming from the CDC and the experts?
    - Very few participants expressed full endorsement of CDC messaging rather the majority expressed varying levels of trust. The influence of politics and the perception that the CDC recommendations were inconsistent or changed too quickly were discussed as reasons for only trusting CDC messages to a certain extent.
4. Do you have any suggestions or ideas of ways to encourage or increase vaccinations, for COVID-19 and flu, through media messages, specifically for Black/African Americans?
    - Comments varied but there was an emphasis on the CDC and other health organizations communicating new information often and being transparent. Participants also felt that having one consistent message and national spokesperson would be helpful in providing a consistent and reliable source of information regarding COVID-19. Having too many media spokesperson (via different new outlets)with varying messages were often seen as messages that were conflicting and confusing. There were mixed opinions regarding whether or not media messages should target Blacks/African Americans. There was a concern that targeting Blacks/African Americans could stigmatize the community. However, it was discussed that "representation in marketing matters" and if media messages did target Blacks/African Americans that these messages should be positive and should have a more holistic message around health that encourage Blacks/African Americans to have a primary doctor and to schedule regular visits with their doctors.
5. Suppose you had the opportunity to create your own media messaging around COVID-19, what would you highlight that you believe could be more effective to get Black/African Americans vaccinated?
    - Although one participant mentioned the use of Black celebrities in media messages, the majority of participants discussed more relational and local media

message strategies. There was an emphasis on having more personal one on one communication, working with people with a large audience our platform, using more canvasing or door to door techniques and using radio and Facebook as media outlets.

### Summary of Major Findings of Focus Groups

There were several consistent themes throughout all focus groups including the media messaging focus groups. Institutional distrust of US systems including healthcare, government and politics has negatively influenced Blacks/African Americans perceptions of COVID-19 and COVID-19 vaccines. Having a trusting relationship with the messenger whether it be from an individual or entity is critical in how the messages will be perceived. Participants in the focus groups had varying levels of trust with public health, medical and governmental agencies but many participants expressed some level of trust and some event discussed a growing level of trust with some organizations like the CDC and their local health department. However, continuing efforts that building community relationships was desired to strengthen trust. Local media messages that supported national media messages seemed to garner the most positive feedback from participants and any campaigns or efforts that promoted more conversations with local doctors, or with family and friends were perceived to be effective approaches to promoting the COVID-19 vaccines. “Waiting for more research” was often discussed as a reason for delaying or not getting the COVID-19 vaccines, however some participants reported changing in the FDA approval as reasons for changing their minds and getting vaccinated. Medical advances or authorizations of the vaccines like receiving FDA approval seemed to be critical factor in decision making progress regarding vaccination by some participants.

# COMMUNITY SURVEY

## RAO Community Health Vaccine Survey Results

The purpose of the survey was to identify actions, trusted sources, and messaging sources that could influence people to get vaccinated against the COVID-19 virus. The primary focus of the survey was to collect this information for developing influential messaging to Black/African American adults. For purposes of being representative of different perspectives the survey was open to all adults. Survey results are separated into two respondent samples: All respondents (compared by race group) and by Black/African American respondents only. The survey was designed to collect responses from three distinct respondent groups: (1) those who reported having received at a COVID-19 vaccination, (2) those who were undecide about getting a COVID-19 vaccination, and (3) those who indicate they were not planning to get vaccinated against COVID-19.

## Survey Development

A survey was developed based on information from a variety of media and local and national survey sources reporting barriers and facilitating factors associated with the decision of adults to get or not get a COVID-19 vaccination. The final set of survey items was vetted by three sources RAO Community Health, CDC, and an evaluation team from the University of North Carolina at Greensboro. The survey was administered on-line using the Qualtrics Survey Management software (www.Qualtrics.com).

## Sample Outreach

The intent of the survey was to sample adult respondents residing in Mecklenburg and Cabarrus Counties in North Carolina. Invitations to complete the survey were sent through RAO Health's list serve as well as to community partners in Mecklenburg and Cabarrus counties. Follow-up e-mails to these same sources were also delivered. A series of flyers were distributed with QR codes to expand opportunities for participation beyond the initial invitation outreach. In addition, RAO implemented a social media campaign posting survey participation graphics on Facebook and Instagram. The campaign ran from Nov 1, 2021 to November 29, 2021. {Add in outreach event using notebooks}

Survey Items

The survey was organized to ask all respondents a series of questions relating to their demographic characteristics (County of Residence, Gender Group, Racial Identification Group, Age Group, Marital Status, Employment Status, and Household Income) and direct experience involving COVID-19 (Tested Positive, Lives with Someone Who Contracted Virus, Worry about a Family Member Getting COVID-19, and Worry about Themselves Becoming Infected with the Virus).

A. For Respondents Who Reported Being Vaccinated they were asked questions relating to their decision to get vaccinated:

    1. Reasons that influenced their decision
    2. Information sources that influenced their decision
    3. Media sources that provided information influencing their decision
    4. Sources of media messages such as radio, TV, newspaper, billboards that influenced their decision
    5. Sources of social media messages such as Facebook, Twitter, Instagram billboards that influenced their decision
    6. Benefits of getting vaccinated
    7. If they were planning to get a seasonal flu shot, and
    8. If they were planning to get a booster vaccination if they were eligible to receive one.

B. For Respondents Who Identified as Being Undecided About Getting Vaccinated they were asked questions relating to:

    1. Reasons for being undecided about getting vaccinated
    2. Reasons that might influence them to get vaccinated
    3. Information sources that might influence their decision to get vaccinated

4. Media sources that might influence their decision to get vaccinated
5. Sources of media messages such as radio, TV, newspaper, billboards that might influence their decision to get vaccinated
6. Sources of social media messages such as Facebook, Twitter, Instagram that might influence their decision to get vaccinated
7. Perceived benefits if they were to get vaccinated
8. If they were planning to get a seasonal flu shot, and
9. The importance to their family and friends that they get COVID-19 and seasonal flu vaccinations.

C. For Respondents Who Identified as Not Planning to Get Vaccinated they were asked questions relating to:

1. Reasons why they were not planning to get a COVID-19 vaccination
2. Media sources they followed that encouraged them not to get vaccinated
3. Sources of media messages that encouraged them not to get vaccinated
4. Sources of social media messages that encouraged them not to get vaccinated
5. If they were planning to get a seasonal flu shot
6. The importance to their family and friends that they get COVID-19 and seasonal flu vaccinations
7. Actions that might increase the likelihood that the respondent would be willing to get vaccinated, and
8. Whether they believe other people should get vaccinated

**Survey Response**

A total of 284 surveys were submitted. For purposes of the analysis for this project only responses from individuals who identified their vaccination status as: (1) being vaccinated, (2) undecided about being vaccinated, or (3) not planning get vaccinated were included. This resulted in 243 usable surveys.

**Total Sample Demographics**

Vaccination Status

Of the 243 respondents, 213 (88%) reported having been vaccinated prior to completing the survey, 21 (9%) were undecided about getting a COVID-19 vaccination, and 9 (4%) indicated they were not planning to get vaccinated.

Respondent Residential Location

Respondents were asked to identify the county of their residency. 208 (86%) reported Mecklenburg County, NC and 35 (14%) reported Cabarrus County, NC.

Racial Group Identification

About half (49%) of the sample was White, a little over a third (35%) was Black/African American, and less than a fifth (16%) represented all other racial/ethnic identities – Other Race group.

Gender Group

Over half (52%) of the sample was female, a little over two-fifths (43%) was male. Individuals identifying as non-binary or transgender made up about 4% of the sample.

Age Group

Distribution of the sample by age shows that over half (55%) of the sample was under the age of 35; the remainder of the sample were either between the ages of 35 – 54 (35%) or 55 and older (10%).

Marital Status

The majority of the sample was either married (44%) or never married (41%). Small percentages of the sample represented those who were divorced (8%), widowed (5%), or separated (3%).

Employment (multiple responses permitted)

About 70% reported being either employed full-time (58%) or part-time (13%). About one fifth (22%) identified themselves as students. For the additional employment categories, percent representation was unemployed (4%), disabled (3%), homemaker (3%), and retired (3%).

Household Income

The distribution of household incomes was roughly equivalent across four income categories. About a third reported incomes between $40,000 and $74,999, while the remaining income groups, $0 and $19,999, $20,000 and $39,999, and $75,000+ each included approximately one fifth of the sample.

Comparison by Race Groups

Complete survey results for this section are included in Appendix ___. Below is a summary of notable differences among the three race/ethnicity groups.

Gender Group

Approximately two-thirds (68%) of the Black/African American sample were female compared with about half (49%) of the White sample and a little over a third (38%) of the Other race group sample. Males made up twice as many respondents in the Other race group sample compared with the Black/African American sample.

Age Group

The age distributions for the three race groups were somewhat different. For the Black/African American group while over half (51%) of the respondents were between the ages of 18 and 34 which was similar with the other two groups, almost a fourth (23%) of the Black/African American group was 55 and older while only about 5% of the White and Other race group included individuals representing this older age category. The White sample had the largest representation of individuals between the ages of 18 and 34 (59%) and the Other race group had the greatest percentage of individuals between 35 and 54 (47%).

Marital Status

The distribution of respondents by marital status also differed across the three race groups. For the Black/African American sample married individuals made up just 20% majority of the sample

as compared with 57% and 49% of the White and Other race group samples, respectively. Conversely, over half (53%) of the Black/African American sample was never married which contrasted with about two-thirds of the individuals in the Other race (37%) and White (35%) group samples.

Employment

The three race group samples had similar employment status profiles. In each group about 70% of individuals reported full or part-time employment. About one fifth (22%) identified themselves as students. For the additional employment categories, percent representation was unemployed (4%), disabled (3%), homemaker (3%), and retired (3%).

Household Income

The three race respondent groups differed in terms of the proportional representation across the four household income categories. Over a third (38%) of the Black/African American group had incomes of less than $19,999, whereas less than 16% of the White and Other race groups reported incomes in this range. By contrast, two-fifths (40%) of the Other race group reported incomes of $75,000 or more as compared with about a fifth (21%) of the White respondent group and only 12% of the Black/African American group.

**Health & COVID-19 Experience/Exposure**

Nearly all (87%) of the Black/African American respondents, but only 70% of White and 64% of Other race group respondents reported having a primary care provider or medical home.

Relatively low percentages (12 – 17%) across the three groups reported ever being tested positive for COVID-19. Slightly higher percentages (19-25%) reported having someone in their household having a positive COVID-19 test. Similar levels (59% - 69%) of worry about a family member becoming sick from the virus were reported across the three groups.

On a 5-point scale with 5 being “Very Worried” Other race group individuals recorded the highest level of worry (3.9) followed by members of the White sample (3.7) and finally the Black/African American sample (3.2). It should be noted that on average all respondent groups reported at least moderate levels of concern about being affected by COVID-19.

**Demographic Characteristics of Respondents Who are Undecided or Not Planning to Get Vaccinated**

The majority of individuals that participated in the survey were vaccinated. However, the following are the demographics characteristics for those who either reported being undecided about getting vaccinated or not planning on getting vaccinated.

| **Undecided** | **Undecided** | **Not Planning on Getting Vaccinated** |
|---|---|---|
| **Race** | | |
| Black/African American | n=7 | n=5 |
| White | n=11 | n=4 |
| Other | n=3 | n=0 |
| **Gender** | | |
| Male | n=5 | n=6 |
| Female | n=3 | n=3 |
| Non-binary | n=2 | n=0 |
| **Age Group** | | |
| 18-34 | n=11 | n=7 |
| 35-54 | n=8 | n=2 |
| 55+ | n=2 | n=0 |

For Respondents Who Reported Being Vaccinated (n=213)

Reasons that Influenced the Decision to Get Vaccinated

Endorsement of the reasons included in the survey were similar across the three race groups. The primary reasons reported were “Wanting to protect self and others against getting the virus”, Having friends/family members offering encouragement to get vaccinated, and having family and

friends who had gotten vaccinated. There was a trend for the Black/African American respondents to report lower percentages of these reasons, but the differences were not substantial.

### Information Sources that Influenced the Decision to Get Vaccinated

The information sources that respondents reported influencing their decisions to get vaccinated were similar across the three race groups. Of note, the information sources most likely to be reported represented conventions sources such as CDC, the Health Department, doctors and other health care providers, health clinics and hospitals. Two sources reported by the Black/African American group less frequently than the other two groups were faith leaders and other leaders in the community. Both are usually important to the African American community.

### Received Incentives

Relatively few (about 40) respondents reported they received incentives in connection with their getting vaccinated. The most frequently identified incentive was a gift or cash card.

### Media Sources that Influenced the Decision to Get Vaccinated

Black/African American respondents were the least likely to report media messages from radio, TV, newspapers, billboards, and other messages seen in the community and half as likely as to identify messages on social media such as Facebook, Twitter, Instagram as sources of encouragement to get vaccination against COVID-19.

### Media Messaging Outlets that Influenced the Decision to Get Vaccinated

All three race groups identified TV news as their top source for receiving encouragement to get vaccinated against COVID-19. With the exception of billboards, Black/African American respondents reported markedly lower levels of reliance on media messages. The differences were quite sharp re: TV commercials, on-line publications, radio campaigns, and fliers.

### Social Media Messaging Outlets that Influenced the Decision to Get Vaccinated

Overall, the most influential outlet was Facebook, followed by Twitter. For most social media outlets, reliance on these sources was lowest among Black/African American respondents and highest among the Other race group.

### Benefits of Getting vaccinated

All three race groups reported moderate to high levels that getting vaccinated "will reduce the likelihood of passing the COVID-19 virus on to others", "reduce the length of time or the severity of symptoms", "allow more socialization in person with others", and "allow more participation in group recreational activities".

### Planning to Get a Seasonal Flu Shot

Other race group individuals were the most likely (89%) to report they planned to get a seasonal flu vaccination. About three-fourths (77%) of the White sample and less than two-thirds (61%) of the Black/African American sample indicated they were planning to get a seasonal flu shot.

### Planning to get a COVID-19 Booster Vaccination

Similar to the pattern of responses for seasonal flu vaccination likelihood, virtually all (98%) of the Other race group planned to get a COVID-19 booster vaccination, 88% of the White sample, but only 70% of the Black/African American sample indicated similar intentions.

## Respondents Who Are Undecided About Being Vaccinated (n=21)

Of the 21 undecided respondents, over half (52%) were White, a third (33%) were Black/African American and 3 (14%) were from the Other Race group. Not all questions were answered by respondents who reported being undecided about their decision to get vaccinated against COVID-19.

### Reasons for Being Undecided about Getting a COVID-19 Vaccination

The most frequently cited reason for Black/African American and White respondents for being undecided about getting vaccinated was the concern over possible side effects. For White respondents along with concerns about side effects a perceived lack of family support for getting vaccinated were the most frequently reported reasons. For Black/African American respondents along with possible vaccine side effects, knowing someone who became ill from the vaccine were the reasons most cited for their vaccine hesitancy. Overall, the Black/African American respondents were more likely to report more reasons for their indecision than White respondents.

### Reasons that Might Influence Getting a COVID-19 Vaccination

White respondents reported that if an employer or school required getting vaccinated or if family/friends were to get vaccinated they may be more inclined themselves to get vaccinated. Black/African American respondents reported that influences from their family/friends may have more of an influencing effect to get vaccinated in comparison with the White respondent sample.

### Information Sources that Might Influence the Decision to Get a COVID-19 Vaccination

White respondents reported that sources that might influence their decision to get vaccinated were more likely than Black/African American respondents to come from nonconventional sources including faith leaders, other community leaders, and personal services providers (i.e., hair stylists, barbers, bartenders).

### Media Sources that Could Influence the Decision to Get Vaccinated

Some respondents from all three groups reported that media messages from TV, radio, newspaper, billboards, and community messaging and messages on social media such as Facebook, Twitter, Instagram might be influential regarding to their decision to get vaccinated.

### Media Messaging Outlets that Could Influence the Decision to Get Vaccinated

The most frequent identified media messaging outlets reported by respondents from the three race groups were TV News and TV commercials advocating for individuals to get vaccination against the COVID-19 virus. Twitter, YouTube, and Facebook also were identified as outlets for possible advocacy for vaccination efforts.

### Planning to Get a Seasonal Flu Shot

Seventy percent of White respondents reported planning to get a seasonal flu shot. By comparison only 33% of the Black/African American and Other race group samples reported they were planning to do so. Another 33% of each of these groups also reported being unsure if they were going to get a flu vaccination.

### Importance to Your Family/Friends that You Get Vaccinated Against the COVID-19 Virus

In response to question about the importance to others regarding if the respondents received a COVID-19 vaccination Black/African American and Other race group respondents reported it was more important than White respondents. Overall ratings indicated it to be only of moderate importance.

### Importance to Your Family/Friends that You Get the Annual Seasonal Flu Vaccination

A similar question was asked regarding annual seasonal flu and results of moderate importance was noted for all groups. Flu vaccinations were perceived as somewhat less important to friends than to families.

### Willingness to Consider FDA Approved COVID-19 Vaccine

FDA approval for a COVID-19 vaccine was not a strong supporting feature for getting vaccinated among Black/African American or White respondents. It was a potential convincing factor for representatives of the Other race group.

## Respondents Reporting Being Not Planning to Get Vaccinated (n=9)

Of the nine respondents who indicated they were not planning to get vaccinatd against COVID-19, four were Black/African American and five were White. This group answerd only a limited number of the questions included on the survey. Response to these survey questions are included in Appendix E.

### Reasons Why NOT Planning to Get a COVID-19 Vaccination

The primary reasons among Black/African American respondents were lack of trust of information from government sources about the vaccines and not believing the vaccines are safe. For White respondents their concerns related to how quickly the vaccines were developed and approved and having cultural or religious beliefs against being vaccinated.

### Media Sources that Are Encouraging NOT to Get Vaccinated

There were too few responses to provide a summary.

### Planning to Get a Seasonal Flu Shot

Of the eight respondents who answer this question - one who was White - answered yes the remaining seven said no.

### Importance to Your Family/Friends that You Get Vaccinated Against the COVID-19 Virus

In response to question about the importance to others regarding if the respondents received a COVID-19 vaccination White it was of low importance to them. None of the Black/African American reported its importance to their families.

### Importance to Your Family/Friends that You Get the Annual Seasonal Flu Vaccination

A similar question was asked regarding annual seasonal flu and results of low importance to Black/African American and White respondents' family and friends.

### Actions that Might Increase the Likelihood that a Respondent Would Get a COVID-19 Vaccination

Only White respondents answered this set of questions. They indicated that they might consider getting vaccinated if: "it was required by their school", "they were offered an incentive", or "a trusted source like a medical provider or someone knowledgeable about the safety of the vaccines recommends getting vaccinated".

### Other people Should Get Vaccinated

When asked if other people should get vaccinated 60% (n=3) of White respondents and 33% (n=1) of Black/African American respondents responded yes.

## Black/African American Sample

The survey sample included 84 respondents who either identified their vaccination status as: (1) those who have been vaccinated (n=73, 87%), (2) those who are undecided about being vaccinated (n=7, 8%) and (3) those who indicate that are not planning get vaccinated (n=4, 5%). The respondents were recruited from Mecklenburg and Cabarrus Counties, North Carolina. The sample distribution was 82% from Mecklenburg and 18% from Cabarrus. Below is a listing of the topics included in the survey.

## Sample Demographics For Respondents Who Reported Being Vaccinated (n=73)

### Respondent Residential Location

65 (89%) reported Mecklenburg County, NC and 8 (11%) reported Cabarrus County, NC as their county of residence.

### Gender Group

Over two-thirds (68%) of the sample were female, a little less was than one-third (31%) was male. Individuals identifying as transgender made up 1% of the sample.

### Age Group

Distribution of the sample by age shows that about two-thirds (68%) of the sample was under the age of 45; the remainder of the sample were either between the ages of 45 – 64 (25%) or 55 and older (7%).

### Marital Status

Over half (54%) of the sample was never married; abut one fifth (21%) were married. The remainder were divorced (11%), separated (7%) or widowed (7%).

### Employment

A breakdown of employment status shows that over three-fourths of the sample either employed full-time (49%) or part-time (20%). About one fourth (23%) identified themselves as students. For the additional employment categories, percent representation was distributed as disabled (10%), retired (6%), homemaker (3%), or unemployed (1%).

### Household Income

The distribution of household incomes indicated that about one third of the sample had incomes between $0 and $19,999, another third in the $40,000 and $74,999. Less than a fifth (18%) reported incomes having incomes of $75,000 or more.

### Health & COVID-19 Experience/Exposure

Nearly all (87%) of the sample reported having a primary care provider or medical home.

A large percentage (86%) of the sample reported have never tested positive for COVID-19. About a fifth (21%) reported having someone in their household with a positive COVID-19 test. Over half (56%) reported being worried about a family member becoming sick from the virus.

On a 5-point scale with 5 being "Very Worried" about themselves getting sick from the virus, two-fifths (40%) of the sample expressed high levels of worry; about a third (34%) reported modest levels of concern.

### Reasons that Influenced the Decision to Get Vaccinated

The primary reasons reported were "Wanting to protect self and others against getting the virus", "Having friends/family members offering encouragement to get vaccinated", "Wanting to decrease the spread of the virus", and "having family and friends who had gotten vaccinated."

### Received Incentives

About 15% reported they received incentives in connection with their getting vaccinated. The most frequently identified incentive was a gift or cash card.

### Information Sources that Influenced the Decision to Get Vaccinated

The leading information sources respondents reported influencing their decisions to get vaccinated were conventional sources such as CDC, the Health Department, doctors and other health care providers, health clinics and hospitals. Non-medical community sources such as faith and community leaders were cited by about 15% of respondents.

### Media Sources that Influenced the Decision to Get Vaccinated

Messaging from conventional media sources such TV, radio newspapers, billboards, and other messages seen in the community were twice (55% vs. 25%) as likely to be identified as likely as sources on influential information compared with social media such as Facebook, Twitter, Instagram as sources of encouragement to get vaccination against COVID-19.

### Media Messaging Outlets that Influenced the Decision to Get Vaccinated

TV news (38%) and TV commercials (19%) were identified as the top sources for receiving encouragement to get vaccinated against COVID-19.

### Social Media Messaging Outlets that Influenced the Decision to Get Vaccinated

Of the social media outlets that were identified as being influential sources of encouragement to get vaccinated, the three sources most reported were Instagram (15%), Facebook (12%), and YouTube (11%).

### Benefits of Getting Vaccinated

Large majorities agreed that that being vaccinated would: "reduce my chances of getting the COVID-19 virus" (87%), "reduce the likelihood that I would pass the virus on to others" (82%), "reduce the length of time and/or the severity of illness should I get the virus" (88%), "allow me to socialize more in person with others (82%), and "allow more participation in group recreational activities.

### Planning to Get a Seasonal Flu Shot

A little less than two-thirds (63%) of the sample indicated they were planning to get a seasonal flu vaccination.

### Planning to get a COVID-19 Booster Vaccination

Nearly three-fourths (71%) of the sample planned to get a COVID-19 booster vaccination.

### Respondents Who Are Undecided About Being Vaccinated (n=7)

Due to the small number of respondents in the survey sample who identified themselves as undecided rather than a review of each survey sections presented below is a selected summary of the findings relating to their being undecided about getting vaccinated against COVID-19. Complete results are presented in Appendix E.

### Reasons for Delaying the Decision to Get Vaccinated

The most frequently cited reasons for being undecided about getting vaccinated was knowing someone who became seriously ill after being vaccinated (n= 3) and concern over possible side effects (n=3).

### Reasons that Might Influence Getting a COVID-19 Vaccination

No more than two respondents identified a particular factor or action that might influence a positive decision to get a COVID-19 vaccination.

### Information Sources that Might Influence the Decision to Get a COVID-19 Vaccination

Advice from a doctor or other health care provider was the most cited (n=3) information source.

### Media Sources and Media Source Outlets that Could Influence the Decision to Get Vaccinated

Messaging from conventional media sources such TV, radio newspapers, billboards, and other messages seen in the community were almost twice (43% vs. 29%) as likely to be identified as likely as sources on influential information compared with social media as sources of encouragement to get vaccinated against COVID-19.

### Benefits of Getting Vaccinated against COVID-19

While half (n=3) of the sample reported that getting vaccinated was likely associated with reducing the chances of being ill from the virus and would enable more group participation, the respondents in this sampler were largely unconvinced that the benefits outweighed the risks.

### Planning to Get a Seasonal Flu Shot

About a third of the sample (n= 2) reported planning to get a seasonal flu shot.

### Importance to Your Family/Friends that You Get Vaccinated Against the COVID-19 Virus

In response to question about the importance to others regarding if the respondents received a COVID-19 vaccination half (50%) of respondents reported to their family and friends.

### Importance to Your Family/Friends that You Get the Annual Seasonal Flu Vaccination

A similar question was asked regarding annual seasonal flu and three-fifths (60%) of respondents reported they reported their family and friend believe getting a flu vaccination was important.

### Willingness to Consider FDA Approved COVID-19 Vaccine

Regarding the question about FDA approval status for a COVID-19 vaccine, only three respondents indicate that it might influence their decision to get vaccinated

### Respondents Reporting Being Not Planning to Get Vaccinated (n=4)

Due to the small number of respondents in the survey sample who identified themselves as undecided rather than a review of each survey sections presented below is a selected summary of the findings relating to their being undecided about getting vaccinated against COVID-19. Complete results are presented in Appendix E.

### Reasons Why NOT Planning to Get a COVID-19 Vaccination

The primary reasons were cultural or religious beliefs and concerns related to how quickly the vaccines were developed and approved.

### Media and Messaging Outlet Sources that Are Encouraging NOT to Get Vaccinated

There were too few responses to provide a summary.

### Planning to Get a Seasonal Flu Shot

Of five respondents who answer this question only indicated they were planning to get a flu shot.

### Actions that Might Increase the Likelihood that a Respondent Would Get a COVID-19 Vaccination

Two respondents each indicated they might consider getting vaccinated if it was required by their school, if they were offered an incentive, or if a trusted source like a medical provider or someone knowledgeable about the safety of the vaccines recommends getting vaccinated.

### Other People Should Get Vaccinated

When asked if other people should get vaccinated three respondents responded yes – people 65 years and older, those with medical conditions, and those who choose to get vaccinated.

# KEY MAJOR FINDINGS

## Reasons for Getting Vaccinated

The majority of our survey respondents were vaccinated and even though participants in the focus group sessions were not required to many disclosed they were vaccinated as well. There was a consensus amongst survey respondents and participants in the stakeholder interviews and focus groups that the main reasons for getting vaccinated were: family and friends, work (i.e. policies), travel, wanting to feel safe, fear of getting sick, and protecting loved ones.

## The Role of Mistrust

"As institutional distrust is shaped by individual and collective experiences of untrustworthiness"… Trustworthiness is a requisite condition to foster trust that is frequently overlooked; in the absence of trustworthiness, distrust is only rational." (Best, 2021) The legacy of medical, research, and public health injustice experienced by African Americans fosters institutional distrust, thereby violating public health ethics theory, practice, and core values.13 One of the most frequently cited violations influencing institutional distrust in African Americans is the U.S. Public Health Service (USPHS) Study of Untreated Syphilis in the Negro Male in Macon County, Alabama (USPHS Syphilis Study) Best, 2021). Lack of perceived susceptibly and/or severity of COVID-19 and skepticisms towards public health interventions and research are all potential consequences of institutional distrust. Previous research indicates a strong association between institutional distrust and nonadherence to health-related recommendations. Evidence of and justification for African Americans' distrust of health care systems have continued to build during the COVID-19 pandemic. Examples include the Flint Michigan water crisis while being under a stay at home order and police violence, protests, and the Black Lives Matter Movement.

## Identifying Trusted Messengers and Trusted Sources

For some communities, representatives of health care and public health agencies, and figures of authority such as pastors, elected officials and business leaders, are effective, trusted messengers. Others will require a different kind of messenger: someone from the community, who shares the experiences and perspectives of its members. Additionally, for some community members, a messenger who is receiving government support may seem to be speaking for the

government and may be less trusted, especially if that messenger seeks to enlist the help and effort of community partners who are expected to donate their time.

RAO's role as a researcher under government contract made them less trusted in the view of some neighborhood activists. RAO should explore ways to connect community-based, grassroots and neighborhood organizations to funding that could then support vaccine and more broad-based health equity work. In addition to efforts aimed at slowing the spread of COVID-19, the World Health Organization has established a new platform to curtail "an overabundance of information—some accurate and some not." Characterized as an infodemic, the influx of information makes it difficult for consumers to identify trustworthy sources and reliable guidance. The accumulation of unreconciled injustices, combined with "misinformation, missteps, conspiracies, and cover-ups"6 during the COVID-19 pandemic has intensified African Americans' distrust in public health, medical, and government systems. In light of this, increasing the visibility of trusted and respected individual and organizational stakeholders to deliver public health information and messages is critically important (Best, 2021).

## RECOMMENDATIONS

Acknowledge the Role of Institutional Racism and the role it plays in vaccine uptake and involvement in research

- Promotion of vaccines tends to focus, as it should, on their benefits to individual and public health; messaging is often framed to correct misinformation. But for some community members, this misses the mark. We recommend messaging that places vaccine attitudes within a larger framework of Black history; respects rather than discounts narratives of mistreatment and mistrust; acknowledges the racism embedded in health care policy and discourse; and centers the experience of underserved and underinsured communities rather than the perspectives of white-dominated health care and public health institutional systems.

Implement Community Engaged Approaches that increase community partnerships

- We learned from our research that not all community-based, grassroots and neighborhood organizations know RAO or are familiar with their work. We recommend that RAO reach out to more of these groups, including ones engaged in organizing and political advocacy as well as those operating in the fields of health care and public health. More people need to see who RAO is and what it can do for the communities.

- Provide opportunities for continued dialogue about vaccines and informed consent as it relates to participation in research and encourages these conversations to include family members “In addition to promoting trusted professional sources to deliver information, public health institutions should consider the importance of familism (i.e., solidarity among multigenerational family and community networks) and the oral tradition within African American communities. Moreover, among college students, African Americans are more likely to be first-generation college students compared with non-Hispanic Whites, which often positions them to act as conduits of health and other information between their older family members and U.S. institutions. Thus, health information can

be delivered from the younger generation to their older family members (i.e., upstream intergenerational communication)" (Best, 2021)

- Apply Community-centered public health practices. Engaging communities that are most burdened by COVID-19 is a critical component to ethical public health practice. Community engagement not only demonstrates respect and sensitivity, but it also helps capture relevant social, cultural, and environmental realities necessary to contextualize public health information. Continue community outreach (including community/neighborhood clinics and educational events) and the establishment of community partnerships.

Create and Disseminate Influential Messaging

- These messages should be accurate and is easy to understand. Efforts should also be made to establish relationships and communication interventions that actively involve trusted community messengers (i.e. pastors, barbers, local health care providers and outreach workers, school officials etc.) to share and promote these messages among community members. Some other important organizational/institutional sources of information which can be leveraged within various African American communities include the National Medical association, the National Black Nurses Association, the National Pan-Hellenic Council (i.e. Black Greek-lettered fraternities and sororities), and others (Best, 2021).

- Messages that are related to vaccine uptake or participation in research including systematic and comprehensive needs assessments should include mild incentives and emphasis altruisms (i.e. the direct benefits of community members participation)

- Increase the availability and choice of incentives for people interested in getting vaccinated. There is strong evidence that incentives can increase vaccination participation, but incentives need to be made more available and match the interest of those being offered an incentive to get vaccinated. Cash or gift cards are desirable incentives, but they may not be what a person needs to support a choice to get

vaccinated. Other incentives such as transportation passes, time off from work, or access to special opportunities in the community may be more preferred.

- Although money and other incentives were also mentioned, the main discussion consisted of strategies to ensure potential research participants had full knowledge about what they were being asked to do and were given sufficient time to consider their options. There was a strong desire to receive information from multiple points of view, including time to go to the library on their own and to talk with friends or family members. (Corbie-Smith, 1999).
- While younger Black/African American adults may be more "social media connected", more of the information pertaining to the vaccine and the COVID-19 virus included on social media is more likely to be incomplete, misleading or simply wrong. Conventional message outlets have higher standards of responsibility to their audiences and require less technical expertise to access and receive. Older adults, especially parents or parent figures (leaders, mentors, people with experience), can be important providers of advice and influence regarding following good health practices including following health advice regarding recommended vaccinations. We recommend targeted media messaging interventions for both traditional and nontraditional (i.e social media platforms) that address misinformation regarding COVID-19 and COVID-19 vaccines.
- The communication source and outlet is important in creating an influential message. But the delivery of that message also needs to be by someone (or something) with credibility and the ability to explain reasons for getting a vaccine and the likely risks that may accompany getting a COVID-19 vaccination. Training in delivery of messaging could improve influential of messaging.
- One approach to leveraging intergenerational communication in the COVID-19 pandemic is to engage adult children, grandchildren, and other caretakers of older African American adults in message development processes and explicitly target these groups in communication strategies aimed at protecting older African American adults from COVID-

19, as they may be consuming or delivering this information to their older family members. (Best, 2021)

- Formative research (including message pre-testing) is a critical step in developing effective public health interventions and messages. Since health crises such as COVID-19 disproportionately affect disadvantaged and vulnerable communities,1–6 it is particularly important to engage those affected in message development and risk communication. (Best, 2021)

Incorporate Theoretical Frameworks that Examines the Role of Racism on Health

Referenced below are examples of theoretical considerations for future community needs assessments that focus on historically marginalized communities.


- Bonilla-Silva E. Rethinking racism: Toward a structural interpretation. American Sociological Review. 1996;62:465-480.
- Clark R, Anderson NB, Clark VR, Williams DR. Racism as a stressor for African Americans: A biopsychosocial model. American Psychologist. 1999;October 1999:805-816.
- Gee GC, Payne-Sturges DC. Environmental health disparities: a framework integrating psychosocial and environmental concepts. Environ Health Perspect. 2004;112(17):1645-1653.
- Graham L, Brown-Jeffy S, Aronson R, Stephens C. Critical race theory as theoretical framework and analysis tool for population health research. Critical Public Health. 2011;21(1):81-93.
- Krieger N. Got theory? – on the 21st c CE rise of explicit use of epidemiologic theories of disease distribution: a review and ecosocial analysis. Current Epidemiol Reports 2014; 1(1):45-56
- Viruell-Fuentes EA, Miranda PY, Abdulrahim S. More than culture: Structural racism, intersectionality theory, and immigrant health. Soc Sci Med. 2012.

## CONCLUSIONS

Our recommendations are based upon findings from our data collection and the continued emergence of the COVID-19 scientific literature. Also, throughout the needs assessment process we reflected upon our on potential biases and positionality as researchers and practitioners, how this may shape our development of instruments for data collection and the interpretation and presentation of our findings and how to incorporate best research practices to limit researcher bias as a research team. Next recommended steps for RAO Community Health would be to have participants who participated in the needs assessment review the major findings and recommendations for respondent validation to enhance trustworthiness of our findings (Birt et al, 2016) and to plan a community forum to involve community members in identifying next action steps.

## REFERENCES


1. A Timeline of COVID-19 Developments in 2020. Accessed June 24, 2021. https://www.ajmc.com/view/a-timeline-of-covid19-developments-in-2020

2. Coronavirus. Accessed June 24, 2021. https://www.who.int/westernpacific/health-topics/coronavirus

3. CDC. Cases, Data, and Surveillance. Centers for Disease Control and Prevention. Published February 11, 2020. Accessed October 21, 2021. https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html

4. Corbie-Smith G, Wolfe MK, Hoover SM, Dave G. Centering Equity and Community in the Recovery of the COVID-19 Pandemic. *N C Med J*. 2021;82(1):62-67. doi:10.18043/ncm.82.1.62

5. Sessoms B. How does your county's COVID-19 vaccination rate stack up to others in NC? Raleigh News & Observer. Accessed October 3, 2021. https://www.newsobserver.com/news/local/article254267758.html

6. Guilford County COVID-19 Data. Accessed October 3, 2021. https://guilford-covid19-data-guilfordgis.hub.arcgis.com/

7. Hamel L, Kirzinger A, Lopes L, Kearney A, Sparks G, Brodie M. *KFF COVID-19 Vaccine Monitor: January 2021*.; 2021. Accessed June 24, 2021. https://www.kff.org/coronavirus-covid-19/report/kff-covid-19-vaccine-monitor-january-2021/

8. Rattner BLJ Nate. U.S. reaches 70% Covid vaccine milestone for adults about a month behind Biden's goal. CNBC. Published August 2, 2021. Accessed August 3, 2021. https://www.cnbc.com/2021/08/02/covid-vaccine-us-reaches-bidens-70percent-goal-for-adults-a-month-behind.html

9. Herd immunity and COVID-19 (coronavirus): What you need to know - Mayo Clinic. Accessed August 3, 2021. https://www.mayoclinic.org/diseases-conditions/coronavirus/in-depth/herd-immunity-and-coronavirus/art-20486808

10. MacDonald NE. Vaccine hesitancy: Definition, scope and determinants. *Vaccine*. 2015;33(34):4161-4164. doi:10.1016/j.vaccine.2015.04.036

11. Betsch C, Böhm R, Chapman GB. Using Behavioral Insights to Increase Vaccination Policy Effectiveness. *Policy Insights Behav Brain Sci*. 2015;2(1):61-73. doi:10.1177/2372732215600716

12. 1_Report_WORKING_GROUP_vaccine_hesitancy_final.pdf. Accessed June 23, 2021. https://www.who.int/immunization/sage/meetings/2014/october/1_Report_WORKING_GROUP_vaccine_hesitancy_final.pdf

13. Jarrett C, Wilson R, O'Leary M, Eckersberger E, Larson HJ. Strategies for addressing vaccine hesitancy – A systematic review. *Vaccine*. 2015;33(34):4180-4190. doi:10.1016/j.vaccine.2015.04.040

14. Larson HJ, Jarrett C, Eckersberger E, Smith DMD, Paterson P. Understanding vaccine hesitancy around vaccines and vaccination from a global perspective: A systematic review of published literature, 2007–2012. *Vaccine*. 2014;32(19):2150-2159. doi:10.1016/j.vaccine.2014.01.081

15. Babalola S. Maternal reasons for non-immunisation and partial immunisation in northern Nigeria. *J Paediatr Child Health*. 2011;47(5):276-281. doi:10.1111/j.1440-1754.2010.01956.x

16. Lopes L, Stokes M, 2021. KFF COVID-19 Vaccine Monitor: June 2021. KFF. Published June 30, 2021. Accessed October 18, 2021. https://www.kff.org/coronavirus-covid-19/poll-finding/kff-covid-19-vaccine-monitor-june-2021/

17. National Academies of Sciences E. *Strategies for Building Confidence in the COVID-19 Vaccines*.; 2021. doi:10.17226/26068

18. Building Vaccine Confidence Through Community Engagement: (510882020-001). Published online 2020. doi:10.1037/e510882020-001

19. Quinn SC, Andrasik MP. Addressing Vaccine Hesitancy in BIPOC Communities — Toward Trustworthiness, Partnership, and Reciprocity. *N Engl J Med*. 2021;0(0):null. doi:10.1056/NEJMp2103104

20. Bogart LM, Dong L, Gandhi P, et al. What Contributes to COVID-19 Vaccine Hesitancy in Black Communities, and How Can It Be Addressed? Published online March 1, 2021. Accessed June 23, 2021. https://www.rand.org/pubs/research_reports/RRA1110-1.html

21. Bunch L. A Tale of Two Crises: Addressing Covid-19 Vaccine Hesitancy as Promoting Racial Justice. *HEC Forum Interdiscip J Hosp Ethical Leg Issues*. 2021;33(1-2):143-154. doi:10.1007/s10730-021-09440-0

22. Enhancing public trust in COVID-19 vaccination: The role of governments - OECD. Accessed June 23, 2021. https://read.oecd-ilibrary.org/view/?ref=1094_1094290-a0n03doefx&title=Enhancing-public-trust-in-COVID-19-vaccination-The-role-of-governments&_ga=2.77422165.1958189684.1624501468-2000638418.1624501468

23. Privor-Dumm L, King T. Community-based Strategies to Engage Pastors Can Help Address Vaccine Hesitancy and Health Disparities in Black Communities. *J Health Commun*. 2020;25(10):827-830. doi:10.1080/10810730.2021.1873463

24. Luyten J, Beutels P. The Social Value Of Vaccination Programs: Beyond Cost-Effectiveness. *Health Aff (Millwood)*. 2016;35(2):212-218. doi:10.1377/hlthaff.2015.1088

25. Sobo EJ. Social cultivation of vaccine refusal and delay among Waldorf (Steiner) school parents. *Med Anthropol Q*. 2015;29(3):381-399.

26. The use of the health belief model to assess predictors of intent to receive the COVID-19 vaccine and willingness to pay. Accessed June 24, 2021. http://www.tandfonline.com/doi/epub/10.1080/21645515.2020.1790279?needAccess=true

27. Shmueli L. Predicting intention to receive COVID-19 vaccine among the general population using the health belief model and the theory of planned behavior model. *BMC Public Health*. 2021;21(1):1-13. doi:10.1186/s12889-021-10816-7

## APPENDIX A: VACCINE HESITANCY: SELECTED SOURCES

Emerging public health threats present unique challenges regarding dissemination of evidence and intervention design given the lag in publication of peer-reviewed literature. In these situations, it is prudent to rely and learn from the real-time knowledge being generated from responsible and respected NGOs and governmental entities. The following list of such resources should be used as a vehicle for considering the developing knowledge around strategies for messaging to improve COVID vaccine uptake. This is not meant to replace examination of peer-reviewed evidence but should be used to hasten and inform communication and intervention design efforts.

*Sources are listed in alphabetical order:*

**Ad Council. (2020). *COVID-19 vaccine education initiative: Messaging recommendations* [infographic]. COVID Collaborative. https://www.adcouncil.org/covid-vaccine**

Messaging recommendations based on extensive qualitative and quantitative research conducted in December 2020, which specifically tested potential messaging with a variety of Americans nationwide, including white Americans, Black Americans and Hispanics. Identifies primary drivers of vaccine hesitancy; strategic guidelines for messaging, including tone and language considerations; and trusted messengers.

**Centers for Disease Control and Prevention. (2021, January 28). *Increasing COVID-19 vaccine uptake among members of racial and ethnic minority communities: A guide for developing, implementing, and monitoring community-driven strategies*. US Department of Health and Human Services. Retrieved August 6, 2021, from https://www.cdc.gov/vaccines/covid-19/downloads/guide-awardees-community-driven-strategies.pdf**

A community-driven approach to identifying partners and increasing vaccine confidence and uptake using five steps:

- Step 1: Use data to identify and prioritize racial/ethnic minority communities that may be less likely to receive a COVID-19 vaccine.
- Step 2: For each community of focus, identify relevant government officials and community partners to form a "community partner network."
- Step 3: Work with the community partner network to understand barriers in the community and create an implementation plan for vaccination messaging, outreach, and administration (includes a table with potential questions and considerations for workshops and implementation plans).

- Step 4: Help community partner networks implement plans, providing funding and support as needed.
- Step 5: Conduct continuous program evaluation through data collection and analysis to inform possible changes to the ongoing strategies (includes sample qualitative questions to supplement required vaccination data).
    - Appendix A lists data sources with links and Appendix B contains a summary of activities relevant to COVID-19. (13 pages)

**Centers for Disease Control and Prevention. (n.d.). *Vaccinate with confidence: Strategy to reinforce confidence in COVID-19 vaccines*. US Department of Health and Human Services. Accessed August 7, 2021, https://www.cdc.gov/vaccines/covid-19/vaccinate-with-confidence.html**

This website briefly describes vaccine confidence and why it is important and then provides links for six ways to help build COVID-19 vaccine confidence and the most recent as well as previous versions of the COVID-19 State of Vaccine Confidence Insights Report. It concludes with a resource section containing various communication toolkits, checklists, infographics, and other resources to help you get started.

**Hooper, M. W., Nápoles, A.-M., & Pérez-Stable, E. J. (2021). No populations left behind: Vaccine hesitancy and equitable diffusion of effective COVID-19 vaccines. *Journal of General Internal Medicine, 2021 Mar 22*. https://doi.org/10.1007/s11606-021-06698-5**

COVID-19 vaccine hesitancy is not uniform within racial/ethnic minority populations; yet, given the disproportionate impact, understandable distrust, and widespread misinformation, there is an imperative to overcome challenges associated with vaccination willingness and uptake, as well as implementation and access. This Perspective [authors are from the National Institute of Minority Health and Health Disparities (NIMHD)] discusses the complexity of drivers for each of these areas, which include individual, community, and structural factors. It also highlights two initiatives at the National Institutes of Health. One is focused on addressing misinformation and distrust through academic-community partnerships, and the other on community-engaged behavioral interventions to address the population-specific reasons for COVID-19 vaccine hesitancy, support informed decision-making, and promote equitable access among populations with health disparities.

**Hamel, L., Kirzinger, A., Lopes, L., Kearney, A., Sparks, G., & Brodie, M. (2021, January 22). *KFF COVID-19 Vaccine Monitor: January 2021 (Vaccine Hesitancy)*. Kaiser Family Foundation. Retrieved from https://www.kff.org/report-section/kff-covid-19-vaccine-monitor-january-2021-vaccine-hesitancy/**

The KFF COVID-19 Vaccine Monitor is an ongoing research project tracking the public's attitudes and experiences with COVID-19 vaccinations. Using a combination of surveys and qualitative research, this project tracks the dynamic nature of public opinion as vaccine development and distribution unfold, including vaccine confidence and hesitancy, trusted messengers and messages, as well as the public's experiences with vaccination. The January 22, 2021, issue specifically looks at vaccine hesitancy.

**Kirzinger, A., Sparks, G., Hamel, L., Lopes, L., Kearney, A., Stokes, M., & Brodie, M. (2021, August 4).** ***KFF COVID-19 Vaccine Monitor: July 2021*****. Kaiser Family Foundation. Retrieved from https://www.kff.org/coronavirus-covid-19/poll-finding/kff-covid-19-vaccine-monitor-july-2021/**

The August 4, 2021, issue of KFF COVID-19 Vaccine Monitor updates the previous report with the latest findings.

**Chou, W.-Y. S., Burgdorf, C. E., Gaysynsky, A., & Hunter, C. M. (2020).** ***COVID-19 vaccination communication: Applying behavioral and social science to address vaccine hesitancy and foster vaccine confidence*****. National Institutes of Health. Retrieved from https://obssr.od.nih.gov/news-and-events/news/director-voice/nih-releases-report-summarizing-research-vaccine-communication**

Although newly developed COVID-19 vaccines are poised to be a powerful tool in the control of the devastating COVID-19 pandemic, the public's confidence in and willingness to receive the vaccines will determine the outcome of this mass-scale public health intervention. This report, which was developed in consultation with leading experts in social and behavioral sciences and public health, outlines **evidence-informed communication strategies in support of national COVID-19 vaccine distribution efforts** across federal agencies and their state and local partners. The recommendations put forth are actionable and responsive to the unique challenges faced by the United States in responding to the COVID-19 pandemic. The report relies on a few foundational practices of effective health communication, namely **coordinated communication and consistent messaging, trust building through partnerships, consideration of different health literacy levels** in the population, and importantly, **prioritizing equity** in all aspects of communication. We build on these foundational principles to outline three intersecting considerations for communication efforts (*What* is being communicated, *Who* is the target of the message, and *How* the message is communicated), along with concrete recommendations for targeted and tailored communication that responds to the needs and perspectives of the intended audience.

**Razai, M. S., Chaudhry, U. A., Doerholt, K., Bauld, L., & Majeed, A. (2021). Covid-19 vaccination hesitancy.** ***BMJ, 373*****, n1138. http://doi.org/10.1136/bmj.n1138**

In this practice pointer we offer an overview of vaccine hesitancy and some approaches that clinicians and policymakers can adopt at the individual and community levels to help people make informed decisions about Covid-19 vaccination. Key points include:

- Lack of confidence in vaccines for Covid-19 poses direct and indirect threats to health, and could derail efforts to end the current pandemic.
- Concerns about unknown future effects, side effects, and a lack of trust are common reasons given by people who say they are unlikely to have a Covid-19 vaccine.
- No single intervention is likely to be able to address vaccine hesitancy.
- Consider barriers to uptake of vaccination at a population level and in groups who have lower rates of vaccine uptake.
- Develop local approaches by engaging members of the community and co-producing communications and materials that meet population needs.

**Karpman, M., Kenney, G. M., Zuckerman, S., Gonzalez, D., & Courtot, B. (2021). *Confronting COVID-19 vaccine hesitancy among nonelderly adults: Findings from the December 2020 Well-Being and Basic Needs Survey*. Urban Institute. https://www.urban.org/sites/default/files/publication/103713/confronting-covid-19-vaccine-hesitancy-among-nonelderly-adults_0_0.pdf**

This study explores vaccine hesitancy among nonelderly adults with new data from the Urban Institute's Well-Being and Basic Needs Survey (WBNS), a nationally representative survey of more than 7,500 adults ages 18 to 64 fielded December 8 through 30, 2020. We define vaccine-hesitant adults as those reporting they would probably not or definitely not get a COVID-19 vaccine. We note vaccine hesitancy exists along a continuum (SAGE Working Group 2014), and concerns that people hold at a point in time may change as new information becomes available about the vaccines' effectiveness and potential side effects. Protecting the population from COVID-19 through vaccination requires understanding who is hesitant, what their concerns about the vaccines are, and who is best positioned to address them. This study examines how vaccine concerns, trust in community sources of information, and connections to the health care system vary by race, ethnicity, and political party affiliation, where some of the starkest differences in vaccine hesitancy are evident.

**Gonzalez, D., Jakubos, H. S., Courtot, B., Alvarez Caraveo, C., & Aarons, J. (2021). COVID-19 vaccine attitudes among nonelderly adults who reported being unlikely to get vaccinated: A qualitative snapshot from the early vaccine rollout. Urban Institute. https://www.rwjf.org/en/library/research/2021/06/covid-19-vaccine-attitudes-among-nonelderly-adults-who-reported-being-unlikely-to-get-vaccinated.html**

Adults' decision-making about getting the COVID-19 vaccines is complex. Much is known already from polls and survey data about the characteristics of adults reluctant to get a COVID-19 vaccine and their concerns about the vaccines, including worries about side effects and the rapid

development process. Here, we add to our earlier work exploring COVID-19 vaccine confidence (Karpman et al. 2021). This brief provides qualitative insights from interviews conducted in February 2021 with 40 nonelderly adults who reported in the Urban Institute's December 2020 Well-Being and Basic Needs Survey (WBNS) that they would probably or definitely not get a COVID-19 vaccine.

**Thomas, K., & Darling, J. (2021, March 2).** ***Education is now a bigger factor than race in desire for COVID-19 vaccine*****. USC Schaeffer School of Public Health. Retrieved from https://healthpolicy.usc.edu/evidence-base/education-is-now-a-bigger-factor-than-race-in-desire-for-covid-19-vaccine/**

A summary of the February 2021 findings from the nationally representative Understanding Coronavirus in America Tracking Survey conducted by the USC's Center for Social and Economic Research. As of February 2021, and excluding those already vaccinated, more than half of all U.S. adults (56%) planned to get vaccinated for COVID-19. However, people's willingness to get a COVID-19 vaccination varies by race, ethnicity, age, education, income, gender and other demographic factors. While the survey finds that racial and ethnic differences in vaccine hesitancy persist, **level of education now has a stronger effect on people's willingness to get the vaccine**. The only exception may be people of Asian descent who—regardless of educational level—indicate a high level of willingness to get vaccinated. Discussion includes vaccine hesitancy and equitable access, vaccine attitudes and education, and implications of the findings.

**Washington State Department of Health. (2020).** ***Social marketing recommendations for COVID-19 vaccine*****. Retrieved from https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/VaccineSocialMarketingPlan.pdf**

The Washington State Department of Health (DOH) funded this project to develop strategic community-based social marketing recommendations. These recommendations are designed to motivate people living in Washington state to get the COVID-19 vaccine when it becomes available and when they are eligible to receive it. Ultimately, this will help flatten the Coronavirus curve, allow Washingtonians to protect themselves and avoid spreading the virus to others. This process was instigated by the COVID-19 Vaccine Education and Communication team at DOH. The DOH team worked hand-in-hand with a team of social marketing experts to conduct this research and complete the planning process. The process was organized around 10 planning steps used in social marketing. The team used a combination of secondary and primary research and social marketing planning principles to arrive at these recommendations.

**RAO Community Health Vaccine Messaging Project 2021**

**Community Stakeholder Interview Script**

Date: _____

Person Interviewed: _____

Organization: _____

**BEGIN RECORDING**

Good morning/afternoon. My name is Bruce Rich. I'm a Project Director with the UNCG Center for Housing and Community Studies. This interview is part of the RAO Community Health project on vaccine resistance and health messaging in African American communities. Our job is to find out more about the challenges and obstacles encountered in the vaccination effort, about people's attitudes toward the vaccine, and about the most effective ways of delivering the vaccine and communicating information about it. We're speaking with community leaders, educators, administrators and health care providers – people with knowledge and experience in some aspect of the vaccine rollout.

Thank you for taking the time to answer our questions. We want to point out that this interview is confidential. Your answers won't be used for any reason other than for purposes of this assessment. We will report on what we learned, but no statement will be attributed by name or affiliation with any specific respondent.

1. To begin, tell me about you and (if you are part of an organization), about your organization and your role in it.

2. What communities or neighborhoods do you serve or work in that are predominately African American?

3. What challenges have these communities experienced in gaining access to quality health care?

4. Are you or your organization part of the effort to get the COVID-19 vaccine to people?
    - If so, how are you and your organization involved and what is your role?
    - Has the subject of the seasonal flu vaccine and people's attitudes toward it come up during this process?

**The remaining questions pertain to vaccine confidence, acceptance, and health messaging in African American Communities.**

5. How would you describe the impact of COVID-19 on African American communities in Cabarrus and Mecklenburg counties?

6. Regarding the people you've talked with who have been vaccinated, what are the main reasons they have for getting vaccinated?

7. Regarding the people you've talked with who do not intend to get vaccinated or are ambivalent about it, what are the main reasons they have for not getting vaccinated?
    - Have you been involved in any specific efforts to promote or encourage community members to get the vaccine?
    - Have there been efforts by others that you feel are notable and are making a difference?

8. Regarding the people you've talked with who want to get the vaccine but face obstacles to access, what are the main obstacles?
    - Have you been involved in any specific efforts to help community members to overcome these obstacles?

- Have there been efforts by others that you feel are notable and are making a difference?

9. Do people from these groups have similar or contrasting attitudes about the seasonal flu vaccine and the COVID-19 vaccine?

10. What can you and others who are part of the effort to get the COVID-19 vaccine to people do
    - To learn more about people's concerns and the obstacles they face?
    - To communicate more effectively with them?
    - To earn the trust of community members?

11. Based upon conversations you have had with people you work with in your community
    - What individuals, organizations, news media and other information sources stand out as examples of trusted sources of health information, including vaccine information, in African American communities in Cabarrus and Mecklenburg Counties, in NC?
    - What about them makes them "trusted"?
    - What information sources stand out as examples of untrustworthy sources of health information, including vaccine information, in African American communities in Cabarrus and Mecklenburg Counties?
    - What about them is unhelpful or even discourages people from getting vaccinated?
    - Do these attitudes toward information sources vary or differ by sub-groups or populations (by age, gender, socioeconomic status, location) within African American communities in Cabarrus and Mecklenburg Counties in NC?
    - If so, how?

12. Based upon conversations you have had with people that you work with in your community who do not trust the vaccine, what are their reasons for not trusting the vaccine.

13. Would it help if more vaccine clinics or mobile vaccination sites were brought to the community?
    - If so, what specific areas or locations would you suggest would be convenient for the communities you work with?
    - Would you or your organization consider hosting a community vaccination site or assist with outreach efforts to get the word out about nearby vaccination sites?

14. What kinds of incentives might encourage people to be vaccinated?
    - Cash, gift cards, prize lotteries, bus passes, child care, food shopping assistance?

15. Do you think relaxed mask mandates and social distancing rules will affect people's decisions about whether to get vaccinated?

16. In what ways do you think the COVID-19 vaccine and seasonal flu vaccine face different or similar challenges and barriers?

17. Are there other challenges and concerns that your organization and others face that we haven't talked about?

**RAO Community Health Vaccine Messaging Project 2021**

**Focus Group Script**

Date: _____

Start Time: _____

Focus Group Facilitator: _____

Group Participants:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

**BEGIN RECORDING**

Good morning/afternoon. My name is _____. I'm a _____ with the UNCG Center for Housing and Community Studies. We thank all of you for joining us today.

This event is part of the RAO Community Health project on vaccine resistance and health messaging in African American communities. Our job is to find out more about the challenges and obstacles encountered in the vaccination effort, about people's attitudes toward the vaccine, and about the most effective ways of delivering the vaccine and communicating information about it.

Today's group is devoted specially to issues of interest to young people, ages 18 to 25. We know that a smaller percentage of this age group has been vaccinated than other age groups, and we want to explore some of the reasons for this.

We're not asking you to share information about your own medical condition, but you can share about your experiences or the experiences of people you know. We're seeking your thoughts, observations, and opinions; there are no right or wrong answers.

One last thing. What is said here will be confidential. We will report what we learn, but you won't be identified by name. We're recording the discussion just to be sure that we don't miss anything important, but no one outside our project team will hear the recording or read the transcript.

1. To begin, can we have each person introduce themselves? Tell us your name and where you're from. [Facilitator hold to five minutes.]

2. How would you describe the impact of COVID-19 on your community?

3. You've probably talked with friends and family, and people you work with or otherwise encounter, about the vaccine. Let's talk about some of the things you've heard people say about it.

    - First, for the people you've talked with who have been vaccinated, what are the main reasons they have for getting vaccinated?

    - For the people you've talked with who are taking a "wait-and-see" attitude or have expressed concerns, what are the main reasons they have for not getting vaccinated yet?

    - What about the people who say they definitely won't get vaccinated? What are their reasons?

    - And finally, those who do want the vaccine or say they intend to get it but haven't yet, what do you think is holding them up?

4. Do you know anyone who changed their mind and got the vaccine? What events, messages or other reasons led them to change their minds?

5. What or who are the trusted sources of information about health care in general, and COVID and the vaccine in particular, for you and people in your communities? What is it about them that makes them trusted?

6. Would hearing from a trusted person who could provide accurate information about the COVID-19 vaccine influence you or people you know?

    - What specific information would you like this person to share with you?

    - Does it matter if the person is a locally known person or someone that people in the community trust?

7. Do you think more people that you know would get vaccinated if there were more vaccine locations right in the neighborhoods where they live?

8. What do you think about the incentives that are being offered, like cash or gift cards or a lottery, to encourage people to be vaccinated? Do you think those things work?

9. The circumstances of the pandemic are changing rapidly.

    - Will lower case numbers and relaxed mask mandates and social distancing rules affect people's decisions about whether to get vaccinated?

    - Will the more transmissible Delta variant or another yet-to-develop variant of the virus affect people's decisions about whether to get vaccinated?

10. In what ways do you think people's attitudes about the COVID-19 vaccine and seasonal flu vaccine are different or similar?

Again, thanks for taking the time to talk with us today. Your contributions have been extremely interesting and helpful. Please remember to keep in confidence the things we have discussed today. It's OK to tell people the general nature of our discussion but don't use anyone's name. Thank you.

**TURN OFF RECORDING**

End Time: _____

APPENDIX D: COMMUNITY SURVEY

# RAO Community Health Vaccine Survey

**If you have access to the internet, complete this survey at:** go.uncg.edu/raovaccinesurvey

Welcome to the RAO Community Health/University of North Carolina at Greensboro COVID-19 Health Vaccination Interest Survey. The purpose of this survey is to collect information on people's interest in and experience with getting a COVID-19 vaccination. The survey also includes a few questions about seasonal flu vaccination. We want to hear from people who ***have been vaccinated, are undecided about getting vaccinated***, and those who ***are not planning to get vaccinated***. All perspectives are welcomed and valued. Your participation will be completely anonymous, and all information will be kept confidential.

The responses you provide will be combined with the responses of all the other people who complete the survey. We will use this information to help us understand what people need and want to know about the COVID-19 vaccine, so that we can help them make informed decisions about being vaccinated.

The survey also includes a few questions about seasonal flu vaccination.

Your participation in the survey will not be connected to any health services you are currently or may receive in the future. The responses to the questions you give will be added to the responses from all participants of the survey. The survey should take about 10 minutes to complete. If you have any questions or concerns, please contact RAO Community Health REACH Program Director Ashley Carmenia (ACarmenia@raoassist.org).

Please mark your survey like this:

Correct: ● Incorrect: ✓ ✗ ⊘

## DEMOGRAPHICS

A1. How do you identify?

- ○ Male
- ○ Female
- ○ Non-binary
- ○ Transgender
- ○ Other, specify _____

A2. How do you identify? (Check all that apply)

- ○ Black/African American
- ○ White
- ○ American Indian/Alaska Native
- ○ Native Hawaiian/Pacific Islander
- ○ Asian
- ○ Hispanic/Latinx
- ○ Other, specify _____

A3. How old are you?

- ○ Under 18
- ○ 18 - 24
- ○ 25 - 34
- ○ 35 - 44
- ○ 45 - 54
- ○ 55 - 64
- ○ 65 - 74
- ○ 75 - 84
- ○ 85 or older

A4. Where do you live?

- ○ Mecklenburg County, NC
- ○ Cabarrus County, NC

A5. What is your Zip Code? _____

A6. What is your marital status?

- ○ Married
- ○ Widowed
- ○ Divorced
- ○ Separated
- ○ Never married

A7. What is your employment status? (Check all that apply)

- ○ Employed full time
- ○ Employed part time
- ○ Unemployed looking for work
- ○ Unemployed not looking for work
- ○ Retired
- ○ Student
- ○ Disabled
- ○ Homemaker

A8. What is your total household income?

- ○ $0 - $19,999
- ○ $20,000 - $39,999
- ○ $40,000 - $74,999
- ○ More than $75,000

A9. Do you have children under the age of 18?

- ○ Yes (*If selected, please answer A10*)
- ○ No

A10. Have any of your children been vaccinated against COVID-19?

- ○ Yes
- ○ No (*If selected, please answer A11*)

A11. If no, will you allow them to be vaccinated?

- ○ Yes
- ○ No
- ○ Undecided or unsure

## HEALTH INFORMATION

A12. Do you have a primary doctor / care provider / medical home?

- ○ Yes
- ○ No
- ○ Prefer not to say

A13. Have you ever tested positive for COVID-19?

- ○ Yes
- ○ No
- ○ Prefer not to say

A14. Has anyone in your household had COVID-19?

- ○ Yes
- ○ No
- ○ Prefer not to say

A15. Are you worried about a family member getting sick from the COVID-19 virus?

- ○ Yes
- ○ No
- ○ Prefer not to say

A16. On a scale 1-5, how worried are you about getting sick from the COVID-19 virus?

- ○ 1 (Not worried at all)

- ○ 2
- ○ 3
- ○ 4
- ○ 5 (Very worried)

## COVID-19 VACCINE STATUS

***Instruction***: Your answer to this question below will direct you to different group of follow-up questions. Please use the page instructions in the parenthesis.

A17. What is your current status for receiving the COVID-19 vaccine?

- ○ Have been vaccinated (**Complete pages 6-7**)
- ○ Undecided about getting vaccinated (**Complete pages 8-11**)
- ○ Not planning on getting vaccinated (**Complete pages 12-15**)

## ANSWER IF YOU HAVE BEEN VACCINATED

B1. Which of the following are reasons that influenced you to get vaccinated? (Check all that apply)

- ○ My friends/family members encouraged me
- ○ Most of my family and friends had gotten vaccinated
- ○ I wanted to protect myself and others against getting the virus
- ○ My employer gave me time off to get vaccinated
- ○ My employer or school required me to get vaccinated
- ○ I received an incentive for getting vaccinated (*If selected, please answer B2*)
- ○ Decrease the spread of more contagious virus
- ○ Messages from celebrities, sports stars, others with high profiles on social media
- ○ Other (please describe) _____

B2. If received an incentive what type(s) did you receive? (Check all that apply)

- ○ Gift Card / Cash Card
- ○ Chance to win prizes in a lottery
- ○ Time off from work
- ○ Merchandise such as a t-shirt or small gift items
- ○ Other (please describe) _____

B3. Which of the following information sources helped you to decide to get vaccinated? (Check all that apply)

- ○ Advice from doctor or other health care provider
- ○ Encouragement from a faith leader from my community
- ○ Encouragement from other local community leaders
- ○ Suggestions from a personal services connection (i.e., hair stylist, barber, bartender)
- ○ Announcements from hospitals and/or health care clinics
- ○ Information from the CDC, FDA, County Health Department, and other government sources
- ○ Other (please describe) _____

B4. Which of the following media sources influenced you to get vaccinated?

- ○ Media messages from radio, TV, newspaper, billboards, and others seen in the community
- ○ Messages on social media such as Facebook, Twitter, Instagram
- ○ Other (please describe) _____

B5. To what extent do you feel each of the following is true for you now that you have been vaccinated?

| | Not True at All | Unsure | Somewhat True | Very True |
|---|---|---|---|---|
| Reduces my chances of getting the COVID-19 virus | ○ | ○ | ○ | ○ |
| Reduces the likelihood that I would pass the COVID-19 virus on to others | ○ | ○ | ○ | ○ |
| Reduces the length of time or the severity of symptoms should I get sick from the COVID-19 virus | ○ | ○ | ○ | ○ |
| Allows me to socialize more in person with others | ○ | ○ | ○ | ○ |
| Allows me to participate in more group recreational activities | ○ | ○ | ○ | ○ |

B6. Are you planning to get a seasonal flu shot this Fall?

- ○ Yes
- ○ No
- ○ Not sure

B7. If you become eligible for a booster vaccination, are you planning to get one?

- ○ Yes
- ○ No
- ○ Not sure

**STOP HERE. THANK YOU!**
**PLEASE COMPLETE SEPARATE FORM FOR GIFT CARD DRAWING**

## ANSWER IF YOU ARE UNDECIDED ABOUT GETTING VACCINATED

U1. Which of the following were reasons that have kept you from getting a COVID-19 vaccination? (Check all that apply)

- ○ My employer wouldn't give me time off to get vaccine
- ○ My family/friends have not been supportive of me getting the vaccine
- ○ I am concerned about the possible side effects
- ○ I do not want to miss work due to possible vaccine side effects
- ○ I have health conditions that the vaccine may affect
- ○ I don't trust the information about the safety of the vaccines
- ○ I don't believe the virus is that bad or is making people all that sick
- ○ I have concerns about being tracked by the government
- ○ I wanted to "wait and see" how the vaccine is working for other people before getting vaccinated
- ○ I know someone that became seriously ill after receiving a COVID-19 vaccine
- ○ Not all of the vaccines being provided to protect against COVID-19 are fully FDA approved
- ○ Other (please describe) _____

U2. Which of the following are reasons that might influence you to get vaccinated? (Check all that apply)

- ○ Most of my friends/family members encourage me to
- ○ Most of my family and friends have gotten vaccinated
- ○ It is established that it would protect me and others against getting COVID-19
- ○ My employer gives me time off to get vaccinated
- ○ My employer or school requires me to get vaccinated
- ○ I am offered an incentive to get vaccinated
- ○ It is proven to decrease the spread of more contagious variants of COVID-19
- ○ Messages from celebrities, sports stars, others with high social profiles that encourage me to get vaccinated
- ○ Other (please describe) _____

U3. Which of the following information sources would help you to decide to get vaccinated? (Check all that apply)

- ○ Advice from doctor or other health care provider
- ○ Encouragement from a faith leader from my community
- ○ Encouragement from other local community leaders

- ○ Suggestions from a personal services connection (i.e., hair stylist, barber, bartender)
- ○ Announcements from hospitals and/or health care clinics
- ○ Information from the CDC, FDA, County Health Department, and other government sources
- ○ Other (please describe) _____

U4. Which of the following media sources might influence you to get vaccinated?

- ○ Media messages from radio, TV, newspaper, billboards, and others seen in the community
- ○ Messages on social media such as Facebook, Twitter, Instagram
- ○ Other (please describe) _____

U5. To what extent do you feel each of the following is true for you if you were to get vaccinated against COVID-19?

| | Not True at All | Unsure | Somewhat True | Very True |
|---|---|---|---|---|
| There would be a reduced risk of my getting the COVID-19 virus | ○ | ○ | ○ | ○ |
| There would be a lower risk of my passing on the COVID-19 virus on to others | ○ | ○ | ○ | ○ |
| The length of time or the severity of symptoms would be less should I get sick from the COVID-19 virus | ○ | ○ | ○ | ○ |
| I would be able to socialize more in person with others | ○ | ○ | ○ | ○ |
| I would be able to participate in more group recreational activities | ○ | ○ | ○ | ○ |

U6. Are you planning to get a seasonal flu shot this Fall?

- ○ Yes
- ○ No
- ○ Not sure

U7. How important is it to your **family** that you get the COVID-19 vaccine?

- ○ 1 (Not Important at All)
- ○ 2

- ○ 3
- ○ 4
- ○ 5 (Extremely Important)

U8. How important is it to your **family** that you get the annual seasonal flu shot?

- ○ 1 (Not Important at All)
- ○ 2
- ○ 3
- ○ 4
- ○ 5 (Extremely Important)

U9. How important is it to your **friends** that you get the COVID-19 vaccine?

- ○ 1 (Not Important at All)
- ○ 2
- ○ 3
- ○ 4
- ○ 5 (Extremely Important)

U10. How important is it to your **friends** that you get the annual seasonal flu shot?

- ○ 1 (Not Important at All)
- ○ 2
- ○ 3
- ○ 4
- ○ 5 (Extremely Important)

U11. Does FDA approval of a COVID-19 vaccine increase your willingness to consider getting vaccinated against COVID-19?

- ○ Yes
- ○ No
- ○ Not sure

**STOP HERE. THANK YOU!**
**PLEASE COMPLETE SEPARATE FORM FOR GIFT CARD DRAWING**

# ANSWER IF YOU ARE NOT PLANNING ON GETTING VACCINATED

N1. Which of the following are reasons why you are **NOT** planning to get a COVID-19 vaccination? (Check all that apply)

- ○ I don't trust what I am hearing about the vaccines from the government
- ○ I am concerned with how quickly the vaccine was developed and approved
- ○ Media messaging, I typically receive advise against getting vaccinated
- ○ I have cultural or religious beliefs against being vaccinated
- ○ I don't believe the virus is that bad or is making people all that sick
- ○ I have concerns about being tracked by the government
- ○ I don't believe the vaccines are safe
- ○ It is a personal freedom issue for me
- ○ I know someone who became seriously ill after receiving a COVID-19 vaccine
- ○ Other (please describe) _____

N2. Which of the following media sources are encouraging you to **NOT** to get vaccinated?

- ○ Media messages from radio, TV, newspaper, billboards, and others seen in the community
- ○ Messages on social media such as Facebook, Twitter, Instagram
- ○ Other (please describe) _____

N3. Are you planning to get a seasonal flu shot this Fall?

- ○ Yes
- ○ No
- ○ Not sure

N4. How important is it to your **family** that you get the COVID-19 vaccine?

- ○ 1 (Not Important at All)
- ○ 2
- ○ 3
- ○ 4
- ○ 5 (Extremely Important)

N5. How important is it to your **family** that you get the annual seasonal flu shot?

- ○ 1 (Not Important at All)
- ○ 2
- ○ 3

- ○ 4
- ○ 5 (Extremely Important)

N6. How important is it to your **friends** that you get the COVID-19 vaccine?

- ○ 1 (Not Important at All)
- ○ 2
- ○ 3
- ○ 4
- ○ 5 (Extremely Important)

N7. How important is it to your **friends** that you get the annual seasonal flu shot?

- ○ 1 (Not Important at All)
- ○ 2
- ○ 3
- ○ 4
- ○ 5 (Extremely Important)

N8. Which of the following actions might increase the likelihood that you would get vaccinated? (Check all that apply)

- ○ The vaccine was offered at a place I normally go for health care (i.e., a doctor's office, pharmacy)
- ○ Someone I know well has gotten vaccinated
- ○ A trusted source like a medical provider or someone knowledgeable about the safety of the vaccines told me I should
- ○ A trusted voice from the community such as a pastor, community leader, or local media figure told me I should
- ○ My employer arranged for the vaccination to be administered at work
- ○ My employer gave me paid time off to get vaccinated
- ○ I was offered an incentive such as discount coupons to local businesses, gift cards, or entry into a raffle to win prizes or money
- ○ My employer required me to get vaccinated
- ○ My school required me to get vaccinated
- ○ I wasn't be able to visit places I wanted to go to unless I got vaccinated
- ○ People I care about didn't meet up with me in person unless I got vaccinated
- ○ I was denied medical care for COVID-19 for not getting vaccinated
- ○ Other (please describe) _____

N9. Do you think other people should get vaccinated?

- ○ Yes (*If selected, please answer N10*)
- ○ No

N10. If you think other people should get vaccinated - who should get vaccinated?
(Check all that apply)

- ○ People 65 and older
- ○ People with medical conditions
- ○ People who work in hospitals, clinics, nursing homes
- ○ Children 12 - 17 years of age
- ○ College students
- ○ Other (please describe) _____

**STOP HERE. THANK YOU!**
**PLEASE COMPLETE SEPARATE FORM FOR GIFT CARD DRAWING**

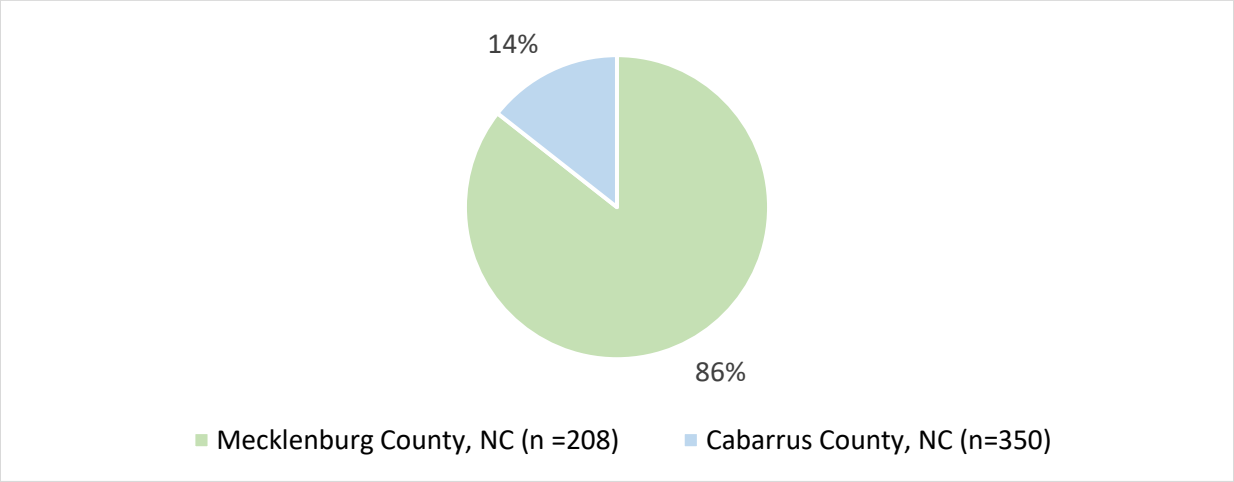
# APPENDIX E: COMMUNITY SURVEY RESULTS: TABLES AND CHARTS

## RAO Community Health Vaccine Survey Results*

***Note VAX = BEEN VACCINATED | UND = UNDECIDED | NPV = NOT PLANNING TO GET VACCINATED**

## Total Sample Demographics

### Table 1. County of Residence (Total Sample)




### Table 2. Gender Group (Total Sample)

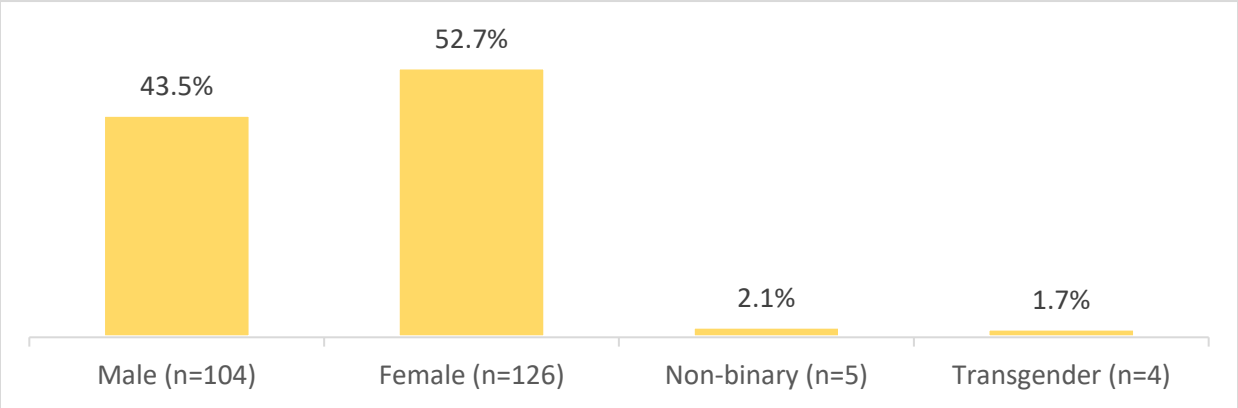


**Table 3. Race Group (Total Sample)**

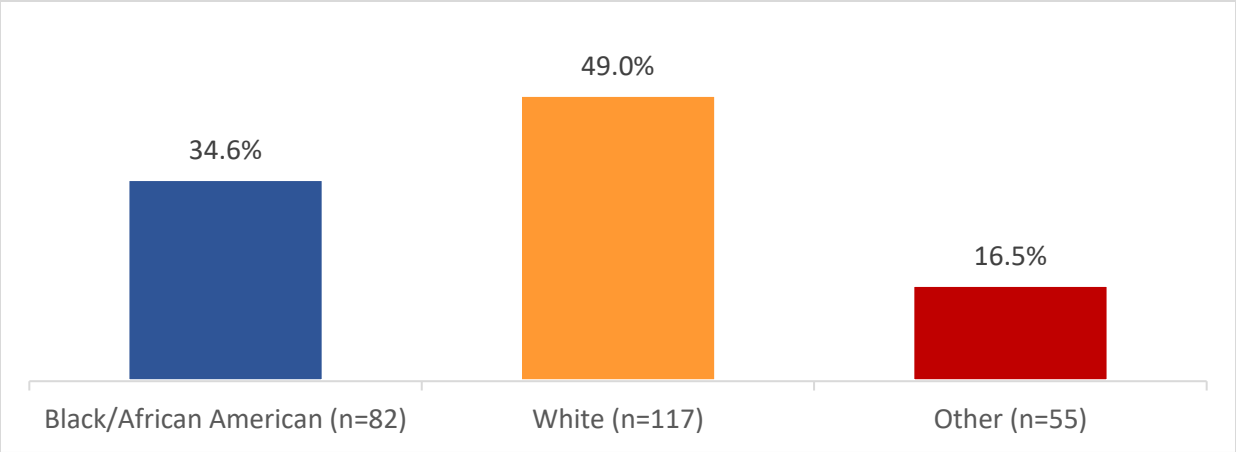



**Table 4. Age Group (Total Sample)**

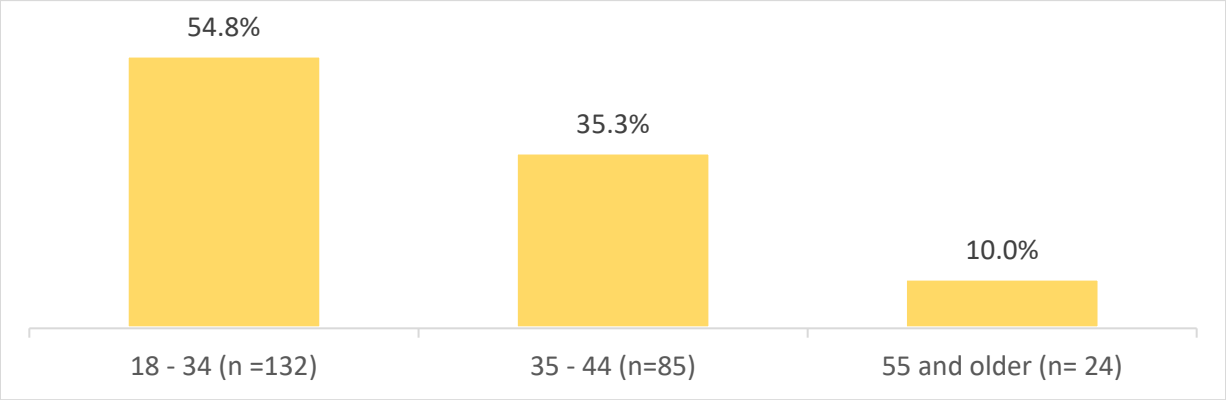



**Table 5. Marital Status (Total Sample)**

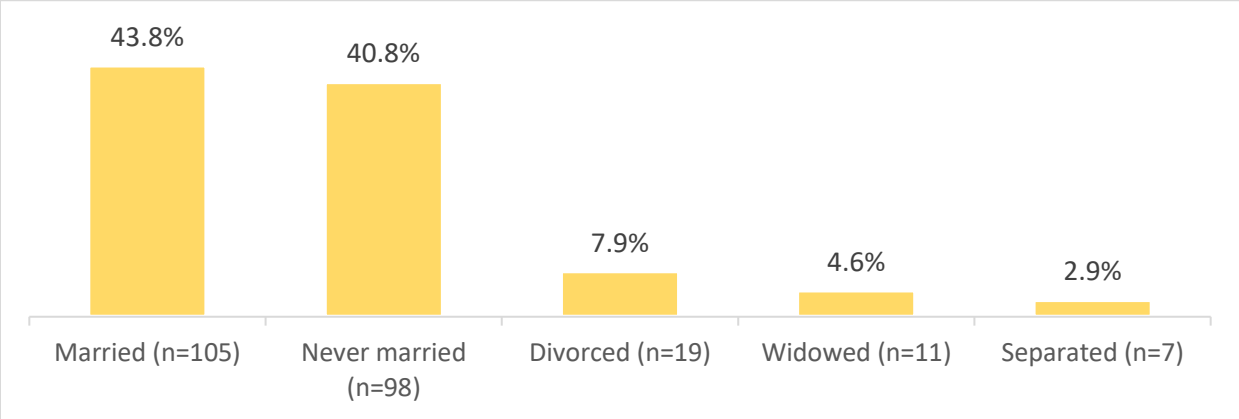


**Table 6. Employment Status (Total Sample)**

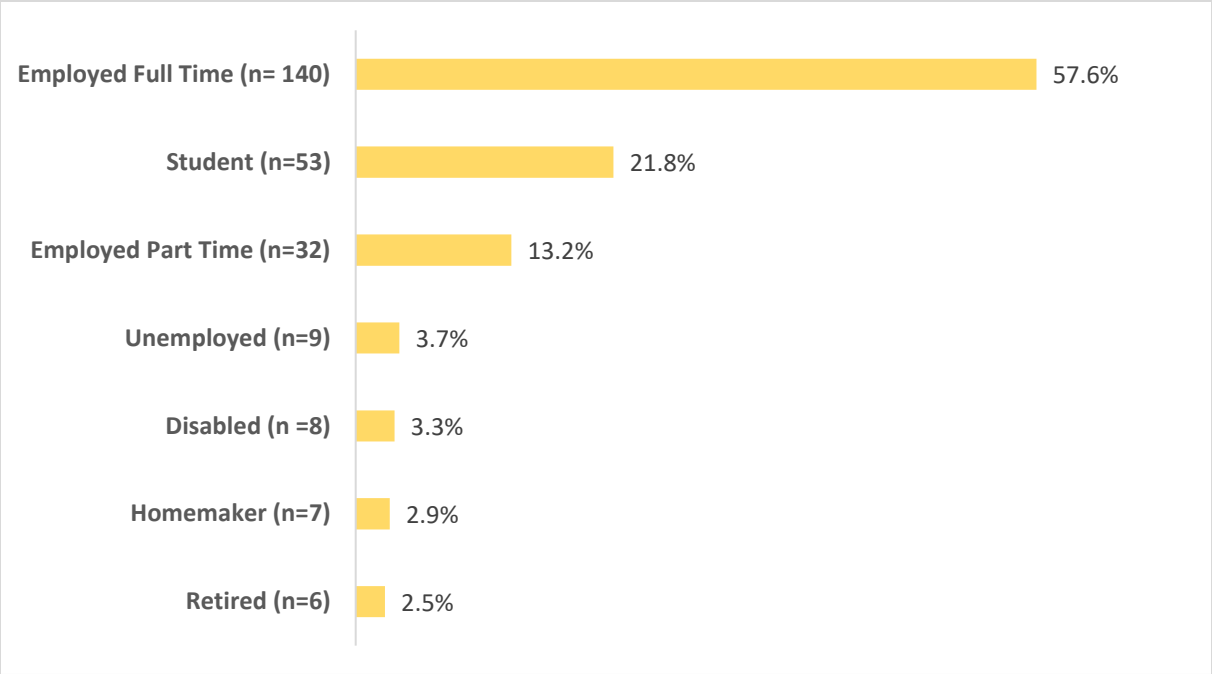



**Table 6. Total Household Income (Total Sample)**

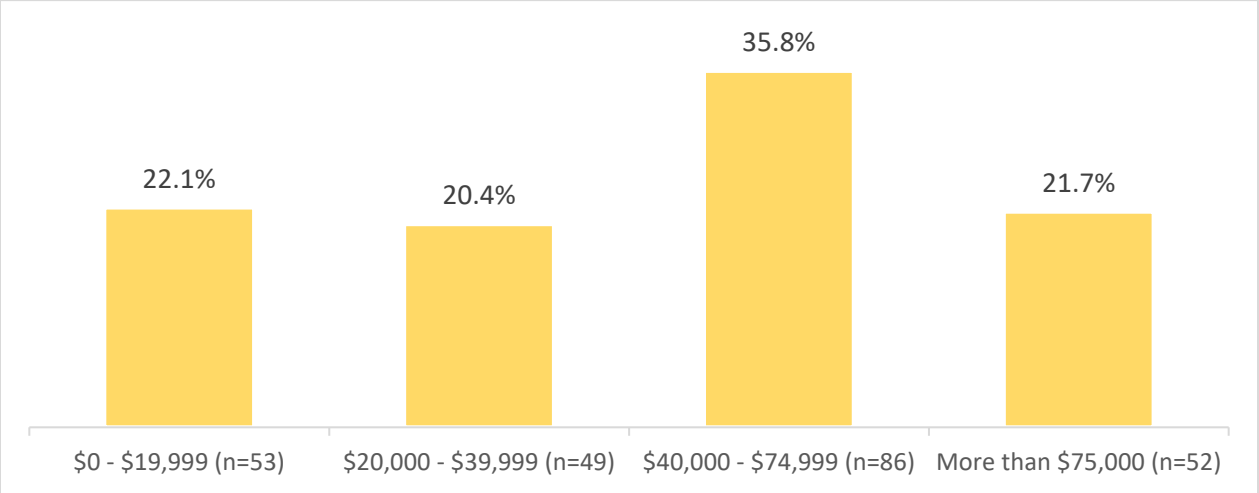



**Table 7. COVID-19 Vaccination Status (Total Sample)**

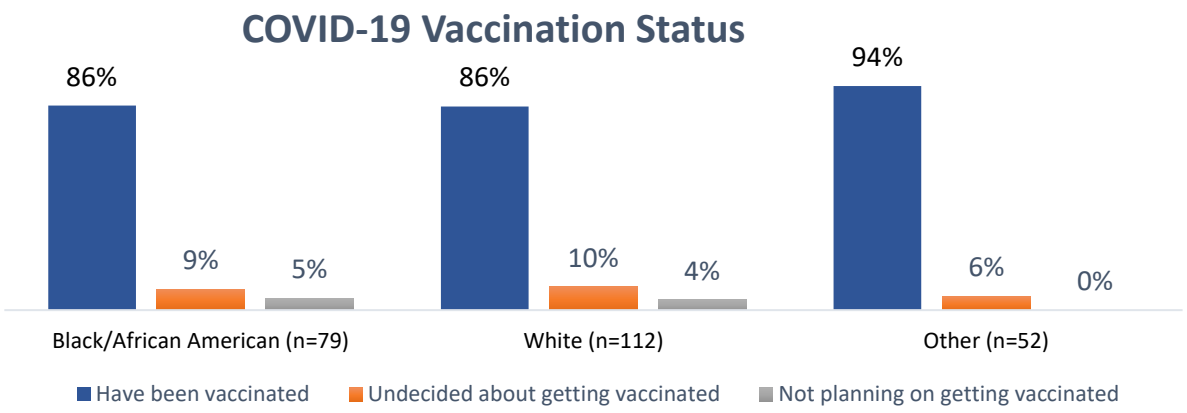



**Table 8. COVID-19 Vaccination Status (Mecklenburg County Sample)**

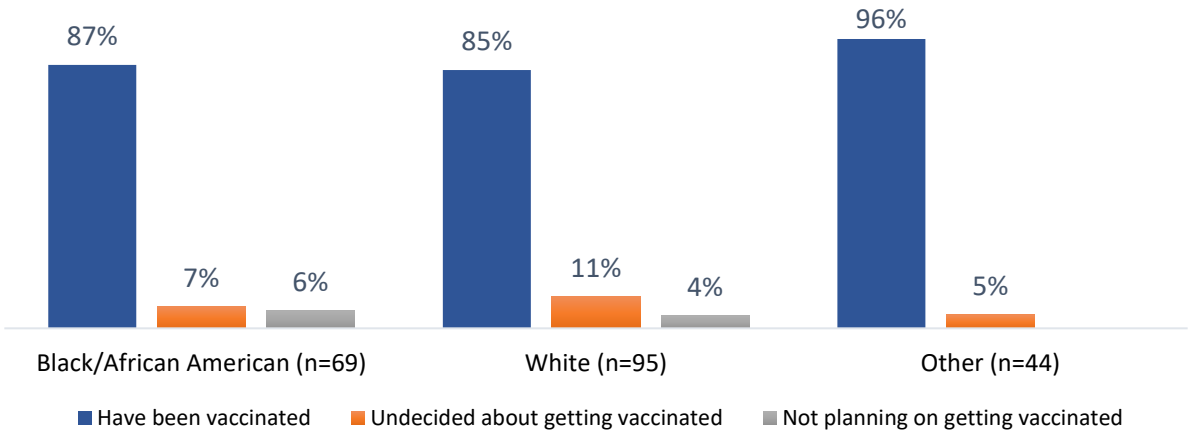



**Table 9. COVID-19 Vaccination Status (Mecklenburg County Sample)**

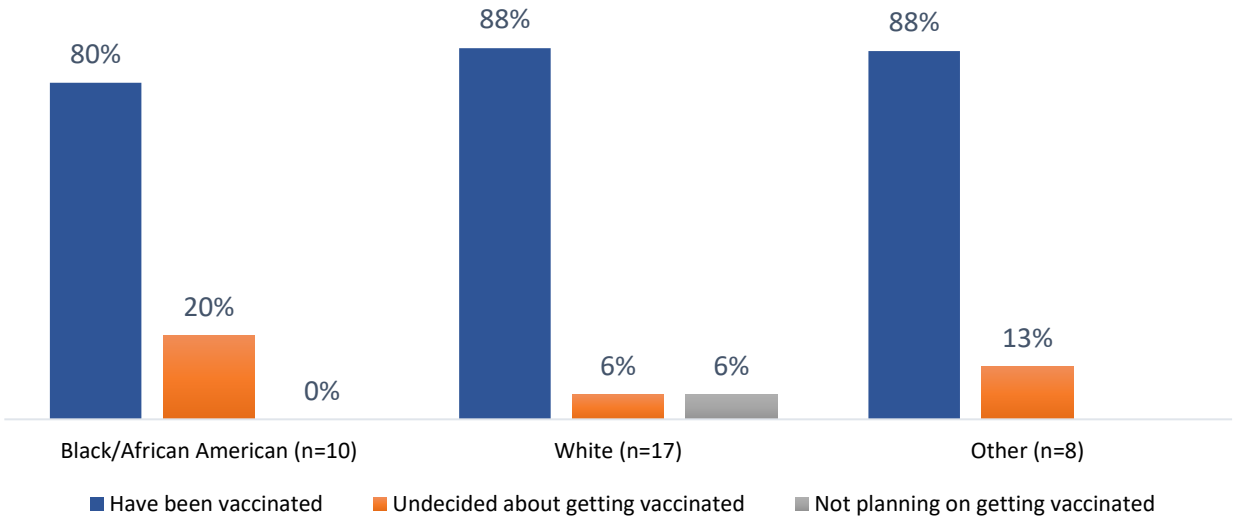


**Table 10. Race/Ethnicity (Total Sample)**

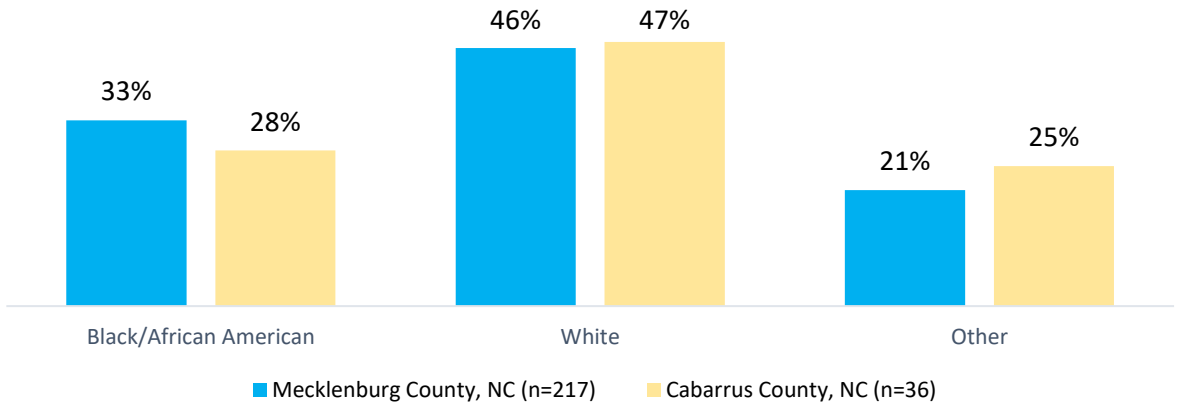



**Table 10. Gender (Total Sample)**

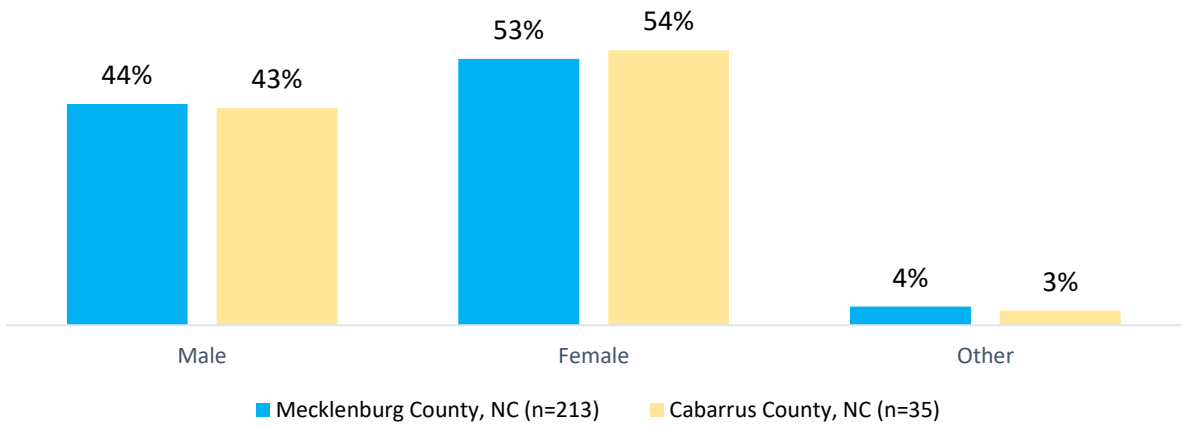
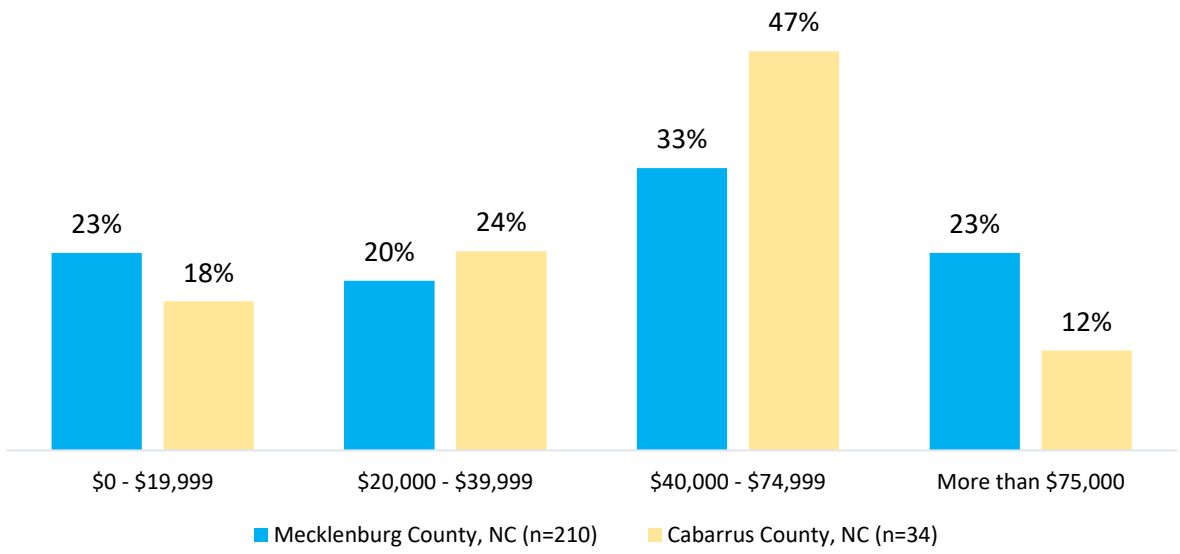
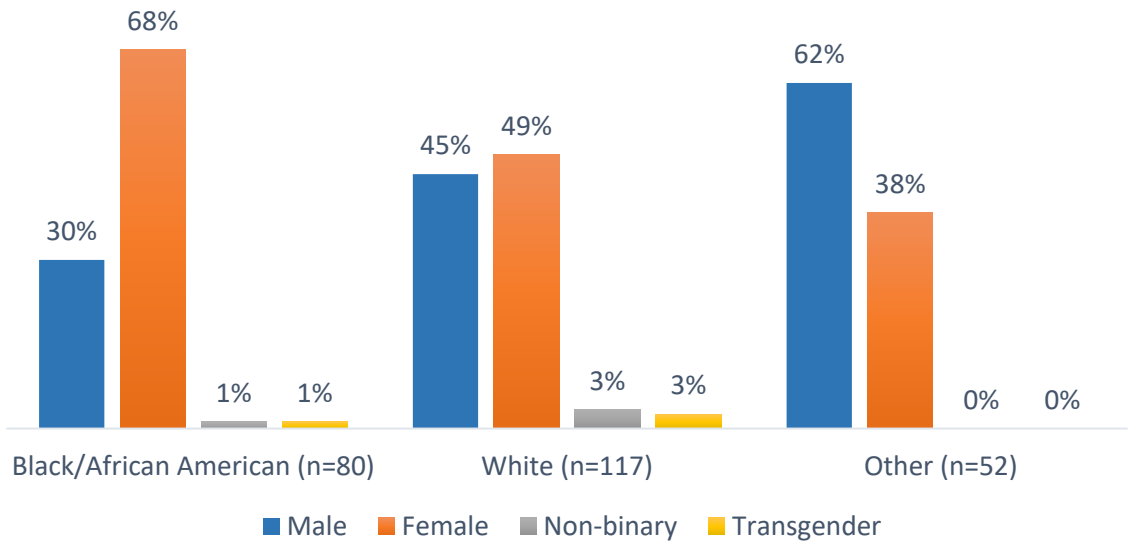



**Table 11. Total Household Income (Total Sample)**



## Comparison by Race Group

### Table CRG-1. Gender Group




### Table CRG-2. Age Group

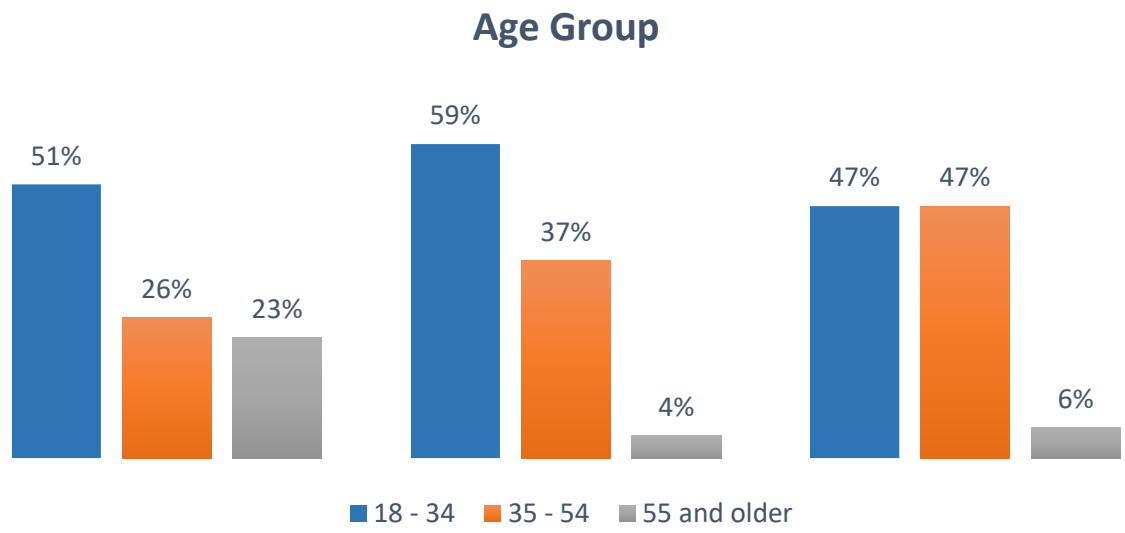


**Table CRG-3. Marital Status**

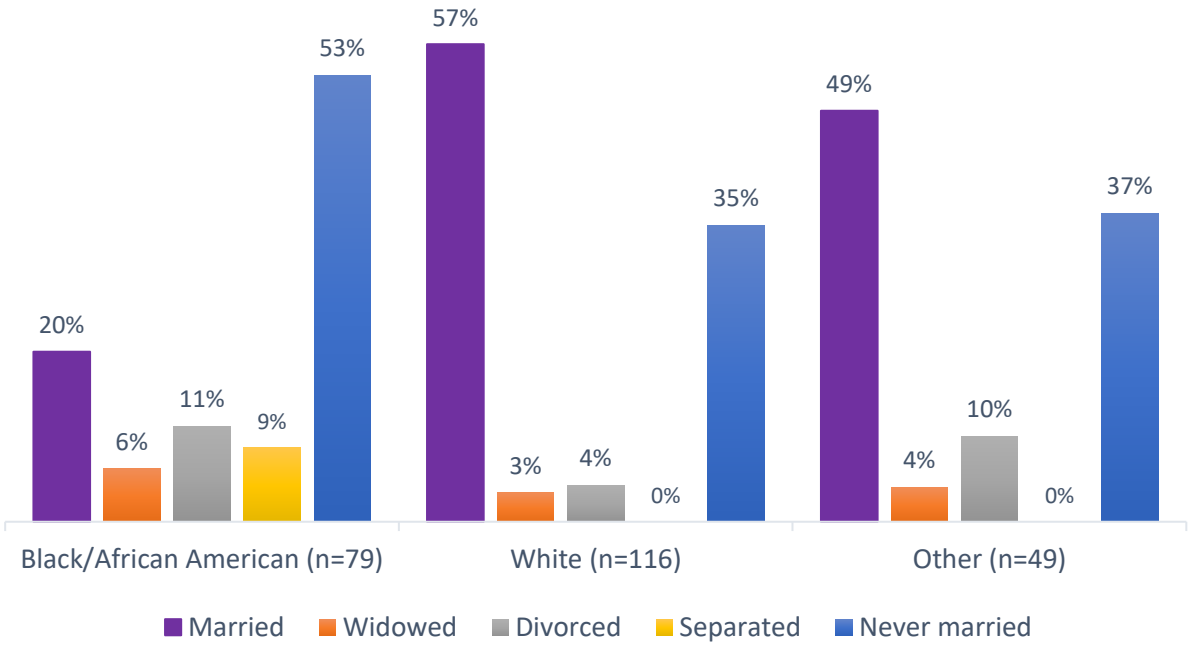



**Table CRG-4. Employment Status**

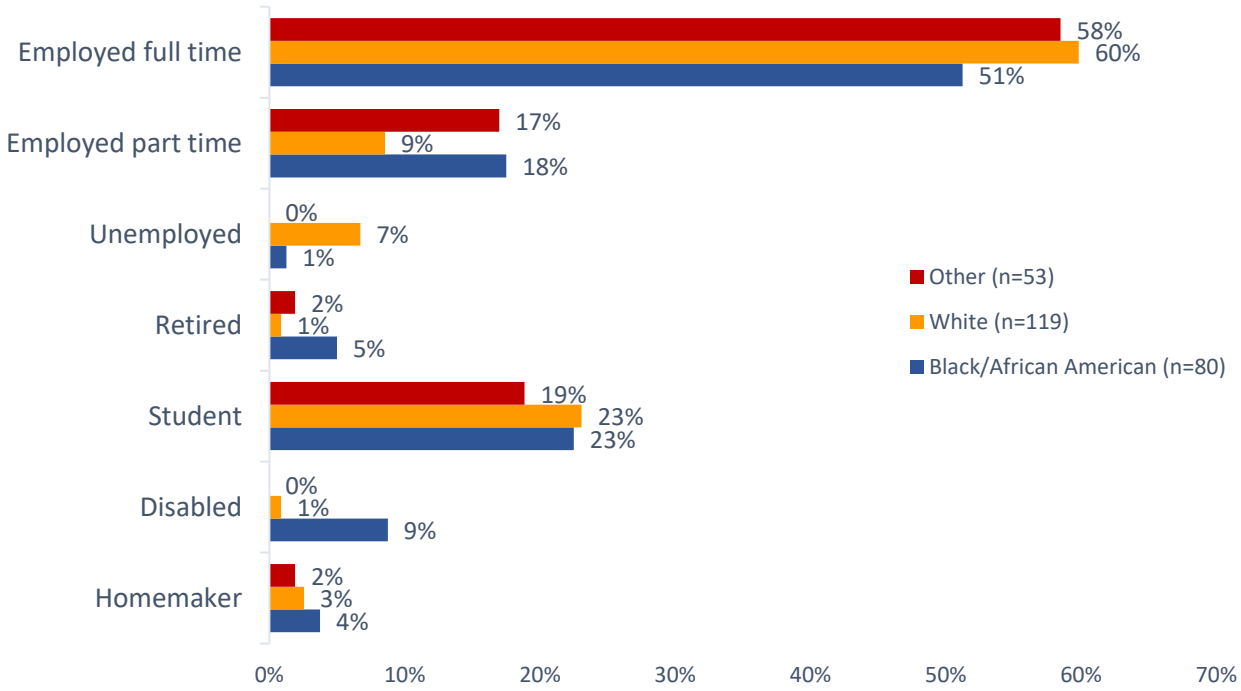


**Table CRG-5. Total Household Income**

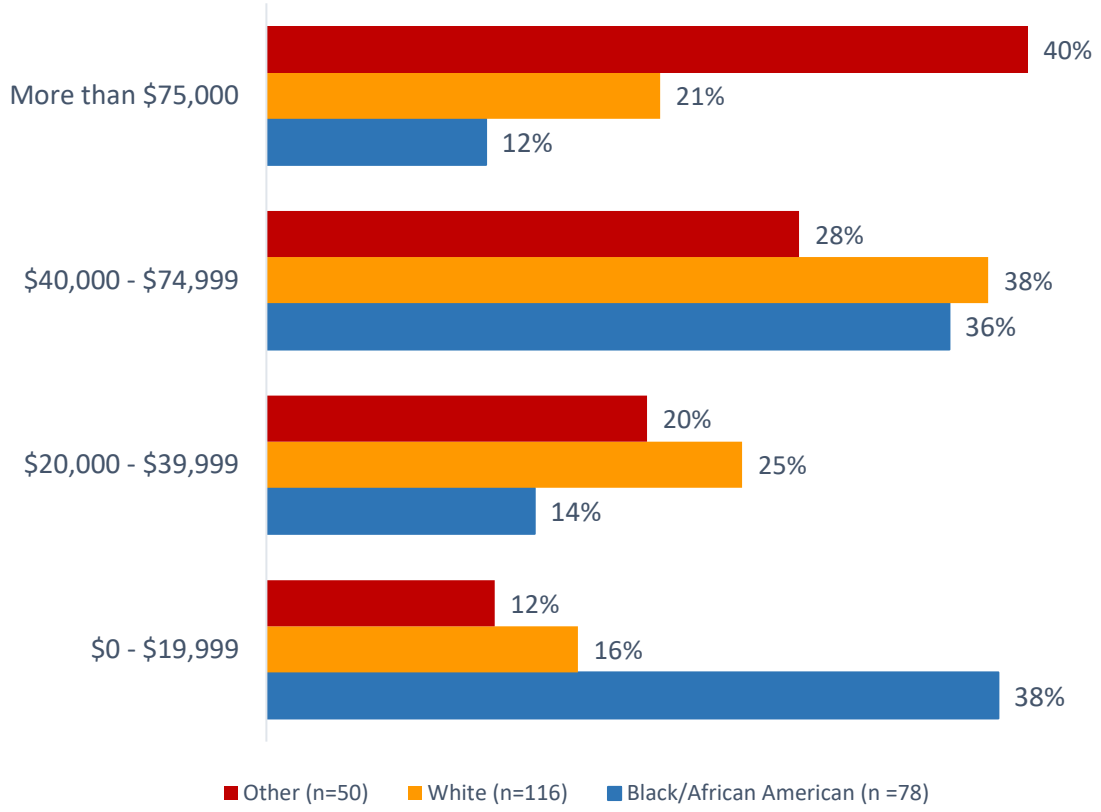



**Table CRG-6. Have a Primary Care Provider/Medical Home**

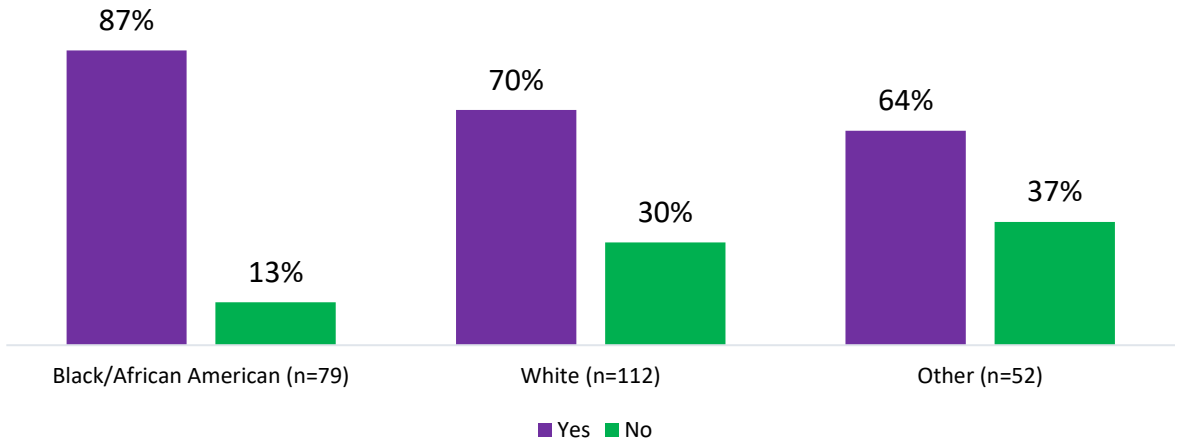


**Table CRG-7. Ever Tested Positive for COVID-19**

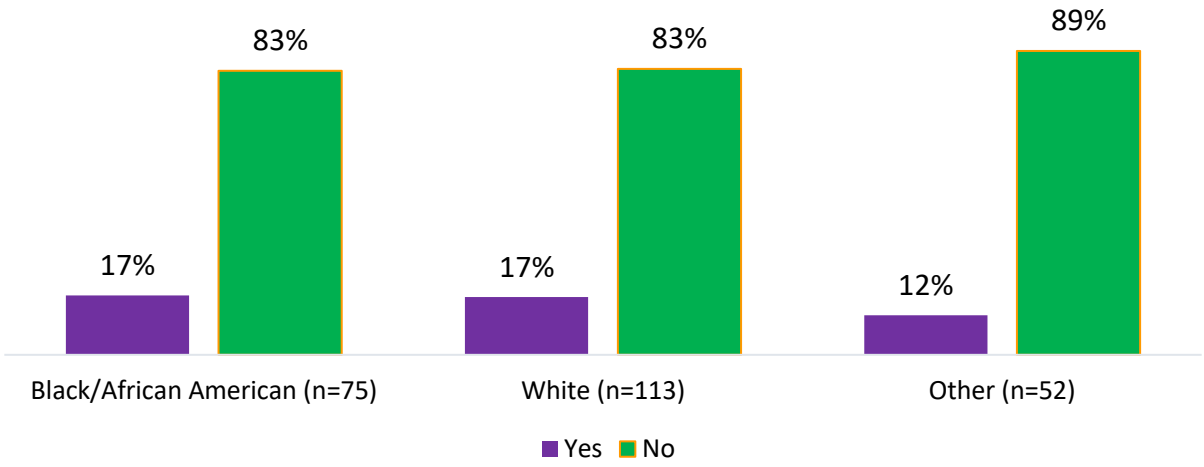



**Table CRG-8. Anyone in Your Household Having COVID-19**

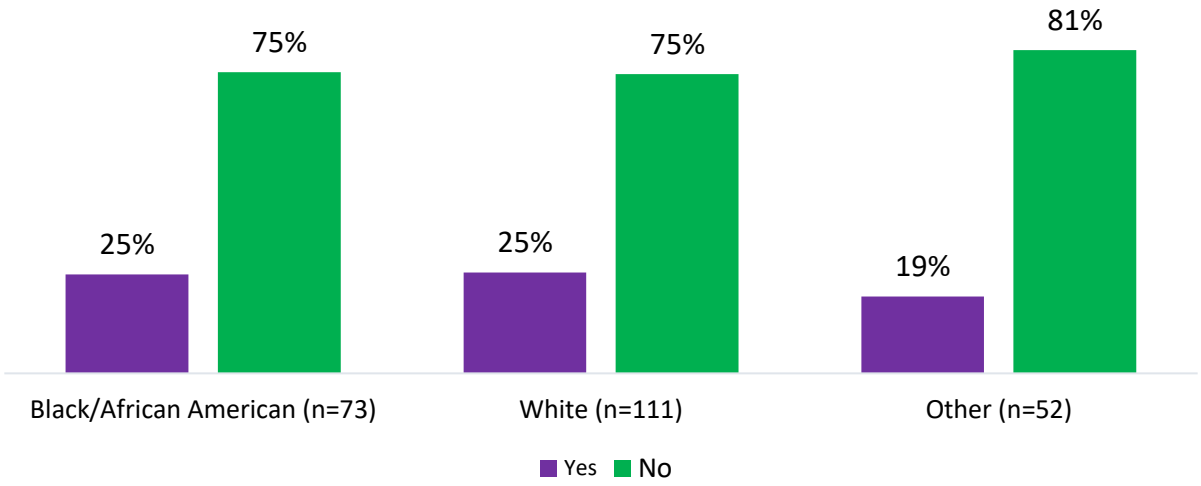



**Table CRG-9. Worried about a Family Member Getting Sick**

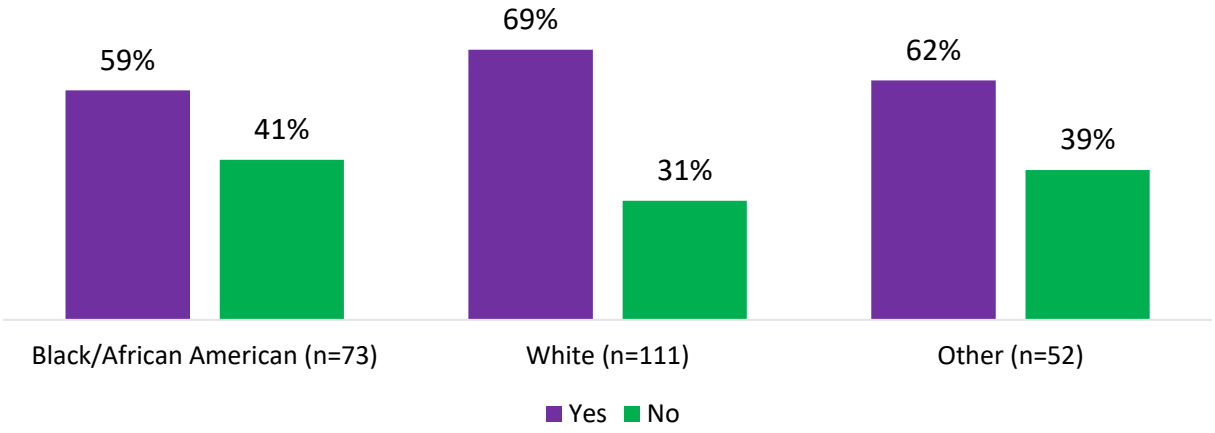
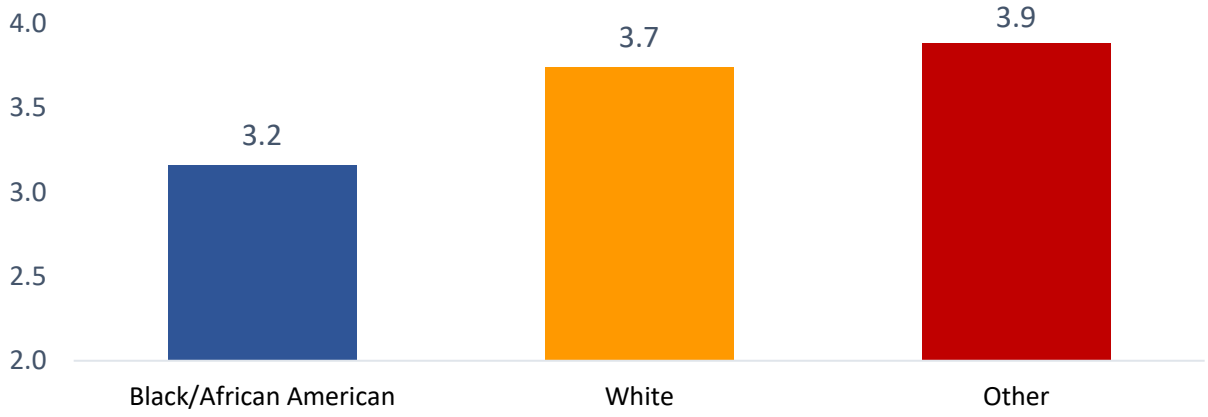


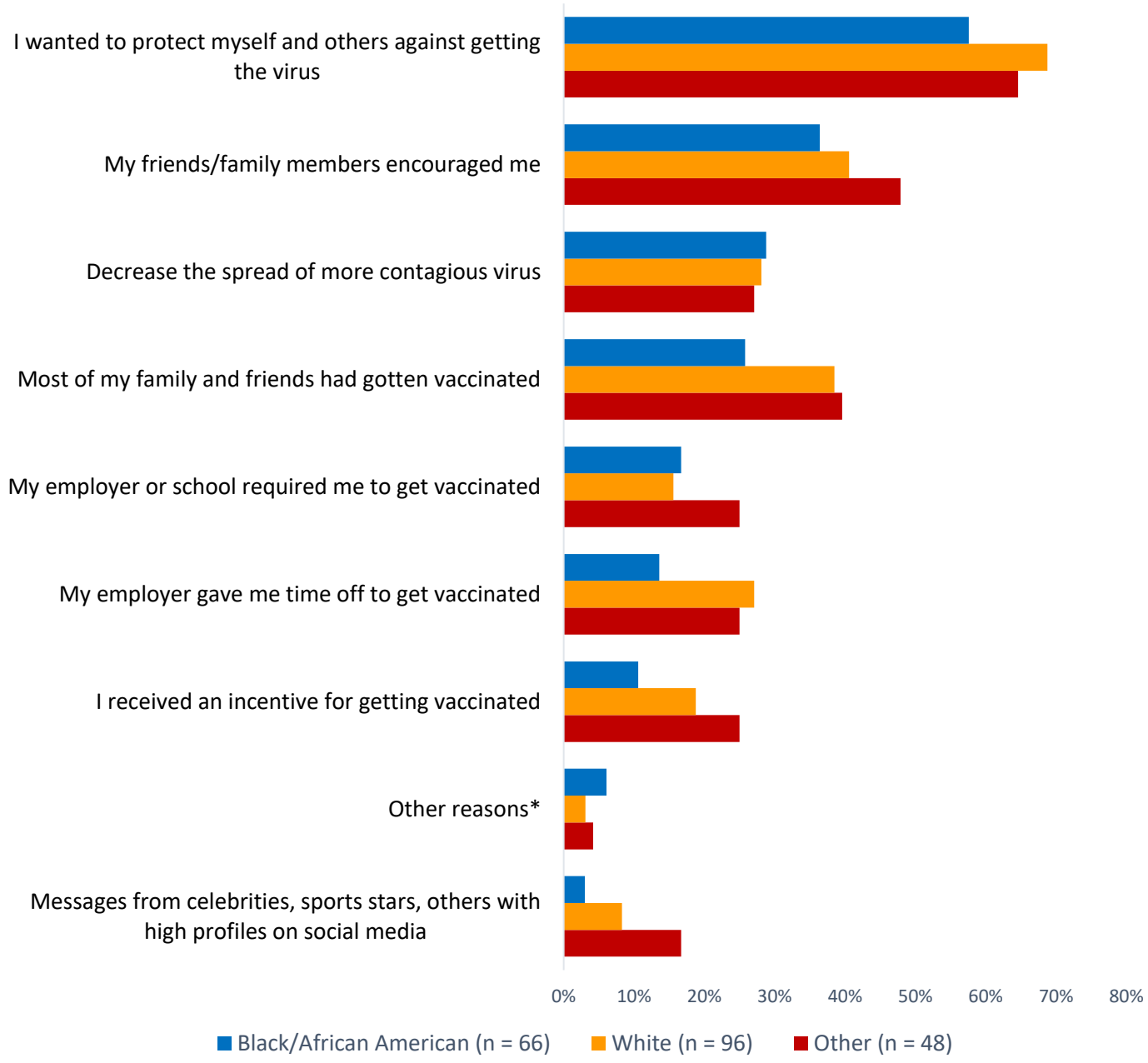

**Table CRG-10. Worried about Self Getting Sick from COVID-19**

**(1= Not worried at all – 5 Very Worried)**



## Respondents Reporting Being Vaccinated

### Table CRG-VAX - 1. Reasons for Getting Vaccinated



***Other reasons**

| Black/African American | White | Other |
|---|---|---|
| Currently pregnant and wanted to protect my family and babies | I have an autoimmune disorder so covid could kill me | It was available |
| I am scientist and smart | I'm not an idiot! :D | |
| My brother had COVID | To reduce likelihood of serious illness for me & to be able to do more activities | |

**Waiting to hear from God and I received the message during a church service on Roman's 13.**

**Table CRG-VAX - 2. Information Sources that Influenced the Decision to Get Vaccinated**

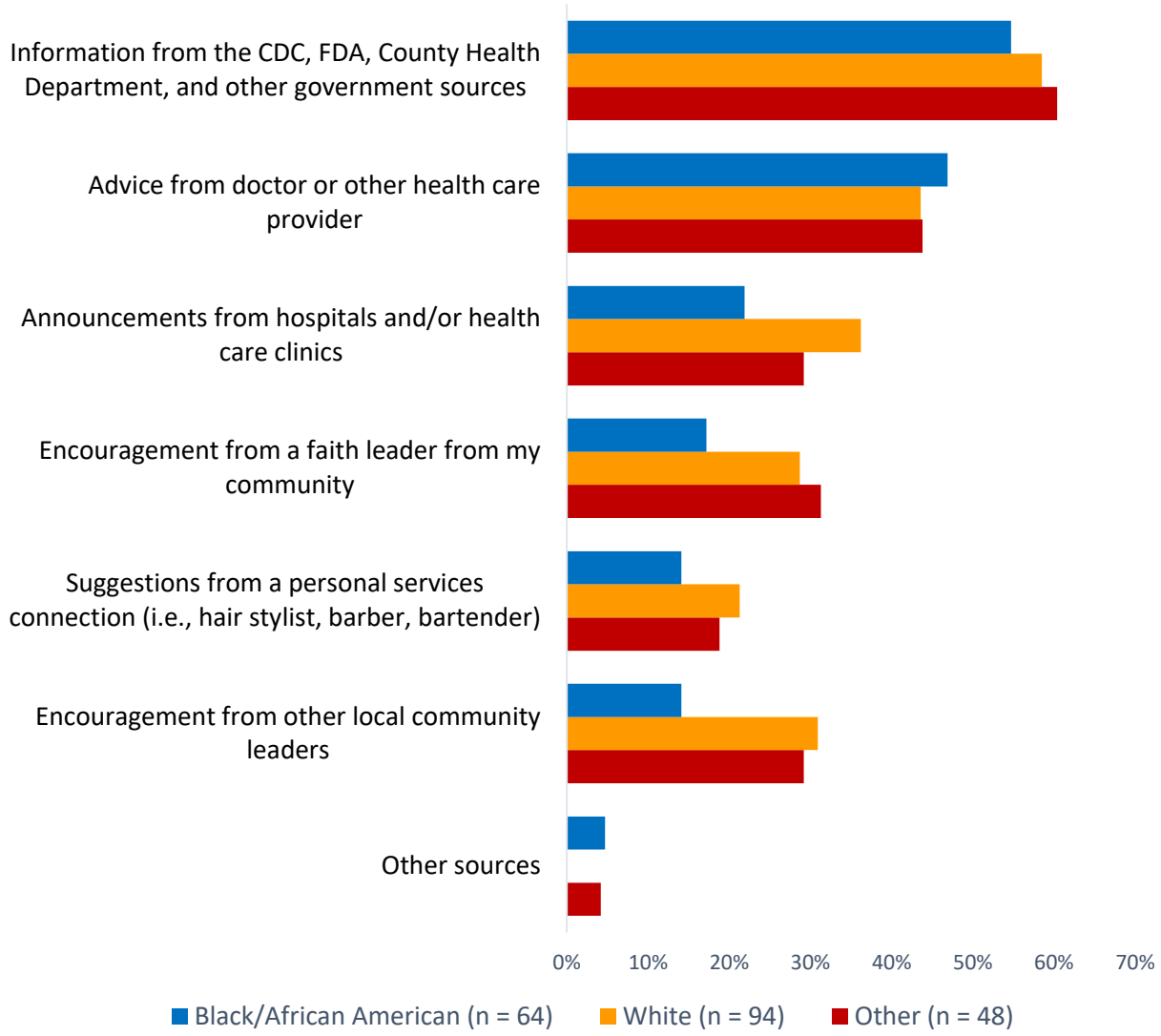


**Table CRG-VAX - 3. Received Incentives to Get Vaccinated**

**(Multiple options allowed – Counts Only)**

**Table CRG-VAX - 4. Media Sources that Encouraged Getting Vaccinated**

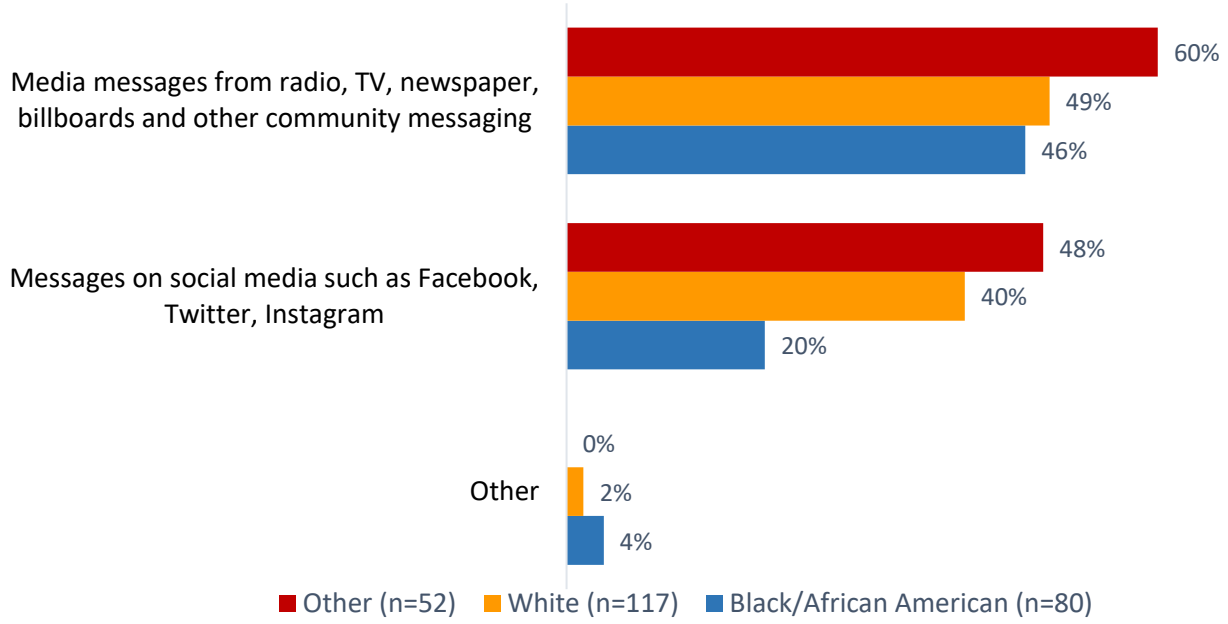


**Table CRG-VAX - 5. Media Messaging Outlets that Encouraged Getting Vaccinated**

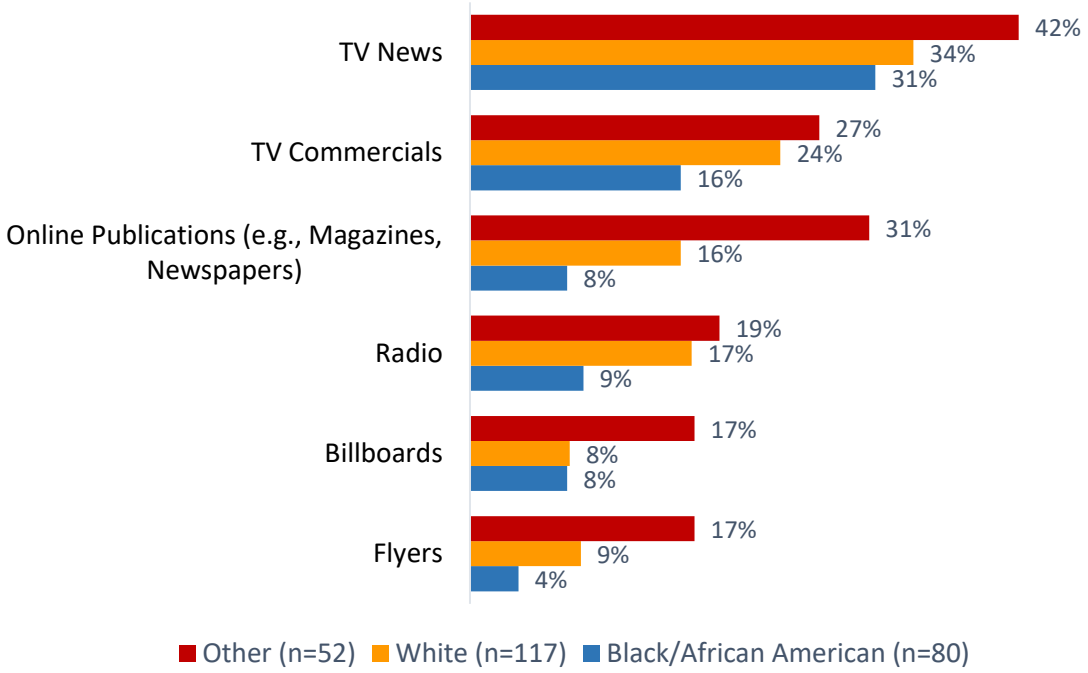


**Table CRG-VAX - 6. Social Media Messaging Outlets that Encouraged Getting Vaccinated**

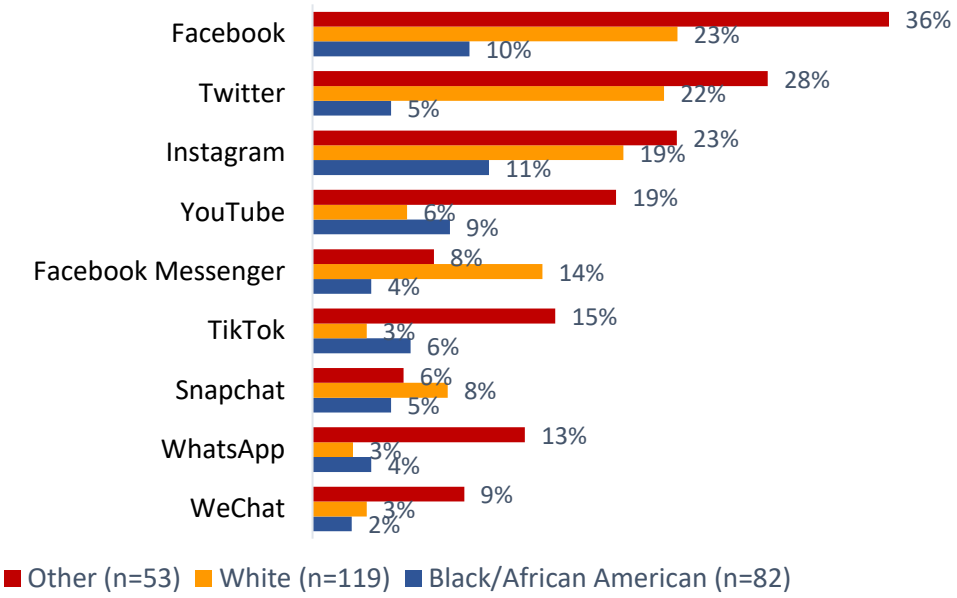


**Table CRG-VAX - 7. Benefits of Getting Vaccinated Against COVID-19**

**(1 = Not true at all – 4 = Very true)**

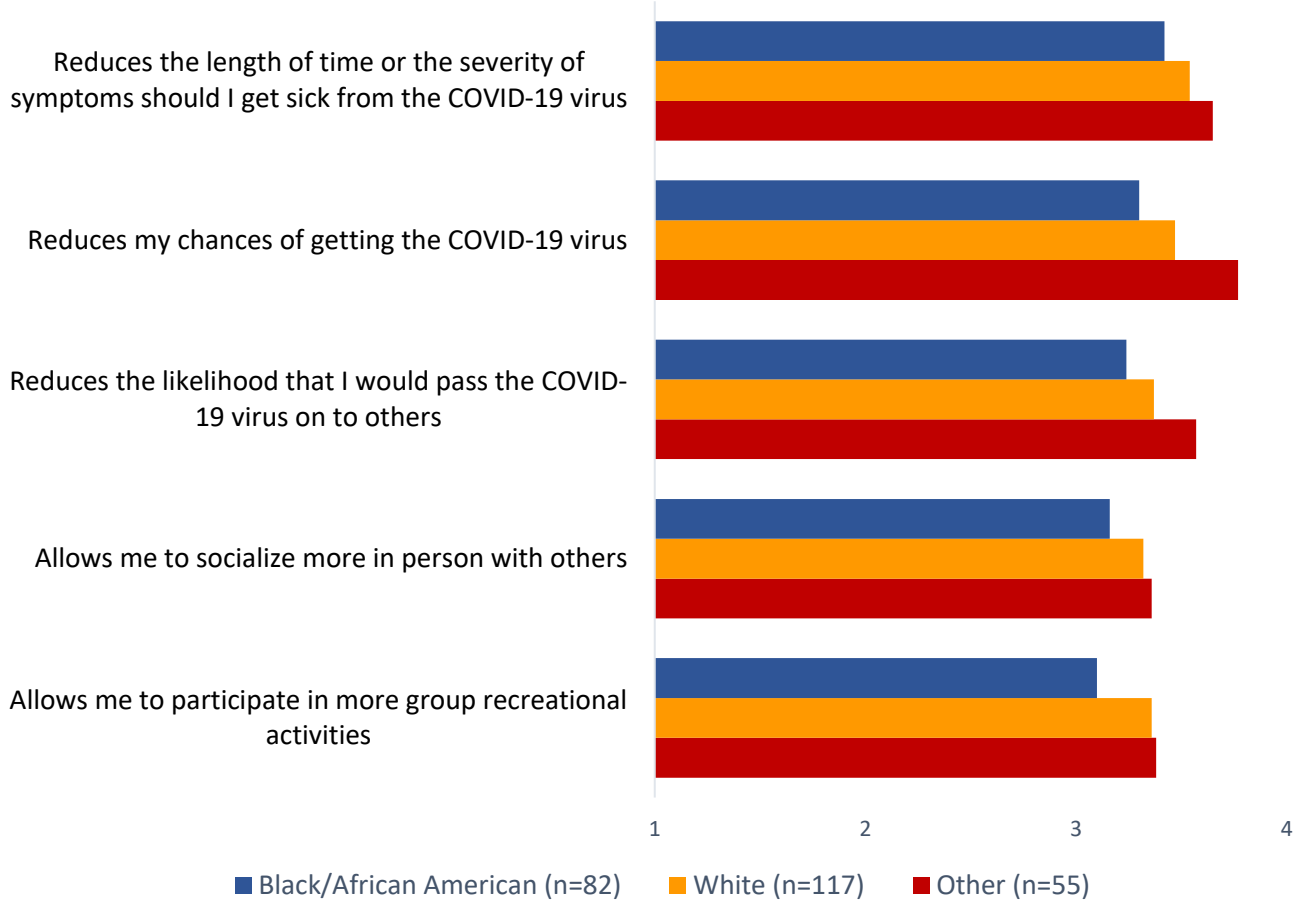


**Table CRG-VAX - 8. Planning to Get Season Flu Shot this Fall**

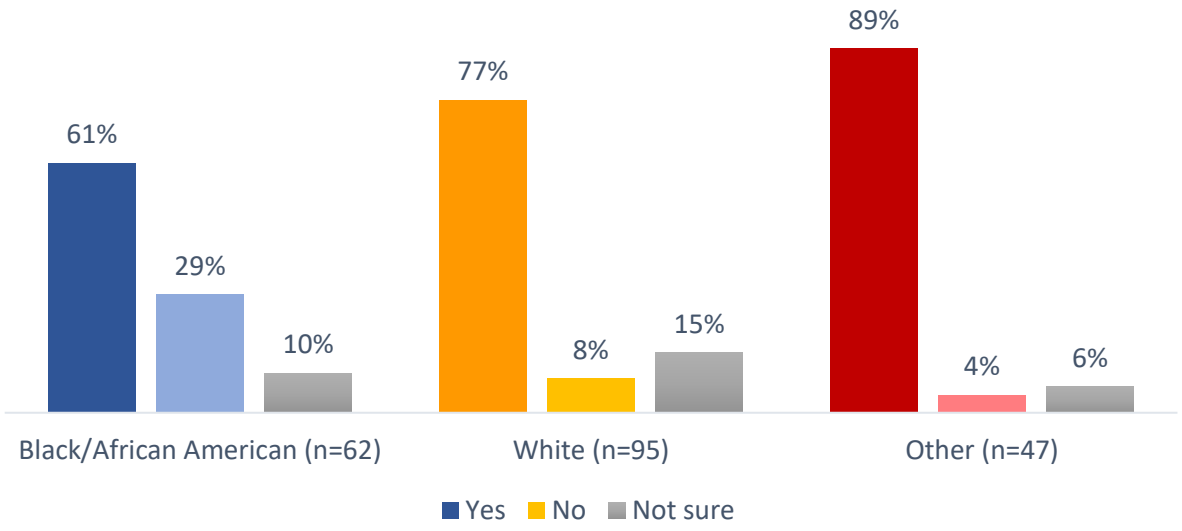
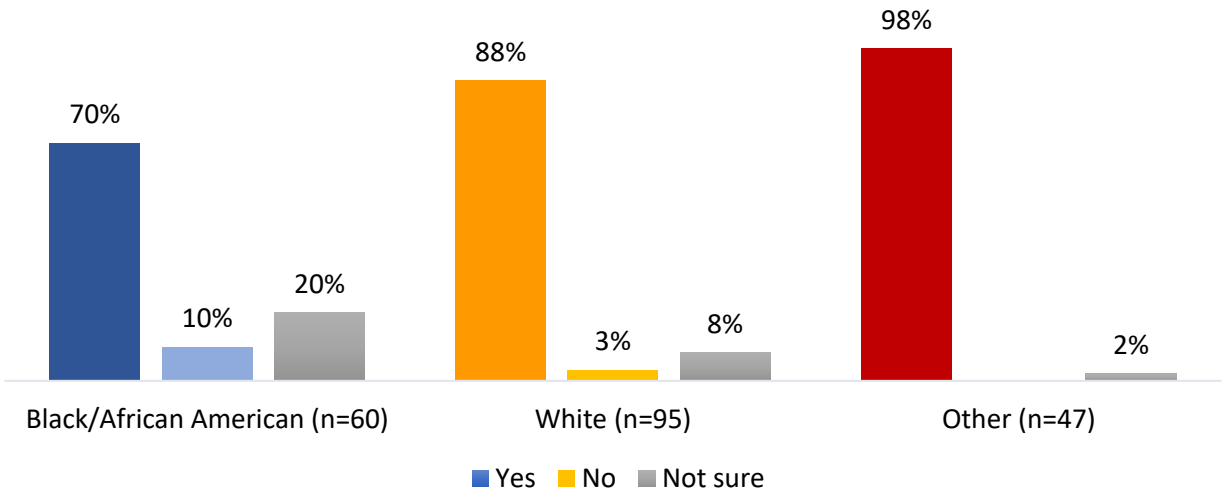
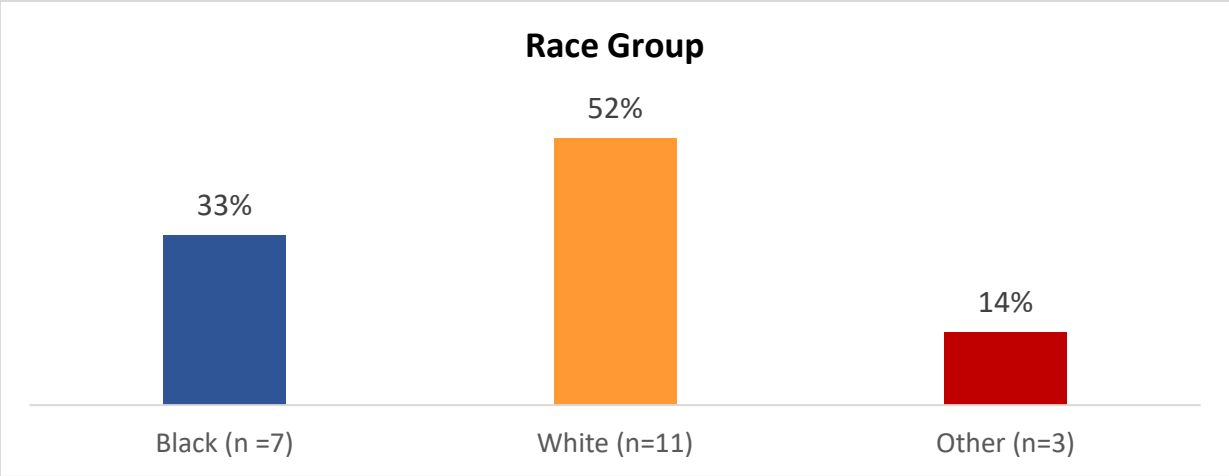



**Table CRG-VAX - 9. Planning to Get a COVID-19 Booster Shot**



## Respondents Reporting Being Undecided about Getting Vaccinated

### Table CRG-UND-1. Race Group



## Reasons Why NOT Planning to Get a COVID-19 Vaccination

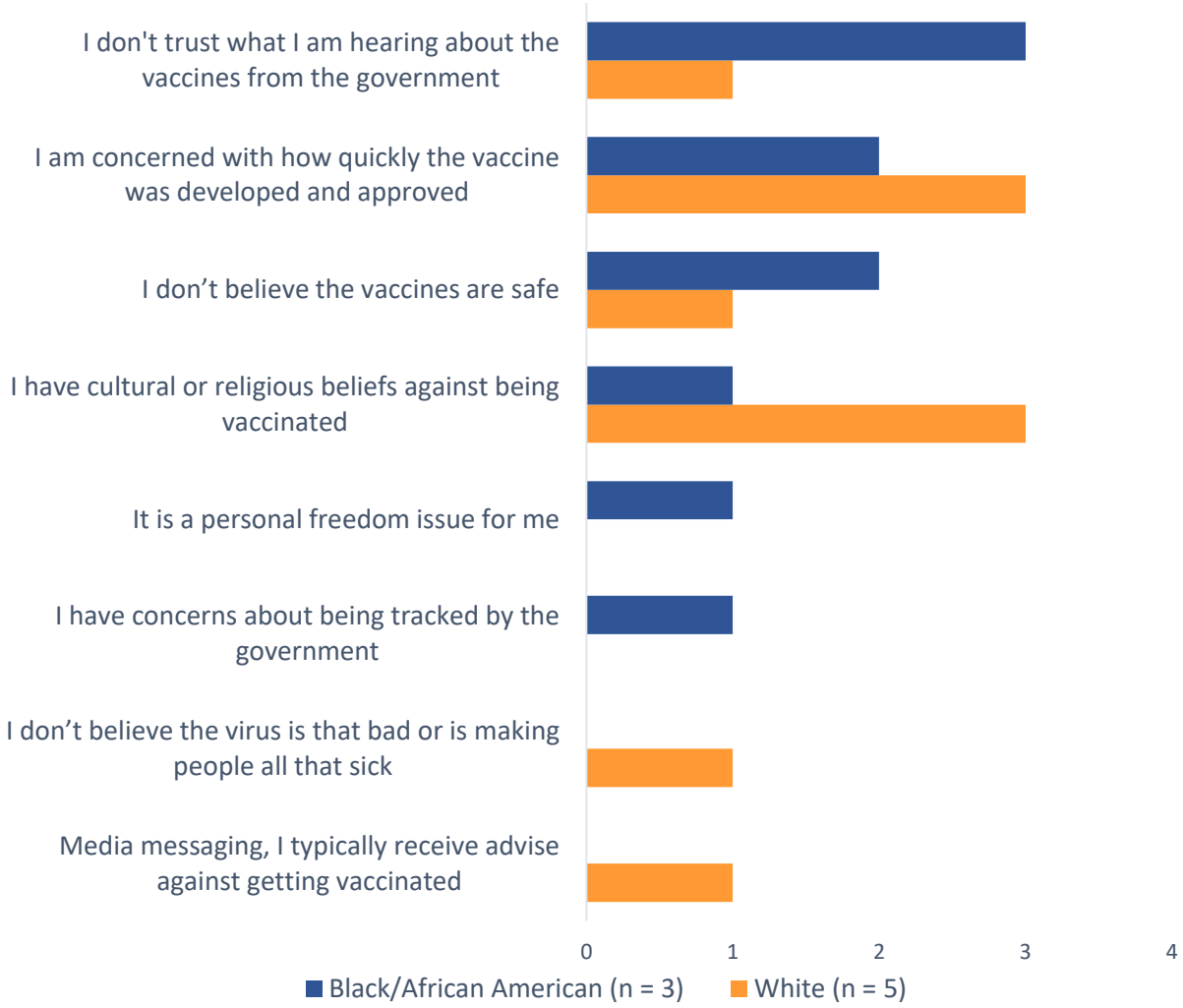


**Table CRG-UND - 2. Reasons for Being Undecided about Getting Vaccinated**

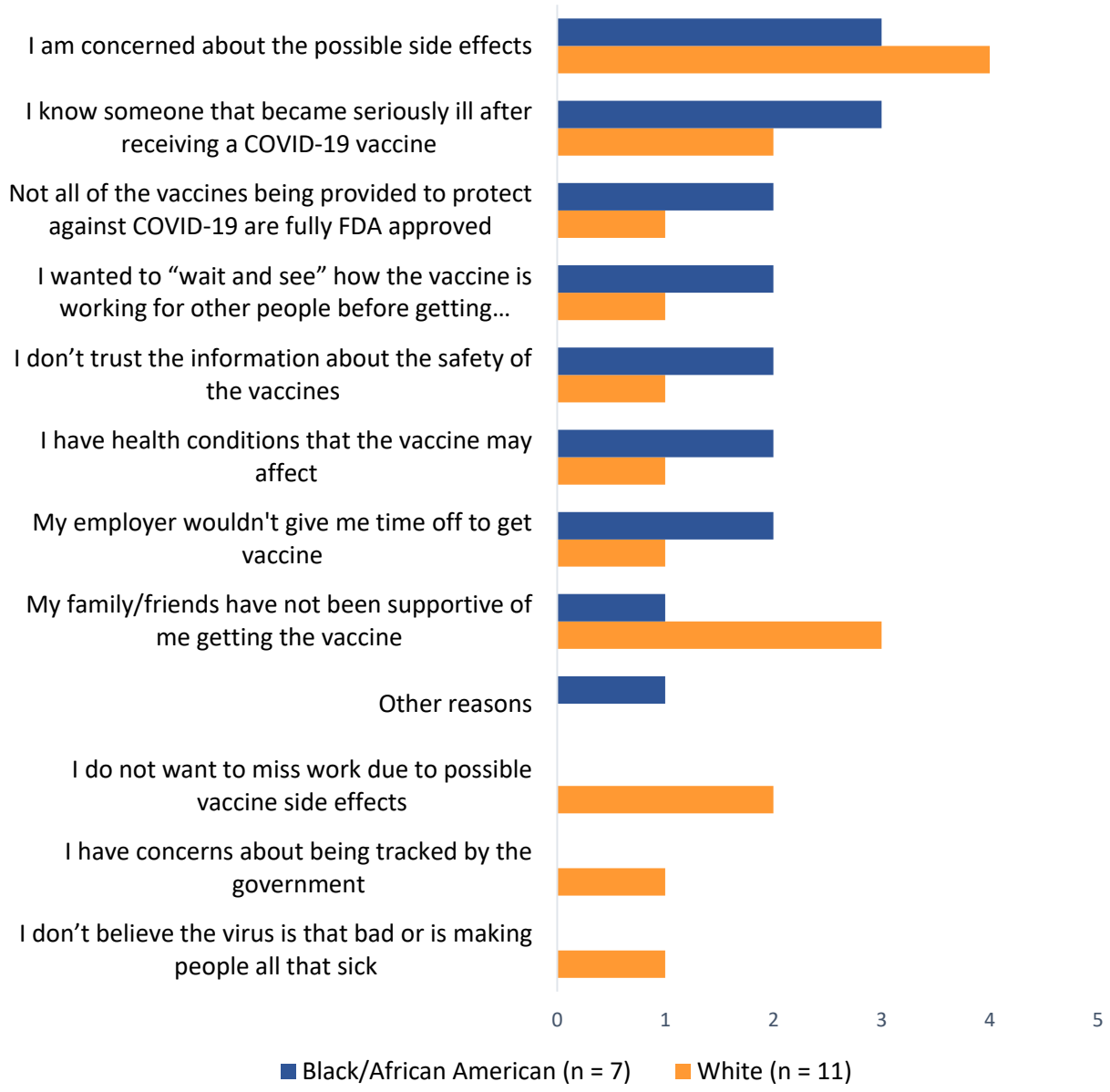


**Table CRG-UND - 3. Reasons that Might Influence for Getting a COVID-19 Vaccination**

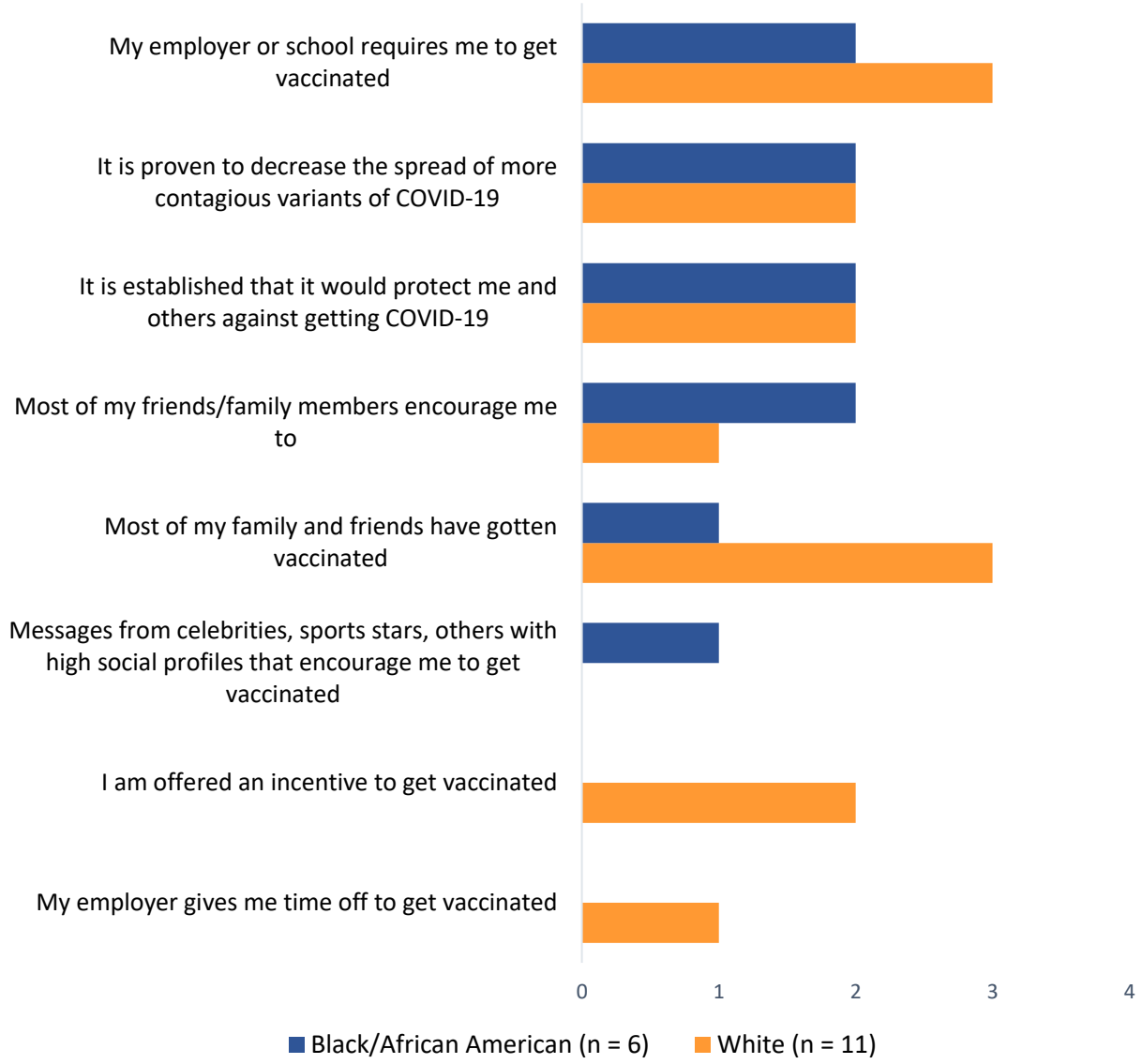


**Table CRG-UND - 4. Information Sources that Might Influence for Getting a COVID-19 Vaccination**

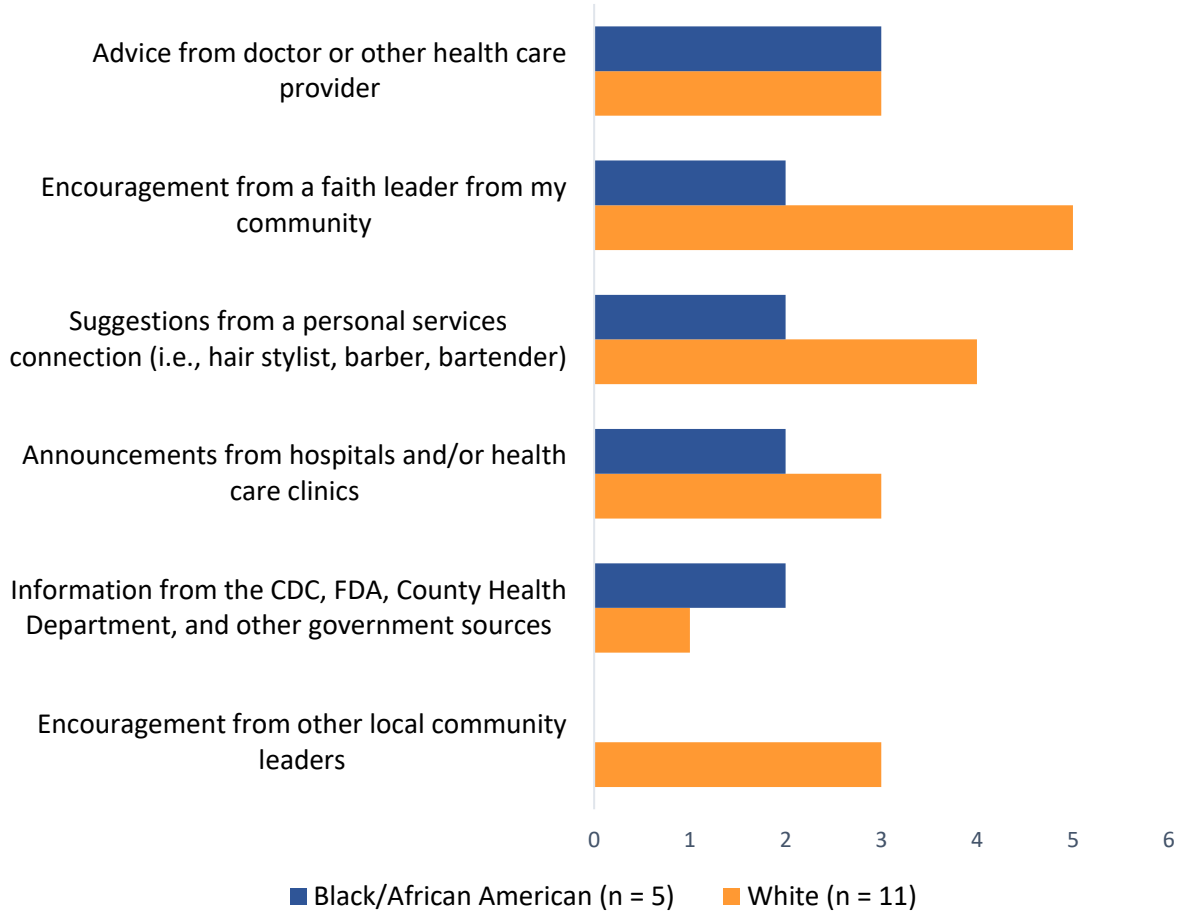


**Table CRG-UND - 5. Information Sources that Could Influence for Getting COVID-19 Vaccinations (Counts Only)**

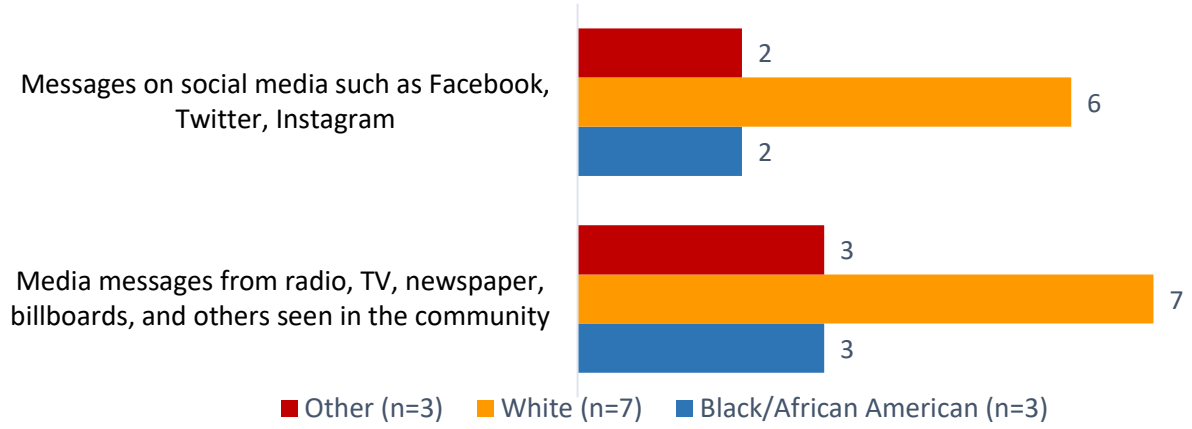



**Table CRG-UND - 6. Media Messaging Outlets that Could Influence for Getting COVID-19 Vaccinations (Counts Only)**

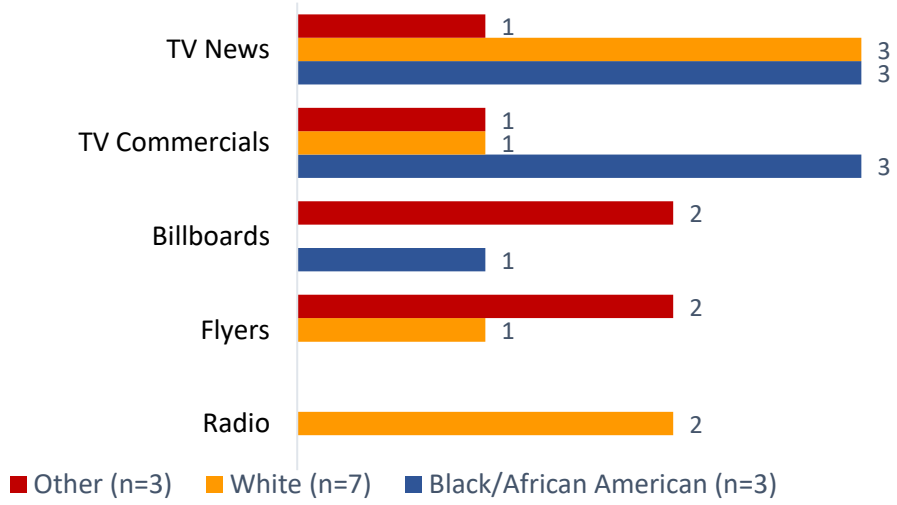


**Table CRG-UND - 7. Social Media Messaging Outlets that Could Influence for Getting COVID-19 Vaccinations (Counts Only)**

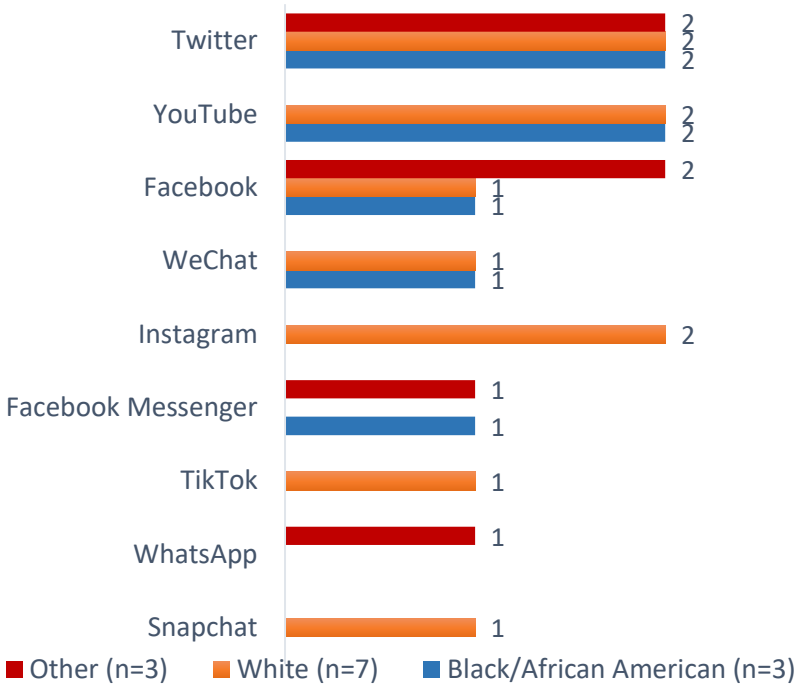


**Table CRG-UND - 8. Planning to Get Season Flu Shot this Fall**

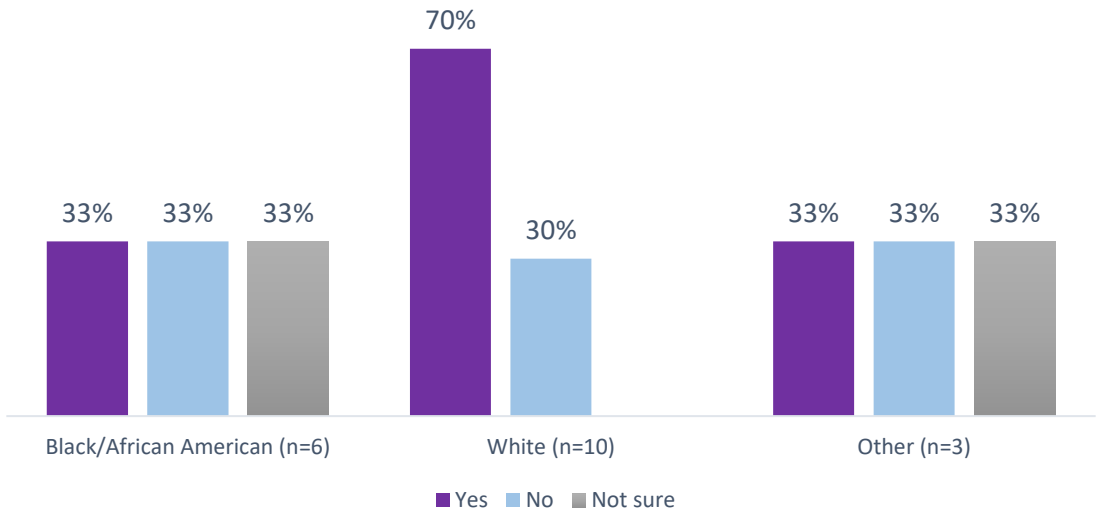


**Table CRG-UND-9. Importance of Getting the COVID-19 Vaccine and Seasonal Flu Shot**

**(1 = Not important at all – 5 Extremely Important)**

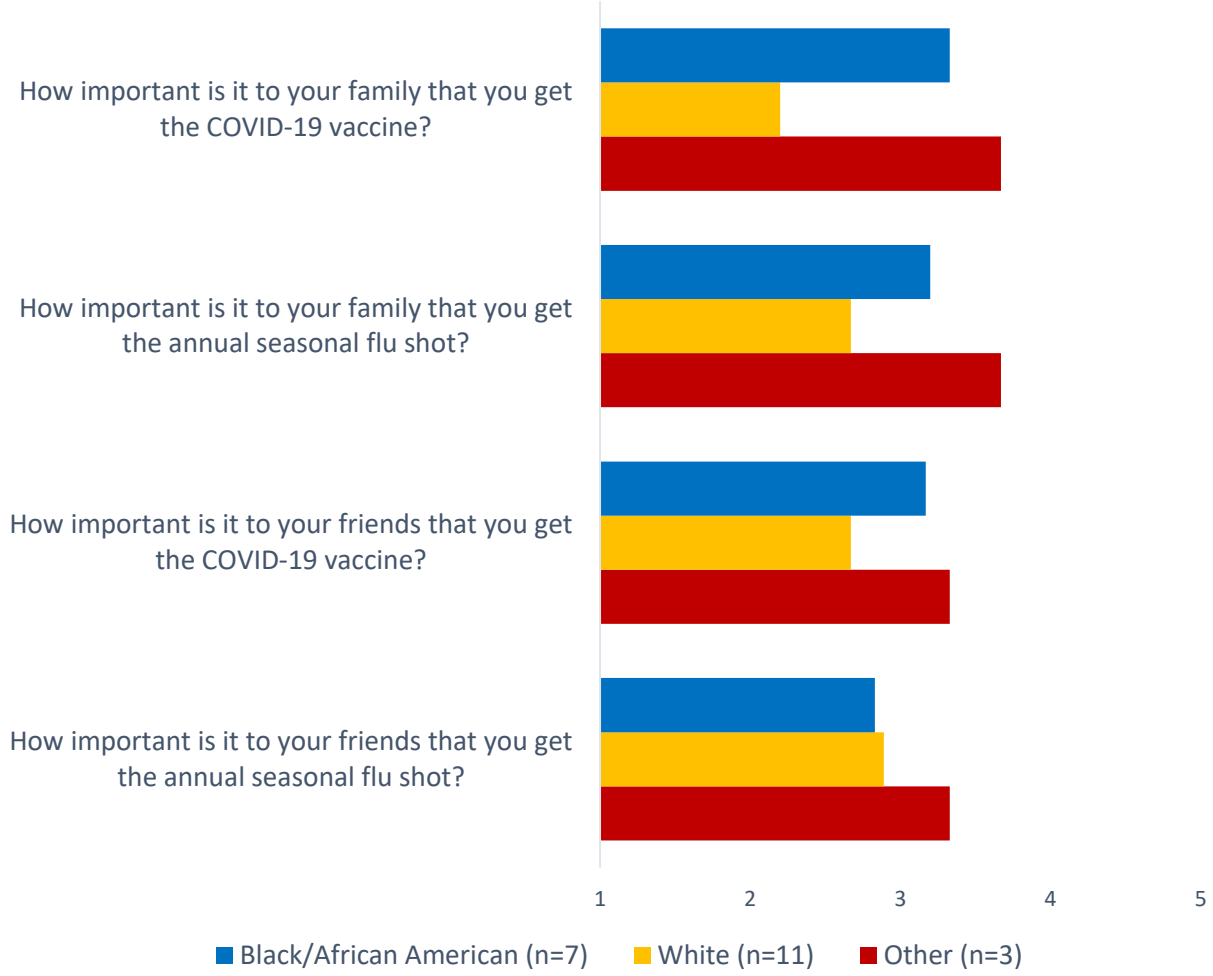
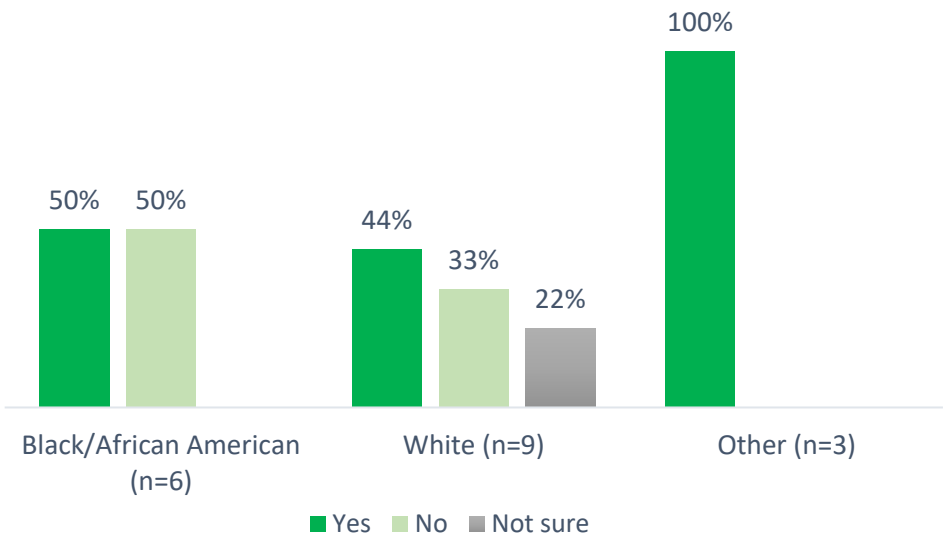


**Table CRG-UND – 10. Willingness to Consider FDA Approved COVID-19 Vaccine**




**Respondents Reporting Being Not Planning to Get Vaccinated**

**Table CRG-NPV-1. Race Group**

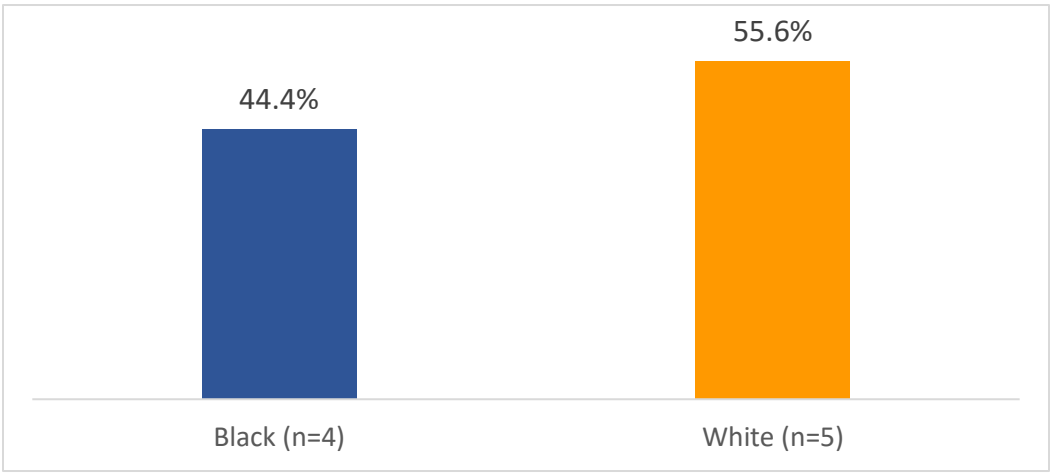


**Table CRG-NPV-2. Reasons Why <u>Not</u> Planning to Get a COVID-19 Vaccination**

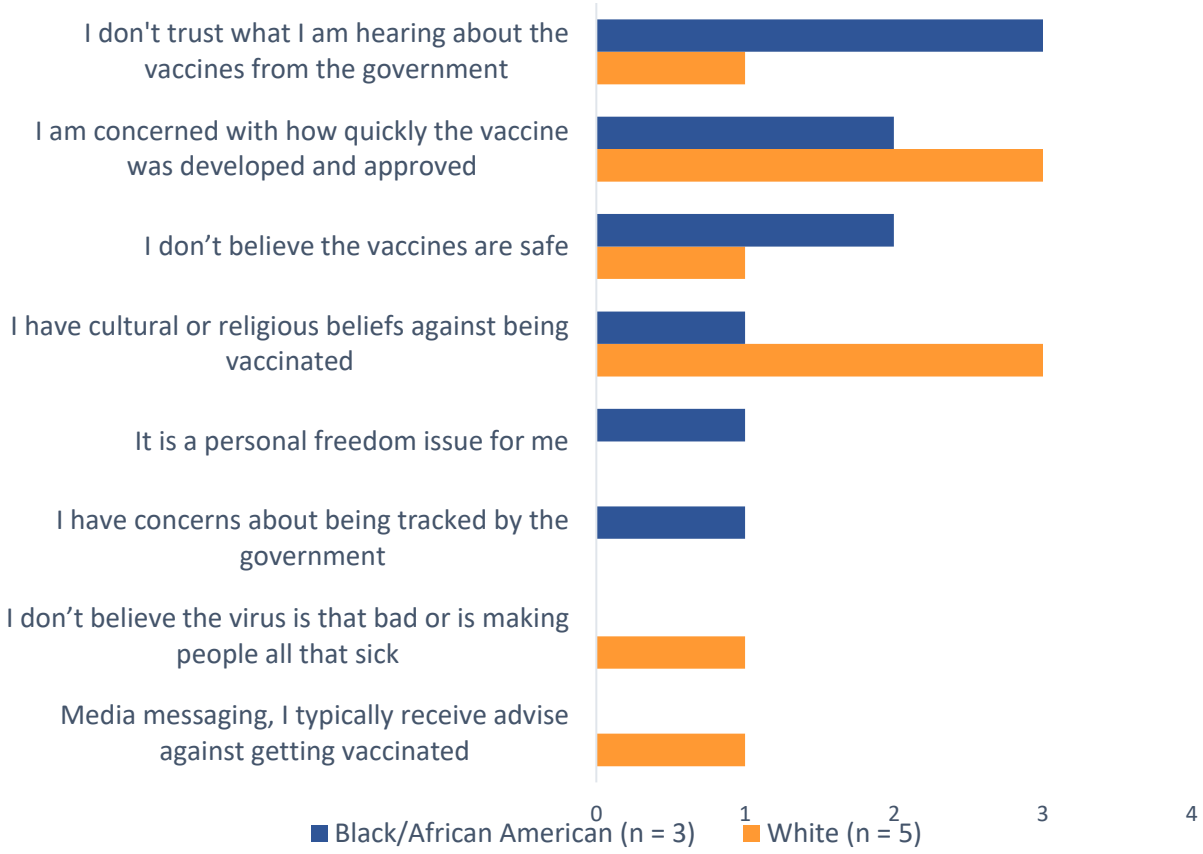


**Table CRG-NPV-3. Media Sources that Are Not Encouraging Getting COVID-19 Vaccination (Counts Only)**

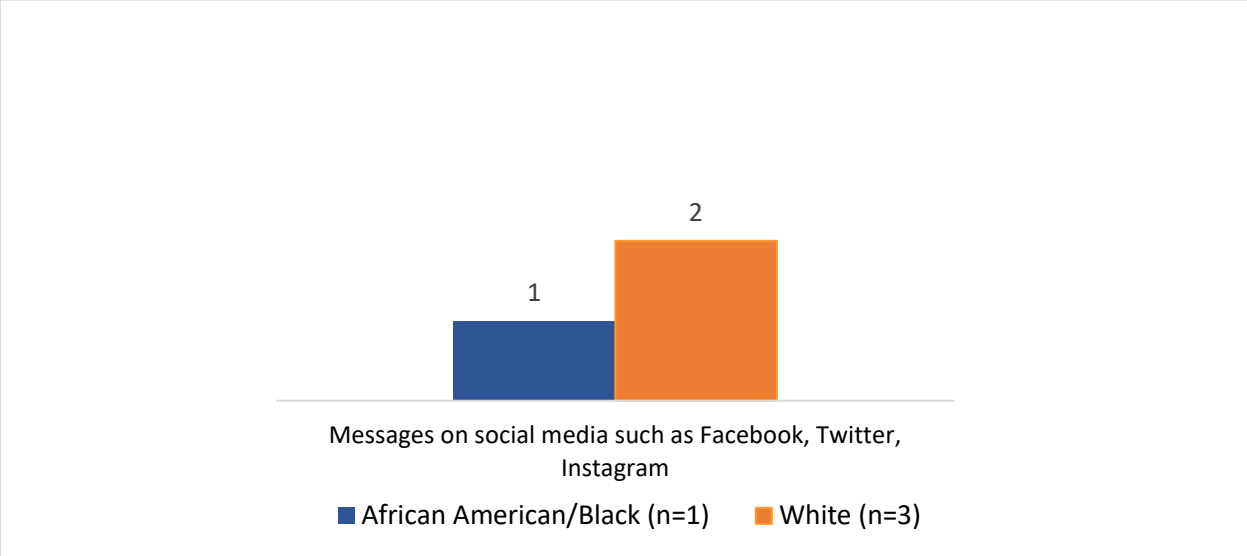



**Table CRG-NPV-4. Messaging Outlets that Are Not Encouraging Getting COVID-19 Vaccination (Counts Only)**

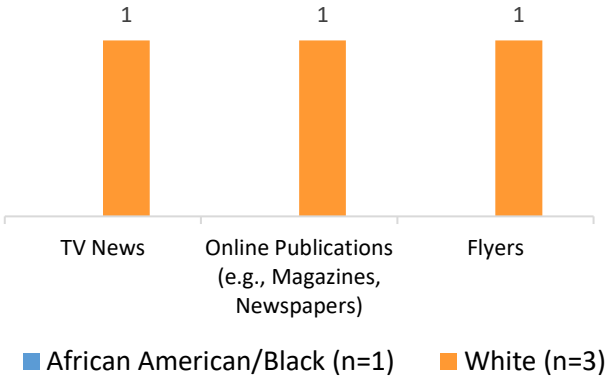


**Table CRG-NPV-5. Social Media Sources that Are Not Encouraging Getting COVID-19 Vaccination (Counts Only)**

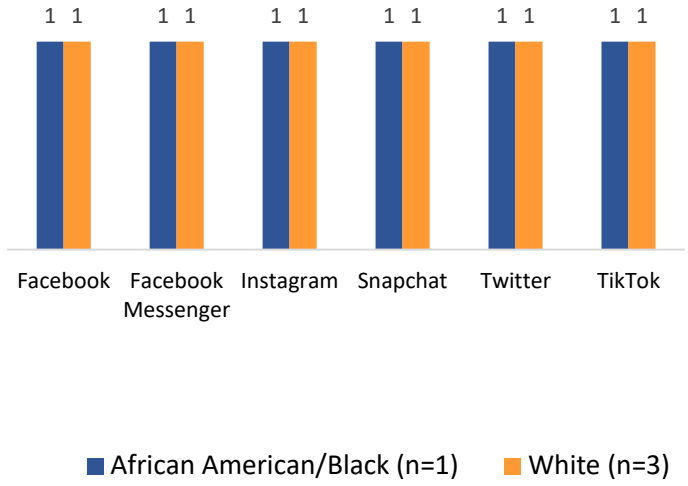



**Table CRG-NPV-6. Planning to Get Season Flu Shot this Fall**

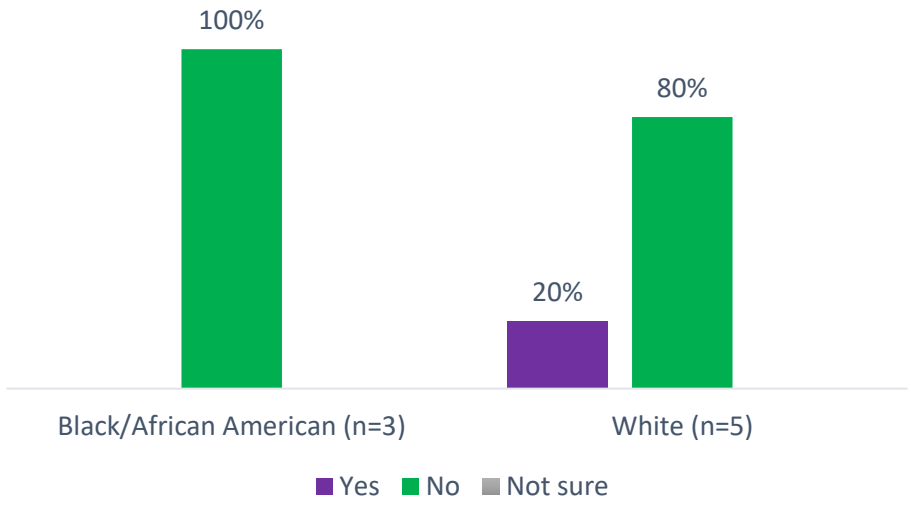


**Table CRG-NPV-7. Importance of Getting the COVID-19 Vaccine and Seasonal Flu Shot**

**(1 = Not important at all – 5 Extremely Important)**

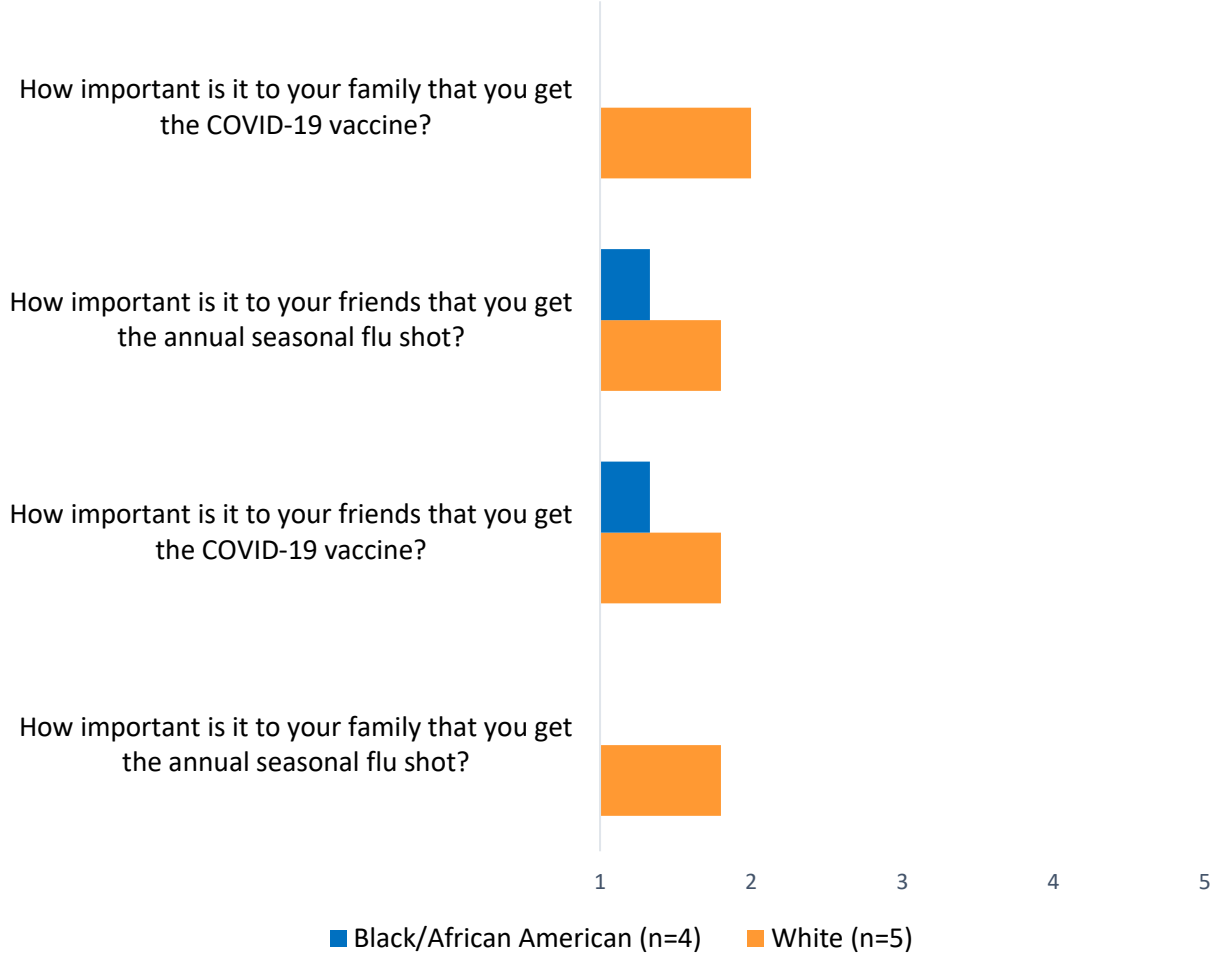


**Table CRG-NPV-8. Actions that Might Increase the Likelihood that a Respondent Would Get a COVID-19 Vaccination**

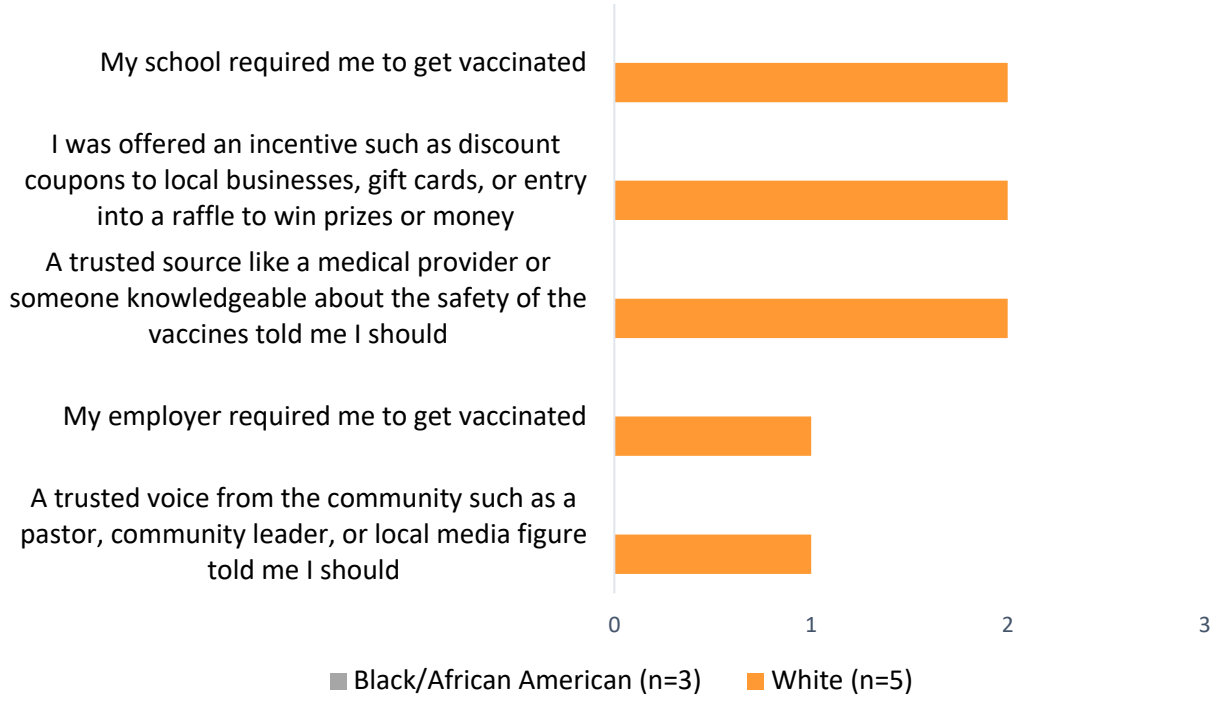
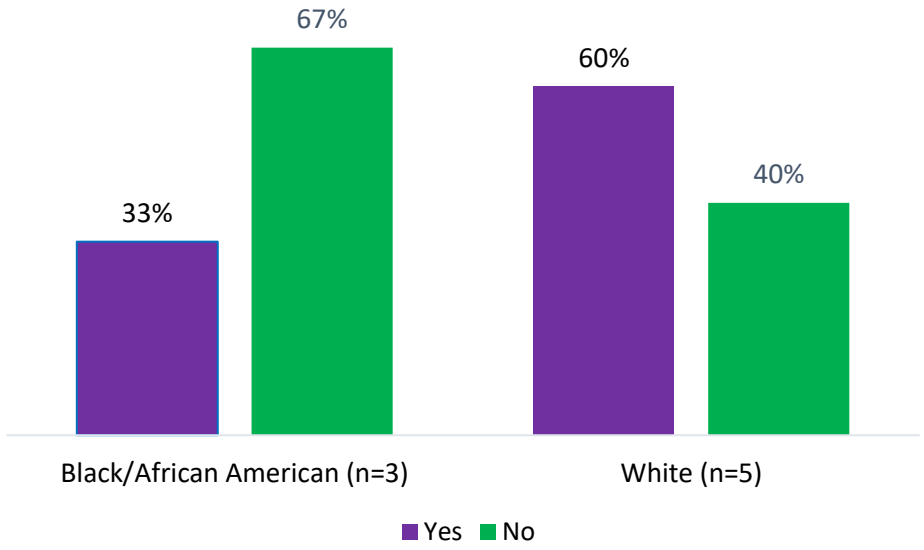



**Table CRG-NPV-9. Should Other People Get Vaccinated?**

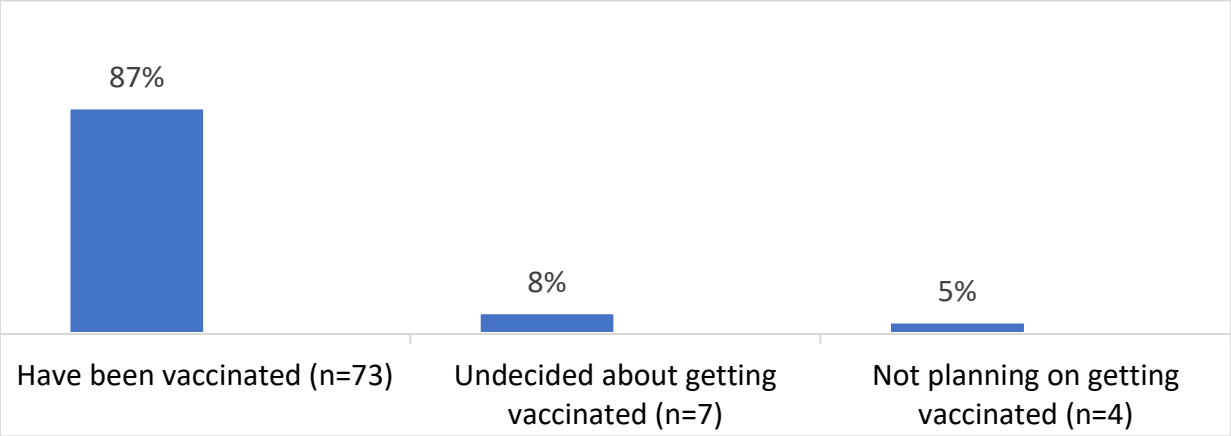


**RAO Community Health Vaccine Survey Results***

***Note VAX = BEEN VACCINATED | UND = UNDECIDED | NPV = NOT PLANNING TO GET VACCINATED**

## Black/African American Sample

### Table BL-1. COVID-19 Vaccination Status




### Respondents Who Report Being Vaccinated (N = 73)

### Table - BL-VAX-1. County of Residence

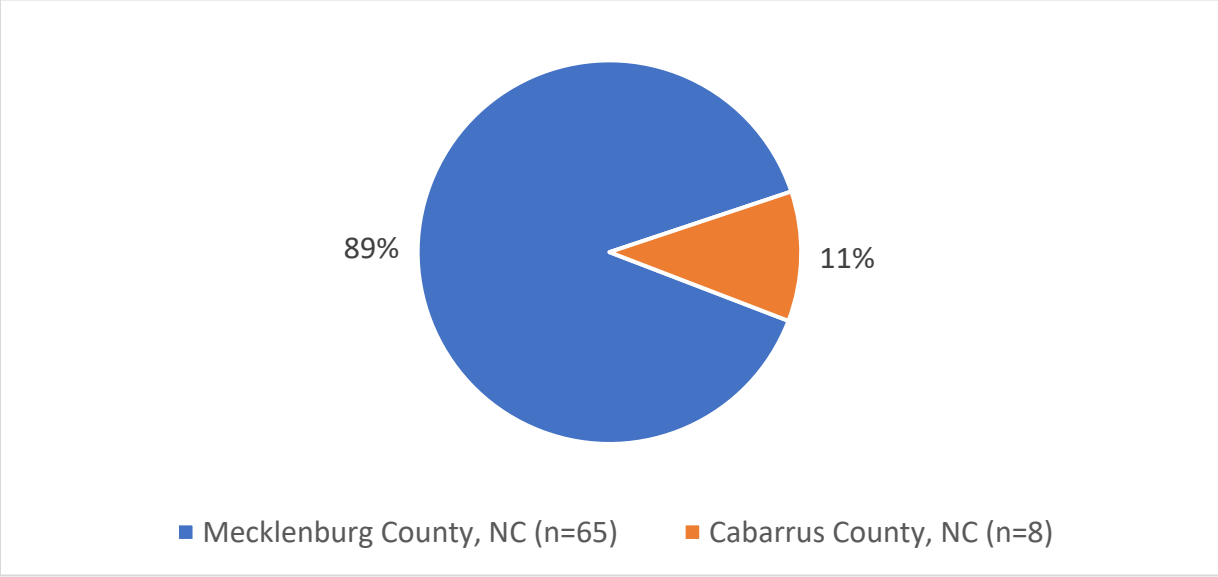


**Table – BL-VAX-2. Gender Group**

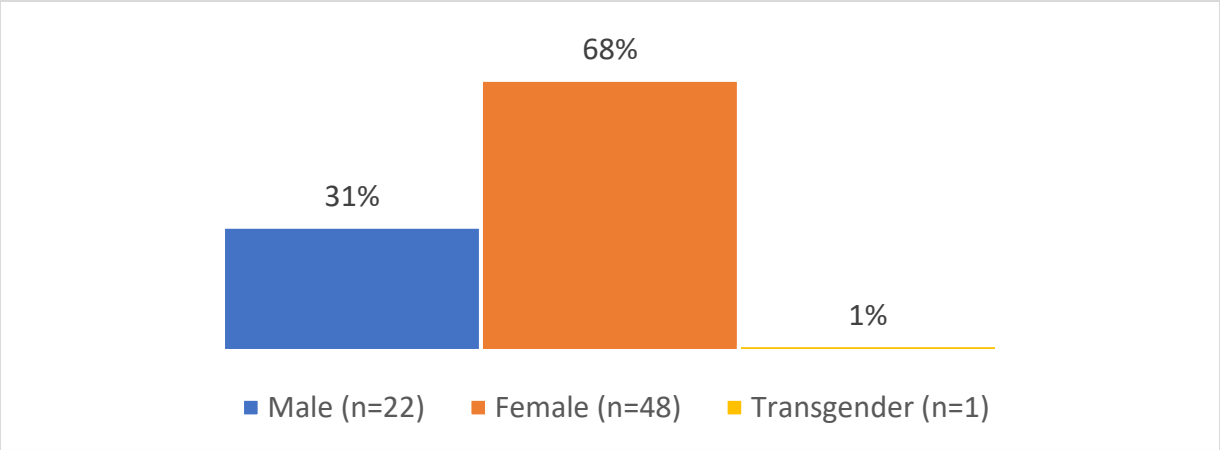



**Table – BL-VAX-3. Age Group**

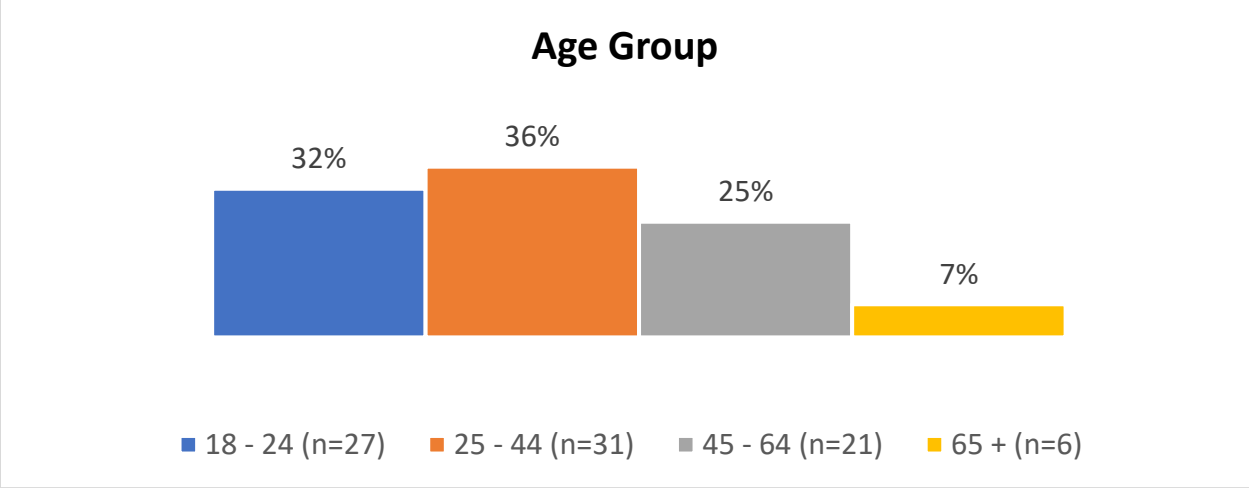



**Table – BL-VAX-4. Marital Status**

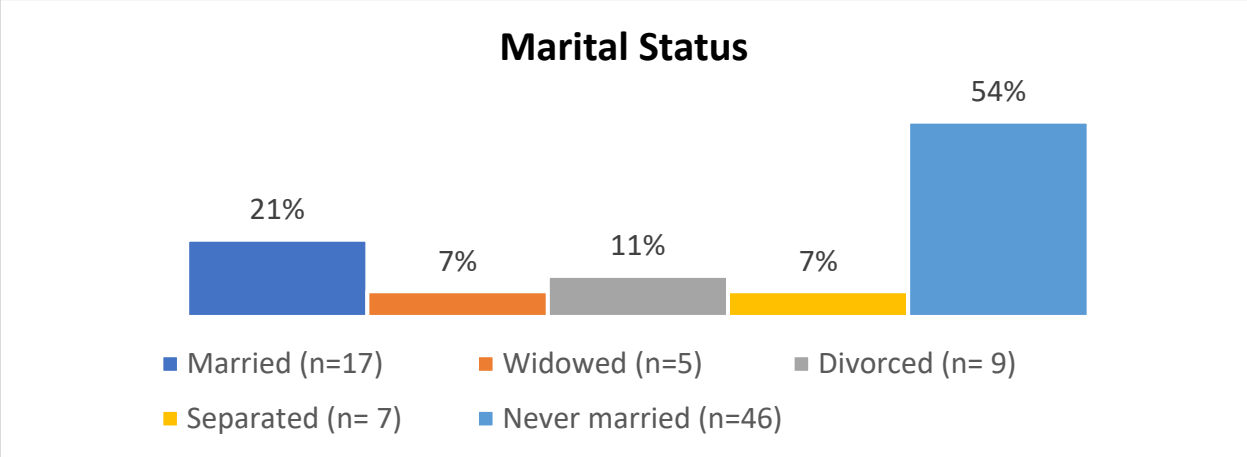


**Table – BL-VAX-5. Employment Status**

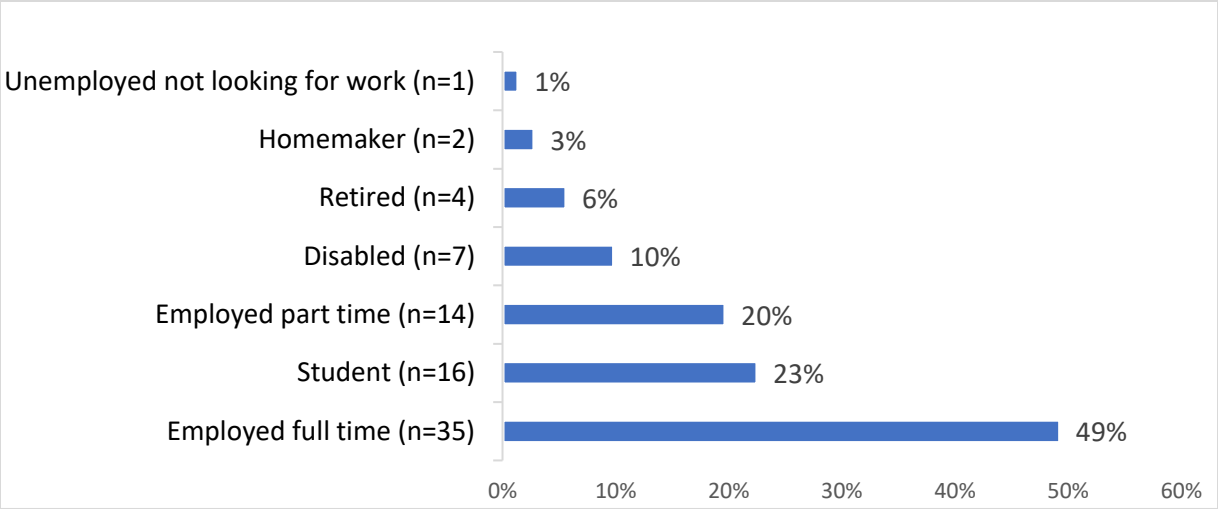



**Table – BL-VAX-6. Total Household Income**

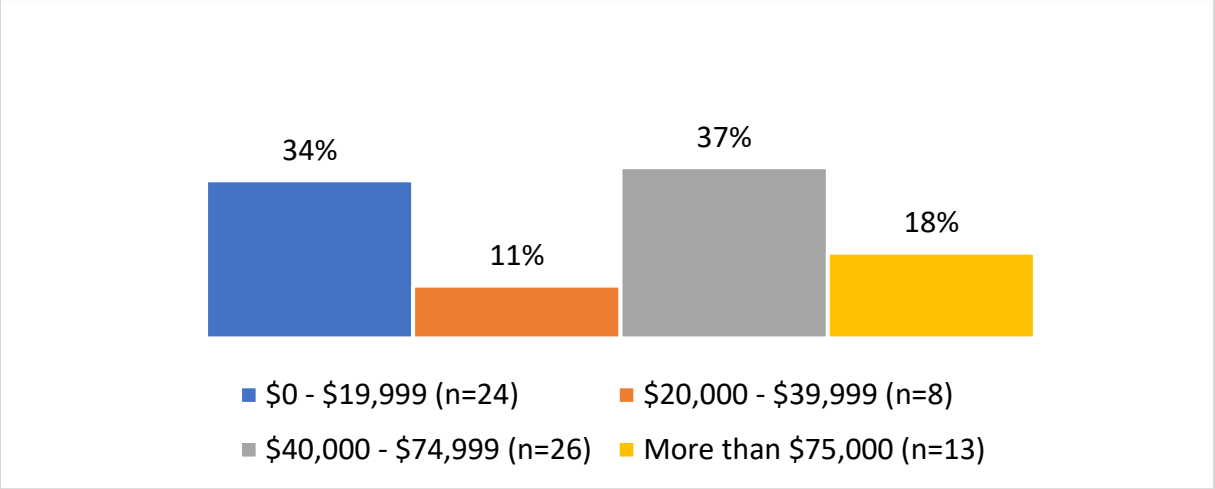



**Table – BL-VAX-7. Have a Primary Care Provider**

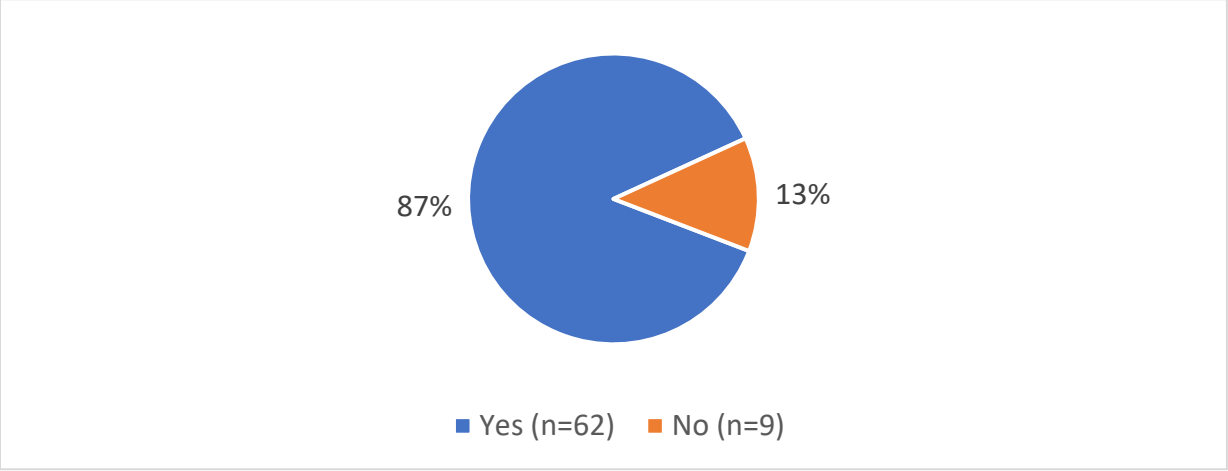


**Table – BL-VAX-8. Ever Tested Positive for COVID-19**

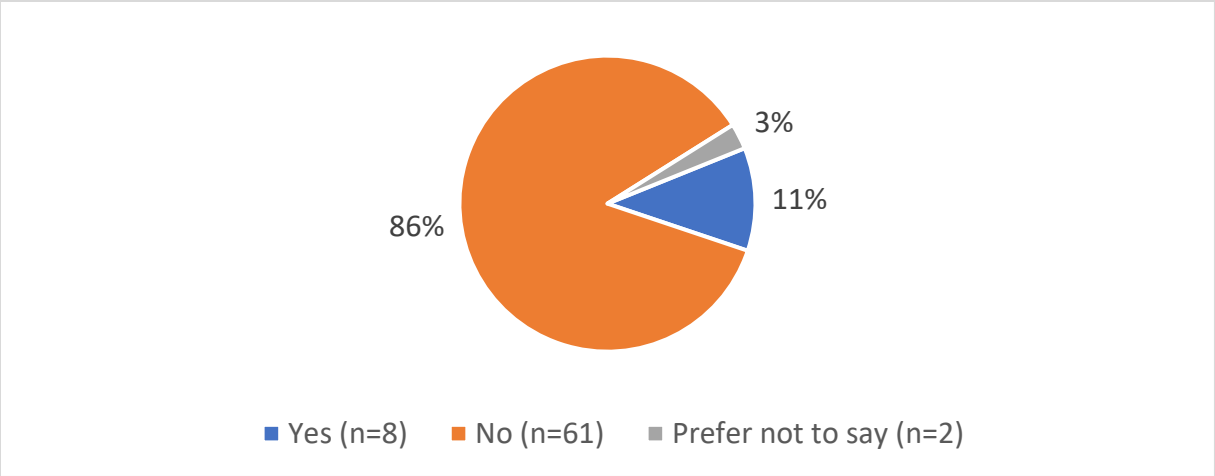



**Table – BL-VAX-9. Anyone in Your Household Having COVID-19**

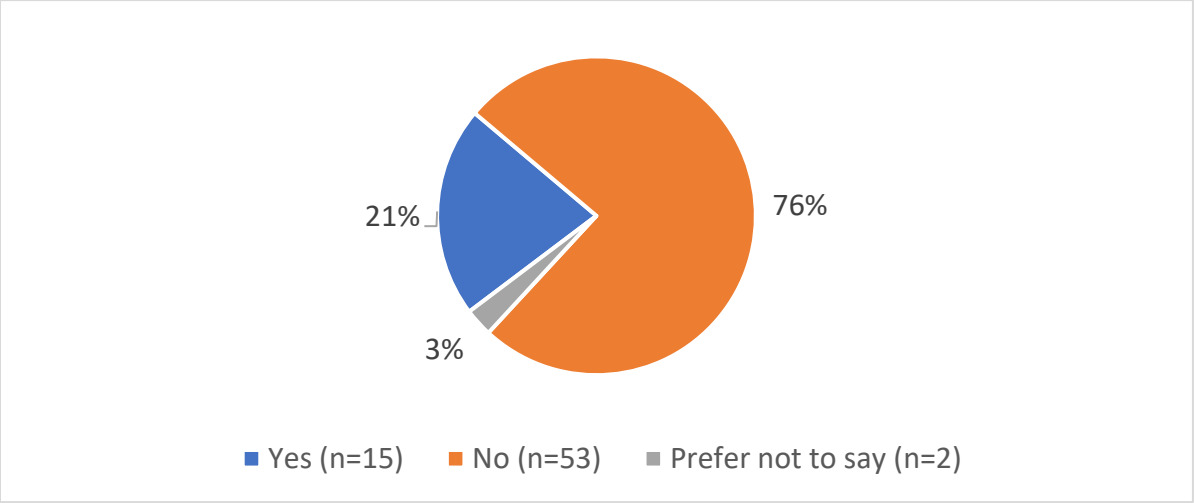



**Table – BL-VAX-10. Worried about a Family Member Getting Sick**

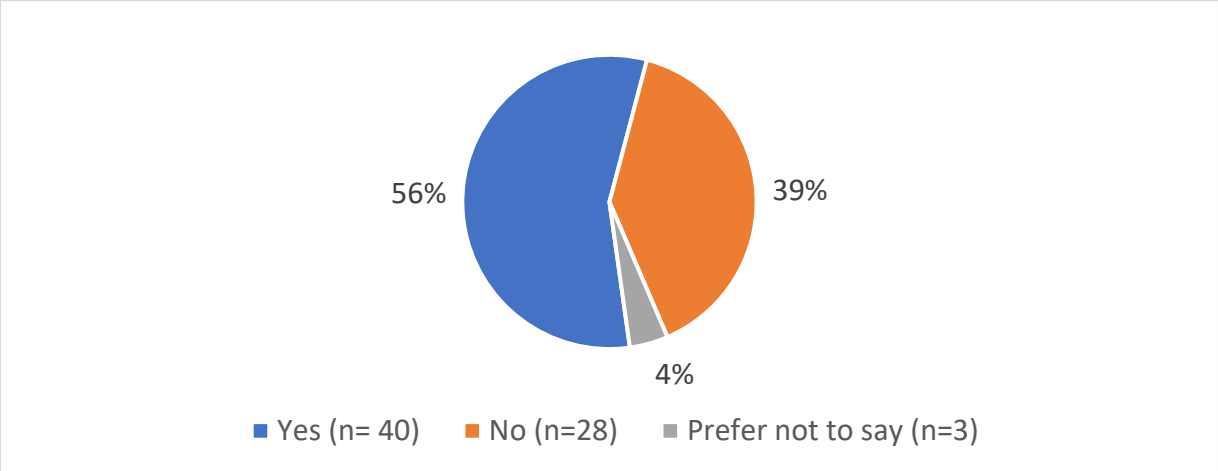


**Table – BL-VAX-11. Worried about Self Getting Sick from COVID-19**

**(1= Not worried at all – 5 Very Worried)**

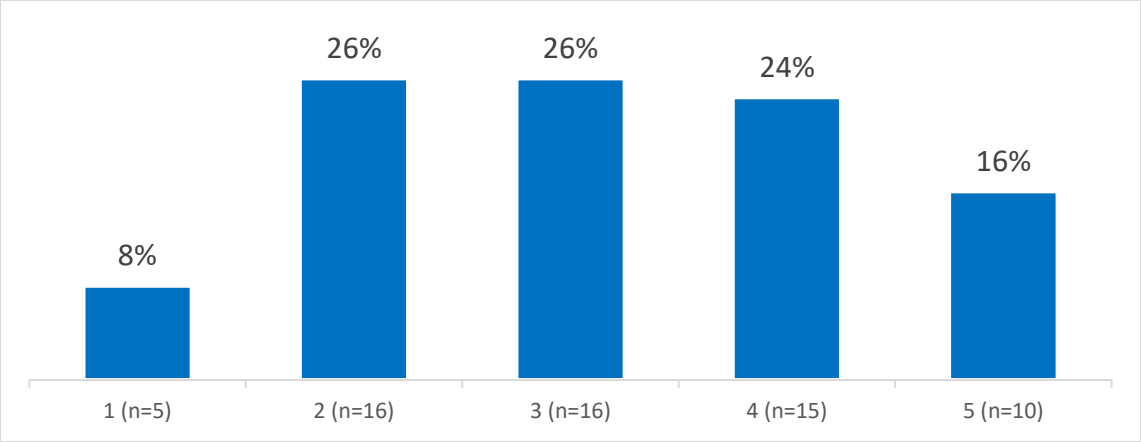
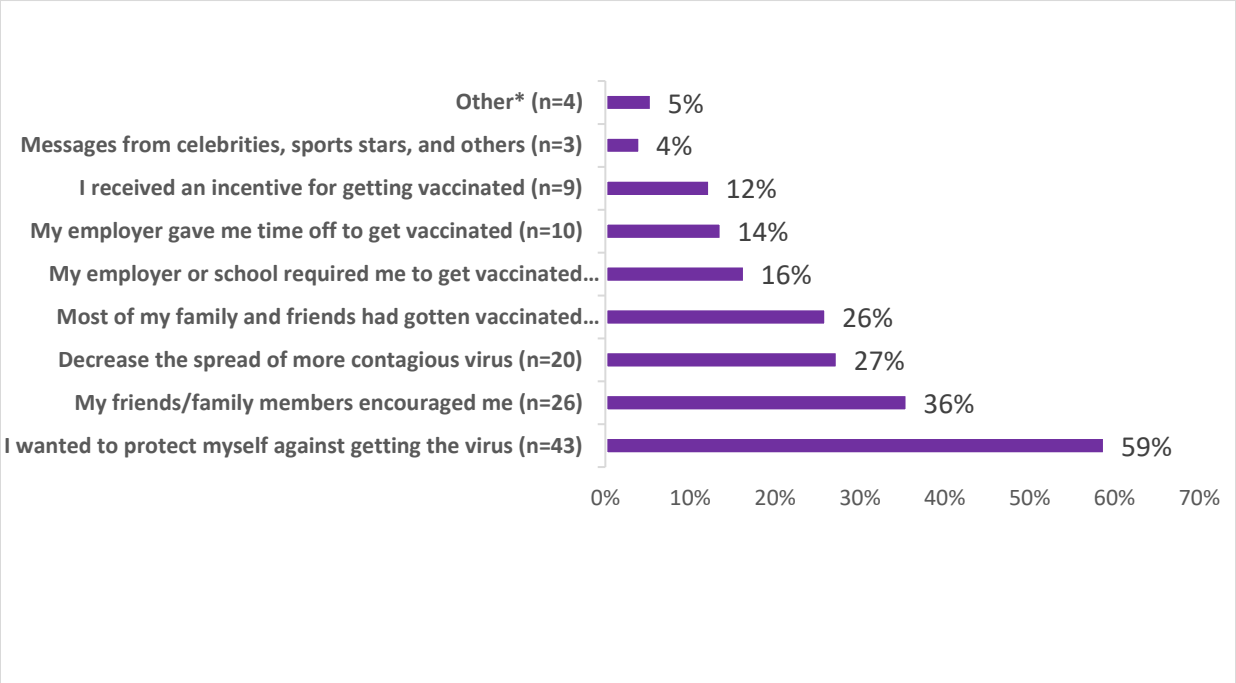



**Table – BL-VAX-12. Reasons for Getting Vaccinated**




***Currently pregnant and wanted to protect my family and babies**

**I am a scientist and smart**

**My brother had COVID**

**Waiting to hear from God and I received the message during a church service on Roman's 13.**

**Table – BL-VAX-13. Information Sources that Influenced the Decision to Get Vaccinated**

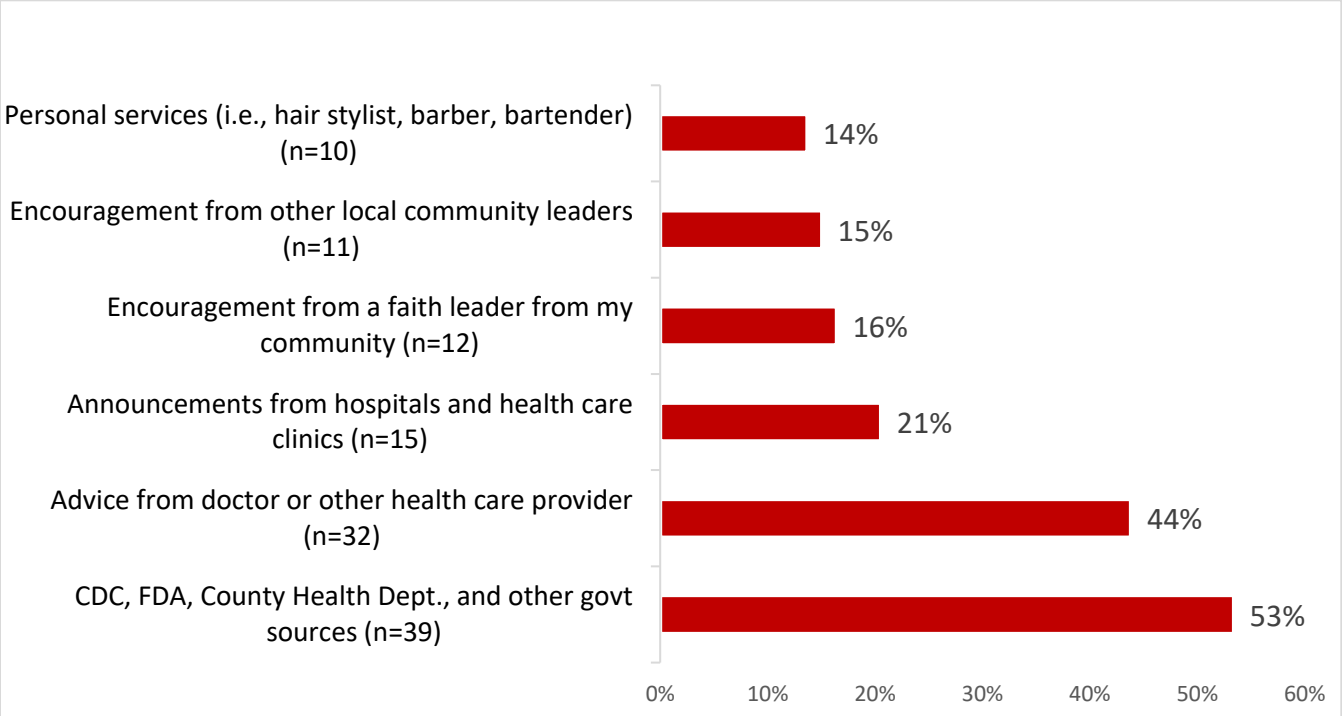



**Table – BL-VAX-14. Received Incentives to Get Vaccinated**

**(Multiple Options Allowed – Counts Only)**

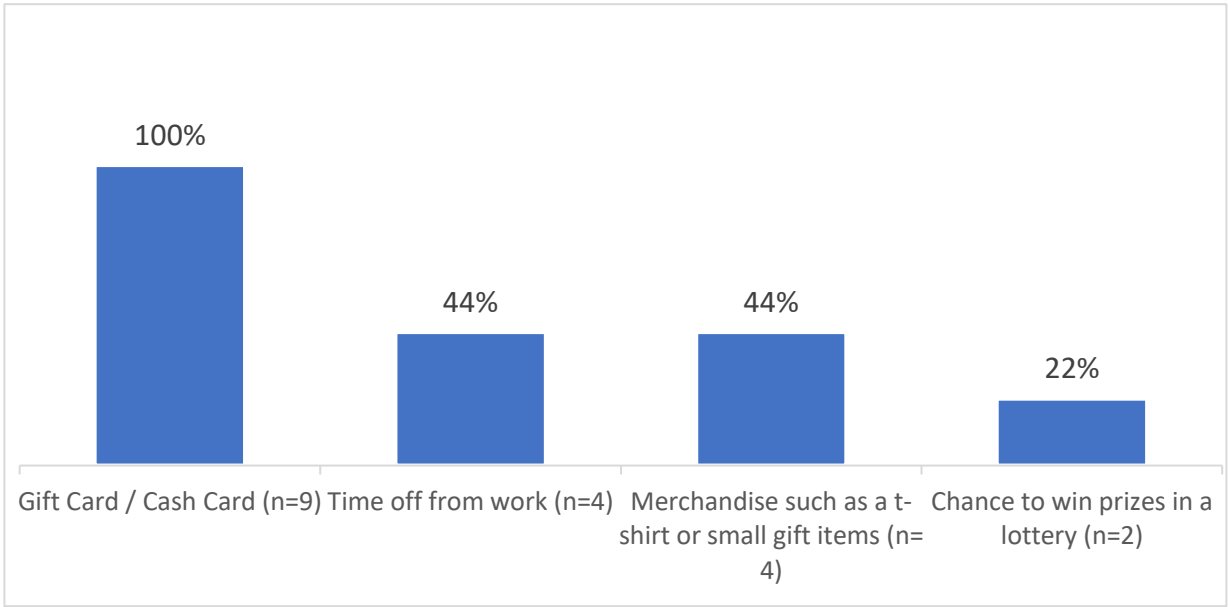


**Table – BL-VAX-15. Media Sources that Influenced Getting Vaccinated**

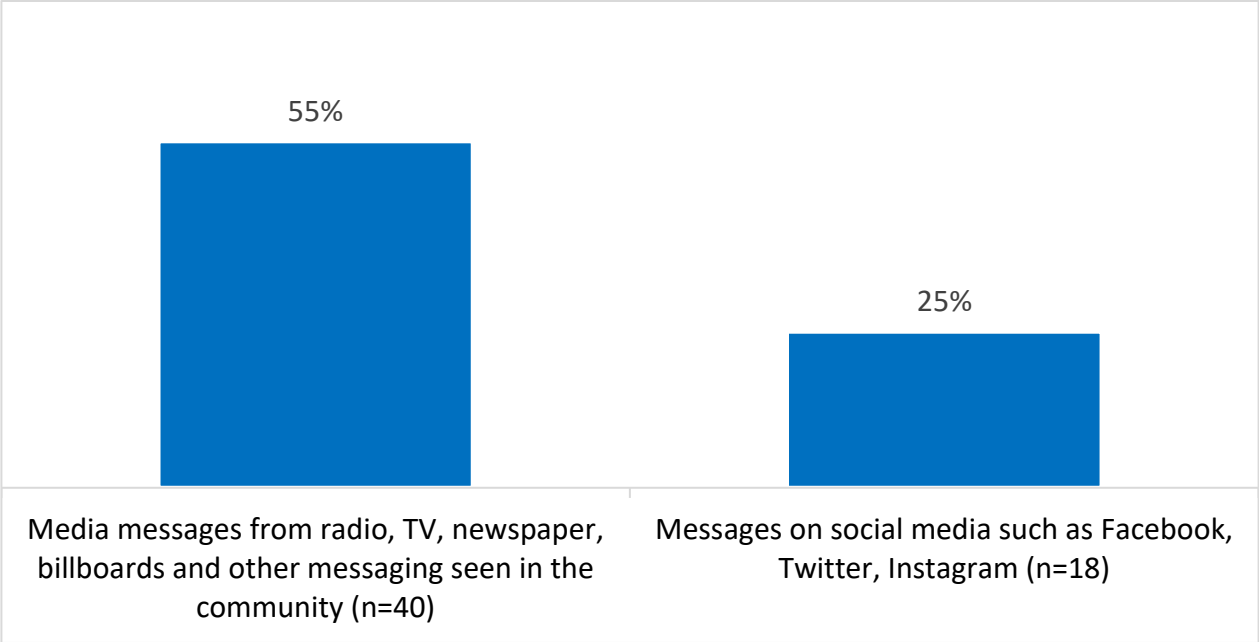


**Table – BL-VAX-16. Media Sources that Influenced Getting Vaccinated**

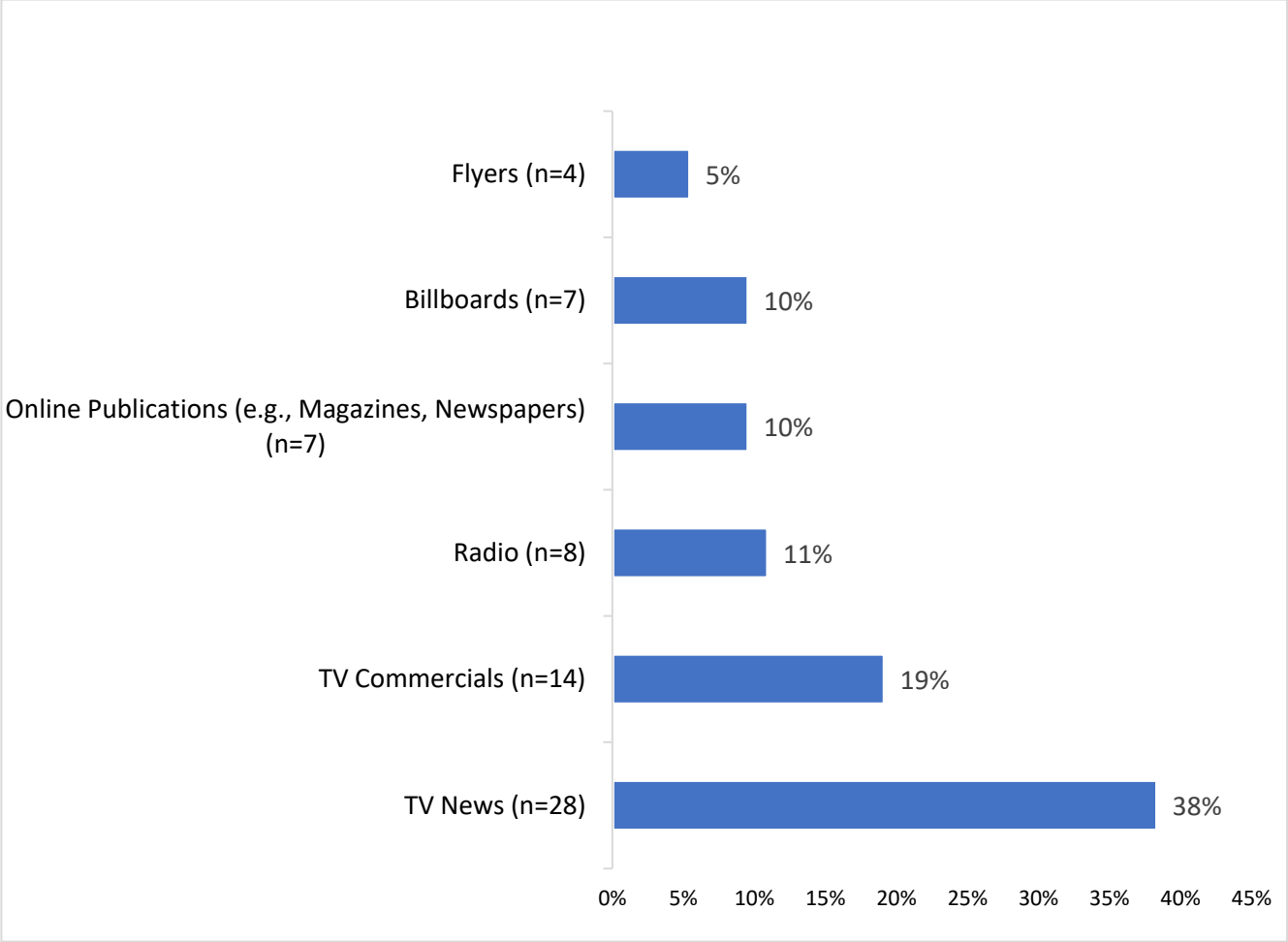


**Table – BL-VAX-17. Media Sources that Influenced Getting Vaccinated**

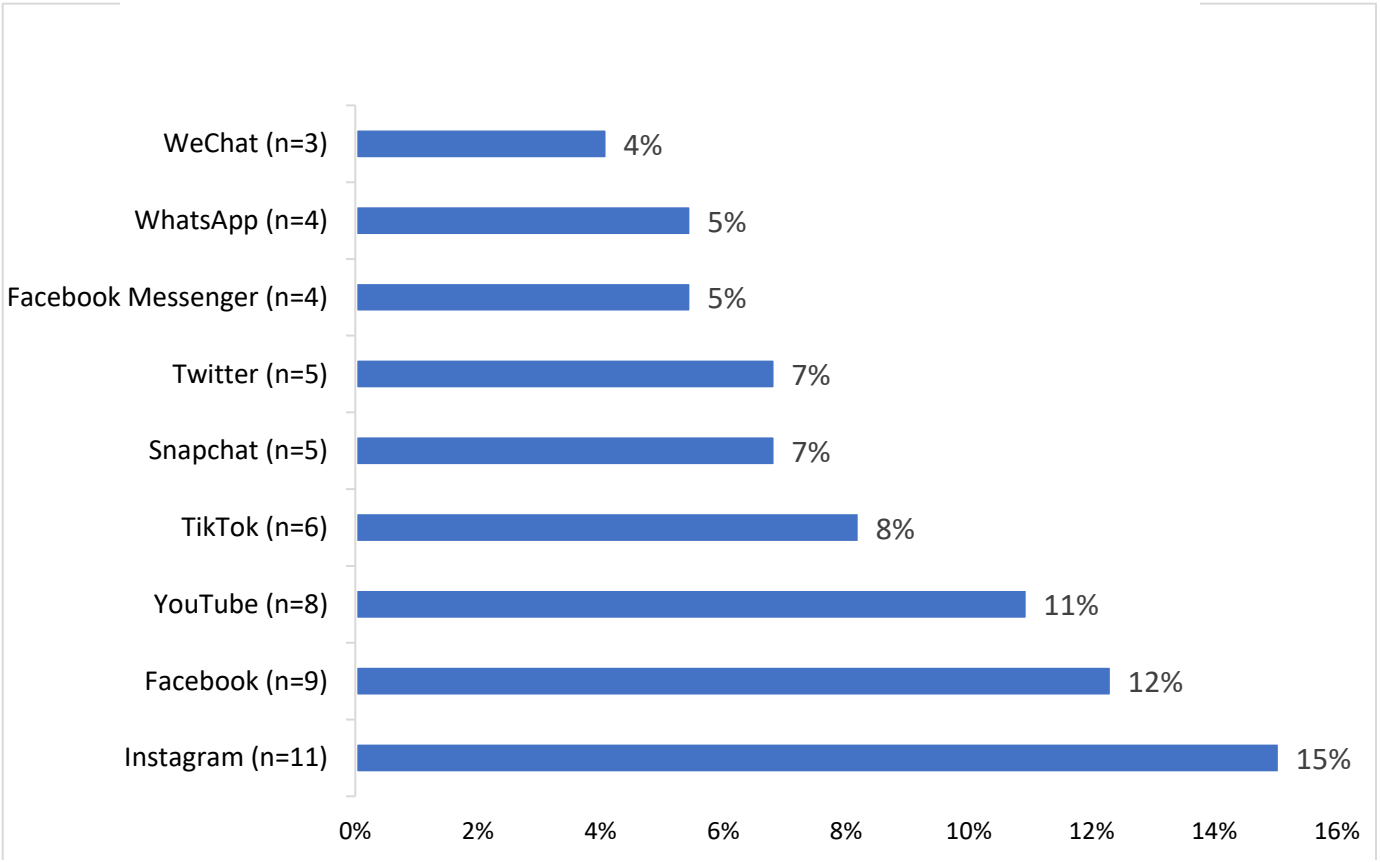


**Table – BL-VAX-18. Being Vaccinated Reduces my Chances of Getting the COVID-19 Virus**

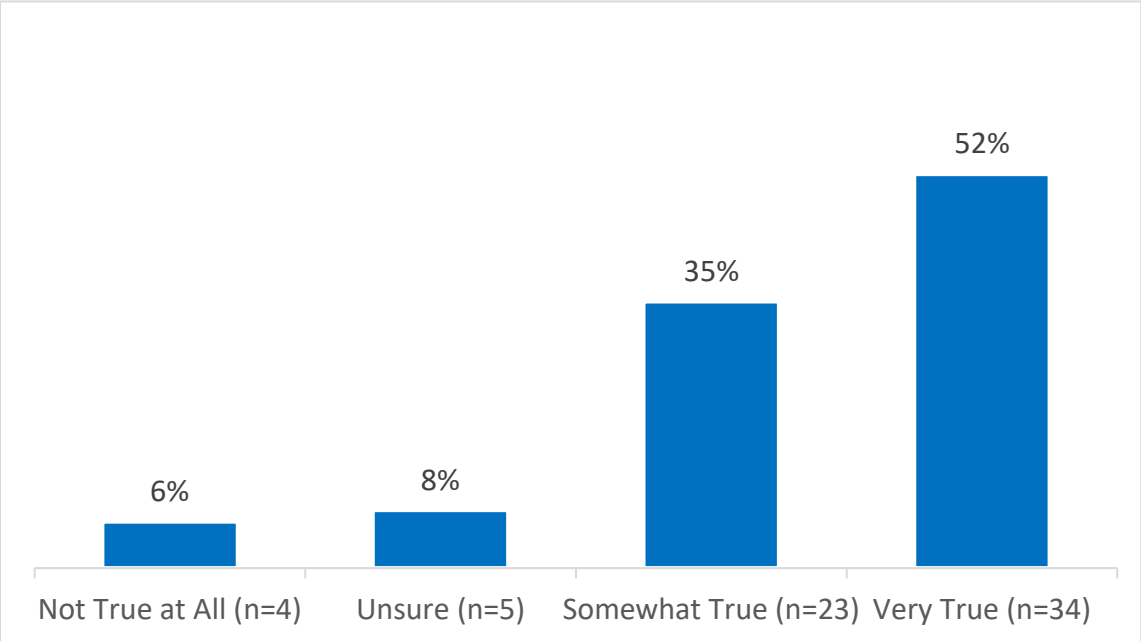



**Table – BL-VAX-19. Being Vaccinated Reduces the Likelihood I would Pass the COVID-19 Virus on to Others**

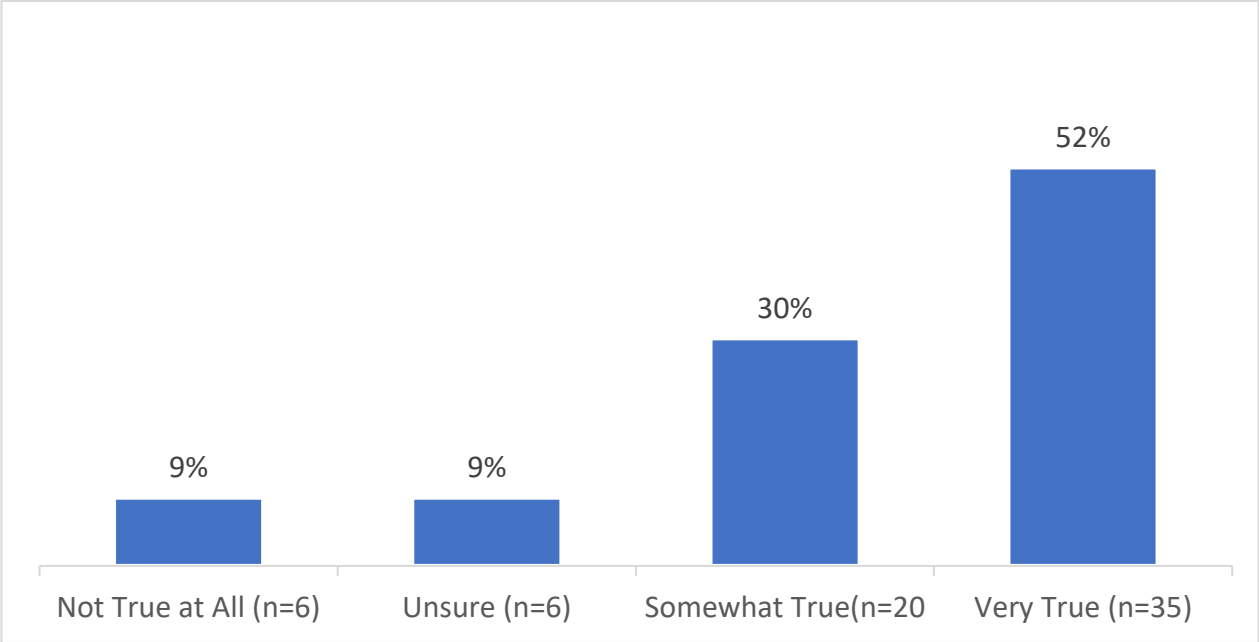


**Table – BL-VAX-20. Being Vaccinated Reduces the Length of Time or the Severity of Symptoms Should I Get Sick from the COVID-19 Virus**

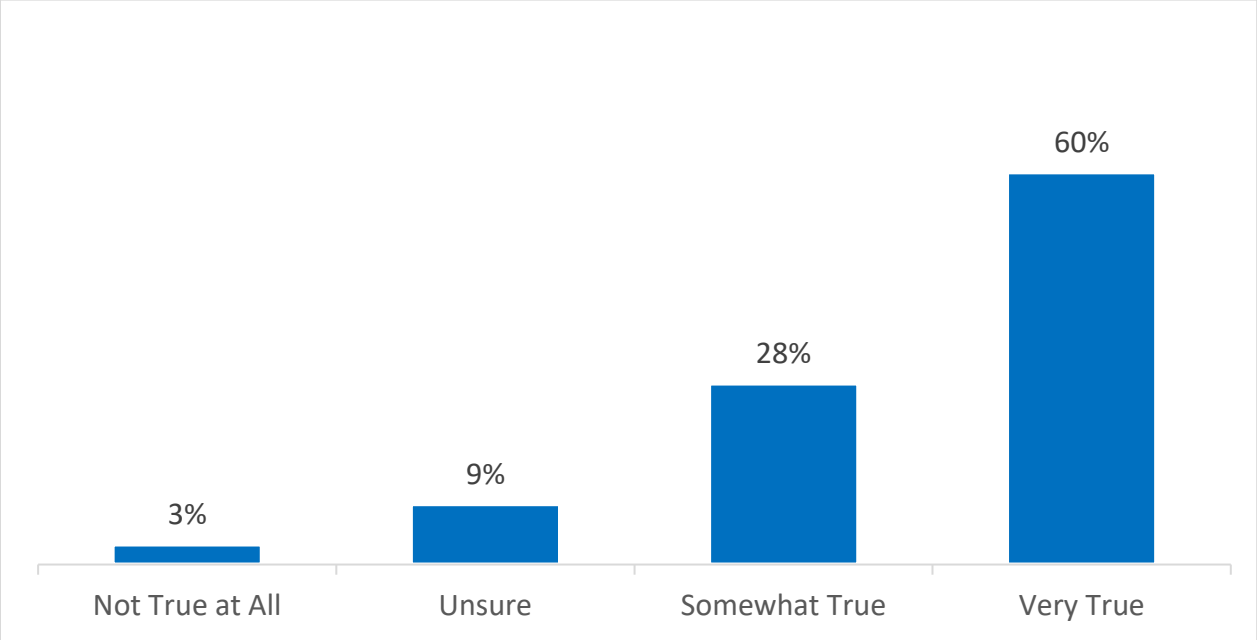



**Table – BL-VAX-21. Being Vaccinated Allows Me to Socialize More in Person with Others**

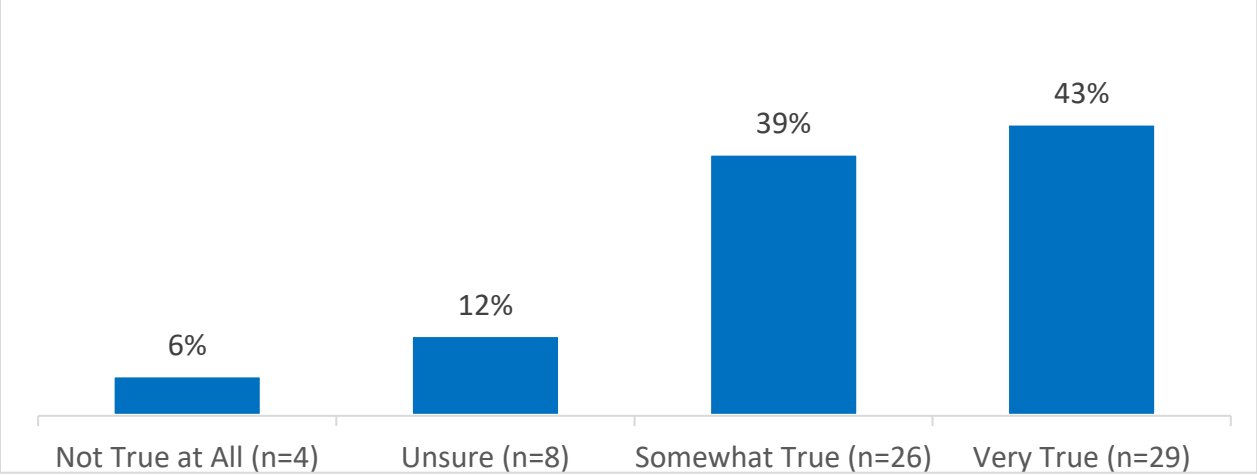


**Table – BL-VAX-22. Being Vaccinated Allows Me to Participate in More Group Recreational Activities**

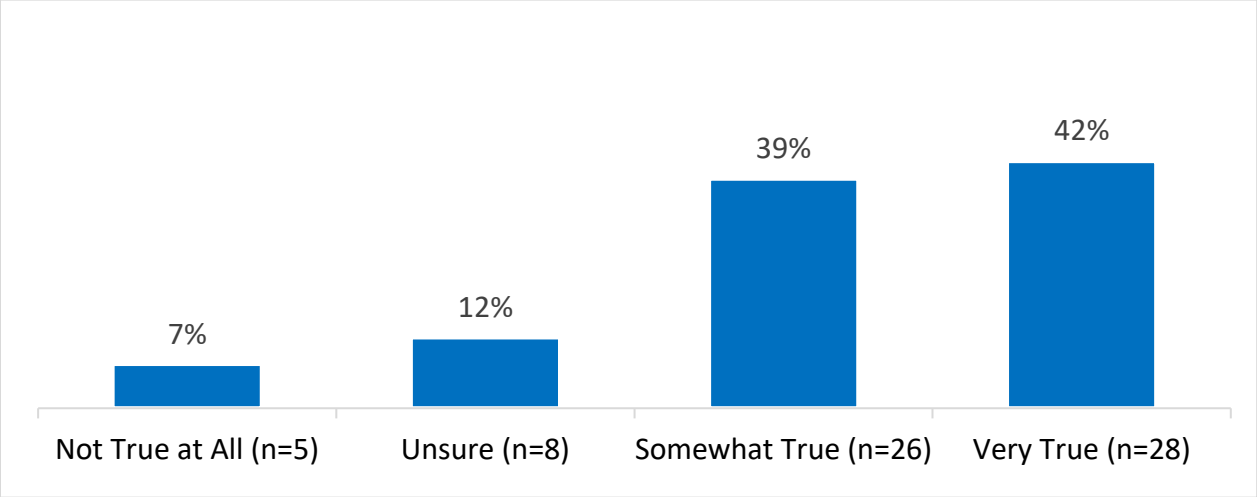



**Table – BL-VAX-23. Planning to Get a Seasonal Flu Shot this Fall**

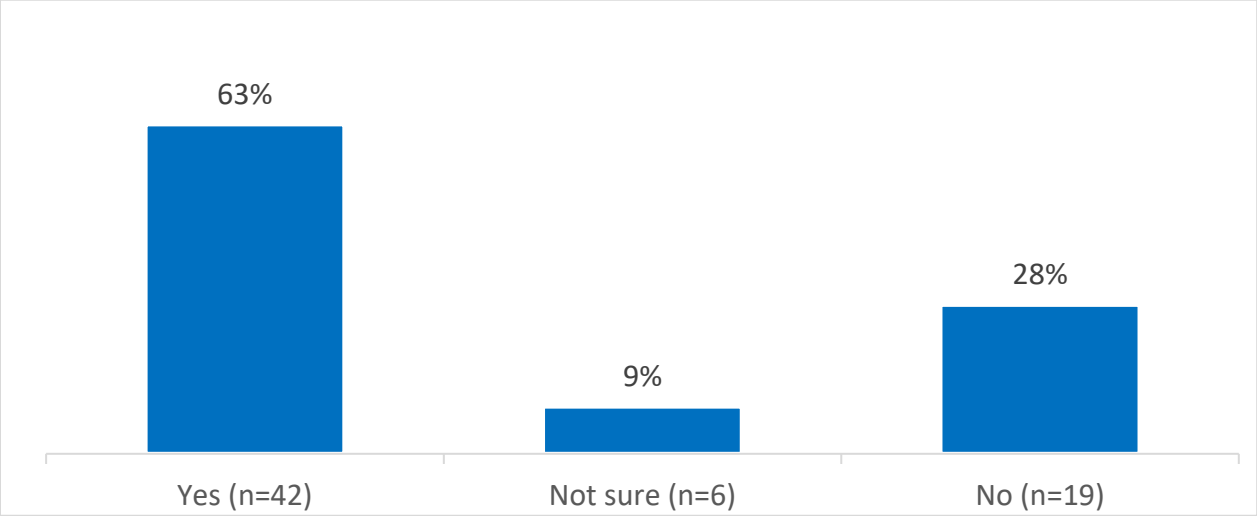
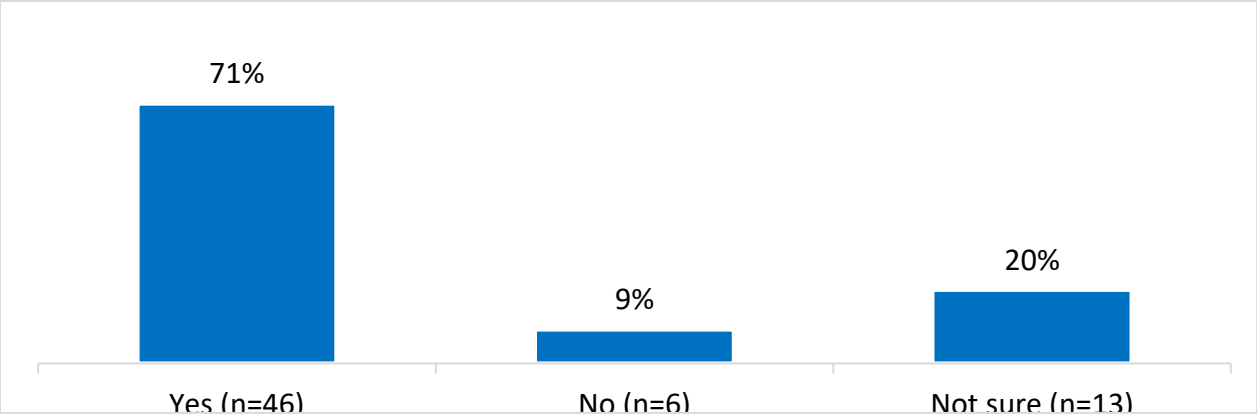



**Table – BL-VAX-23. Planning to Get a Booster COVID-19 Vaccination**



**Respondents Who Report Being Undecided about Getting Vaccinated (n= 7)**

**Table - BL-UND-1. County of Residence**

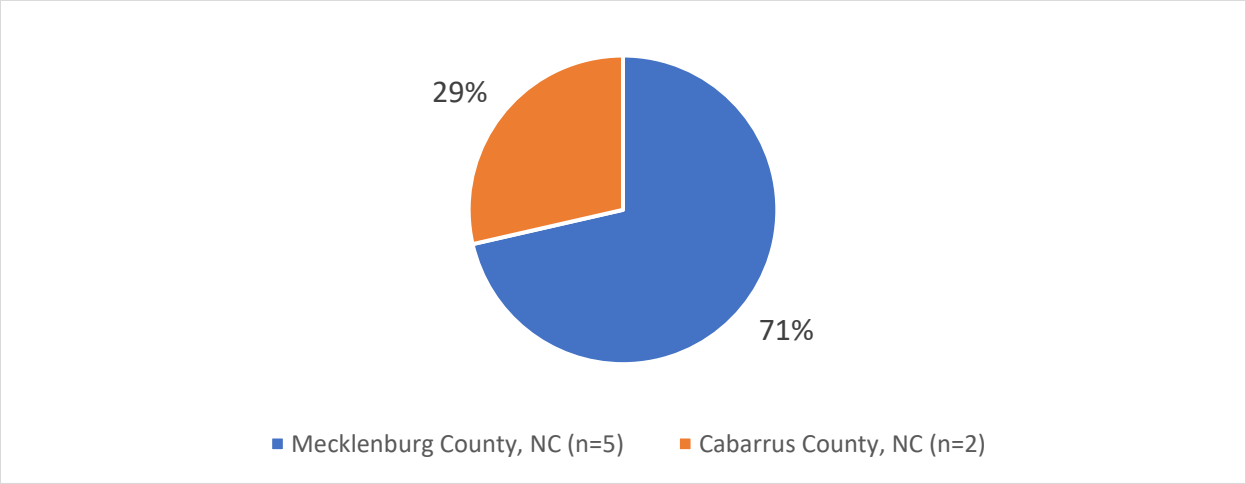



**Table – BL-UND-2. Gender Group**

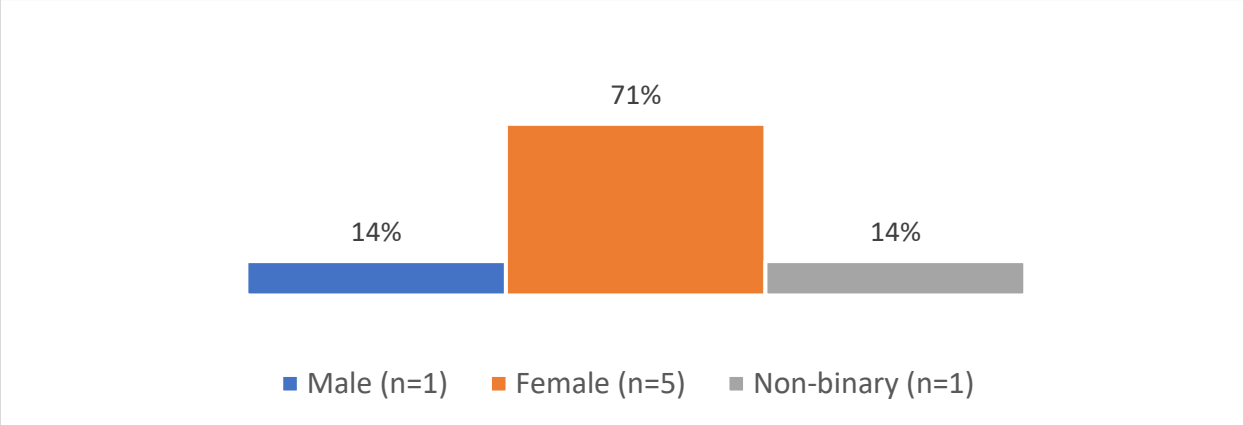



**Table – BL-UND-3. Age Group**

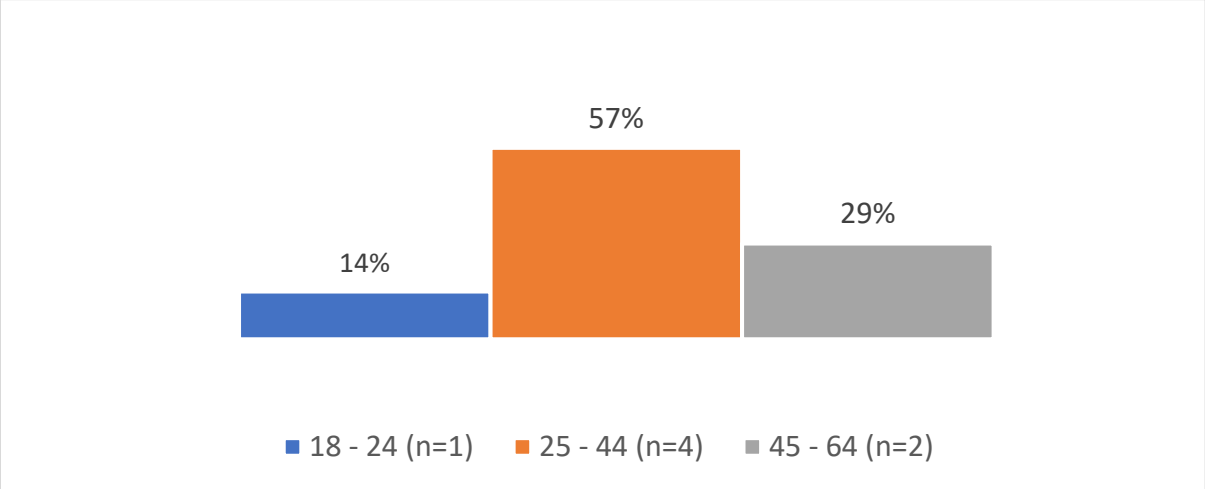


**Table – BL-UND-4. Marital Status**

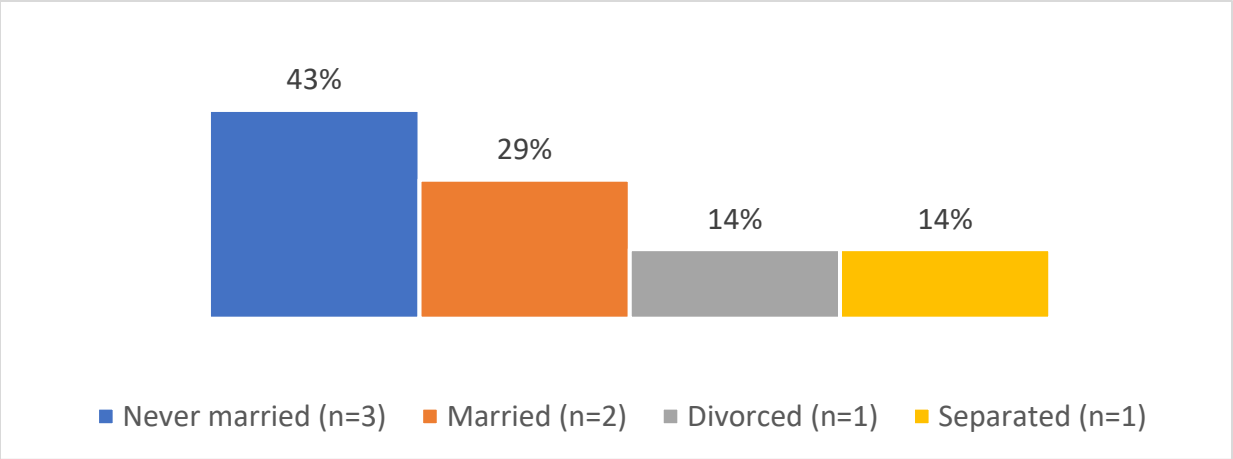



**Table – BL-UND-5. Employment Status**

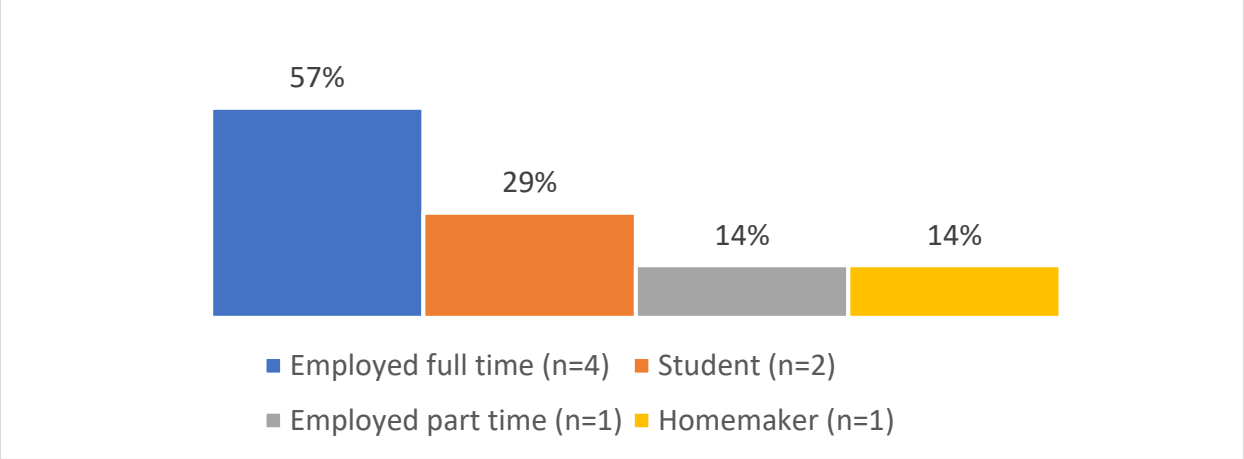



**Table – BL-UND-6. Total Household Income**

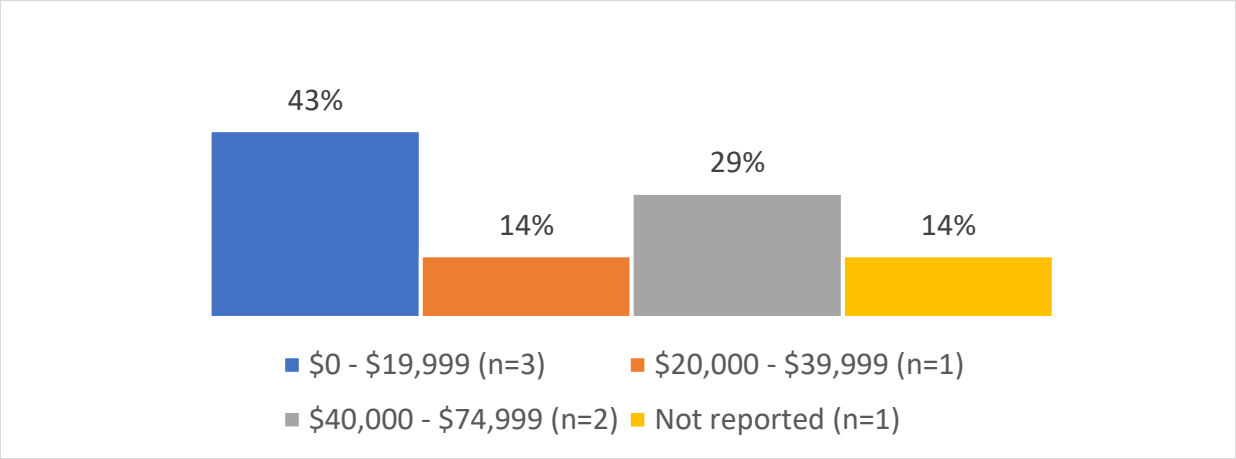


**Table – BL-UND-7. Have a Primary Care Provider/Medical Home**

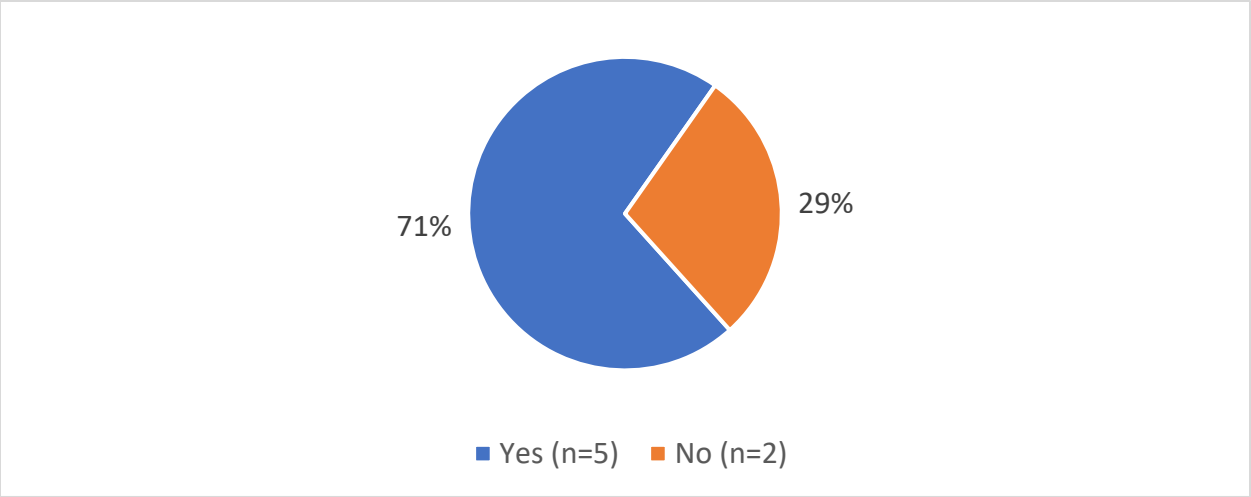



**Table – BL-UND-8. Ever Tested Positive for COVID-19**

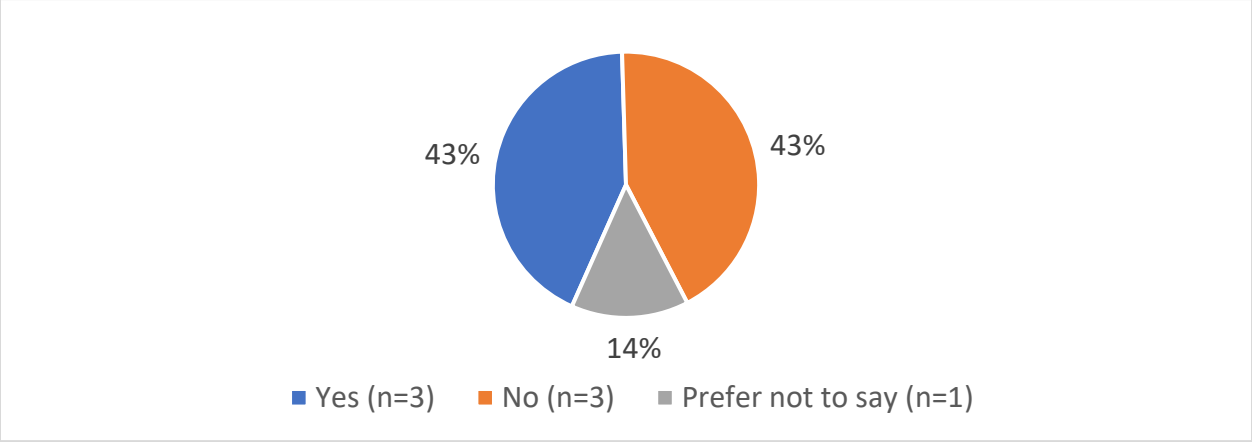



**Table – BL-UND-9. Anyone in Your Household Having COVID-19**

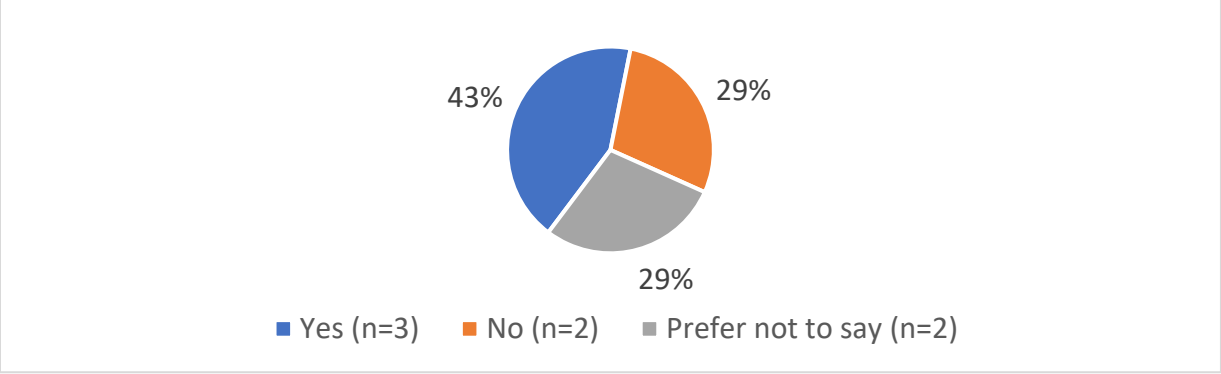


**Table – BL-UND-10. Worried about a Family Member Getting Sick**

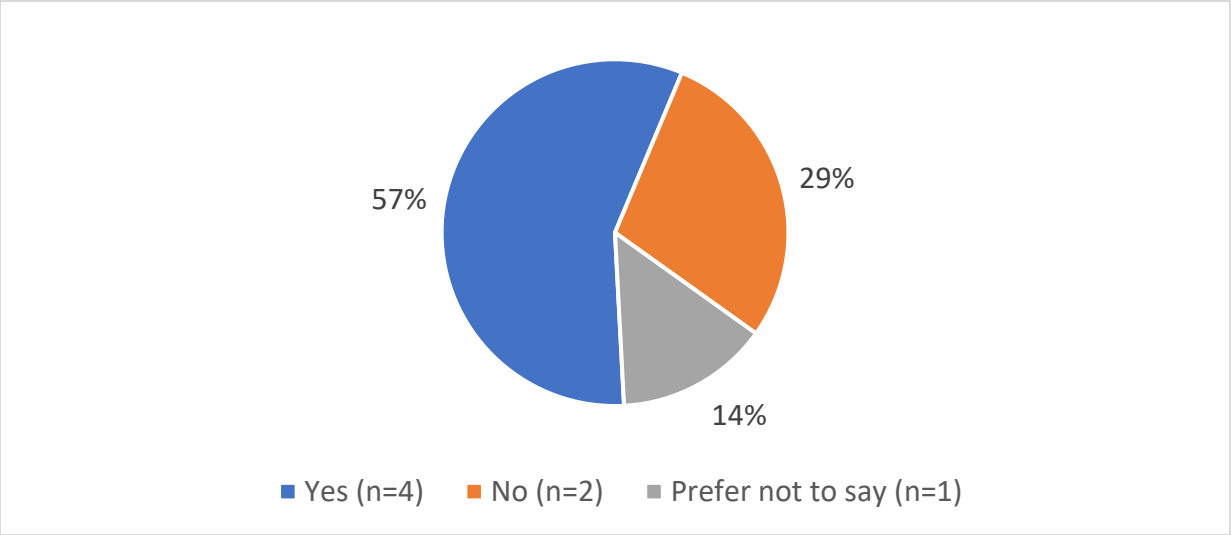



**Table – BL-UND-11. Worried about Self Getting Sick from COVID-19**

**(1= Not worried at all – 5 Very Worried)**

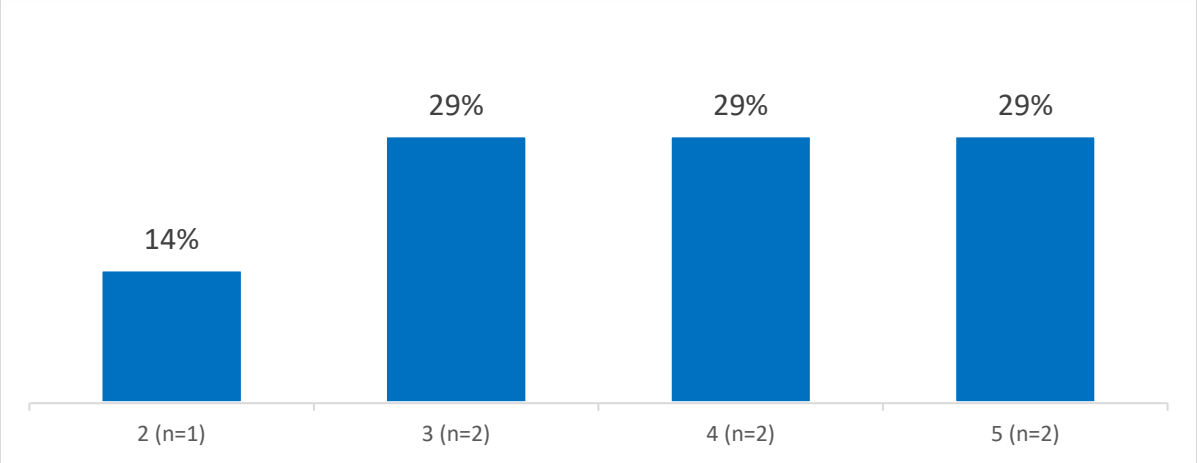


**Table – BL-UND-12. Reasons that Have Delayed Your Decision to Get Vaccinated**

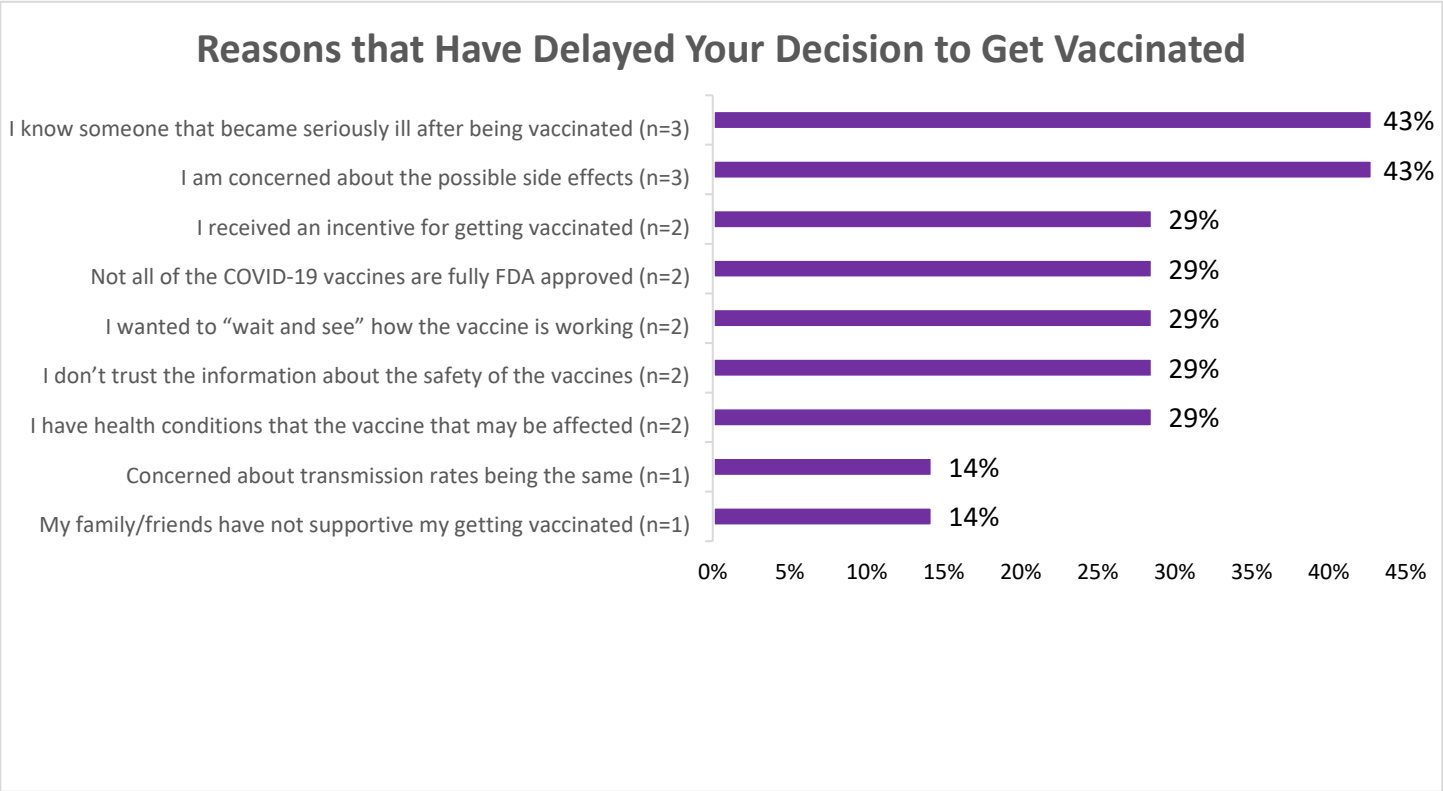


**Table – BL-UND-13. Reasons that Might Influence the Decision to Get Vaccinated**

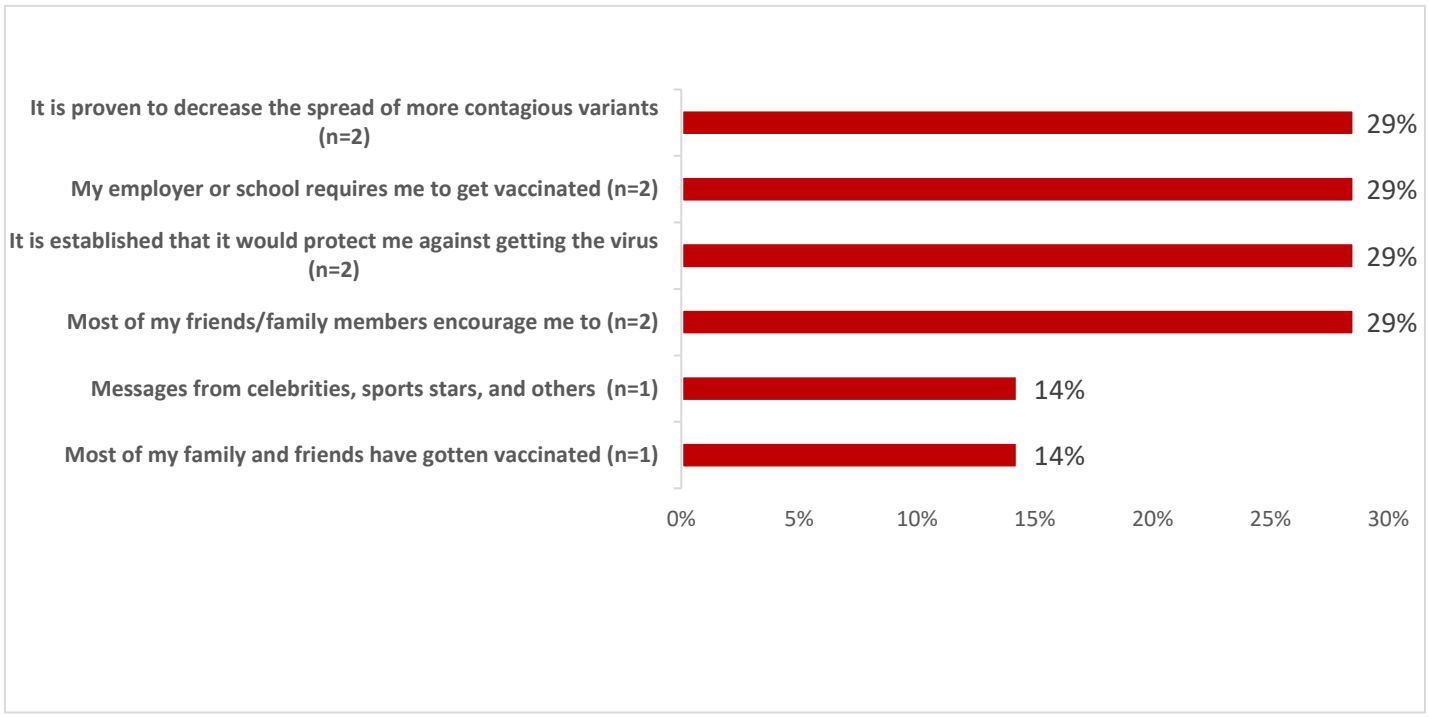


**Table – BL-UND-14. Information Sources that Might Influence the Decision to Get Vaccinated**

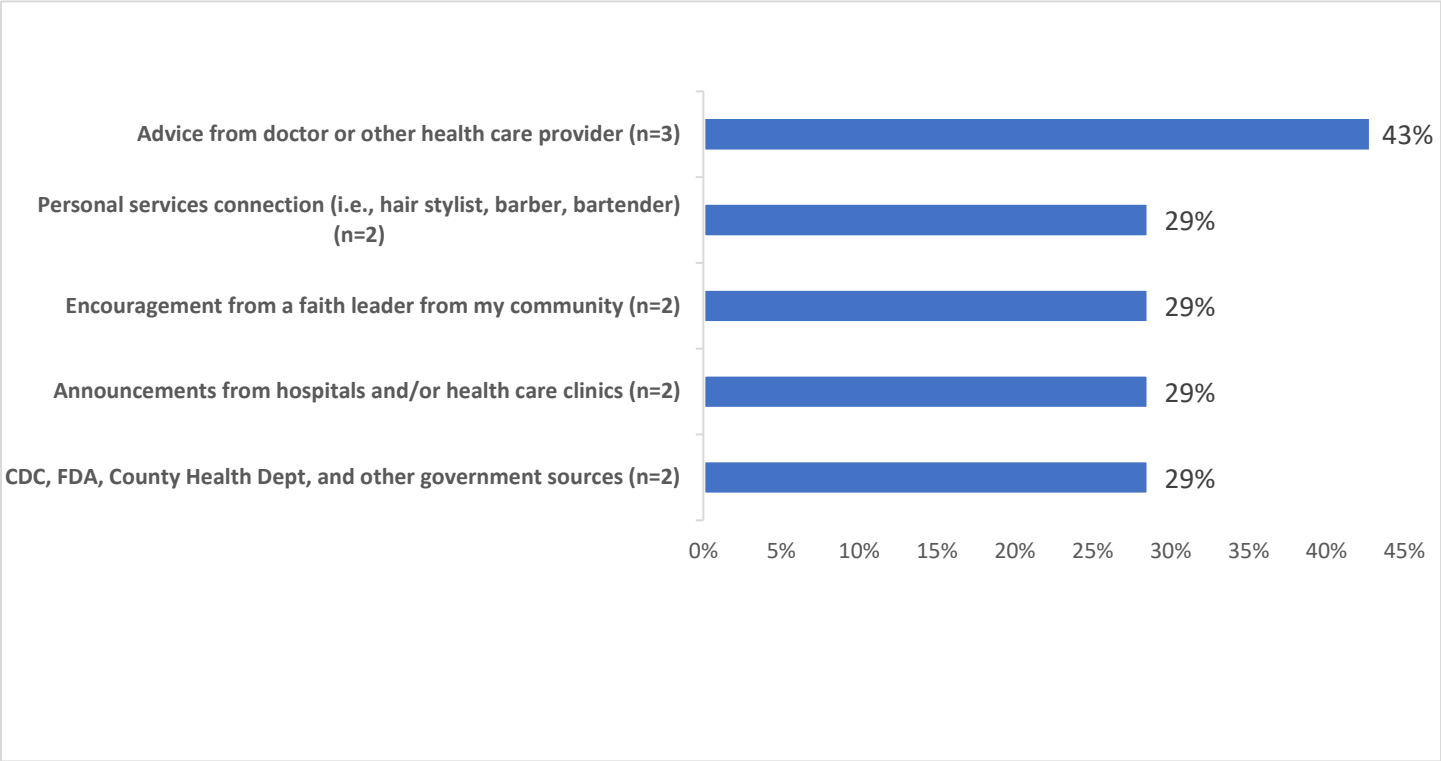



**Table – BL-UND-15. Media Sources that Might Influence the Decision to Get Vaccinated**

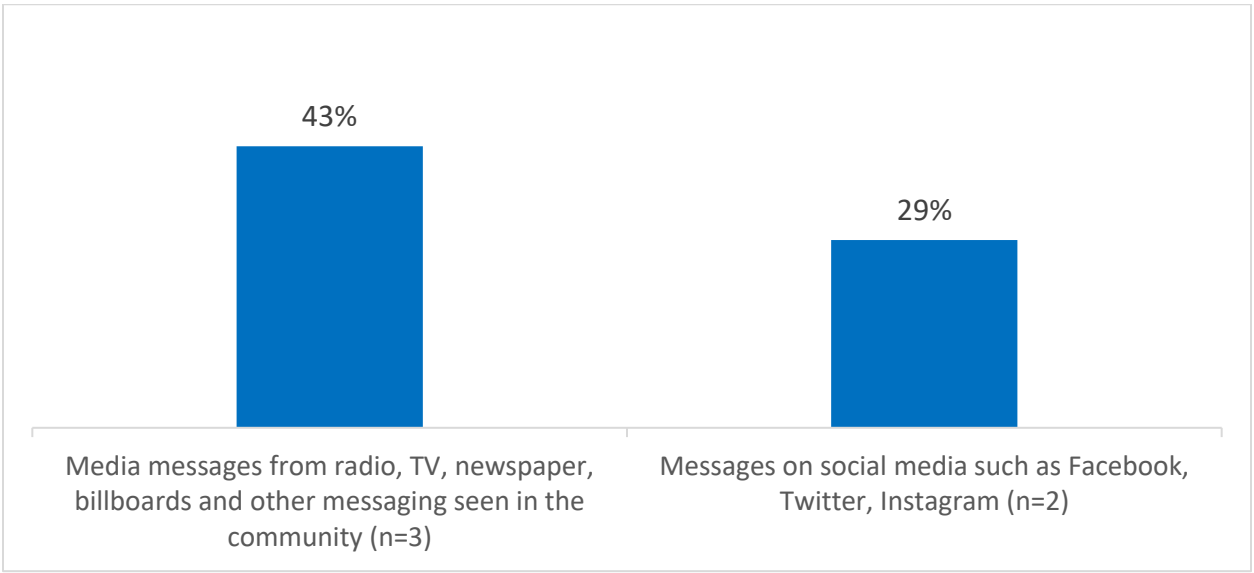


**Table – BL-UND-16. Media Messaging Outlets that Might Influence the Decision to Get Vaccinated**

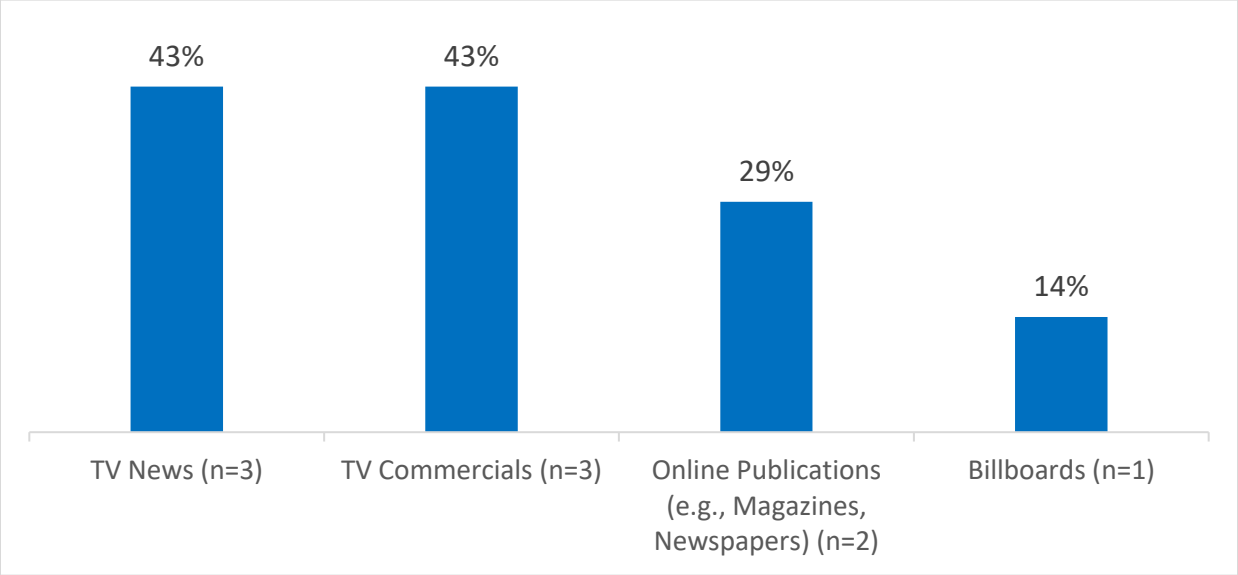



**Table – BL-UND-17. Social Media Messaging Outlets that Might Influence the Decision to Get Vaccinated**

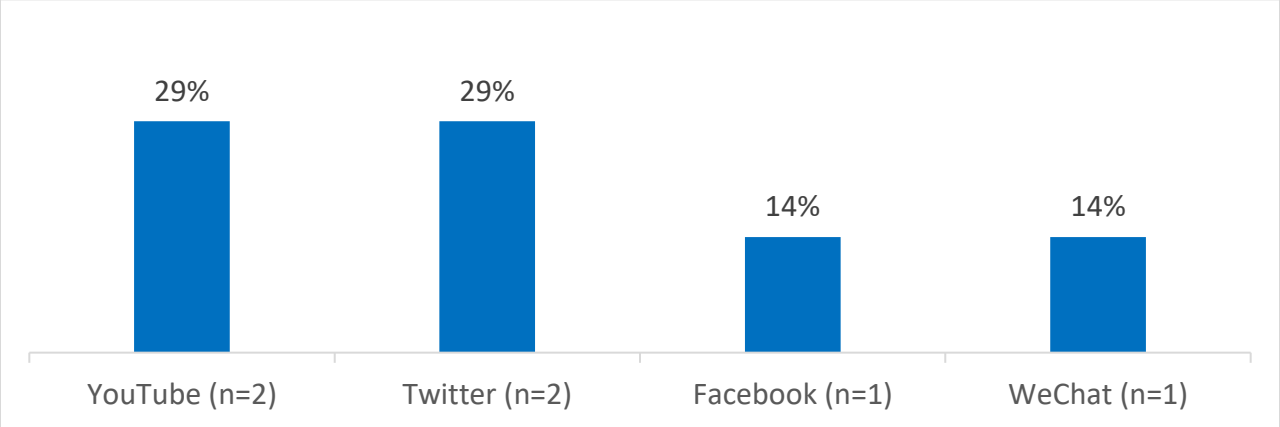


**Table – BL-UND-18. Being Vaccinated Reduces my Chances of Getting the COVID-19 Virus**

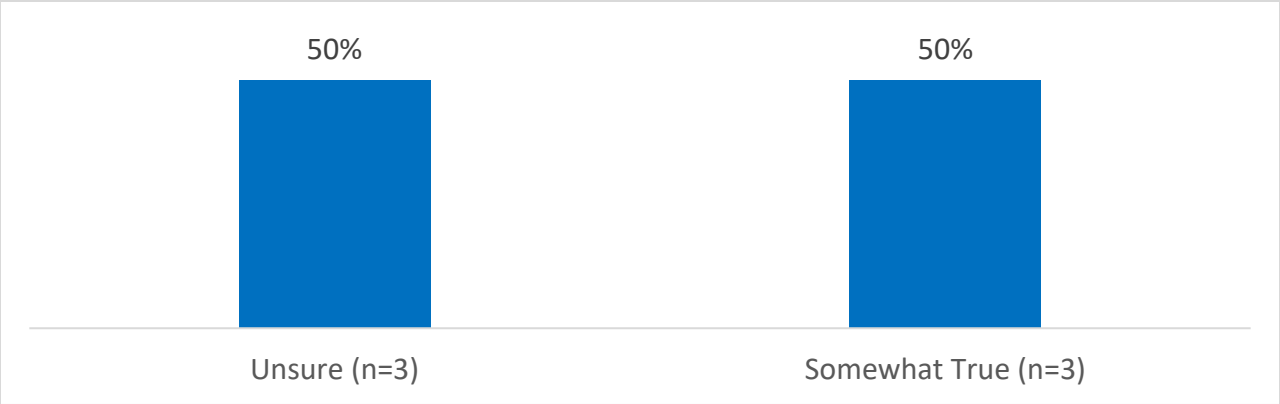



**Table – BL-UND-19. Being Vaccinated Reduces the Likelihood I would Pass the COVID-19 Virus**

**on to Others**

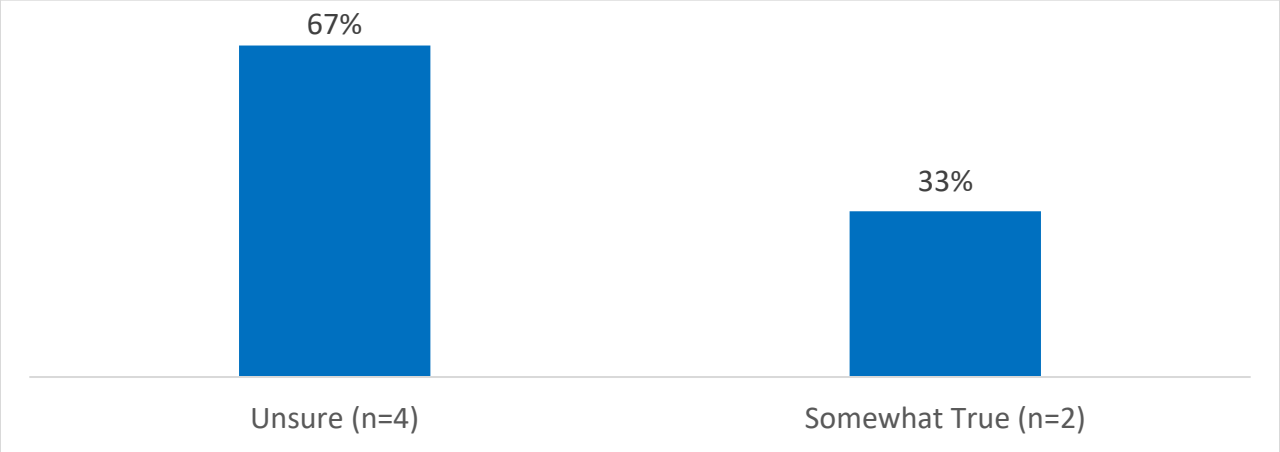


**Table – BL-UND-20. Being Vaccinated Reduces the Length of Time or the Severity of Symptoms Should I Get Sick from the COVID-19 Virus**

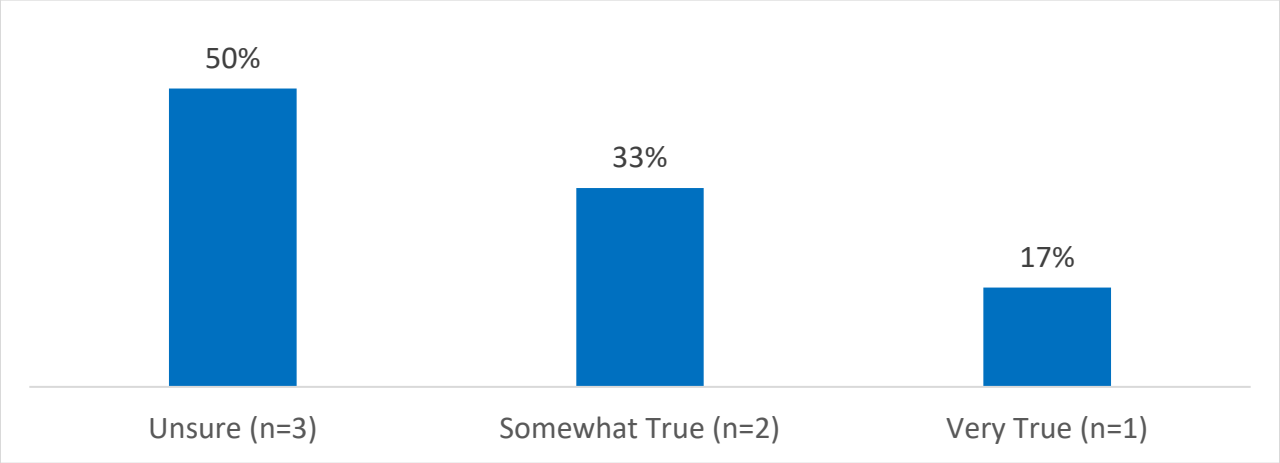



**Table – BL-UND-21. Being Vaccinated Allows Me to Socialize More in Person with Others**

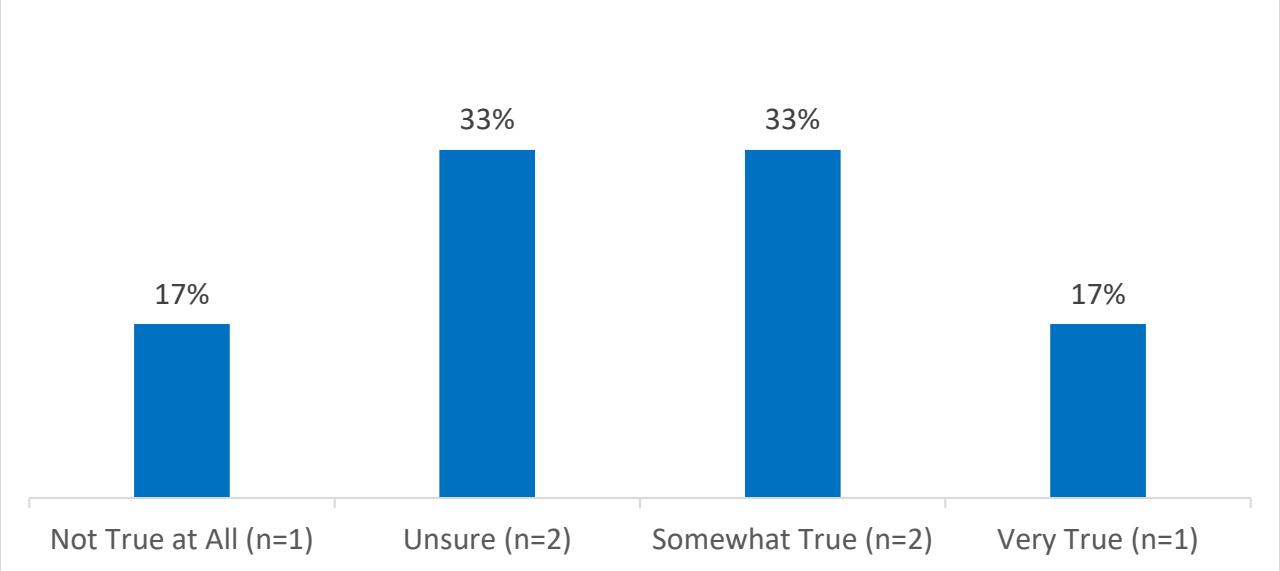


**Table – BL-UND-22. Being Vaccinated Allows Me to Participate in More Group Recreational Activities**

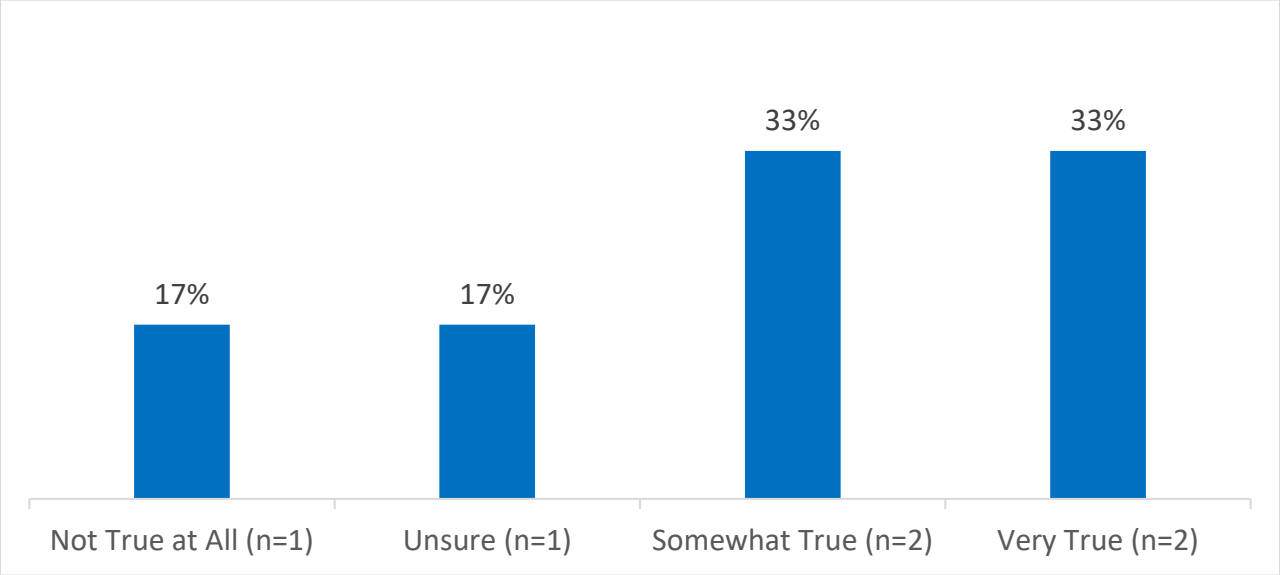



**Table – BL-UND-23. Planning to Get a Seasonal Flu Shot this Fall**

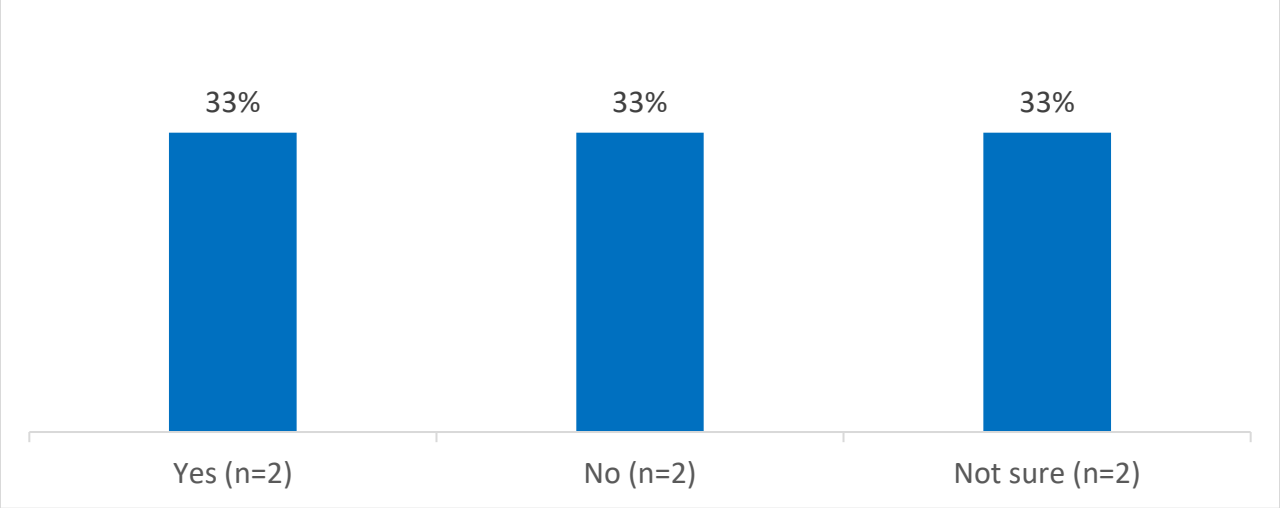


**Table – BL-UND-24. Importance to Your Family that You Get the COVID-19 Vaccine**

**(1 = Not important at all – 5 Extremely Important)**

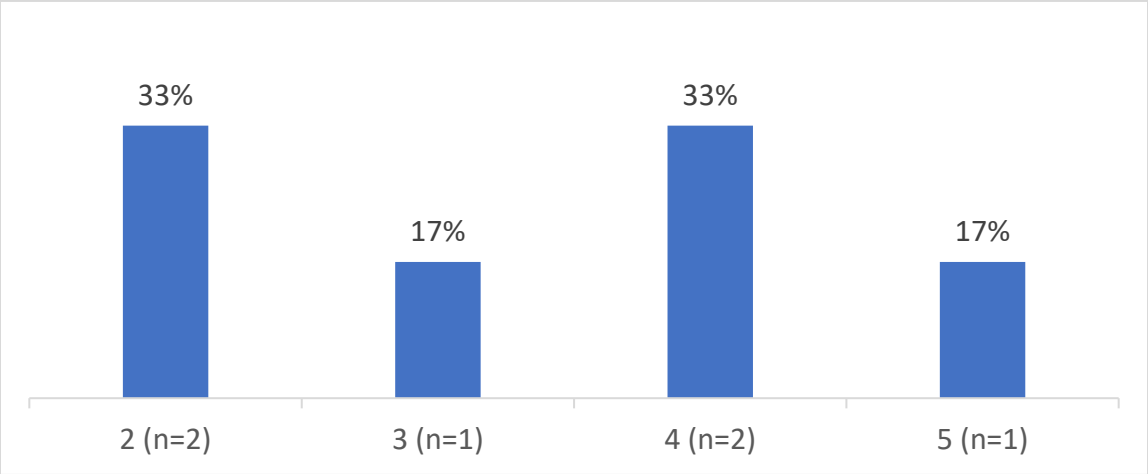



**Table – BL-UND-25. Importance to Your Friends that You Get the COVID-19 Vaccine**

**(1 = Not important at all – 5 Extremely Important)**

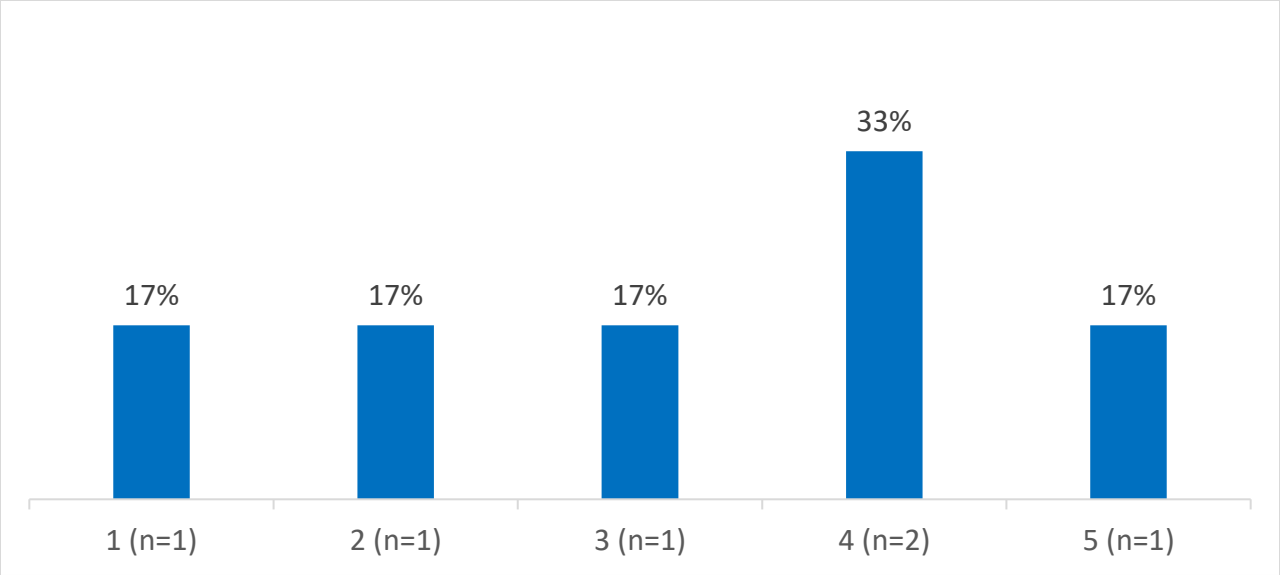


**Table – BL-UND-26. Importance to Your Family that You Get the Annual Flu Vaccine**

**(1 = Not important at all – 5 Extremely Important)**

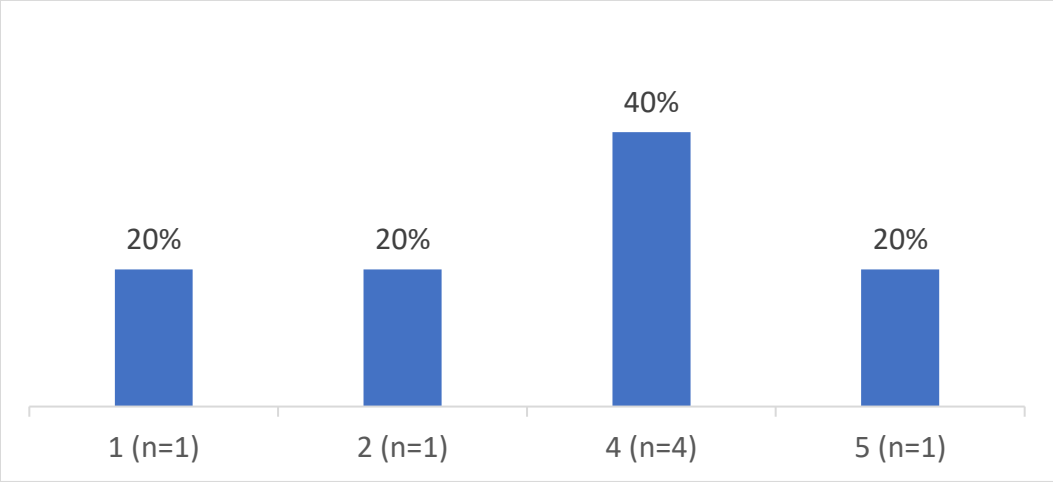



**Table – BL-UND-27. Importance to Your Family that You Get the Annual Flu Vaccine**

**(1 = Not important at all – 5 Extremely Important)**

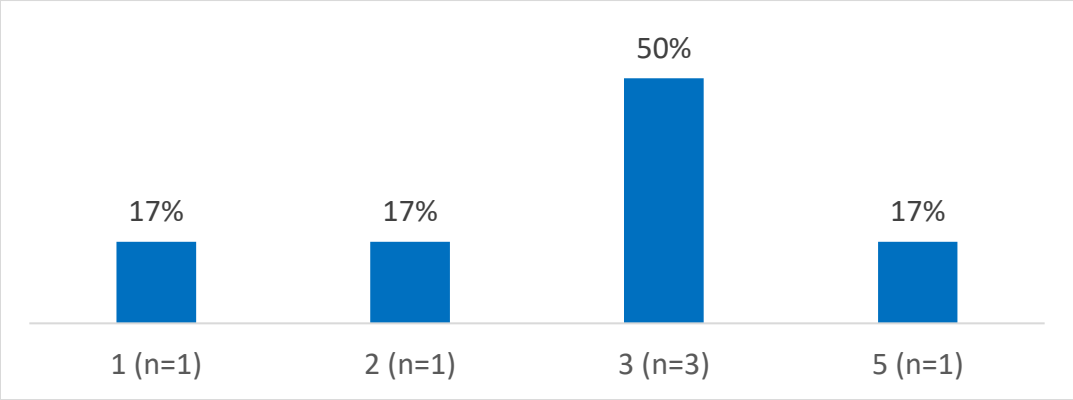
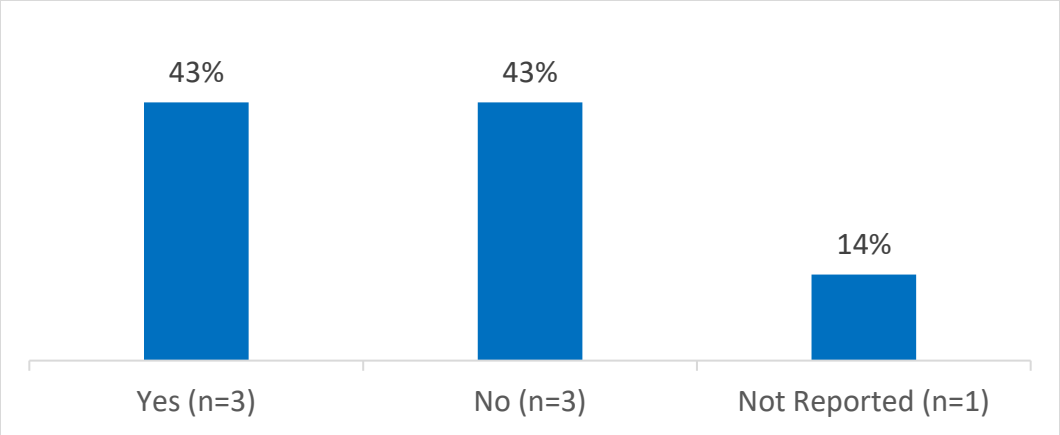



**Table – BL-UND-28. Does FDA Approval of the CVID-19 Vaccine Increase Your Willingness to Consider Getting Vaccinated Against COVID-19?**




**Respondents Reporting Not Planning to Get Vaccinated**

**Table - BL-NPV-1. County of Residence**

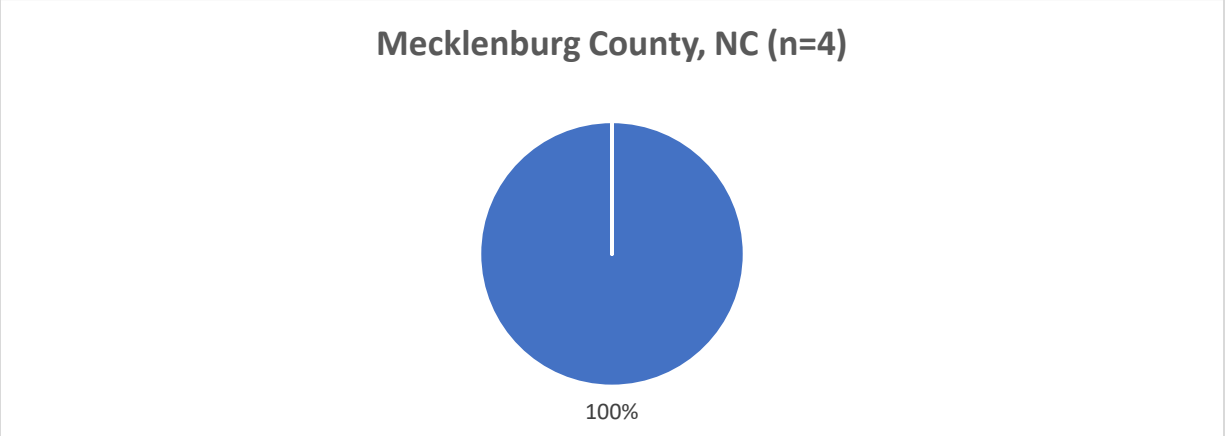



**Table - BL-NPV-2. Gender Group**

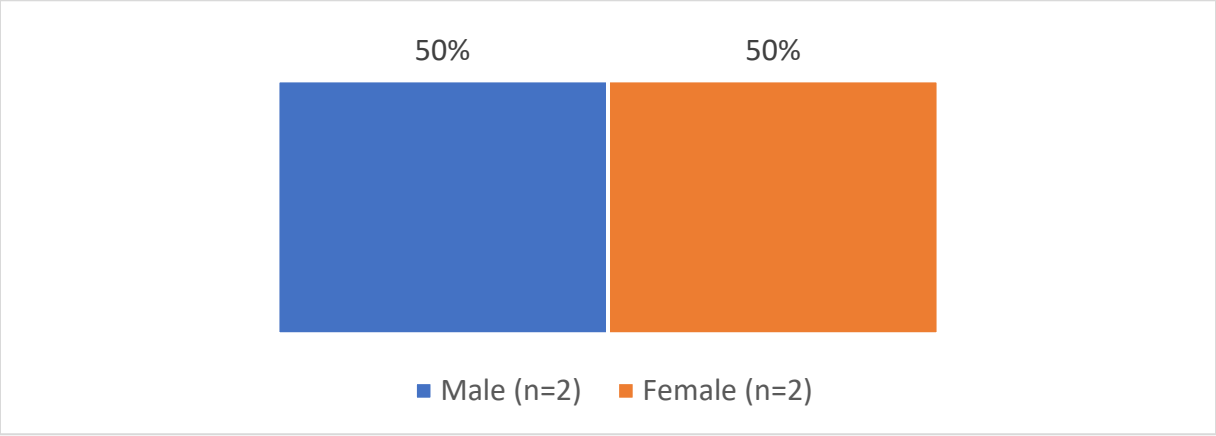



**Table - BL-NPV-3. Age Group**

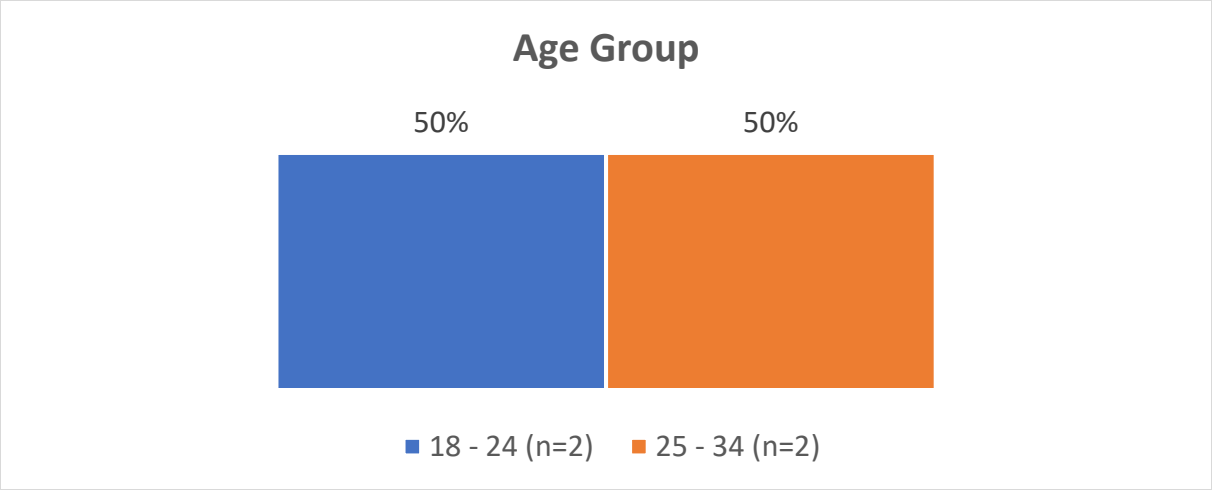



**Table - BL-NPV-4. Marital Status**

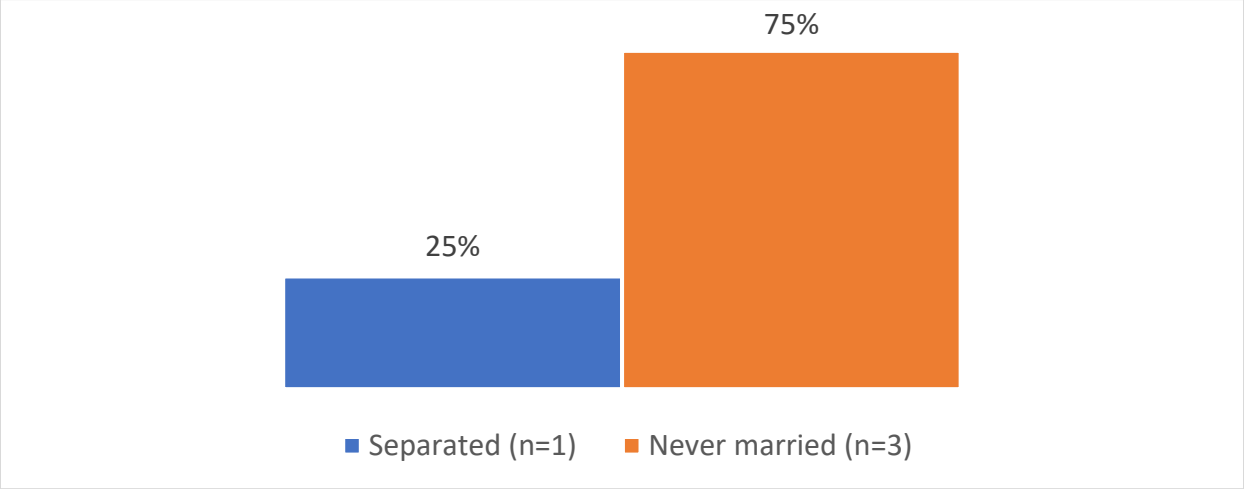



**Table - BL-NPV-5. Employment Status**

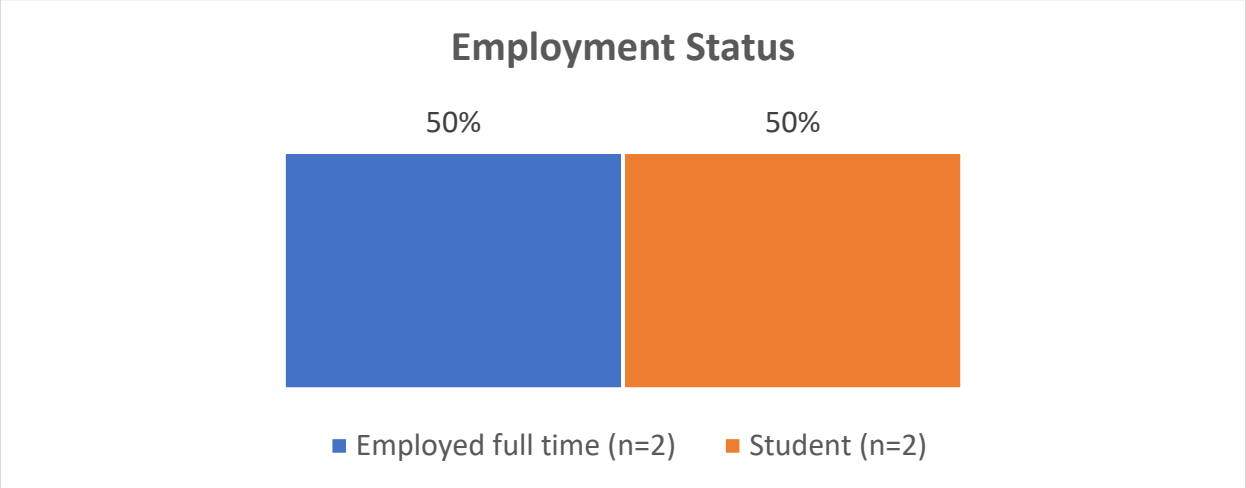


**Table - BL-NPV-5. Total Household Income**

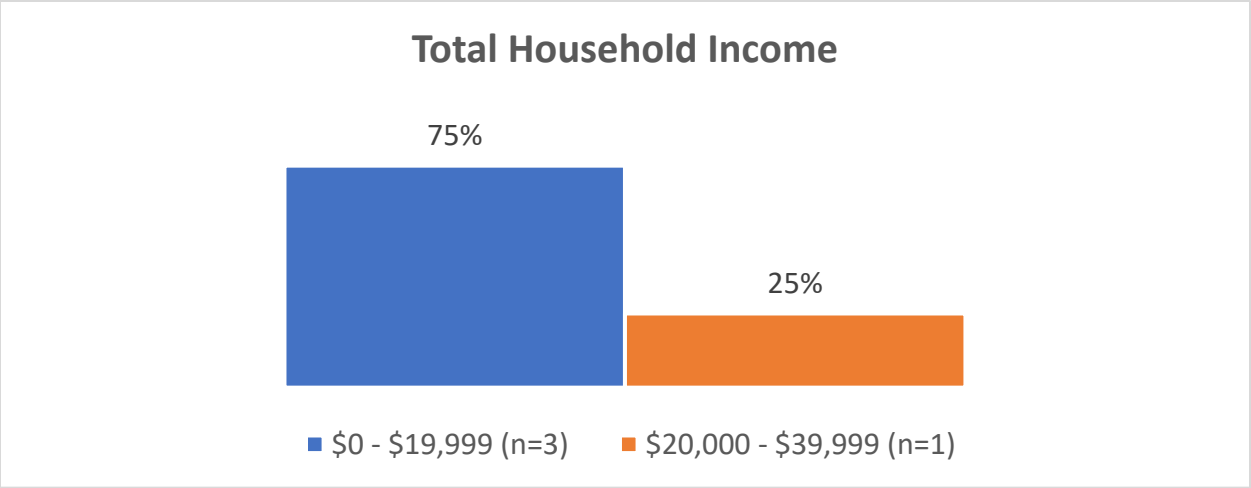



**Table - BL-NPV-6. Have a Primary Care Provider/Medical Home**

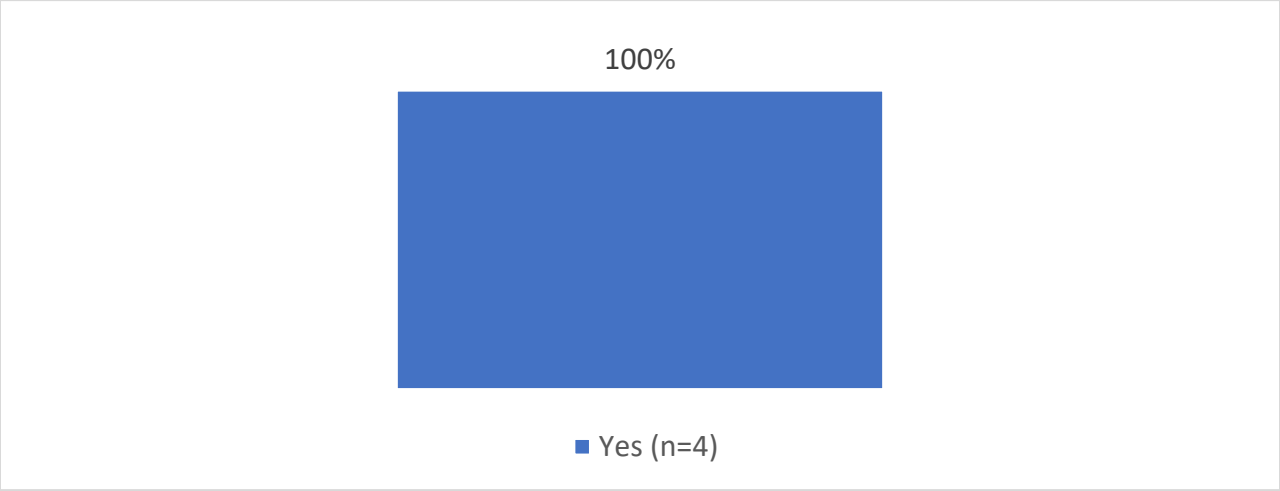



**Table - BL-NPV-7. Have You Ever Tested Positive for COVID-19**

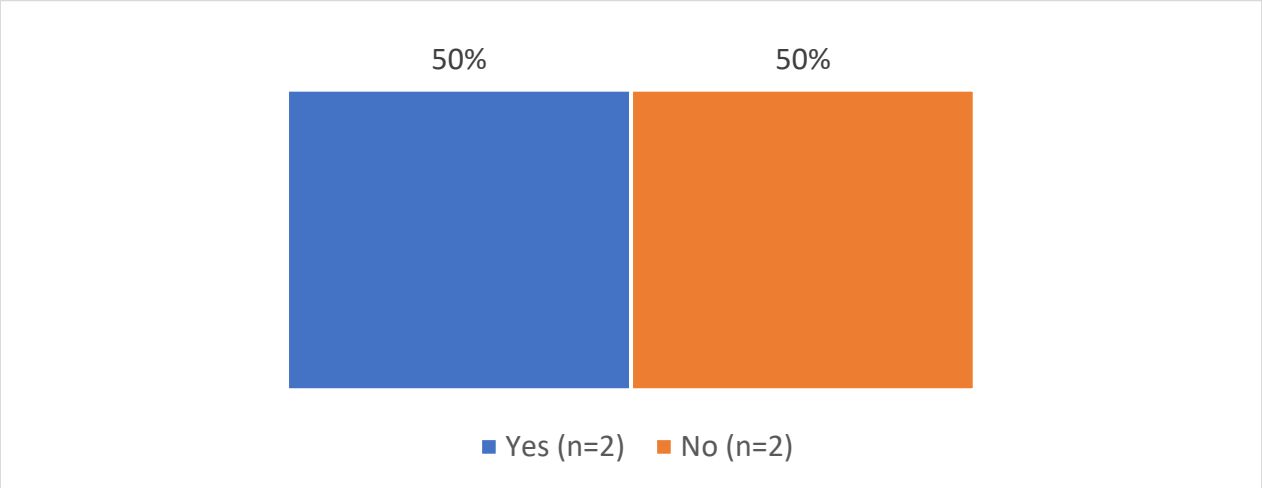


**Table - BL-NPV-8. Anyone in Your Home Had COVID-19**

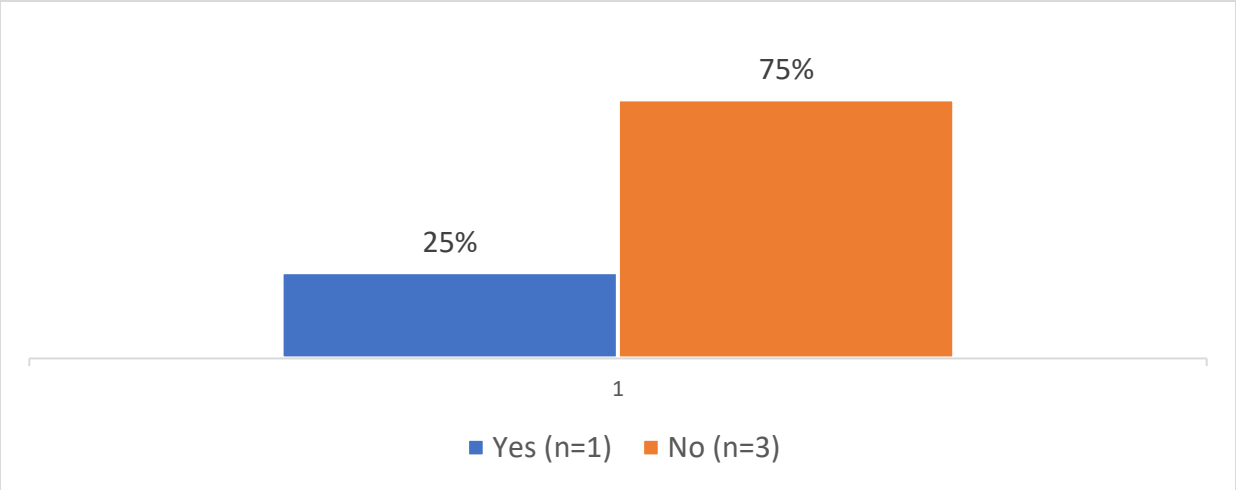



**Table - BL-NPV-9. Worried about a Family Member Getting Sick from COVID-19**

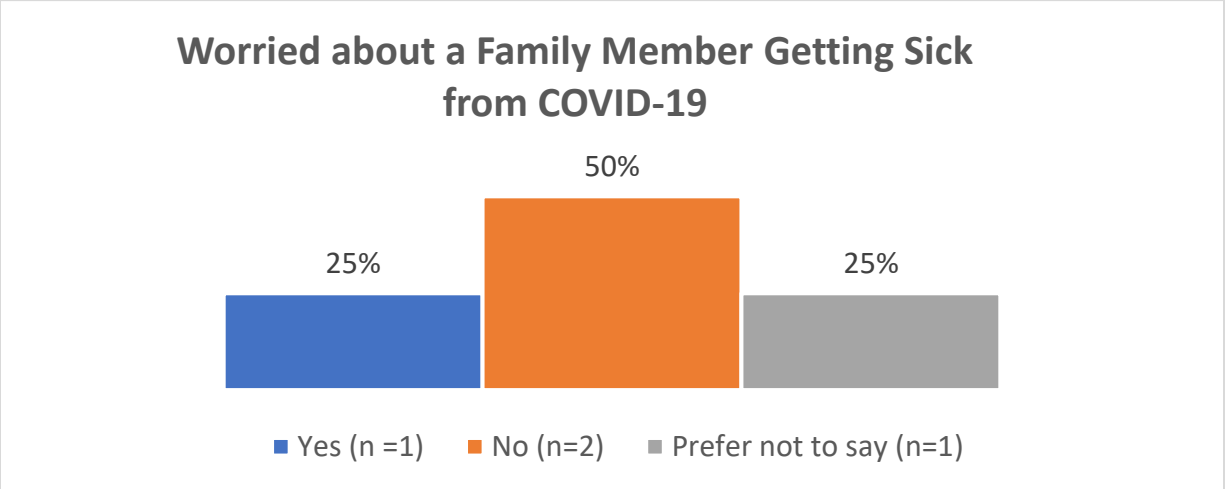



**Table - BL-NPV-10. Worried about Getting Sick Yourself from COVID-19**

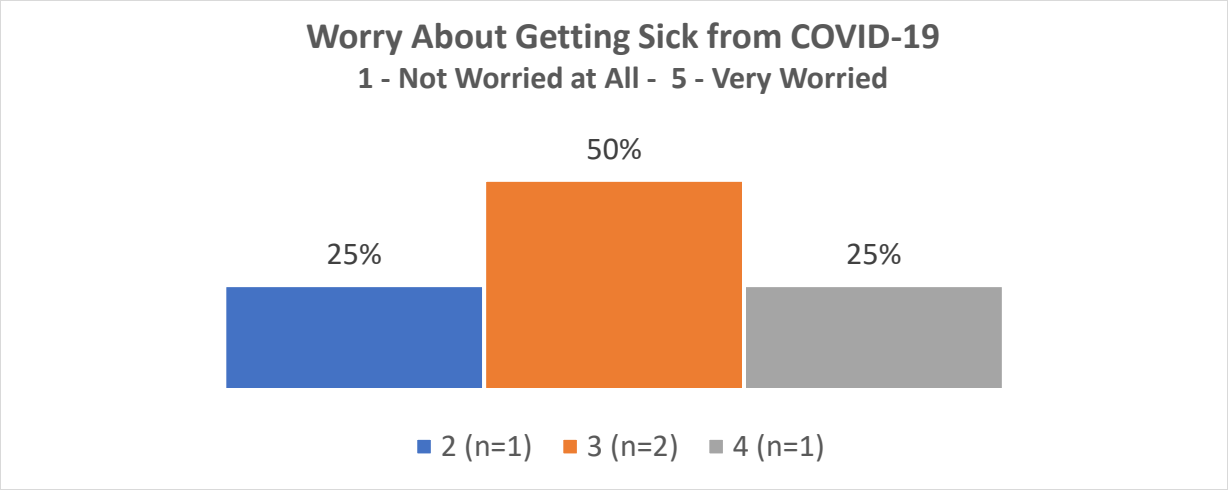

Worry About Getting Sick from COVID-19
1 - Not Worried at All - 5 - Very Worried
50%
25%
25%
2 (n=1)
3 (n=2)
4 (n=1)

**Table - BL-NPV-11. Reasons Why You Are Not Planning to Get a COVID-19 Vaccination**

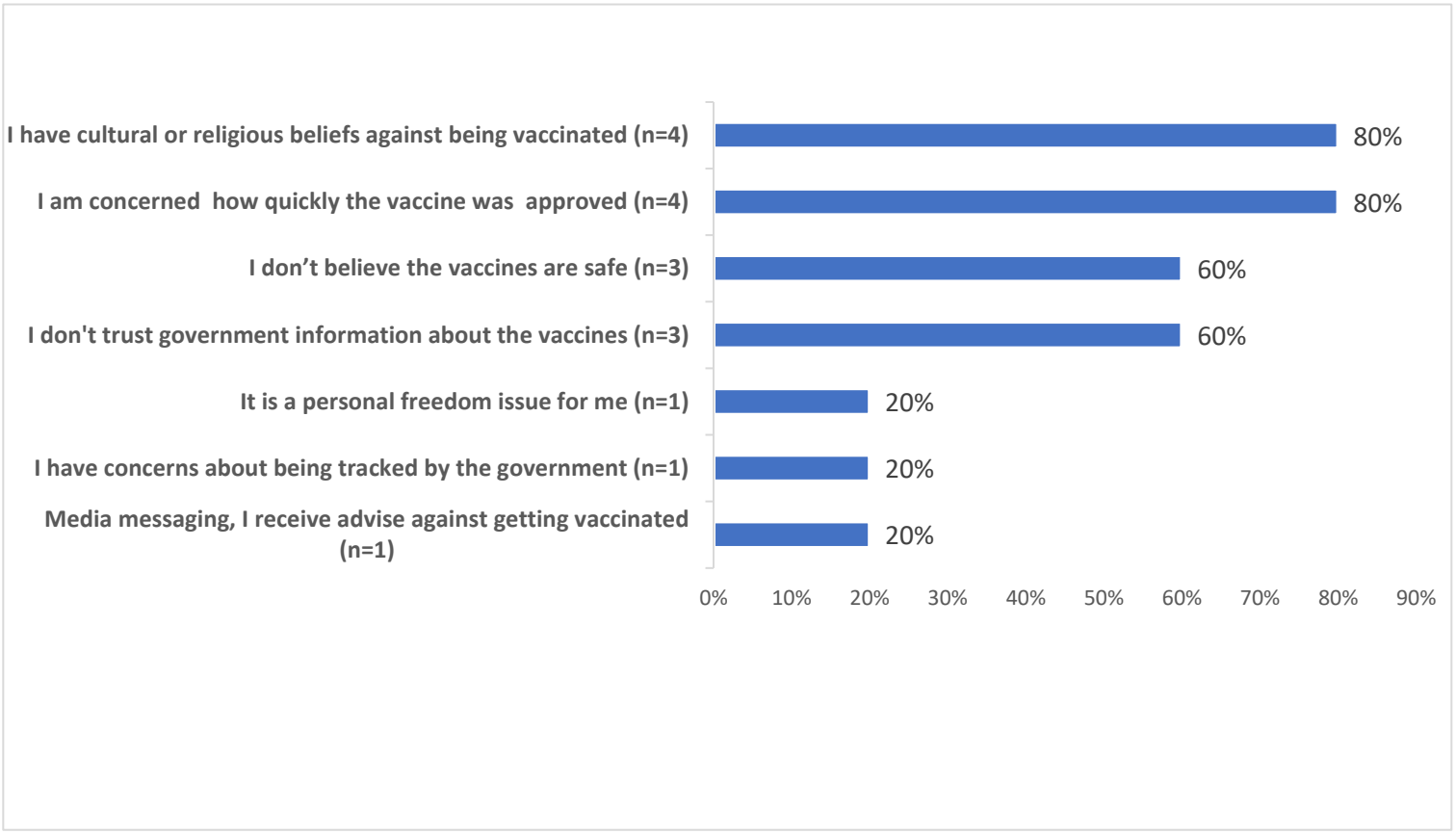



**Table - BL-NPV-11. Media Sources that Are Encouraging You Not to Get Vaccinated**

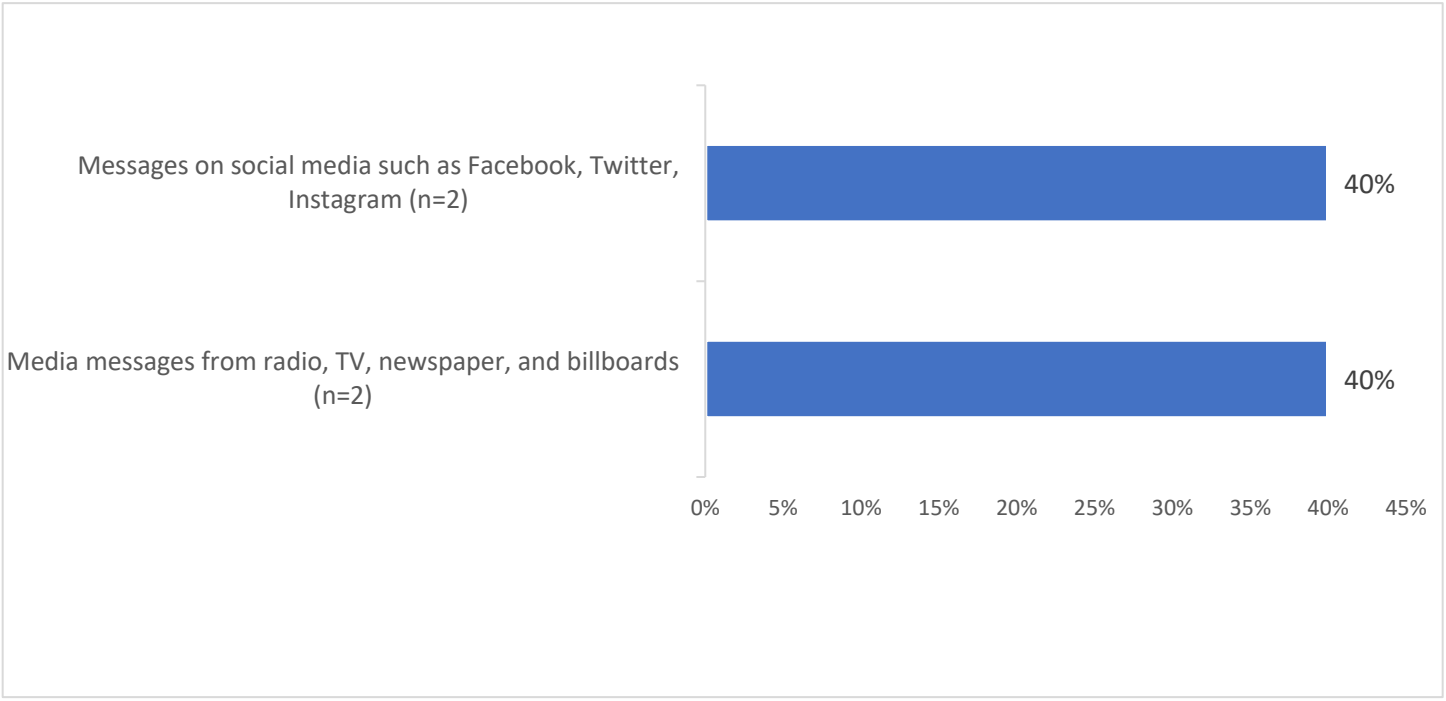


**Table - BL-NPV-12. Media Messaging Outlets Are Encouraging You Not to Get Vaccinated**

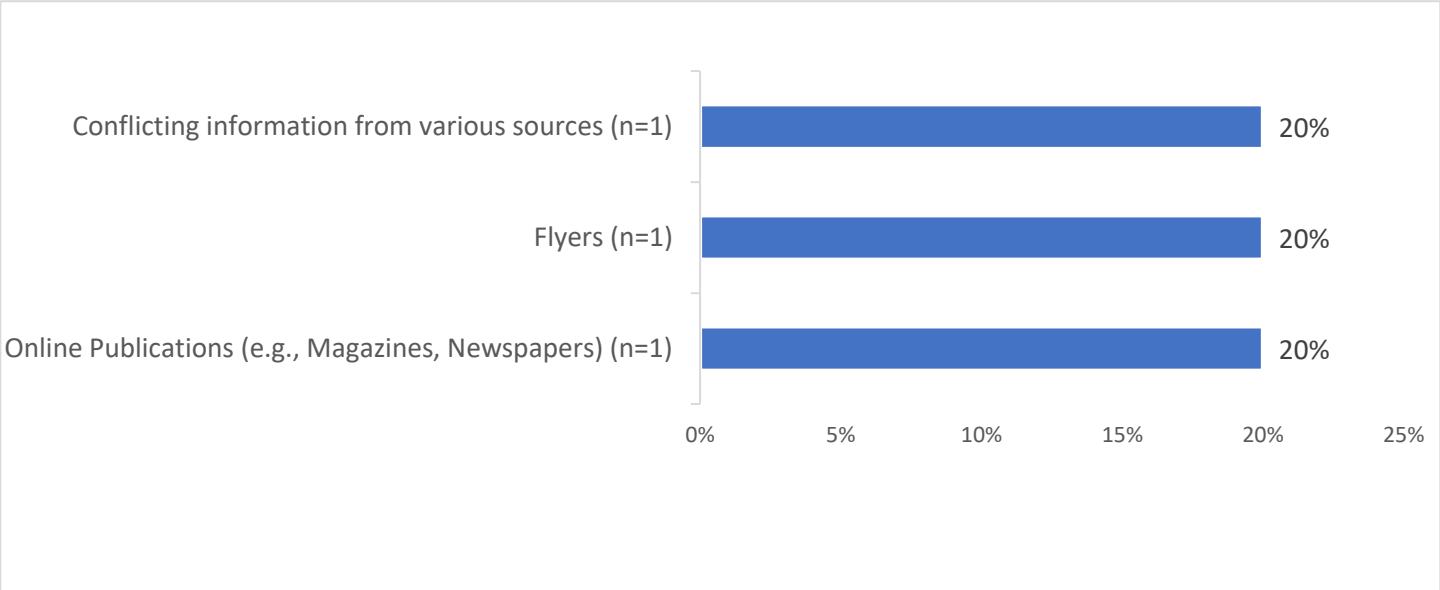


**Table - BL-NPV-13. Social Messaging Outlets Are Encouraging You Not to Get Vaccinated**

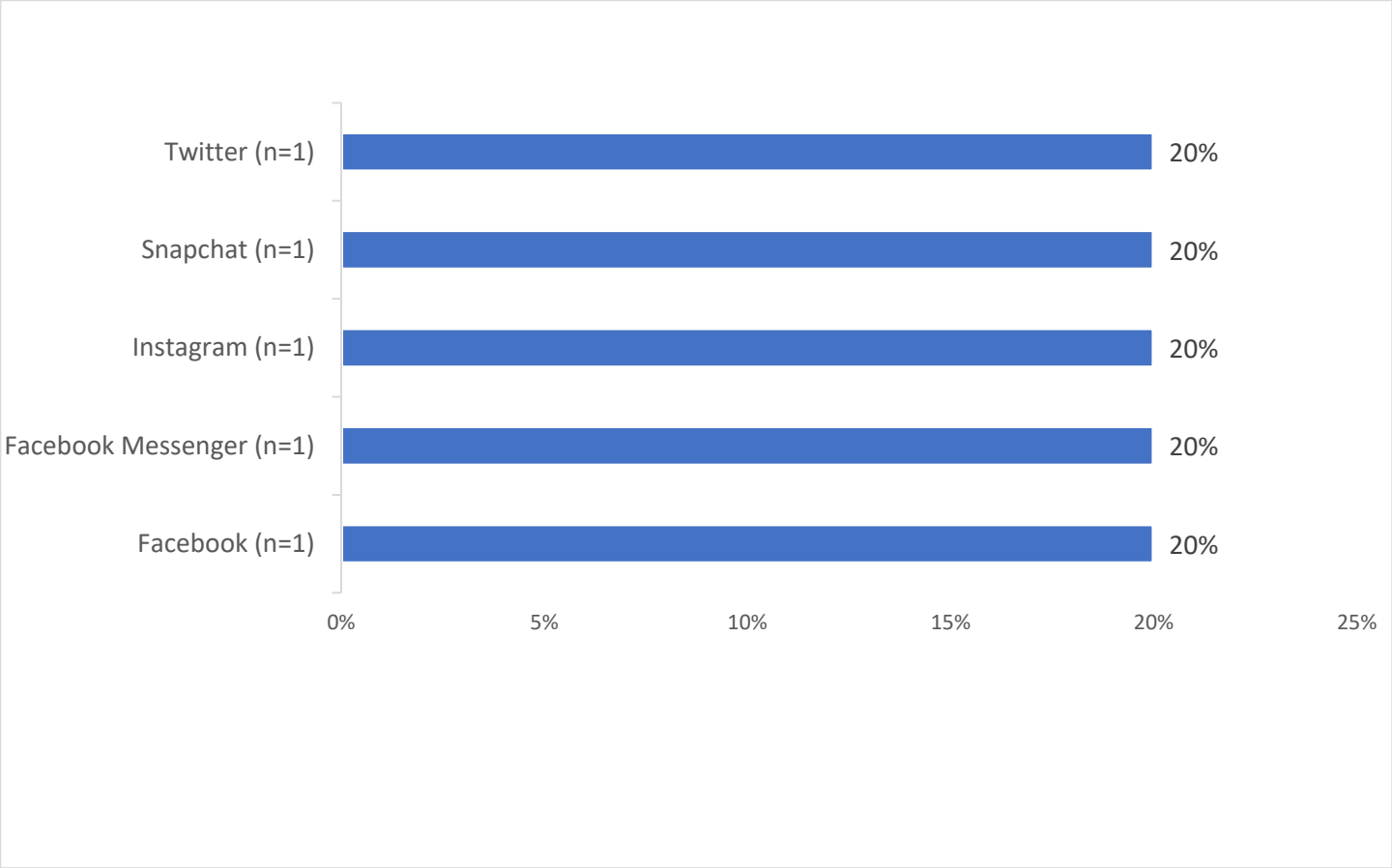



**Table - BL-NPV-14. Planning to Get a Seasonal Flu Shot this fall**

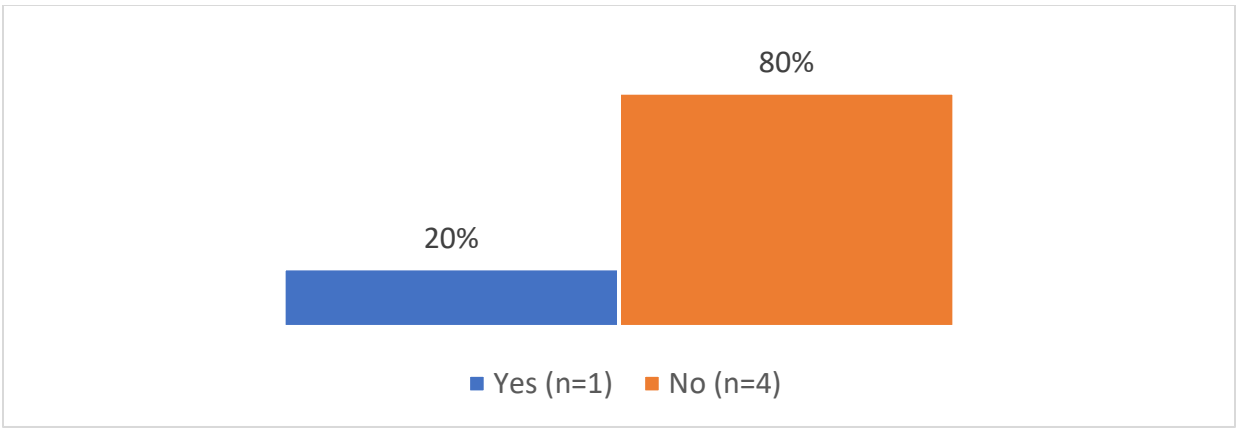


**Table – BL-NPV-15. Importance to Your Family that You Get the COVID-19 Vaccine**

**(1 = Not important at all – 5 Extremely Important)**

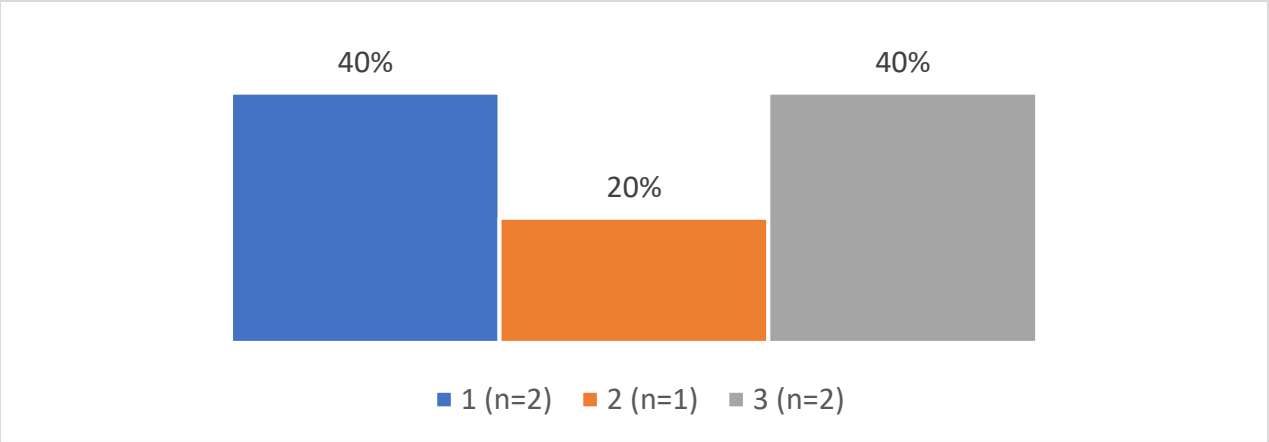



**Table – BL-NPV-16. Importance to Your Friends that You Get the COVID-19 Vaccine**

**(1 = Not important at all – 5 Extremely Important)**

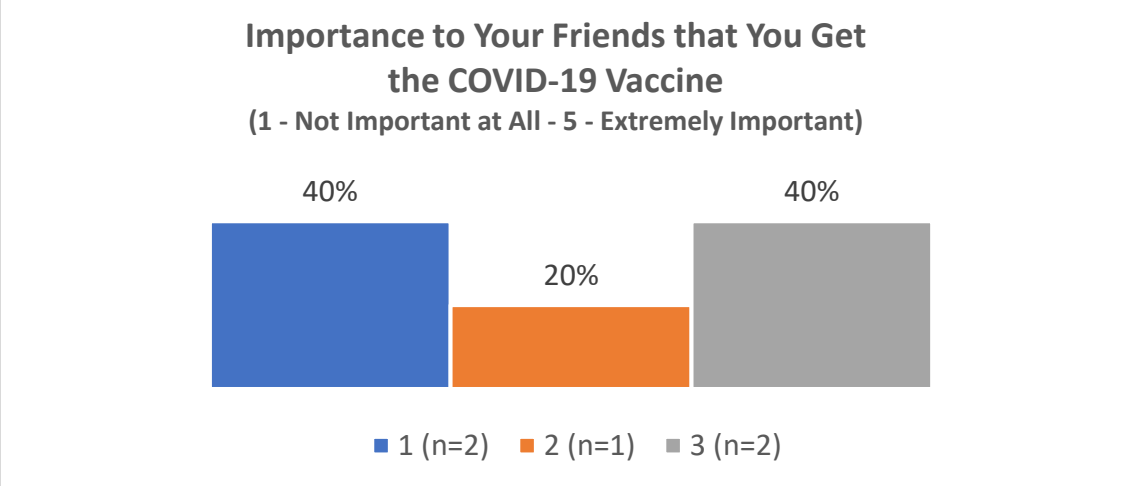


**Table – BL-NPV-17. Importance to Your Family that You Get the Annual Seasonal Flu Shot (1 = Not important at all – 5 Extremely Important)**

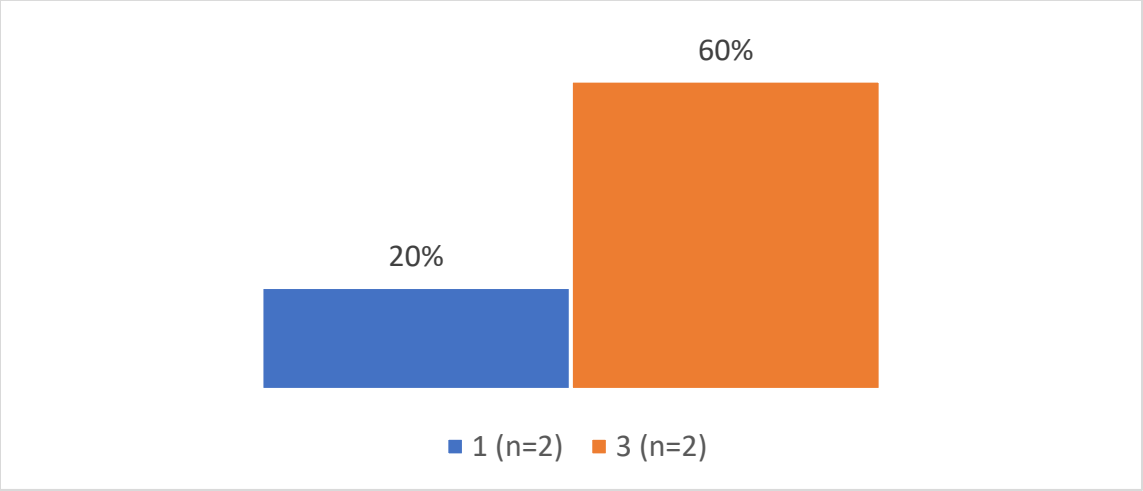



**Table – BL-NPV-18. Importance to Your Friends that You Get the Annual Seasonal Flu Shot (1 = Not important at all – 5 Extremely Important)**

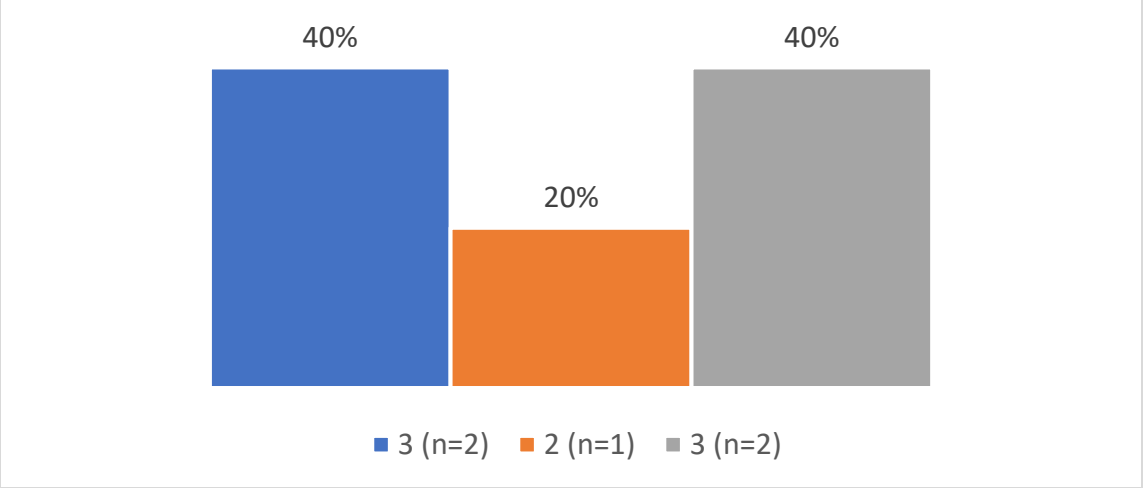


**Table – BL-NPV-19. Actions that Might Increase the Likelihood of Getting a COVID-19 Vaccination**

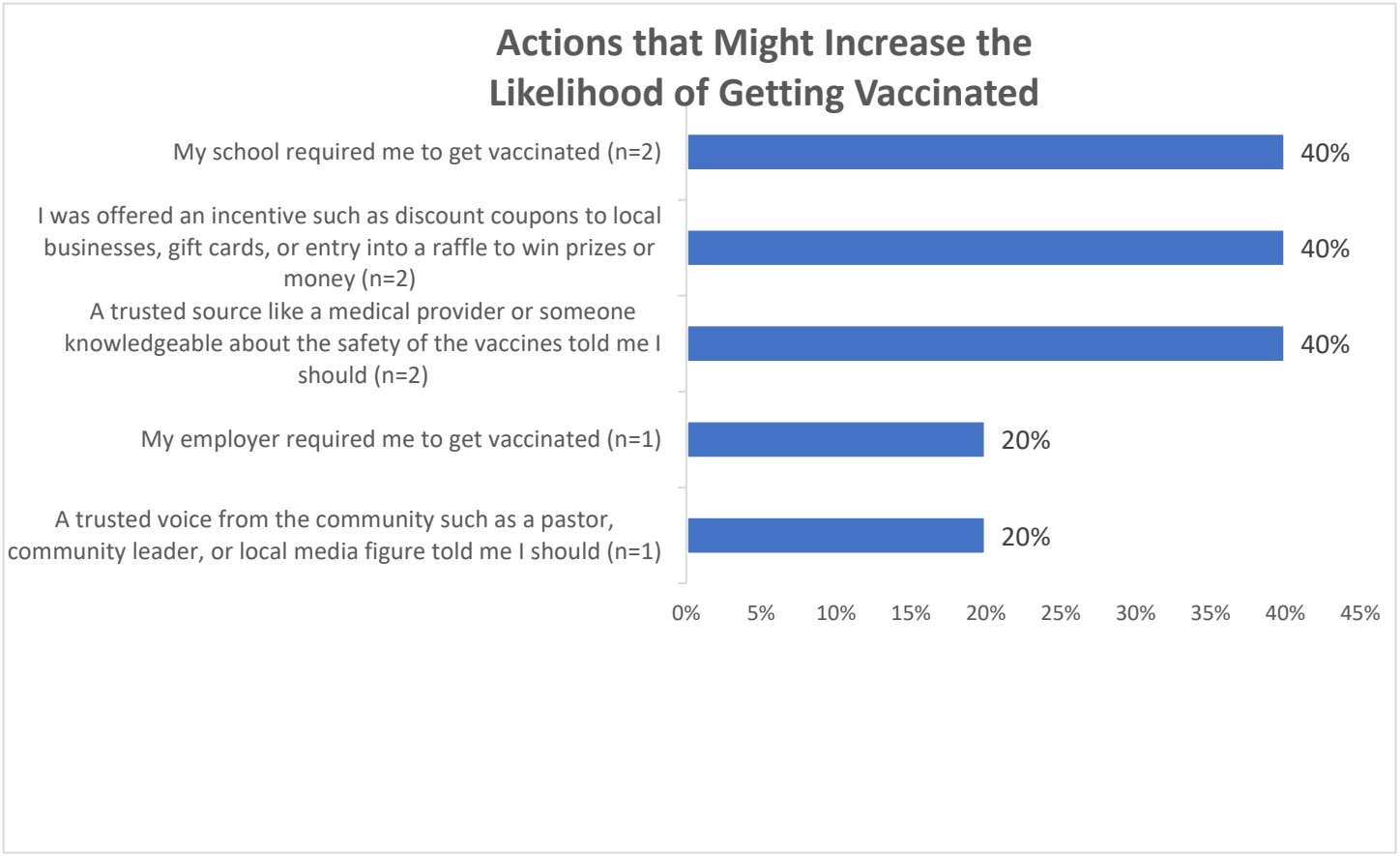



**Table – BL-NPV-20. Do You Think Other People Should Get Vaccinated?**

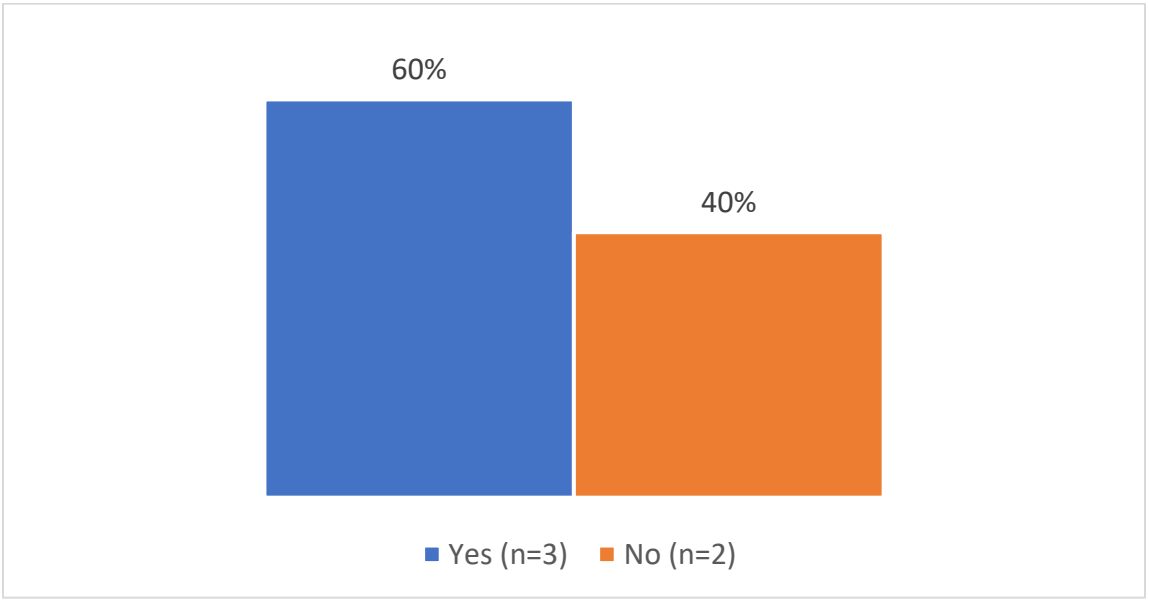
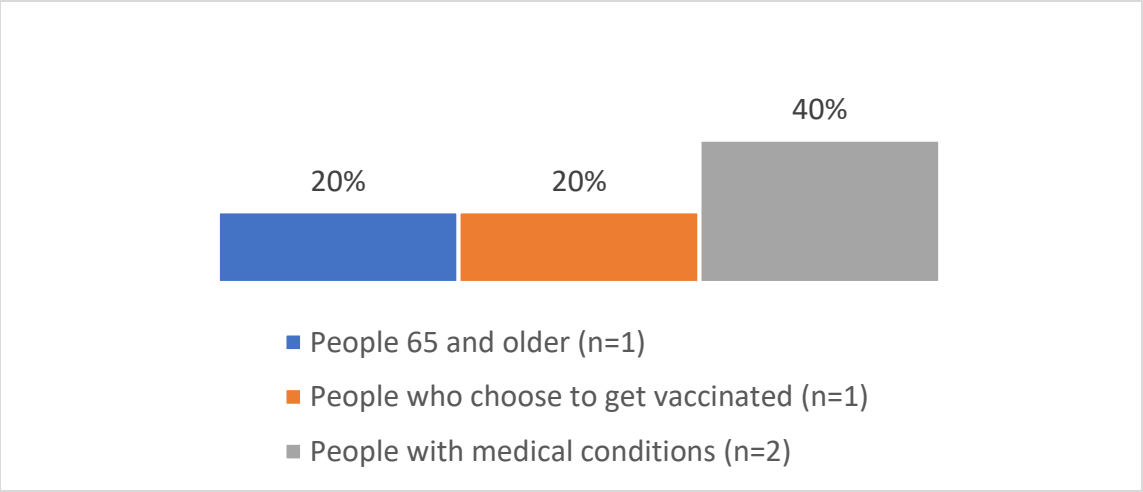


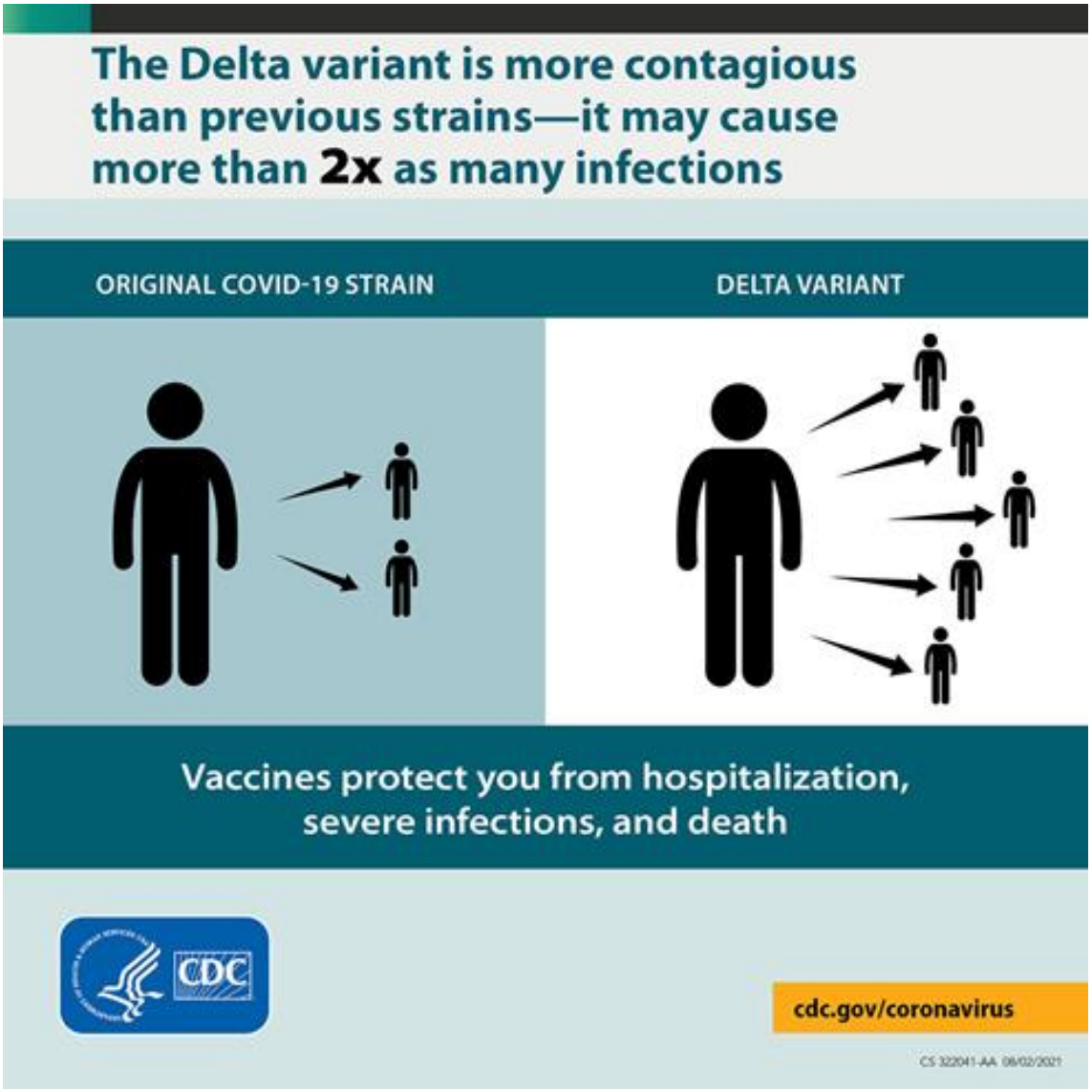
**Table – BL-NPV-21. Who Should Get Vaccinated?**



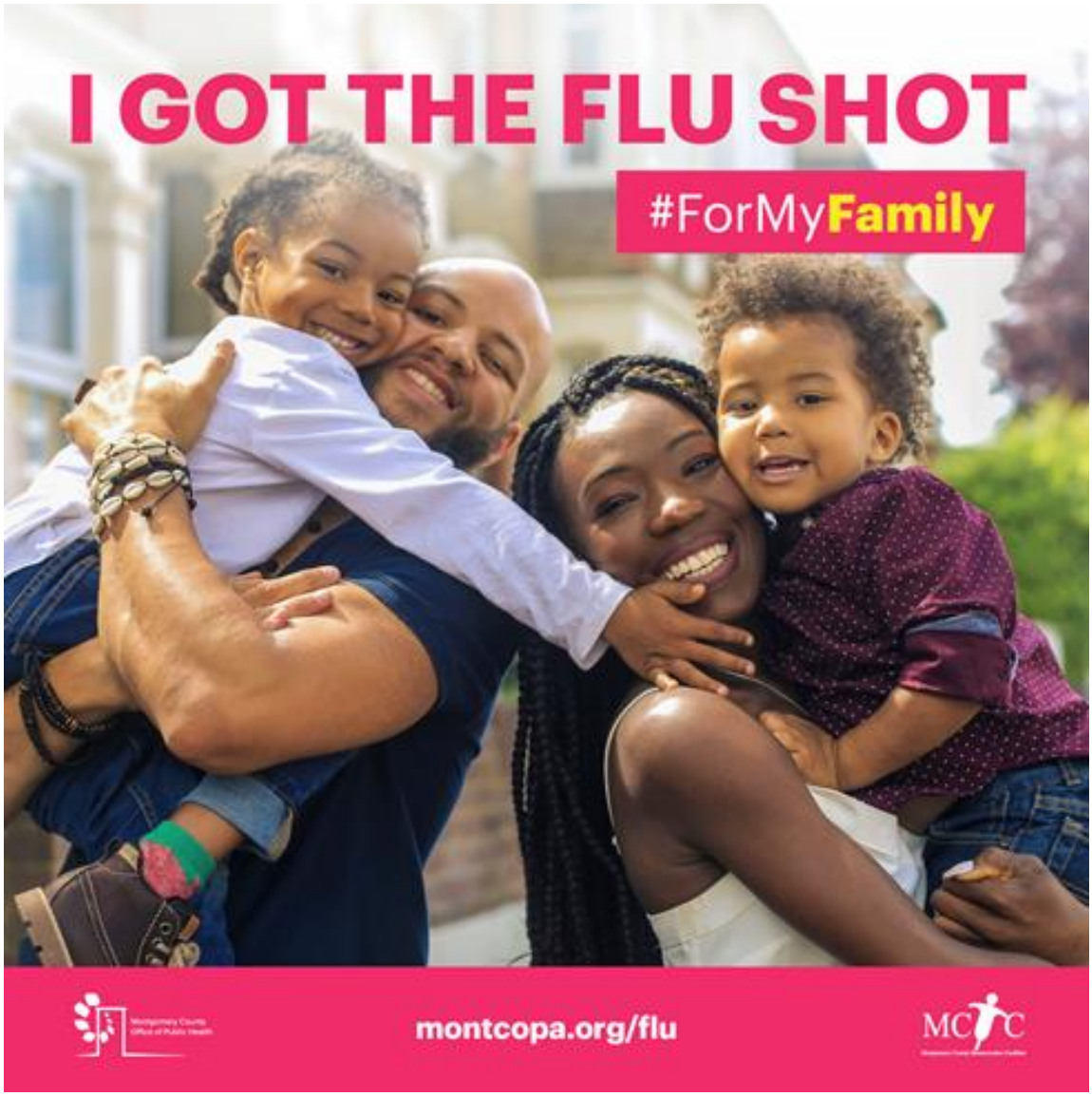
## APPENDIX F: SAMPLE VACCINE MEDIA MESSAGING*

*Sample images were only used as examples for media messaging focus groups. RAO Community Health do not own the rights to these images.

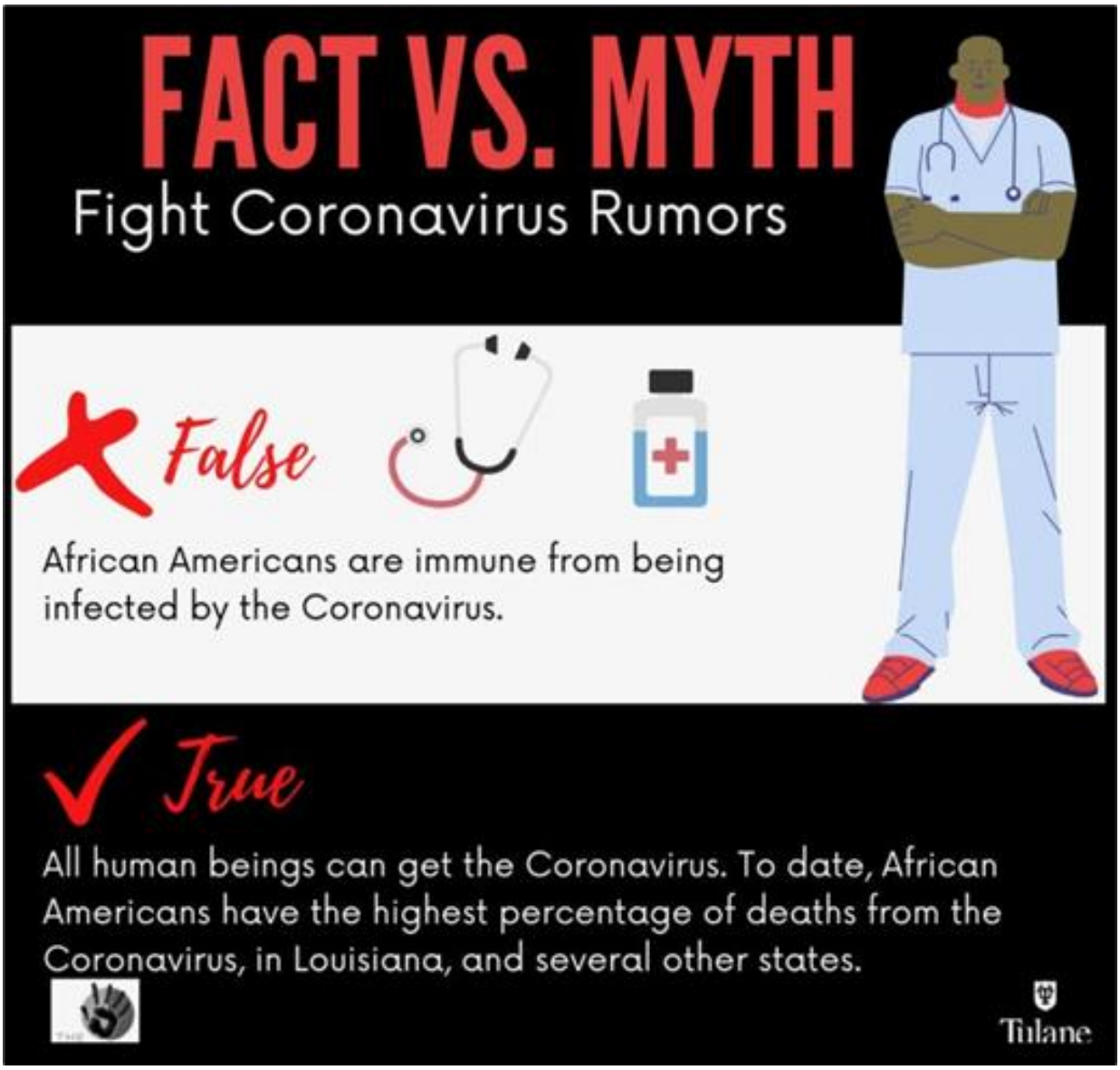
**A:**



**B:**



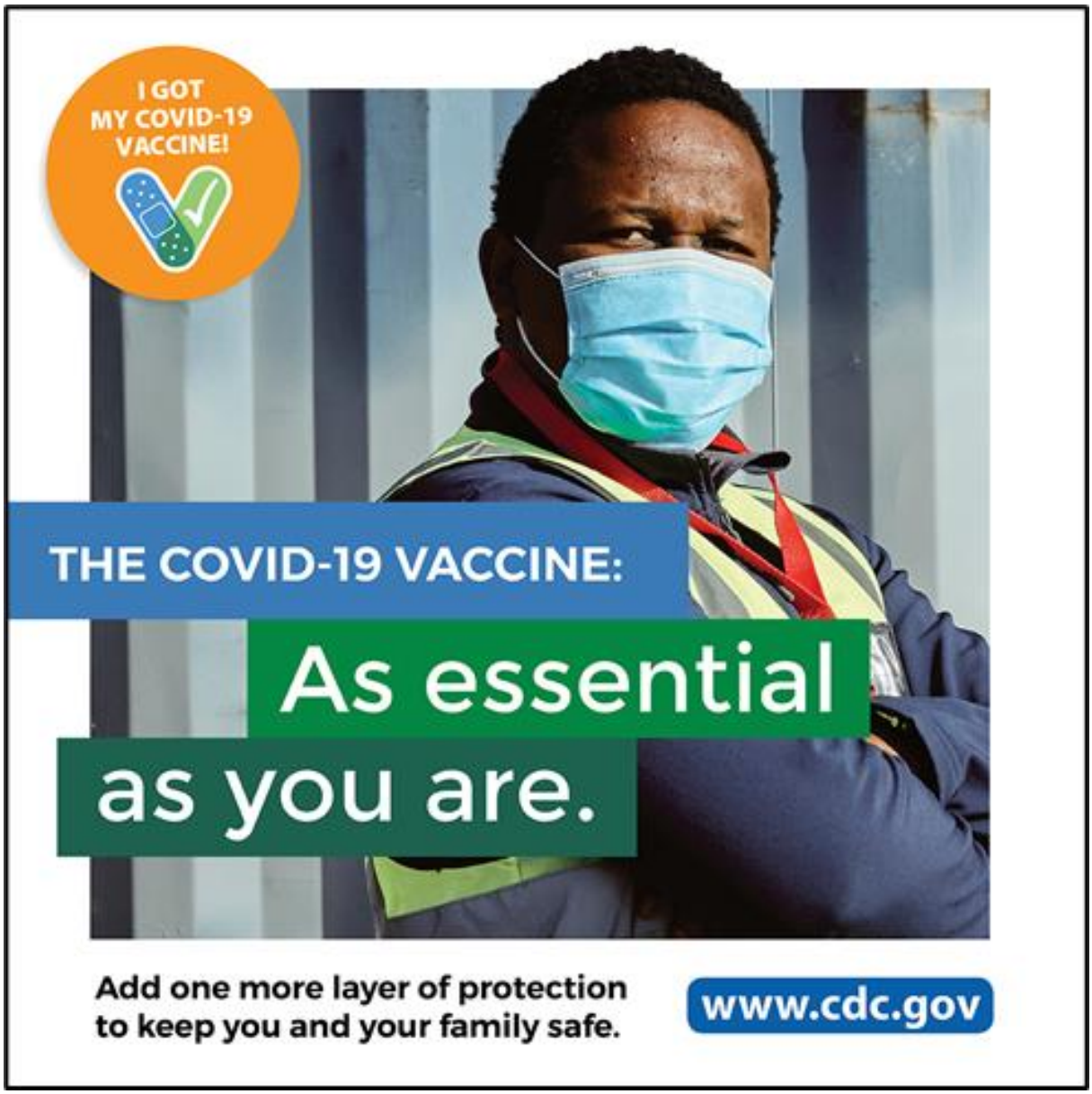
**C:**


FACT VS. MYTH
Fight Coronavirus Rumors
False
African Americans are immune from being infected by the Coronavirus.
True
All human beings can get the Coronavirus. To date, African Americans have the highest percentage of deaths from the Coronavirus, in Louisiana, and several other states.
Tulane

**D:**


THE FLU
CAN BE
SERIOUS.
PROTECT YOUR
FRIENDS AND FAMILY.
#GETAFLUSHOT
VACCINATE
YOUR FAMILY
VaccinateYourFamily.org | @vaccinateyourfamily

**E:**


I GOT MY COVID-19 VACCINE!
THE COVID-19 VACCINE:
As essential as you are.
Add one more layer of protection to keep you and your family safe.
www.cdc.gov

**F:**


A HEALTHIER COMMUNITY
STARTS WITH YOU.
#STOPCOVIDNOW
GET YOUR
COVID-19
VACCINE