Developing core capabilities to identify, report, and respond to infectious disease outbreaks and other public health emergencies is central to North Carolina's preparedness.[1] During a crisis, state and local leaders need timely, reliable data to identify the populations and communities at highest risk and potential actions that can be taken to address those risks. Timely, reliable data can also help leaders understand the health challenges and structural barriers faced by communities at baseline, supporting equity-focused policies and strategies that can better protect these communities when a public health emergency occurs. North Carolinians need timely, reliable data to understand their individual risks and guide their day-to-day decisions as well, especially during times of crisis. The translation of data into actions that can or should be undertaken by individuals in communities across the state relies on effective communication by leadership, along with trust in those leaders and the policies they develop.

What is needed for data-driven decision-making?

The COVID-19 pandemic has shown that leaders at all levels are often asked to make decisions under difficult circumstances. Leaders may not have complete or real-time data to help them understand the situation and challenges that are arising on the ground, or the data may be constantly changing as the situation unfolds in unforeseen ways. Leaders are also faced with determining whether or not the uncertainties of a situation can be answered with data, and if so, whether data have been collected and can be accessed. If data are accessible, leaders must consider whether the data are useful in providing context to the decisions that need to be made, and whether the data are trustworthy. During the COVID-19 pandemic, technical experts (e.g., infectious disease specialists and experts on data sources) have provided critical support in determining the important data elements that should be considered in decision-making processes and the limitations of those data elements.[2,3]

In the early months of the COVID-19 pandemic, leaders across the state, country, and world had inadequate information on the specific characteristics of SARS-CoV-2 that allowed it to spread swiftly.[4] Decades of underinvestment in public health infrastructure and data systems limited the ability of decision-makers to assess the scope of the problem.[5] As a result, the United States overall and many state and local governments were insufficiently prepared to manage the initial surge of COVID-19 cases and subsequent surges driven by variants such as Delta and Omicron. In North Carolina, leaders were also forced to use inefficient data systems that lacked interoperability and common infrastructure to monitor quantities of personal protective equipment (PPE) and other health care supplies, hospital capacity, testing, contact tracing, and eventually, vaccine distribution and uptake.[6] In the early stages of the COVID-19 pandemic, our data systems appeared to lack rapid detection and response capabilities during the earliest emergent phase of a new outbreak, a weakness realized again in the initial stages of the monkeypox outbreak in the summer of 2022. The task force discussed the lessons learned from COVID-19 and their implications on other potential threats.

To support leaders across sectors in understanding threats to the health, safety, and well-being of North Carolinians and develop strategies in response, a robust public health infrastructure and modernized data systems must be in place.

> **"Delays in recognizing the threat led to an exponential increase in infections and deaths. This rate of increase profoundly challenged government decision-makers who are legally responsible for protecting their populations. Although national governments grasped the need for action at varying rates, the rapidity of spread and lethality of the virus severely tested their capacity to manage and control the pandemic."[4]**
> **– Comfort, et al., Public Administration Review (2020)**

Communication Challenges During the COVID-19 Pandemic

The ability to make timely, informed decisions and effectively communicate those decisions to the public is essential to building trust and increasing acceptance of policies and strategies to mitigate risk during a public health emergency.[4] The COVID-19 pandemic and the global "infodemic" have demonstrated the costs of diminished or absent trust in government leaders and their decisions. To build trust, timely, reliable data must also be accessible and easily understood by the general public. The task force underscored the particular importance of building and maintaining trust among historically marginalized communities, which have been and continue to be harmed by structural racism and other systemic factors affecting their health, safety, and well-being.

Several barriers to effective communication have emerged and persisted throughout the COVID-19 pandemic, reflecting the enormity of the problem, the rapidly evolving situation and response, and the spread of misinformation in news media and on social media platforms. Unlike other disasters and emergencies that are typically limited in terms of both geographic impact and duration, the COVID-19 pandemic remains a global concern after nearly three years. Numerous variants have emerged since SARS-CoV-2 was first detected, causing waves of cases that have strained hospitals and health systems, health care and frontline essential workers, supply chains, economies, and many other aspects of society. Political concerns have influenced the implementation and uptake of strategies to mitigate the spread of the virus in North Carolina and throughout the United States, and the absence of a coordinated national response has contributed to confusion and disorder.[7] Misinformation has also influenced the implementation and uptake of strategies, as well as individual willingness to receive either evidence-based treatments or therapies deemed by medical authorities to have little or no therapeutic benefit.[8,9]

"The ability to communicate clearly, concisely, and persuasively to the public is both a challenge and a fundamental responsibility of health departments. The rise of the internet and social media have allowed health departments to communicate with the public in ways never before imagined. But these technologies have also profoundly altered how people seek and receive information—and raised expectations about government transparency."[10] – National Association of City and County Health Officials (2015)

Initiatives to Promote Data-Driven Decision-Making and Effective Communications

Several initiatives at the national, state, and local levels have been introduced to promote data-driven decision-making and effective communications to the public during the COVID-19 pandemic. Since the start of the pandemic, ongoing data collection at a federal level was used to determine allocation of federal resources including vaccines, therapeutics, personal protective equipment, and other resources from the strategic national stockpile. On January 21, 2021, newly inaugurated President Biden issued an executive order to ensure a data-driven response to the COVID-19 pandemic in the United States.[11] In this executive order, President Biden emphasized the importance of responding to the pandemic using "the best available science and data," and strengthening public health infrastructure. To accomplish these goals, President Biden called on all executive departments and agencies to facilitate the collection, analysis, reporting, and sharing of data related to COVID-19 in partnership with the national COVID-19 Response Coordinator. This coordination among national leaders involved in the response is designed to better assist state, local, tribal, and territorial (SLTT) and federal authorities in (1) developing and implementing data-driven policies in communities across the country, (2) increasing public understanding of the pandemic and the response, and (3) reducing the spread of misinformation. President Biden also called on specific agencies to enhance data collection and collaboration capabilities for the COVID-19 response and future public health emergencies, assess public health data systems and issue recommendations to address identified areas of improvement, and develop a plan to advance innovation in public health data and analytics in the United States.

In North Carolina, numerous initiatives were implemented to promote data-driven decision-making and shore up health data systems to inform COVID-19 response. Many major health systems identified ways to improve their health care analytics capabilities, and "leveraged internal expertise, utilized novel data sources, and implemented creative approaches to ensure that systems had capacity, staffing, and protective equipment to face a surge of patients."[12] Insights from Vidant Health in Greenville, Duke Health in Durham, and Cone Health in Greensboro pointed to the need for using epidemiological data from other nations and states to model potential impacts on North Carolina; the importance of enhanced communication and collaboration between health systems across the state (and the data infrastructure to support this); and the importance of proactively applying creative approaches to identifying COVID-19 cases. Vidant used information from its call centers to identify upcoming hotspots of cases, and employees focused communication strategies and awareness of Vidant resources to those areas. Cone Health used a similar approach, developing a novel outbreak detection and case connection algorithm that allowed it to connect cases with community demographic analyses and targeted outreach for mobile testing and vaccination.[12]

The recommendations below, which include a number of actionable strategies, are designed to strengthen North Carolina's systems and structures to better support data-driven decision-making and effective communications with the public:

Recommendation 6.1

Advance equitable access to vaccines and therapeutics through data development.

Recommendation 6.2

Strengthen state and local communications infrastructure and capabilities.

Recommendation 6.3

Ensure the inclusion of key perspectives in the development, implementation, and evaluation of communication strategies.

The following organizations and entities are responsible for implementing the strategies described in Recommendations 6.1–6.3:

State and Local Government: North Carolina Department of Health and Human Services, North Carolina General Assembly, county commissioners, local health departments

Health Care: Hospitals and health systems, pharmacies, and other health care providers

Other: Community-based organizations and other community partners

The recommendations provided by the task force in **Chapter 6** focus on data-driven decision-making in relation to the COVID-19 vaccines—understanding that the activities described can be applied to data-driven decision-making in other contexts—and effective communications with the public by elevating the role of key perspectives and experts in communities across the state. It is important to note that **Chapter 7** (Improving Access to Information and Services: Broadband Infrastructure, Telehealth, and Remote Learning) includes strategies to ensure access to information and communications before, during, and after public health emergencies.

RECOMMENDATION 6.1

The COVID-19 pandemic has shown that data and information about population-level risks are critical to the development and implementation of equitable strategies and the allocation of resources to support those strategies.[7] The vaccines developed by Pfizer-BioNTech and Moderna, which remain highly effective at reducing the risk of hospitalization and death from COVID-19, represent a valuable resource in the COVID-19 response. When the COVID-19 vaccines were authorized for emergency use by the U.S. Food and Drug Administration (FDA) in December 2020, demand exceeded vaccine supply, which was limited.[13] In response, the Centers for Disease Control and Prevention asked states to submit an allocation and distribution plan that would focus on distribution of vaccine to individuals at highest risk and incorporate phases of widening eligibility as more vaccine became available.

In late 2020, the North Carolina Department of Health and Human Services released North Carolina's COVID-19 Vaccination Plan. This plan reflected five principles to guide the state in planning and distributing COVID-19 vaccines in North Carolina:

1. **All North Carolinians have equitable access to vaccines.**
2. **Vaccine planning and distribution is inclusive; actively engages state and local government and public and private partners; and draws upon the experience and expertise of leaders from historically marginalized populations.**
3. **Transparent, accurate, and frequent public communications is essential to building trust.**
4. **Data is used to promote equity, track progress, and guide decision-making.**
5. **Appropriate stewardship of resources and continuous evaluation and improvement drive successful implementation.[14]**

To support this plan, the North Carolina Department of Health and Human Services developed data collection, reporting, and performance-tracking systems to understand who administered and received the vaccine and identify barriers to access and uptake. Although the COVID-19 vaccines have been available to all North Carolinians since June 2022, the North Carolina Department of Health and Human Services continues to collect and analyze data on access and uptake to inform strategies that address identified barriers. NCDHHS also focuses on data transparency, publishing data resources to inform communities, and additional response efforts. Resources including dashboards highlighting race/ethnicity of those who have received the vaccine and maps of vaccine uptake by individual census tracts' Social Vulnerability Index provide context and information about the progress and status of vaccinations in the state. Market research and qualitative data have also informed state and local communication strategies and messaging about vaccine safety, efficacy, and access.[15]

Efforts to understand vaccine access and uptake among historically marginalized communities will continue to be necessary as SARS-CoV-2 evolves, particularly as vaccines are updated or developed to address emerging variants. In response, the task force recommends:

RECOMMENDATION 6.1

Advance equitable access to vaccines and therapeutics through data development.

Strategy 6.1a: The North Carolina General Assembly, North Carolina Department of Health and Human Services, local health departments, health systems, pharmacies, other health care providers, and community partners should ensure ongoing investment in data collection on vaccine distribution and uptake, including the collection of data disaggregated by race, ethnicity, age, gender, preferred language, geography (region, county, ZIP code, census tract, etc.), and other demographic characteristics to inform policies, procedures, and outreach strategies that promote equity and minimize disparities.

DESIRED RESULT

Ongoing investment in data collection on the distribution and uptake of vaccines that protect against hospitalization, death, and other severe outcomes of COVID-19 to inform targeted strategies that elevate equity and the needs of vulnerable groups.

WHY DOES THE TASK FORCE RECOMMEND THIS STRATEGY?

The COVID-19 vaccines continue to be an excellent defense against the worst outcomes of SARS-CoV-2. Tracking access and uptake of the vaccines, and addressing barriers to access and uptake, will remain necessary as SARS-CoV-2 evolves. The task force elevated the work of the North Carolina Department of Health and Human Services and its partners in promoting equitable access and distribution among historically marginalized populations, which have been disproportionately harmed throughout the COVID-19 pandemic, and underscored the importance of ensuring ongoing investment in this work in anticipation of future surges. Ongoing investment in protecting the health and safety of historically marginalized populations is also essential to supporting North Carolina's economic stability, particularly as these populations are overrepresented among the state's frontline essential workforce.[16]

ADDITIONAL CONTEXT

The North Carolina General Assembly, North Carolina Department of Health and Human Services, local health departments, health systems, pharmacies, other health care providers, and community partners are the responsible organizations involved in **Strategy 6.1a**.

In July 2021, the North Carolina Department of Health and Human Services (NCDHHS) and NC Counts Coalition, a nonprofit organization focused on cross-sector partnerships that advance systemic solutions to barriers facing historically marginalized communities,[17] launched the Healthier Together initiative. This initiative awarded $500,000 in federal COVID-19 relief funds to community-based organizations to support the state's goal of equitably distributing the COVID-19 vaccine by implementing strategies to increase demand and access among communities of color and other historically marginalized populations.[18] Strategies include community outreach and education, vaccination events in trusted and accessible locations, assisting with scheduling first- and second-dose vaccination appointments, and providing on-site language translation services.[19,20] The initiative also provides support to community-based organizations engaged in this work, helps to match vaccine providers with community partners, and works with the North Carolina Department of Health and Human Services to offer vaccine supply, outreach, and transportation resources to address some of the structural barriers that prevent North Carolinians from receiving the vaccine. Data on COVID-19 vaccine distribution and uptake disaggregated by race, ethnicity, age, gender, and other key variables are used to inform the implementation of these strategies in communities across the state.

In addition, in summer 2022 NCDHHS received federal recognition for its efforts to ensure equitable distribution and uptake of the COVID-19 vaccines. Speaking at a White House Summit on the Future of COVID-19 Vaccines in July 2022, NCDHHS Secretary Kody Kinsley commented, "We closed the gap as far as vaccinating our Hispanic community, our LatinX community and we nearly closed the gap in our Black, African American community," acknowledging the role that data played in addressing inequities.[21]

Understanding Vaccine Access and Uptake in North Carolina

The North Carolina Department of Health and Human Services has created several resources to track access and uptake of the COVID-19 vaccines:

- **The COVID-19 vaccinations dashboard, which is currently updated weekly and includes demographic data, can be found here: https://covid19.ncdhhs.gov/dashboard/vaccinations**
- **A map that shows the highest rates of social vulnerability and the lowest rates of COVID-19 vaccination by census tracts can be found here: https://nc.maps.arcgis.com/apps/webappviewer/index.html?id=31df85b470ad49809445a2d83e80d269**
- **Information on strategies used by the North Carolina Department of Health and Human Services to promote vaccine equity can be found here: https://covid19.ncdhhs.gov/media/2388/open**

Recommendations 6.2 and 6.3 were developed by the Communications, Misinformation, and Public Trust Work Group of the Carolinas Pandemic Preparedness Task Force.

The Communications, Misinformation, and Public Trust Work Group

The Communications, Misinformation, and Public Trust Work Group, which included 17 task force members, community representatives, and experts representing multiple sectors, met three times between February and March 2022 to consider the communication challenges that were caused or exacerbated by the COVID-19 pandemic and develop recommendations and strategies to address these challenges. **Chapter 10** (Strengthening Collaboration and Coordination to Support Pandemic Preparedness, Response, and Recovery) includes additional recommendations developed by the Work Group that are designed to elevate cross-sector collaboration and partnerships with community-based representatives in the development, implementation, and evaluation of public health communication strategies. The following sectors and organizations participated in the Work Group:

State and Local Government: North Carolina Department of Health and Human Services, North Carolina Department of Public Instruction, Davidson County Health Department, Durham County Health Department, Granville-Vance Public Health, Henderson County Department of Public Health

Business: The Biltmore Company; Hanesbrands, Inc.

Health Systems, Associations, and Providers: North Carolina Healthcare Association, Mountain Area Health Education Center, Western North Carolina Health Network

Community Advocates and Representatives: North Carolina Council of Churches, North Carolina Community Engagement Alliance

RECOMMENDATION 6.2

The development and implementation of communication strategies that are responsive to the needs of communities requires a solid communications infrastructure at the state and local levels. The COVID-19 pandemic response has further strained state and local health department officials, many of whom were already working in a variety of roles before SARS-CoV-2 emerged. The length of the response has exhausted the public health workforce, which has been systemically underfunded and understaffed for many years.[5] According to the North Carolina Institute of Medicine's Task Force on the Future of Local Public Health, state funding for public health in North Carolina was $76 per capita in 2021, placing our state 45th in the nation compared to the national average of $116 per capita. County-level per capita spending on public health in North Carolina has dropped 22% between 2010 and 2018 when adjusted for inflation.[a] Public health workers cite the stress and workload during the pandemic, as well as the need for additional staff with specialized skills, as a factor in burnout and a challenge for retention of the workforce.[b]

[a] *North Carolina Institute of Medicine. Task Force on the Future of Local Public Health: Task Force Report (ahead of print).*
[b] *Ibid.*

The response itself has rapidly evolved as new scientific research has emerged, leading to new policies and guidance that require resources and effective communication strategies to support. Variant-driven surges in COVID-19 cases have also contributed to the rapidly evolving response. In order to manage these rapid and often unexpected changes, state and local health departments have needed to be more flexible and agile than government systems are designed to allow, even with special provisions during declared emergencies under the Emergency Management Act (NCGS Chapter 166A).

Other challenges have arisen as willingness to accept public health mitigation measures has waned among North Carolinians and in other communities across the United States, and misinformation has sowed confusion in both traditional and social media. Combatting misinformation about the COVID-19 vaccines, masking, and other public health mitigation measures to reduce the spread of the virus has added complexity to the work of state and local health departments by creating questions, concerns, and barriers among members of the community that need to be addressed to support uptake of these mitigation measures. Public health practitioners found themselves facing mistrust of scientific evidence; politicization and devaluing of standard public health approaches; and higher incidence of threats, harassment, and other forms of violence directed toward public health workers.[22] Contending with public criticism and workplace threats has led many public health workers to feel demoralized, contributing to lower retention rates and causing additional strain as workers with invaluable technical and institutional knowledge leave their roles.[23]

At the same time, the absence of a coordinated national response has often compelled state and local officials to navigate the complexities of the COVID-19 pandemic on their own. State and local officials have frequently not received timely notice when guidance from federal agencies has been provided, limiting their ability to develop communication strategies to help their communities translate this guidance into practice and to respond to media inquiries.[24–26] The Communications, Misinformation, and Public Trust Work Group also underscored that many local health departments do not have a dedicated public information officer or other communications staff, which compounds these and many other long-standing challenges as local health departments are tasked with a broad scope of work to promote health, safety, and well-being in their communities.[27] In response, the Work Group identified two key strategies to strengthen the communications infrastructure and capabilities of state and local health departments:

RECOMMENDATION 6.2

Strengthen state and local communications infrastructure and capabilities.

Strategy 6.2a: The North Carolina General Assembly and county commissioners should provide additional state and local appropriations to ensure that all local health departments have public health information officers and other staff with the majority of their time allocated to internal and external communications.

Strategy 6.2b: The North Carolina General Assembly and county commissioners should provide additional state and local appropriations to support community health workers and other trusted messengers in the community working in partnership with state and local public health to deliver targeted, accessible communications and increase community engagement.

DESIRED RESULT

Sustained funding for communication experts and community representatives to support local health departments in developing effective communications strategies that meet the needs of the communities they serve.

WHY DOES THE TASK FORCE RECOMMEND THESE STRATEGIES?

Dedicated public information officers (PIOs) and other staff with training, skills, and expertise in communications are essential to strengthening the capacity of state and local health departments to respond to the questions, concerns, and information needs of North Carolinians and their communities. It is also important to develop communications that reflect community values and experiences, which requires collaboration and partnership with community health workers and other trusted messengers who can speak to those values and experiences.

The Work Group noted that state and local health departments with staff dedicated to communications are better prepared to respond to community needs before, during, and after public health emergencies, while also having a greater capacity to build and maintain relationships with community-based organizations and partners that are essential in the development of tailored communications. To ensure that state and local health departments have the capacity to focus on communications and building the relationships needed to support effective communications, the Work Group underscored the need for sustained funding for PIOs and other communications staff.

The Work Group also underscored the importance of appropriately compensating community health workers and other trusted messengers in communities across the state for their invaluable contributions to the development, implementation, and evaluation of communication strategies. Trusted messengers are not only essential to developing tailored communications for their communities, they are also essential to the delivery of those communications and engagement with their communities to promote uptake of key messages.

ADDITIONAL CONTEXT

The North Carolina General Assembly and county commissioners across the state are the responsible entities involved in **Strategies 6.2a and 6.2b**. These organizations and entities are responsible for considering funding requests and allocating funds to state and local health departments, including funds to support dedicated communications staff along with community health workers and other trusted messengers. **Strategy 6.2a** is designed to directly strengthen state and local public health communications infrastructure by providing state and local appropriations to support communications staff, while **Strategy 6.2b** would indirectly strengthen this infrastructure by ensuring a robust network of community health workers and other trusted messengers to support state and local public health communications staff.

The NCIOM Task Force on the Future of Local Public Health also identified the absence of staff with primary roles specific to communications in local health departments across the state as a barrier to robust, effective communication strategies. The task force noted that resource constraints often lead health departments to use staff with varied amounts of training and skills in public health communications in the development and implementation of communication strategies related to COVID-19 and other crisis situations, along with ongoing health promotion needs. In addition, the primary roles of these staff are frequently unrelated to communications. Cultivating relationships with trusted community messengers was identified as another challenge by the task force, which emphasized the importance of these trusted messengers in conveying information about health behaviors, risk factors, and other public health messages in ways that reflect understanding and experience with the community-specific drivers impacting health. To develop and implement effective communication strategies, the task force highlighted the importance of ensuring that local health departments have the capacity to develop and maintain relationships with trusted community messengers and prioritize the inclusion of community members. For additional details and information, please see **Chapter 6** (Strengthening Local Public Health Communication) of the final report from the Task Force on the Future of Local Public Health.

RECOMMENDATION 6.3

To promote the health, safety, and well-being of communities across the state, the Communications, Misinformation, and Public Trust Work Group highlighted the need for effective communication strategies that are responsive to community-level needs. The Work Group also emphasized that all public health communication strategies should center equity, understanding that historically marginalized populations are disproportionately impacted by systems and policies before, during, and after public health emergencies.

The Centers for Disease Control and Prevention provides a framework for improving public health communications in a way that emphasizes equity, community needs, and inclusivity. This framework includes the following key principles:

- Using a health equity lens when framing information about health disparities.
- Considering the key principles, such as using person-first language and avoiding unintentional blaming.
- Using preferred terms for select population groups while recognizing that there isn't always agreement on these terms.
- Considering how communications are developed and looking for ways to develop more inclusive health communications products.
- Exploring other resources and references related to health equity communications.[28]

In addition, the CDC framework also encourages state and local public health professionals, when developing communication strategies, to:

- Build a diverse workforce across their organizations, including considering the benefits of hiring people from the communities served.
- Identify priorities and strategies for communications in partnership with community representatives.
- Use easily understood language and avoid jargon.
- Develop information that is "culturally responsive, accessible, and available," and that represents community members for whom the information is intended.
- Develop information in appropriate and accessible formats (for example, audio, video, braille or large print formats, visual/graphic imagery).[28]

In support of Recommendation 6.3, the Work Group identified two strategies designed to elevate community voices and other key perspectives in developing, implementing, and evaluating public health communication strategies:

RECOMMENDATION 6.3

Ensure the inclusion of key perspectives in the development, implementation, and evaluation of communication strategies.

Strategy 6.3a: The North Carolina Department of Health and Human Services and local health departments should continue to (1) engage and include community representatives and representatives from business, traditional, and social media and public relations; K–12 and higher education; and other key perspectives from targeted audiences in the development, implementation, and evaluation of communication strategies, and (2) conduct community listening sessions and message-testing sessions to inform communication strategies as part of their shared work.

Strategy 6.3b: The North Carolina Department of Health and Human Services should establish a statewide consortium with regional representatives from business, media and public relations, public health, health care systems, faith-based leaders, education, trusted community-level messengers, and other partners to (1) establish or strengthen trusting relationships, (2) strategize opportunities to promote consistent, collaborative messaging, and (3) develop recommendations around communicating data and scientific information.

STRATEGY 6.3a

Develop, implement, and evaluate communication strategies in partnership with community members and people with lived experience.

The North Carolina Department of Health and Human Services and local health departments should (1) engage and include community representatives and representatives from business, media and public relations, K–12 and higher education, and other key perspectives from targeted audiences in the development, implementation, and evaluation of communication strategies, and (2) conduct community listening sessions and message-testing sessions to inform communication strategies as part of their shared work.

DESIRED RESULT

Ongoing and sustainable multi-sector collaboration, along with the meaningful inclusion of community-based organizations and partners, in the development, implementation, and evaluation of public health communication strategies.

WHY DOES THE TASK FORCE RECOMMEND THIS STRATEGY?

An effective communication strategy needs to be tailored to the needs of the target audience, which can be done by sharing messages through commonly used channels, ensuring that messages are well-timed to maximize both reach and engagement, and partnering with trusted messengers who can answer questions and concerns that may arise from within their community. **Strategy 6.3a** highlights the importance of forming bidirectional relationships in which community partners, people with lived experience, and others with key perspectives are meaningfully included in the development and implementation of tailored communication strategies.

Strategy 6.3a also underscores that listening to the perspectives and experiences of a wide range of community representatives provides invaluable insight into community values and needs. The Work Group noted that community listening sessions and message-testing sessions are two opportunities to ensure that community voices are heard and reflected in communication strategies.

ADDITIONAL CONTEXT

Strategy 6.3a builds on the work described in **Recommendation 6.2 (Strategy 6.2b)** by asking the North Carolina Department of Health and Human Services to continue to engage community-based organizations and trusted messengers as well as representatives across multiple sectors in the development, implementation, and evaluation of communication strategies. The North Carolina Department of Health and Human Services has partnered with community voices in the work of the Healthier Together initiative, which focuses on vaccine distribution and uptake among historically marginalized populations, while also partnering with the North Carolina Department of Public Instruction (NCDPI) on communication strategies designed to support K–12 schools across the state. The Communications, Misinformation, and Public Trust Work Group identified the need to strengthen partnerships and engagement with the business community in particular, while also recognizing the work NCDHHS has done throughout the COVID-19 pandemic to support businesses in navigating pandemic-related uncertainties and challenges.[29]

STRATEGY 6.3b

Develop an action plan to promote consistent, collaborative messaging in partnership with community members, people with lived experience, and key perspectives and other experts across sectors.

The North Carolina Department of Health and Human Services should establish a statewide consortium with local and regional representatives from business, media and public relations, public health, health care systems, faith-based leaders, education, trusted community-level messengers, and other partners to (1) establish or strengthen trusting relationships, (2) strategize opportunities to promote consistent, collaborative messaging, and (3) develop recommendations around communicating data and scientific information.

DESIRED RESULT

The development of an action plan that includes strategies for strengthening communications to North Carolinians and their communities, along with the establishment of trusting relationships between partners to promote ongoing collaboration and coordination before, during, and after public health emergencies.

WHY DOES THE TASK FORCE RECOMMEND THIS STRATEGY?

The Work Group recognized that establishing a statewide consortium to convene local and regional representatives across a wide range of sectors and organizations would provide an opportunity to strengthen coordination and alignment, while also encouraging strategic planning around the development of consistent, collaborative messages. As part of this shared work, **Strategy 6.3b** also asks the consortium to develop recommendations that support the translation of data and scientific information into effective communication strategies for a variety of sectors and audiences. The Work Group emphasized that these recommendations, along with the other work of the consortium, should lead to the creation of an action plan to guide agencies and organizations in their implementation efforts.

ADDITIONAL CONTEXT

In September 2020, the North Carolina Institute of Medicine began convening a diverse group of more than 50 stakeholders across the state to provide expert guidance, perspectives, and feedback to the North Carolina Department of Health and Human Services as the department worked to develop a vaccine allocation and prioritization plan, along with communication strategies to support the implementation of this plan. **Strategy 6.3b** leverages a similar model of diverse representation across sectors used in the development and implementation of the state's plan to promote the equitable distribution of the COVID-19 vaccines with a focus on strengthening communication strategies before, during, and after public health emergencies.

The following recommendations were developed by the North Carolina Institute of Medicine Task Force on the Future of Local Public Health and supported by the Carolinas Pandemic Preparedness Task Force. Please see the final report from the Task Force on the Future of Local Public Health for additional details and information (www.nciom.org/publications).

Public health data collection, access, and use are in need of modernization to improve many aspects of the work of local public health—from what information is collected (e.g., health issues and assets in a community, disease rates, and differences in health outcomes among populations) to how it is collected, analyzed, interpreted, and shared. In partnership with the North Carolina Association of Local Health Directors (NCALHD),[c] the NCIOM Task Force on the Future of Local Public Health convened a work group to discuss topics related to data in local public health and to identify opportunities for improvement to help assure that local health departments and their partners have the data they need—when and how they need it—to drive improvement and support community-wide well-being. The work group engaged in four conversations to address these topics:

1. Community and population data (e.g., health factors and status for whole populations)
2. Epidemiological, preparedness, and surveillance data systems (e.g., pandemic surveillance)
3. Local public health service system (e.g., services, staffing, funding)
4. Agency and program performance data (e.g., quality and outcomes of public health programs)

Within and interconnected with these topics are issues related to workforce capacity and competencies, using data to make decisions and talk about the issues affecting the health of communities, sharing data with communities, cross-agency data connectivity and partnerships, and developing necessary technology and tools for collecting and sharing data. The biggest challenge is not that the technology and methodologies to address these issues aren't available. The challenges we are facing in North Carolina are primarily related to the need for enhanced capacity (funding and workforce) and connectivity (between data systems and across partners).

"This nation has failed to invest in the core capabilities of public health data, data analytics, predictive data analysis. We really need to make that investment." - Robert Redfield, former CDC Director (2018–2021)

A Conversation with Robert Redfield. Council on Foreign Affairs. https://www.cfr.org/event/conversation-robert-redfield

The Future of Local Public Health task force recommends the following:

RECOMMENDATION 2:

TRANSFORM LOCAL PUBLIC HEALTH'S CAPACITY TO COLLECT, SHARE, USE, INTEGRATE, AND COMMUNICATE DATA TO DRIVE CONTINUOUS IMPROVEMENT IN PROGRAMS, AGENCIES, AND WHOLE COMMUNITIES

Four strategies are recommended by the Task Force on the Future of Local Public Health to move to a future vision of effective data collection, sharing, use, integration, and communication:

Strategy 2a. DRIVE IMPROVEMENT AND STRENGTHEN CONNECTIVITY - The North Carolina Department of Health and Human Services Division of Public Health should strengthen the public health data ecosystem in North Carolina by supporting and investing in the creation of a strong statewide structure to prioritize, advance, and create collective accountability for improvement opportunities, with a shared set of values, across public health and other relevant data partners.

[c] *NCALHD work associated with this task force is also supported by funding from the Kate B. Reynolds Charitable Trust.*

Strategy 2b. IDENTIFY FUNDING NEEDS FOR DATA MODERNIZATION - The statewide structure recommended in Strategy 2a should identify funding needs and potential funding sources and a plan to secure resources for continued public health data use and system modernization that are outside of the capacity of the Division of Public Health to support.

Strategy 2c. EVOLVE HEALTH DEPARTMENT DATA CAPABILITIES - Local health departments should evolve internal and external capabilities in data collection, sharing, and use by pursuing trainings for staff, developing capabilities around data sharing with community partners, creating a culture of learning, and adopting a shared set of values around intentional data development, use, sharing, and communication.

Strategy 2d. SUPPORT FOR DATA CAPACITY AND MODERNIZATION - North Carolina public health philanthropies and nonprofit organizations, as well as partners in academia, health care, and the private sector, should support developing work in local public health data capabilities by collectively investing in or collaborating on prioritized improvements and innovations related to workforce capacity, skill development, technical assistance, system improvement, and filling gaps in available data.

The Task Force on the Future of Local Public Health identified three key areas of communication for local public health:

1. Communication with community members about ongoing specific health issues or concerns, such as risk and protective factors for chronic diseases and corresponding health behaviors
2. Communication with community members about emergency/urgent health issues (such as information about emerging infectious diseases and other crises)
3. General communication about the role of public health in ensuring a community's health and well-being

To maintain the capacity for effectively addressing these communication responsibilities, the task force highlighted the need for community collaboration and trust when developing strategies to improve public health communications, as well as the need:

RECOMMENDATION 3:

Strengthen capabilities and build trust to communicate effectively with diverse community members, media, and policymakers

Three strategies are recommended by the Task Force on the Future of Local Public Health to move to a future vision of effective communication:

Strategy 3a – BUILD A COMMUNITY OF PRACTICE: Through the North Carolina Public Health Workforce Regional Hubs, the North Carolina Division of Public Health should work to build a Public Health Communication Community of Practice (COP) with representatives of local and Tribal health departments.

Strategy 3b – CREATE A PUBLIC HEALTH COMMUNICATION CERTIFICATE PROGRAM: The North Carolina Public Health Association, Division of Public Health, and academic programs at the university and community college levels should collaborate to create a training certificate program in governmental public health communications to build communication capabilities at the regional and/or local level and to promote best practices in communications across the state.

Strategy 3c –RAISE AWARENESS AND KNOWLEDGE OF PUBLIC HEALTH ISSUES, SERVICES, AND STRATEGIES: North Carolina health- and public-health-related philanthropies should invest in the development of a robust strategic communications framework that clearly identifies messengers, messages, and strategies for increasing public and legislative knowledge of public health's roles, and opportunities to champion development in local public health.

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