NATIONAL PUBLIC HEALTH INFORMATION COALITION

COVID-19 COMMUNICATIONS AFTER-ACTION SYMPOSIUM REPORT

A summary of the discussions held among public health communicators from around the U.S. at the NPHIC COVID-19 Communications After-Action Symposium event on December 6-7, 2021 in Albuquerque, New Mexico

January 14, 2022

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EXECUTIVE SUMMARY

The COVID-19 pandemic has tested the U.S. public health system unlike any previous health issue in more than a century. For much of the pandemic, prior to the release of vaccinations or therapeutic treatments, providing consistent, relevant, and accurate information that influenced behaviors was the best strategy public health officials had to curb the spread of the virus in their communities.

On December 6-7 2021, the National Public Health Information Coalition (NPHIC), in partnership with the Centers for Disease Control and Prevention (CDC) held a hybrid, in-person/virtual convening of public health communicators representing local and state public health agencies from across the country to debrief and discuss communications efforts during the COVID-19 pandemic thus far. These communications professionals, who are also NPHIC members, spent a day examining the challenges, opportunities, and lessons they saw while executing effective communications in their respective jurisdictions. Lastly, these practitioners brainstormed recommendations for actions to be taken by the public health system to improve the efficacy of upcoming COVID-19 communications as well as inform strategies for future pandemics.
In advance of the symposium, NPHIC conducted a survey amongst its members to gather preliminary information regarding challenges, successes, and recommendations for improvement. These survey data were shared with the participants at the symposium and are included in Appendix B of this report. Appendix A holds links to the video recordings of the in-person discussions held at the symposium.

The key themes that emerged from this symposium are discussed in more detail throughout the report. The most salient insights shared include the following:

- Messaging must be honest and relatable: public health communication must be transparent (telling people what is known, what is unknown and why) as well as tailored to reach specific audiences in culturally congruent ways to meet the unique needs of communities and population groups.
- Political figures serving as spokespeople can hamper public health messaging: partisan politics have damaged the efficacy of public health messages breaking through to audiences. It is better to use credible experts or trusted messengers, focus on the science, and speak plain language to deliver messages in a way that audiences can understand.

EXECUTIVE SUMMARY

- Continued collaboration is key: public health communication benefits greatly from bidirectional collaboration up and down the entire system – from CDC to States and localities. All levels of public health have the same goals; therefore, it is crucial that they work together to reduce contradictory messaging, leverage resources, and make maximum impact with communication efforts.
- Urgent need to build public health communications capacity: particularly within state and local health departments where shoestring budgets provide very limited availability for the needed communication professionals that have access to additional training and resources to help them succeed.
- Infodemic management must be a priority: the public's ability to understand science, biology, medicine, and public health is underdeveloped leading to confusion when presented with complex and rapidly evolving information. Feeling uncertain with only bits of information, it is easy for mis/disinformation to fill the void and take over as a dominant narrative. Fully explaining events, actions, and recommendations to demystify key concepts and processes would help minimize the public's frustration and avoid as much mis/disinformation from creeping into the public's newsfeed.

Among the top recommended actions to build a stronger public health communications system included:

- Update Crisis Emergency Risk Communication (CERC): to fully reflect the lessons learned during the COVID-19 pandemic including the management of misinformation, impacts of social media, and navigating political/partisan pressures in communication, this critical training and resource should be updated so future public health communicators may benefit from this added knowledge.
- Reimagine an Incident Command System (ICS) structure that works for long-term events: All public health professionals are trained in understanding the use of ICS to structure emergency response efforts, but that training is meant for short-term events, not long-lasting events like a pandemic. A revamp of ICS is needed to provide public health with a more durable structure for future responses.
- Create additional trainings to equip communicators with a broader skill set: public health communications professionals need deeper training on understanding message framing, how to use storytelling, data visualization to support messages, and manage mis/disinformation in the modern social media age.
- Leverage non-governmental sources of data and expertise to serve as spokespeople: the public health system should look outside of solely government sources for credible, science-backed data and trusted messengers to spread information that will influence populations towards behavior change.

INTRODUCTION

Through its **Strengthening the Nation's Public Health Communications Infrastructure to Respond to COVID-19** grant, the CDC provided funding to NPHIC to bring public health communication professionals together in order to listen and learn from their experiences on the front lines of COVID-19 crisis communications during the pandemic. NPHIC engaged its voting members as well as a select number of Public Information Officers (PIOs) from big cities across the country to attend a hybrid in-person/virtual symposium in Albuquerque, New Mexico on December 6-7th, 2021. Prior to the symposium, all NPHIC members were invited to participate in a pre-event online survey to gather more information about their perceptions on what were challenges they faced, factors and resources they utilized to find success, and recommendations they had for the future. This report synthesizes the rich discussion conducted during the symposium and provides important lessons-learned for the benefit of NPHIC's network of public health communicators, the CDC and its affiliate partners.

It was universally recognized by the symposium participants that there were many challenges communicators faced (and continue to face) during the COVID-19 pandemic, including vaccine resistance and the mounting frustration against public health interventions. To level set the discussion, participants were asked to share their experiences through the lens of three distinct phases of the pandemic: (1) the early days including the winter 2020 surge of cases; (2) the nation's vaccine rollout and; (3) the emergence of the Delta Variant.

CHALLENGES

All participants acknowledged the inherent challenge of the enormity of the pandemic – the speed at which events and information evolved, the sometimes-chaotic manner in which information was released, partisan politics that muddied the messages, the news media and social media's contributions to mis/disinformation, and the length of the pandemic quickly burning out staff and public audiences alike. Many of these challenges felt like headwinds, entirely out of control of the public health response.

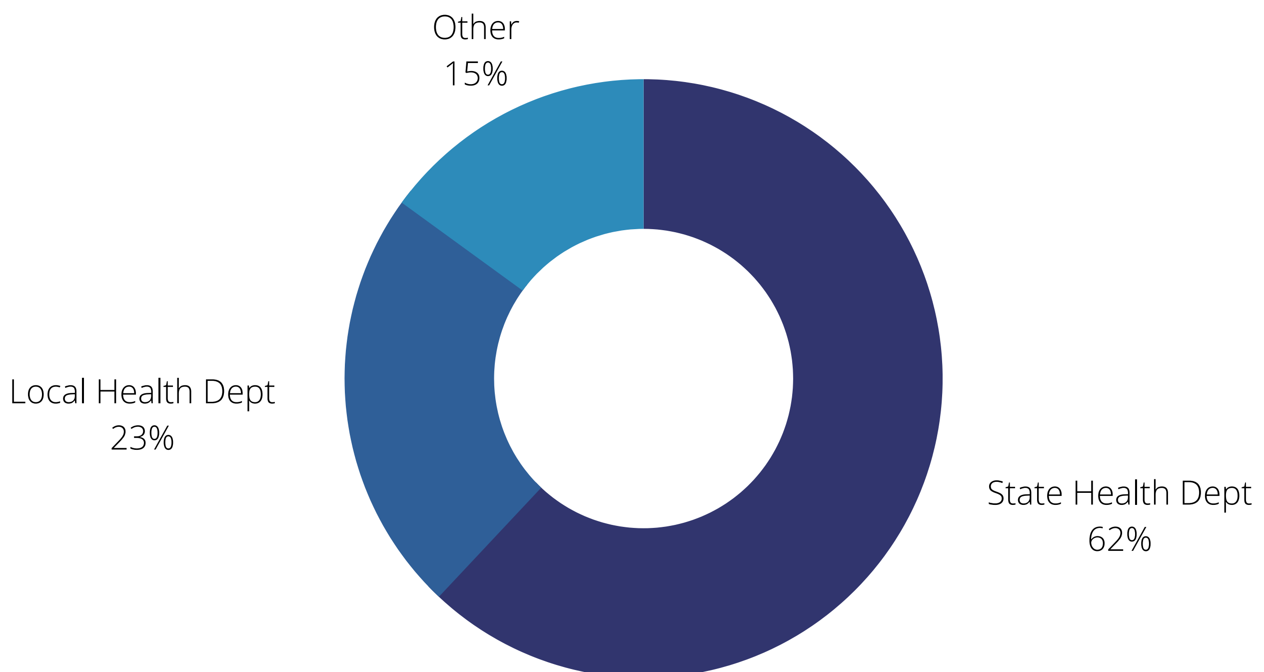
There was, however, diversity in the lived experiences of the communicators which depended on a multitude of factors including the size/strength of their teams, proximity to leadership, geography, political party in control of government, and degree of pre-established relationships with community and media partners. In addition, disparities in how the COVID-19 pandemic was affecting different communities and populations - and how the response to it was being designed and delivered - posed and continues to pose significant challenges not just in addressing the public health crisis, but also in communicating accurately and effectively about it. For example, participants from rural communities spoke of not finding utility in messaging that referenced mitigation strategies for crowded housing or public transportation, as those urban considerations did not impact their jurisdiction. One attendee from a rural and conservative-leaning area spoke about the "stark disconnect" between the messaging pushed to the bigger metropolitan and liberal-leaning areas being irrelevant in her area, leading to disenfranchised feelings of being completely disregarded in the national response.

"Participants from rural communities spoke of not finding utility in messaging that referenced mitigation strategies for crowded housing or public transportation, as those urban considerations did not impact their jurisdiction."

Funding shortfalls also played a key role. After decades of declining funding, the U.S. public health system did not have the cohesion in its communication channels, the data reporting infrastructure, or adequate levels of well-trained personnel to support the type of response needed for a public health crisis of this size and scope. Prior to the pandemic, health departments had very low visibility in the public sphere, but very quickly public health was thrust into the spotlight without having built the essential trust from the public in understanding the powers and duties of public health or the leaders in charge. This lack of trust grew during each phase of the pandemic and in some cases spiraled out of control in certain communities, creating toxic and harmful environments for public health workers as the distrust turned to anger and even threats of violence. While there were infusions of funds to bolster the public health response at several points throughout the pandemic, participants felt that it was "too little, too late".

CHALLENGES

While no one could have predicted the length of the pandemic, participants felt that the enduring nature of the response took (and continues to take) a significant toll on their mental health. The wellness of public health workers was sometimes overlooked, as the more visible strain on hospital systems garnered more public attention. The stress and pressure of the relentless work has left many public health communicators burned out, without the mental, emotional, and sometimes physical health needed to be effective in their positions. Across the country, public health departments are experiencing a staffing crisis with many professionals choosing to leave their positions, thus further overworking the understaffed departments even further.



57% of participants said the beginning of the pandemic was the most challenging, while 29% said the vaccine rollout posed more challenges.

MOST VALUED RESOURCES

Despite the challenges public health communicators have faced during the pandemic, they have been resourceful and resilient in overcoming them. There were many tools available to communicators with even more resources developed over time, and opportunities for collaboration that strengthened the impact of their efforts.

The symposium participants spoke very highly of the value that NPHIC brought to their work. In particular, they highlighted the importance of receiving the information that was passed directly from the CDC to NPHIC members. This included regularly updated talking points, pre-releases of MMWR articles, and embargoed press releases that often gave the public health communicators the edge on the news media that they needed to stay in control of the message. In addition, there was a high significance placed on the monthly NPHIC/CDC Zoom calls, in which members had access to CDC communications staffers and other subject-matter experts, learned of upcoming national campaigns and plans, as well as had the opportunity to ask questions of the CDC staff and their colleagues. NPHIC offers its members a point of connection to their peers that encourages collaboration, sharing, and support, thus strengthening communication messages across the country.

"There was a high significance placed on the monthly NPHIC/CDC Zoom calls, in which members had access to CDC communications staffers and other subject-matter experts, learned of upcoming national campaigns and plans, as well as had the opportunity to ask questions of the CDC staff and their colleagues."

The communicators who participated in the symposium emphasized the value that national and local opinion polling and message testing had in their work. Results from the Kaiser Family Foundation, pollster Frank Luntz, the Robert Wood Johnson Foundation, and the NPHIC/Harvard polling project, to name a few, provided public health communicators with real-world insight about the attitudes, perceptions, and misgivings of the public. These efforts informed campaign development for the COVID-19 vaccination rollout across the country, but also helped communicators know what messages would resonate best in their particular jurisdictions based on the demographic breakdown of the data.

Another resource mentioned included the Public Health Communications Collaborative, a partnership between the de Beaumont Foundation, CDC Foundation, and Trust for America's Health. This collaborative, established in 2020, provides states and local health officials with messaging support, free materials, and communications counsel that aims to support science-based decision making, build support for public health leaders, and correct misinformation. The participants emphasized that sharing of communications assets, pre-developed templates, infographics, social media posts, etc. was extremely valuable in saving time to not "recreate the wheel" and having a more unified voice across the country.

MOST VALUED RESOURCES

A less tangible factor that benefitted communicators was the nature of their established relationships with colleagues and leaders in their respective departments, peers in their community (for example, at the local hospital system or community-based organizations), and media partners. Those who had well-established relationships spoke about the value that brought in expediting their work, getting leadership approval for communications, and amplifying the message by working with the news media. Several state-level communicators stated that proximity to their State Health Official and/or Governor's office was crucial in staying in lock-step with messaging for their state. Similarly, local-level communicators agreed that consistent contact with their mayor/elected officials' communications staffers was critical when trying to "speak with one voice".

Lastly, it was noted that communicators were more successful when they worked alongside trusted community messengers, such as community organizations and informal "influencers" like faith leaders, local health care professionals, business leaders, or school officials. Communicators spoke about the value they found in listening to their communities – hearing what the community members needed helped shape future messaging to resonate more. The power of storytelling was underscored as an effective strategy, especially when using trusted community members as the spokespeople. When it came to reaching "hard to reach" or "hardly reached" populations, public health can only be as effective as its level of trust. While this method of working through trusted community members is not new to public health, it may be one that may be overlooked in a crisis if there is not time and intentionality put into it.

"When it came to reaching 'hard to reach' or 'hardly reached' populations, public health can only be as effective as its level of trust."

RECOMMENDATIONS

Following the discussion on the overall challenges associated with communicating about COVID-19 and the resources that proved to be useful, participants identified action items to strengthen the capacity of the public health system at all levels to more effectively communicate during a future public health crisis.

Among the top recommended action steps public health should take to improve communications include:

Update Crisis Emergency Risk Communication (CERC)

To fully reflect the lessons learned during the COVID-19 pandemic including the management of misinformation, impacts of social media, and navigating political/partisan pressures in communication, this critical training and resource should be updated so future public health communicators may benefit from this added knowledge.

Reimagine an Incident Command System (ICS) structure that works for long-term events

All public health professionals are trained in understanding the use of ICS to structure emergency response efforts, but that training is meant for short-term events, not long-lasting events like a pandemic. A revamp of ICS is needed to provide public health with a more durable structure for future responses.

Create additional trainings to equip communicators with a broader skill set

Public health communications professionals need deeper training on understanding message framing, how to use storytelling, data visualization to support messages, and manage mis/disinformation in the modern social media age ("Infodemic management").

RECOMMENDATIONS

Leverage non-governmental sources of data and expertise to serve as spokespeople

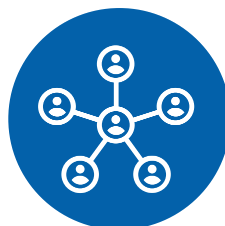
The public health system should look outside of solely government sources for credible, science-backed data and trusted messengers to spread information that will influence populations towards behavior change.

Invest in data infrastructure

Improved technology to create clear, standardized, and robust data dashboards across the country with explanations of the data will establish greater trust through transparency.

Deploy surge support from CDC for state/local communications teams

With limited staff capacity, many states and localities found themselves simply without enough hands to do the work they needed to accomplish. Surge/reserve support deployed specifically for communications teams would help augment their ability to adequately address the needs of their jurisdiction.



Support organizations and efforts that are helping to coordinate public health communications

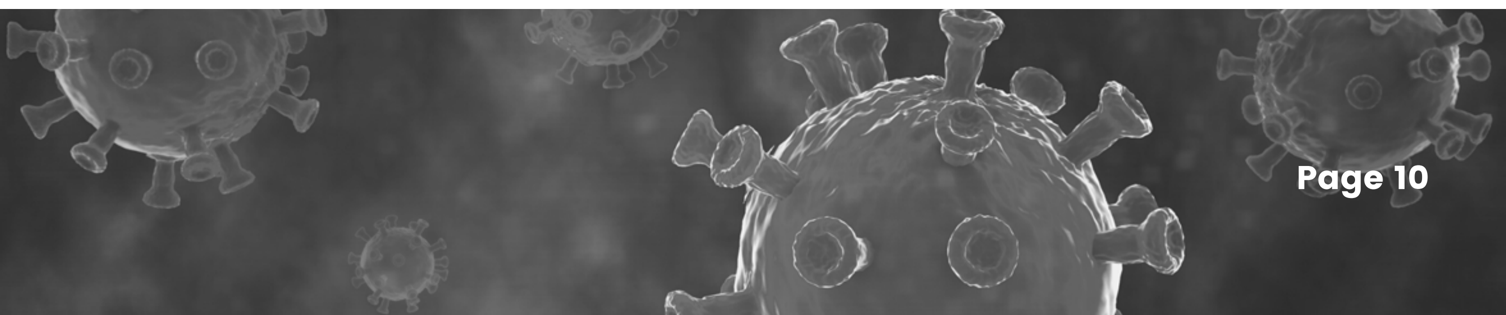
Organizations like NPHIC and strategic partnerships such as the Public Health Communications Collaborative, need ongoing funding and support to effectively coordinate communications, ensuring the bidirectional interaction that is essential for standardization and greater impact.

Emphasize cultural humility for greater relevance

Public health communicators and leaders at the local, state, and national level must demonstrate cultural humility to connect with their audiences. Communications must be tailored to different audiences to show empathy and build trust using multiple techniques and platforms for sharing messages. Its important to recognize all the audiences that need to be reached, even if they may not have immediately come to mind as "vulnerable" or "hard to reach".

CONCLUSION

The December 2021 NPHIC symposium offered a snapshot of perspectives from public health communicators across the country on the pandemic response through calendar year 2021. Participants in the meeting were able to identify lessons from the pandemic to strengthen the capacity of the communications practitioners in the public health sector at all levels to more effectively anticipate and respond to future public health threats. The participants had consensus that these critical conversations must continue beyond the current pandemic. They require deep engagement from organizations at all levels – local, state, and national - to ensure the public health system is collectively prepared for future moments of inevitable crisis.



ACKNOWLEDGEMENTS

NPHIC thanks the many contributions of the people who collaborated on the After Action Symposium and this report. Below, list down the names of those committed to these projects, such as:

- The Centers for Disease Control and Prevention
- Robert Jennings, Executive Director, NPHIC
- Laura Espino, Membership Director, NPHIC
- Cathy Allen, The Board Doctor, Facilitator
- Gillian Conrad, Consultant, Co-Facilitator
- The many colleagues from Local and State Health Departments who participated in the pre-survey, the symposium, and subsequent post-interviews to gather the information needed for this report.

We thank the CDC for continued support in NPHIC's efforts to share our knowledge, expertise and resources to effectively communicate about the important health issues of the day -- helping people lead healthier lives in healthier communities.

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APPENDIX A

Click on the underlined text below for the video recording.

Please note these recordings are password protected. Password: nphic *(all lower case).*

Video Recordings from Monday, December 6, 2021

Opening Remarks, Abbigail Tumpey & Jennifer O'Malley

Participant/Attendee Introductions

Facilitated Discussion, Part 1

- Pre-Meeting Questions Review
- Discussion, Part 1 (challenges faced)
- Discussion, Part 2 (challenges faced, continued)

Facilitated Discussion, Part 2

- Pre-Meeting Questions Review
- What helped PIOs overcome the challenges they faced
- How we can improve communications
- Valuable resources that were available to PIOS
- Importance of self-care and mental health help
- What would help strengthen public health communications capacity
- What we must continue to keep public health communications strong

APPENDIX B

Pre-Symposium Survey Data

National Public Health Information Coalition
Communication Action Symposium - December 6-7
Pre-Planning Questions to Attendees

Q1a. From your perspective, in what ways did public health communications perform well?			
N=38	**What performed well**	**A=20**	**NotA=18**
17	Good information flow and coordination between agencies (CDC/NPHIC/State/Local)	10	7
14	Clear and transparent messaging - what we knew/what we didn't with call to action	9	5
7	Data/science-driven information releases	4	3
2	Use of multiple communication tactics, platforms, emphasis on accessibility	1	1
1	Creativity and hard work	1	--
1	Never good - nothing positive	--	1

17	Good information flow and coordination between agencies (CDC/NPHIC/State/Local)	10	7

R1 Early-on, information was forthcoming and based on science. As the pandemic wore on, politics took over.

R2 Creating new daily content, graphics, and guidance. This did not change for us, we stayed consistent each day on messaging.

R4 The speed at which a collaborative can produce and tailor messaging is/was impressive - but was born out of necessity given the calamity of 1) federal to state to local information exchange, 2) individual actors (like Governor's) having press conferences and announcing information before state or local public health could digest.

R6 We tried to be as consistent as we could be despite changing information and obstacles at all levels. We worked hard to retain credibility, but still lost much of it.

R7 Putting out the best information we had; admitting when we didn't know the answers; supporting each other (NPHIC members & facebook group especially!)

R8 The weekly NPHIC updates/key messages were most useful for current information.

R8 FDA/ACIP on vaccines and other info timelines.

R9 The initial response had a strong JIC behind it because of the state of emergency.

R13 I felt it improved over time. Helpful were things like key messages, talking points, heads-up when things were going to be released.

R17 I appreciated the talking points and sample graphics. It allowed for consistency in messaging and also helped to take the burden off my team in creating collateral materials.

R19 U.S. CDC briefings by Dr. Messionnier early in the pandemic were helpful and thorough. When they stopped, U.S. CDC stopped being a useful information source.

R20 We had a pretty good connection of local and state resources in the beginning. NPHIC was very helpful in connecting us to resources that might be helpful.

R23 Regular briefings from CDC staff were very helpful. The amount of communication improved over time and was appreciated, especially improvements in plan language and consumer focused materials from CDC.

R33 Daily briefings were helpful until things became politicized and then we didn't know what the truth was.

R34 NPHIC was an invaluable partner in allowing states to collaborate and exchange tools early in the pandemic. As the second state with a community acquired case, it helped us get a basic fact sheet out with our case announcement in a timely fashion. The repository of resources early on for states to exchange COVID communication tools really aided in the early phases of the response- particularly for states that were early out of the gate. NPHIC remained a strong constant partner throughout the response.

R34 CDC Immunization Program Rep to our state took our feedback requesting that Emergency Use Authorization Fact Sheets to be issued by manufacturers seriously, as did NPHIC. Their joint advocacy lead to the factsheets being issued in multiple languages.

R34 CDC INFO quickly patched us into the CDC JIC and we were put in touch with a PIO when we were announcing [one of the early] community acquired case[s] in the country, despite the late hour. As time went on it was a little more difficult to communicate with the CDC JIC, but they also began to establish a regular cadence of communicating with the states so it evened out a bit.

R36 I witnessed incredibly hard work, perseverance, creativity. Across the country local public health communicators did the best they could with the information they had. Over the course of the pandemic I've seen an improvement in how federal, state, and local health communicators are trying to work with and learn from each other (this survey is a great example).

R37 Getting us embargoed copies of CDC news releases and information.

R38 There was an abundance of information and regular updates. However, states were often caught flat-footed when asked about changes that had been leaked to the media but not shared with the states yet.

14	Clear, consistent and transparent messaging - what we knew/what we didn't with call to action	9	5

R2 Creating new daily content, graphics, and guidance. This did not change for us, we stayed consistent each day on messaging.

R5 For the most part, most agencies stuck to the same consistent messages across national, state and local levels.

R7 Putting out the best information we had; admitting when we didn't know the answers; supporting each other (NPHIC members & facebook group especially!)

R9 Flexible, active and responsive to the public need to know.

R15 I think PH was proactive in providing information as it was received. However, as it progressed political considerations interfered with messaging (and the speed at which it was provided) in some jurisdictions. Changes in guidance were also challenging to message; masking is one example, identification of additional symptoms was another.

R17 I appreciated the talking points and sample graphics. It allowed for consistency in messaging and also helped to take the burden off my team in creating collateral materials.

R18 In our state, we were nimble and able to navigate constantly changing information to get the right information to the public at (mostly) the right time.

R21 Transparency about what was known and what wasn't and the shift in discussion when it became evident that the pandemic was a US concern.
R24 When information was available, public health was prompt and concise. Unfortunately, public health was the last to know and late with information.
R26 Initial information identified more clearly what was known and what was unknown. Over the course of time, changes in recommendations made this less clear.
R27 Information was one of our best tools, and we improved as time passed. It got better as we learned more, and that created its own challenges. Everything needed to be worded precisely.
R28 Public health communications performed well by providing a lot of resources.
R30 In the beginning we were all in sync - CDC was leading the way with messages we could use. This changed when national leadership communication was not aligned with the science.
R35 In the beginning – public health had a strong, unified message of, "we're in this together." This was amplified by major brands, fortune 500 companies, athletes, musicians around the world, etc. However, as time went on, misinformation took over and the pandemic became a political battle (and not a scientific one).

7	Data/science-driven information releases	4	3

R1 Early-on, information was forthcoming and based on science. As the pandemic wore on, politics took over.
R3 Public health communicators have shown a consistent high level of commitment to transparency, accuracy and public service in the face of tremendous pressures. We have worked hard to help our subject-matter experts share vital information with the public, even as the understanding and science evolved in ways that sometimes confused or angered people.
R14 Hew to science during an intensely political period.
R16 We were very thorough with everything that was published. We wanted to ensure that information was science driven.
R18 I believe we did a good job communicating that science changes over time, and learning new things does not mean public health "changed its mind" but rather shifted recommendations based on new information.
R25 On a macro level, public health communications was the center of much scrutiny. The notion of science-based approach was the most important strategy to communicate with people; however, the idea that science changes was not communicated clearly. The initial request of not using masks was based on initial science and then due to multiple reports masking was implemented but it probably was too late.
R32 Putting out science-based information.

2	Use of multiple communication tactics, platforms, emphasis on accessibility	1	1

R11 Utilized several forms of communications including grass roots work in vulnerable populations.
R34 Our state agency began translating all materials right away, ASL interpreters were used at press conferences out of the gate...this only improved and expanded over time to include the addition of a Facebook Live in Espanol, and FB Live with ASL interpreters.

1	Creativity and hard work	1	--

R36 I witnessed incredibly hard work, perseverance, creativity. Across the country local public health communicators did the best they could with the information they had. Over the course of the

pandemic I've seen an improvement in how federal, state, and local health communicators are trying to work with and learn from each other (this survey is a great example).

1	Never good - nothing positive	--	1

R10 I don't think it did. It never got caught up because of a very slow beginning response.

Q1b. How did this change over the course of the pandemic?			
N=38	**What changed**	**A=20**	**NotA=18**
8	Politics/political actors influenced decisions rather than letting science drive action	4	4
7	Loss of credibility in public health at all levels	6	1
5	Messaging became less clear	2	3
4	Loss of communications capacity (staffing, budget, scope of reach)	4	--
3	CDC messaging improved over time	2	1
1	Pandemic itself changed	1	--
1	Harder to reach or work with CDC	1	--

8	Politics/political actors influenced decisions rather than letting science drive action	4	4

R1 Early-on, information was forthcoming and based on science. As the pandemic wore on, politics took over.

R4 The speed at which a collaborative can produce and tailor messaging is/was impressive - but was born out of necessity given the calamity of 1) federal to state to local information exchange, 2) individual actors (like Governors) having press conferences and announcing information before state or local public health could digest.

R15 I think PH was proactive in providing information as it was received. However, as it progressed political considerations interfered with messaging (and the speed at which it was provided) in some jurisdictions. Changes in guidance were also challenging to message; masking is one example, identification of additional symptoms was another.

R29 I felt as if public health was tainted by political influences. Communication was chaotic at first but then seemed to get a bit better.

R30 In the beginning we were all in sync - CDC was leading the way with messages we could use. This changed when national leadership communication was not aligned with the science.

R33 Daily briefings were helpful until things became politicized and then we didn't know what the truth was.

R34 Application of CERC principles became harder to apply consistently as non-public health staff rotated in to support the response efforts and as political pressure increased.

R35 In the beginning – public health had a strong, unified message of, "we're in this together." This was amplified by major brands, fortune 500 companies, athletes, musicians around the world, etc. However, as time went on, misinformation took over and the pandemic became a political battle (and not a scientific one).

7	Loss of credibility in public health at all levels	6	1

R6 We tried to be as consistent as we could be despite changing information and obstacles at all levels. We worked hard to retain credibility, but still lost much of it.

R19 U.S. CDC briefings by Dr. Messionnier early in the pandemic were helpful and thorough. When they stopped, U.S. CDC stopped being a useful information source.

R22 The mistrust of information from Public Health continued to grow, even as we tried to be more aggressive with responding to misinformation. There was limited success.

R24 When information was available, public health was prompt and concise. Unfortunately, public health was the last to know and late with information.

R34 Additionally, community and the media move at two different paces. This created conflicting priorities with the press and community...with the press putting pressure on public health to being first while the community preferred we take a little more time to focus on demonstrating respectful and credible engagement.

R35 In the beginning – public health had a strong, unified message of, "we're in this together." This was amplified by major brands, fortune 500 companies, athletes, musicians around the world, etc. However, as time went on, misinformation took over and the pandemic became a political battle (and not a scientific one),

R38 There was an abundance of information and regular updates. However, states were often caught flat-footed when asked about changes that had been leaked to the media but not shared with the states yet.

5	Messaging became less clear	2	3

R15 I think PH was proactive in providing information as it was received. However, as it progressed political considerations interfered with messaging (and the speed at which it was provided) in some jurisdictions. Changes in guidance were also challenging to message; masking is one example, identification of additional symptoms was another.

R25 On a macro level, public health communications was the center of much scrutiny. The notion of science-based approach was the most important strategy to communicate with people; however, the idea that science changes was not communicated clearly. The initial request of not using masks was based on initial science and then due to multiple reports masking was implemented but it probably was too late.

R26 Initial information identified more clearly what was known and what was unknown. Over the course of time, changes in recommendations made this less clear.

R27 Information was one of our best tools, and we improved as time passed. It got better as we learned more, and that created its own challenges. Everything needed to be worded precisely.

R29 I felt as if public health was tainted by political influences. Communication was chaotic at first but then seemed to get a bit better.

4	Loss of communications capacity (staffing, budget, scope of reach)	4	--

R9 Once the state of emergency ended, the support of the JIC fell off and existing team members were trying to navigate a second wave while resuming regular duties. This resulted in team member burnout and slower response/engagement time, and less available educational resources.

R34 Application of CERC principles became harder to apply consistently as non-public health staff rotated in to support the response efforts and as political pressure increased.

R35 PH comms took a hit – we simply don't have the budgets to unify and amplify messages that resonate with hard to reach populations.

R36 I witnessed incredibly hard work, perseverance, creativity. Across the country local public health communicators did the best they could with the information they had. Over the course of the

pandemic I've seen an improvement in how federal, state, and local health communicators are trying to work with and learn from each other (this survey is a great example).

3	CDC messaging improved over time	2	1

R12 CDC messaging improved and that sets the tone for so much midlevel messaging. It's what journalists pick up so it really mattered when there wasn't a strong voice inside the CDC.

R13 I felt it improved over time. Helpful were things like key messages, talking points, heads-up when things were going to be released.

R34 CDC INFO quickly patched us into the CDC JIC and we were put in touch with a PIO when we were announcing [one of the early] community acquired case[s] in the country, despite the late hour. As time went on it was a little more difficult to communicate with the CDC JIC, but they also began to establish a regular cadence of communicating with the states so it evened out a bit.

R34 Emphasis and responsiveness on language access at CDC seemed to fluctuate throughout the response. When the federal government consistently provides high quality translations it eliminates duplication of effort at the state level.

1	Pandemic itself changed	1	--

R31 The seriousness of the pandemic. We had mass buy-in from the country in the first 2-3 months. When cases didn't rise quickly in the beginning because of mitigations, people began to take it less seriously. We didn't help people understand that because of the nationwide precautions, cases didn't jump dramatically. We all saw what was happening in New York, but much of the country thought that meant the pandemic was a "big city problem" and didn't connect with it.

1	Harder to reach or work with CDC	1	--

R34 Our state public health agency requested Office of Emergency Management Assistance for the early phases of the response, but the JIC was quickly turned back over to us.

Q2a. What challenges did you face that were completely out of the control of public health?

N=38	Challenges Out of Control	A=20	NotA=18
20	Politicians/politics/politicization of pandemic	12	8
8	Rapid changes in or unclear guidance caused tension for agencies	4	4
8	Uncertainty of what would come next/inability to better plan	4	4
7	Spread of misinformation/distrust	7	--
5	Lack of trust in public health/government	4	1
5	Disinvested public health system	3	2
2	CDC/Feds didn't take the lead in communication	2	--
2	Basic training/principles weren't used/didn't apply	2	--
2	Pandemic factors - PPE, variants,	2	--

1	Educational system not teaching more about public health - lack of societal understanding of science	1	--

20	Politicians/politics/politicization of pandemic	12	8

R1 Politicians! There must be an ongoing and concerted effort to separate health from politics. It pains me to see the trust in our organizations all but gone because of political involvement.

R3 The lack of trust in institutions among many Americans, combined with severe political divisions of our country have made our work extremely difficult. These factors have also taken a huge toll on the emotional and mental health of public health communicators.

R4 Misinformation and lies from the public that were politicized

R6 Politics. Then some politics. Then some more politics.

R7 Politics and big-name people sowing seeds of doubt/mistrust/hate in the public. Everything in 2020 was so charged politically, there was no escaping it. Things calmed down once President Trump was booted from Twitter.

R10 CDC never was the lead. I know this turned into a political matter and it was horrible under both Presidents. CDC should have been the lead and failed messaging from the beginning.

R13 That this pandemic occurred during an election year; the disconnect from the top down; the undermining of health officials by politicians; the vaccine roll-out; masking became political.

R14 The overwhelmingly political nature of much of the public's response to COVID-19 mitigation (masks, etc.) and vaccination.

R15 Politics. Decisions being made by political officials who did not follow public health guidance, or consult with their public health officials. These decisions include what/how/when messaging was shared, and the content of messaging.

R19 The narrative that both administrations placed politics over science proved deeply challenging. Better advance notice would have helped.

R22 The political nature of discourse was something that hurt our ability to have a consistent message.

R24 Political comments on the virus and vaccine.

R25 The politicization of science was well out of control. People follow their own communication venues (social media) that was inundated with pseudo science. Policy makers were so late in recognizing this and powerful social media outlets did not have clear communication/guidelines from the government to control the information.

R27 Politics - politics - politics. Right wing radio. It still hasn't changed.

R30 Our governor's public health decisions, the federal government and White House's communication about the pandemic. This got worse over the course of the pandemic.

R32 Actions/words of politicians.

R34 The political environment was well beyond the control of public health and only worsened over time. The change in federal administrations eased things a little, but so much damage was already done that improvements were barely noticeable.

R34 Additionally, at the state and local level, we still work for our elected officials. If electeds don't support public health recommendations, continue to serve as spokespersons when advised to step back, etc. it affects our work. Electeds at our jurisdictional level continued to be highly involved throughout the response.

R36 The extreme politicization and polarization of the pandemic. This has continued to be extremely challenging in our region.

R38 The political divide on masking and the vaccine.

8	Rapid changes in or unclear guidance caused tension for agencies	4	4

R5 The constantly changing CDC guidance, sudden changes to vaccinate priority groups.

R9 The CDC recommendations changed often and this confused people, leading to mistrust and skepticism. Unfortunately, this combined with widespread misinformation, has resulted in lower uptake of routine vaccination and distrust of public health in other areas (SIDS as an example)

R11 Greatest challenge - CDC kept changing messages and misinformation,

R13 Messaging confusion because the information was changing so much. I hated how we would find out things "late", the media would announce and the public would be calling us before we even knew things!

R20 Communications coming from the federal level was an absolute disaster. It ruined the credibility of locals. We are still dealing with this. It feels like it hasn't even gotten better. Lack of communication from feds to the locals to let us get prepared. We were left flat footed CONSTANTLY.

R23 Mixed messages or lack of factual information coming from non-health federal officials and disinformation/conspiracy campaigns made our jobs infinitely more difficult. We did not have the capacity to refute the volume of fake "news" and social media disinformation. This has not changed over the pandemic, if anything it has gotten worse and people have gotten dug in to false ideas, mistrust of government and anti-science points of view.

R31 Supply chain issues with masks that became a "gotcha" message for most of the country. I wish that federal leaders would have said from the get-go that masking (surgical and N-95) would help control the virus, but we needed to save them for medical professionals. We lost a lot of confidence from the country when federal leaders said that cloth masks wouldn't help and then we said they would and that we all needed them. Of course, the former administration made this issue much worse. The White House taking the lead from the CDC and other health officials made messaging even harder.

R34 Emergency management often says all disasters are local. And not only that, they often start locally and expand. In this instance, it started globally and came down to the local level. In many regards this meant that the bottom up flow of a response and information was flipped on its head. This created tensions, false expectations, and uncertainty between jurisdictional levels...particularly in the early phases of the pandemic. As COVID-19 became more pervasive the traditional model of all disasters are local began to fall back into place, but it was hard to repair the damage of the inverted response model.

8	Uncertainty of what would come next/inability to better plan	4	4

R4 State government not providing information as quickly - efforts were made by our state health department to provide us insight ahead of information releases to the public

R8 Information was tentative or sporadic at times.

R8 Early timelines were tentative.

R8 Speculative information at times.

R10 CDC never was the lead. I know this turned into a political matter and it was horrible under both Presidents. CDC should have been the lead and failed messaging from the beginning.

R16 There was a lot of unknown as things were changing so fast as we were learning.

R17 Political challenges in trying to overcome the opinions of elected officials in the state that were informing policy and often limiting what the response to the pandemic was. That only got harder as

the pandemic continued with opinions on vaccine and masking in particular.

R26 We could prepare for the first case in our area, the first hospitalization, the first death. Those were 'not if but when' events. We couldn't know how quickly the disease would spread, how soon the hospitals would fill, how many variants would/will emerge.

R33 Biggest challenge was the lack of information, figuring out what was happening. I did not feel like I needed government to tell me what to do. Just wanted the facts to make my own decision.

R34 State and local jurisdictions had no control over federal planning and response work. We were often left flatfooted and in the dark. This improved, but not until after the release of vaccine.

7	Spread of misinformation/distrust	7	--

R4 Misinformation and lies from the public that were politicized.

R7 Politics and big-name people sowing seeds of doubt/mistrust/hate in the public. Everything in 2020 was so charged politically, there was no escaping it. Things calmed down once President Trump was booted from Twitter.

R9 The CDC recommendations changed often and this confused people, leading to mistrust and skepticism. Unfortunately, this combined with widespread misinformation, has resulted in lower uptake of routine vaccination and distrust of public health in other areas (SIDS as an example)

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R25 The politicization of science was well out of control. People follow their own communication venues (social media) that was inundated with pseudo science. Policy makers were so late in recognizing this and powerful social media outlets did not have clear communication/guidelines from the government to control the information.

R32 Spread of misinformation.

R35 Social media/ misinformation.

5	Lack of trust in public health/government	4	1

R2 Hesitancy hit very early on, almost immediately after the 70+ were vaccinated.

R3 The lack of trust in institutions among many Americans, combined with severe political divisions of our country have made our work extremely difficult. These factors have also taken a huge toll on the emotional and mental health of public health communicators.

R9 The CDC recommendations changed often and this confused people, leading to mistrust and skepticism. Unfortunately, this combined with widespread misinformation, has resulted in lower uptake of routine vaccination and distrust of public health in other areas (SIDS as an example)

R31 Supply chain issues with masks that became a "gotcha" message for most of the country. I wish that federal leaders would have said from the get-go that masking (surgical and N-95) would help control the virus, but we needed to save them for medical professionals. We lost a lot of confidence from the country when federal leaders said that cloth masks wouldn't help and then we said they would and that we all needed them. Of course, the former administration made this issue much worse. The White House taking the lead from the CDC and other health officials made messaging even harder.

R34 We can determine how we leverage our authorities, but we do not determine what authorities we are given (or have taken away). Some agencies leveraged their full authorities, others did not. Those

that exercised their full authorities, often had their powers or authorities undermined.

5	Disinvested public health system	3	2

R3 America invests a lot of money in health, but the vast majority of that goes to health care and not public health. Therefore, our public health system was poorly equipped and staffed to deal with the intense and prolonged demands of an historic pandemic.

R12 Apathy and 'we're doing the best we can' at the leadership level above LPH. This wasn't good enough.

R18 We continue to struggle to make unbiased public health recommendations without intervention from other entities in our state. This has not really changed over the course of the pandemic.

R28 More resources need to be created in Plain Language for people without a science background or high reading level, and more resources need to be released simultaneously in Spanish.

R36 That fact that we were starting a pandemic with extreme public health and communications infrastructure gaps and under-capacity after years of cut funding.

2	CDC/Feds didn't take the lead in communication	2	--

R25 The politicization of science was well out of control. People follow their own communication venues (social media) that was inundated with pseudo science. Policy makers were so late in recognizing this and powerful social media outlets did not have clear communication/guidelines from the government to control the information.

R31 Supply chain issues with masks that became a "gotcha" message for most of the country. I wish that federal leaders would have said from the get-go that masking (surgical and N-95) would help control the virus, but we needed to save them for medical professionals. We lost a lot of confidence from the country when federal leaders said that cloth masks wouldn't help and then we said they would and that we all needed them. Of course, the former administration made this issue much worse. The White House taking the lead from the CDC and other health officials made messaging even harder.

2	Basic training/principles weren't used/didn't apply	2	--

R6 I also saw very little of the crisis training we'd all received put into practice.

R34 Emergency management often says all disasters are local. And not only that, they often start locally and expand. In this instance, it started globally and came down to the local level. In many regards this meant that the bottom up flow of a response and information was flipped on its head. This created tensions, false expectations, and uncertainty between jurisdictional levels...particularly in the early phases of the pandemic. As COVID-19 became more pervasive the traditional model of all disasters are local began to fall back into place, but it was hard to repair the damage of the inverted response model.

2	Pandemic factors - PPE, variants,	2	--

R21 Lack of PPE and knowledge about how the virus impacted people made early mitigation efforts and communication difficult in a time of fear.

R34 Emergence of variants remained a constant.

1	Educational system not teaching more about public health - lack of societal understanding of science	1	--

R34 The strength of our educational system. Our educational system clearly needs to strengthen education on civics, the extent of our individual rights and the idea that science evolves.

Q2b. How did these change over the course of the pandemic?			
N=38	How They Changed	A=20	NotA=18
5	Things became worse - more political in nature over the pandemic	3	2
4	Change in presidential administration	2	2
3	Deterioration of public health workers (mental/emotional health, burnout, safety threats)	1	2
2	Things became better - flow of information improved	2	--
1	Other (public health) issues occuring and taking precedence	1	--

5	Things became worse - more political in nature over the pandemic	3	2

R17 Political challenges in trying to overcome the opinions of elected officials in the state that were informing policy and often limiting what the response to the pandemic was. That only got harder as the pandemic continued with opinions on vaccine and masking in particular.

R23 Mixed messages or lack of factual information coming from non-health federal officials and disinformation/conspiracy campaigns made our jobs infinitely more difficult. We did not have the capacity to refute the volume of fake "news" and social media disinformation. This has not changed over the pandemic, if anything it has gotten worse and people have gotten dug in to false ideas, mistrust of government and anti-science points of view.

R30 Our governor's public health decisions, the federal government and White House's communication about the pandemic. This got worse over the course of the pandemic.

R35 As time went on - the pandemic became more and more politicized. Politicians questioning science and a population that is tired, stressed, and burnt out on PH messaging made it almost impossible for audiences to be engaged with credible health information.

R37 The public's anger toward public health recommendations. They really didn't change at all -- they got worse. Everything became political instead of about health.

4	Change in presidential administration	2	2

R7 Politics and big-name people sowing seeds of doubt/mistrust/hate in the public. Everything in 2020 was so charged politically, there was no escaping it. Things calmed down once President Trump was booted from Twitter.

R19 When the new administration took over, the timing of its messaging was not optimal, although that improved after a few significant problems.

R31 Supply chain issues with masks that became a "gotcha" message for most of the country. I wish that federal leaders would have said from the get-go that masking (surgical and N-95) would help control the virus, but we needed to save them for medical professionals. We lost a lot of confidence from the country when federal leaders said that cloth masks wouldn't help and then we said they would and that we all needed them. Of course, the former administration made this issue much worse. The White House taking the lead from the CDC and other health officials made messaging even harder.

R34 The political environment was well beyond the control of public health and only worsened over time. The change in federal administrations eased things a little, but so much damage was already done that improvements were barely noticeable.

3	Deterioration of public health workers (mental/emotional health, burnout, safety threats)	1	2

R2 Also a lot of physical threats from the public to the health department.

R3 The lack of trust in institutions among many Americans, combined with severe political divisions of our country have made our work extremely difficult. These factors have also taken a huge toll on the emotional and mental health of public health communicators. The staff responding to this pandemic for nearly two years now is burned out and being "mission driven" can only get us so far.

R19 Personal threats from politically motivated individuals made public health communications more difficult.

2	Things became better - flow of information improved	2	--

R4 State government not providing information as quickly - efforts were made by our state health department to provide us insight ahead of information releases to the public.

R34 State and local jurisdictions had no control over federal planning and response work. We were often left flatfooted and in the dark. This improved, but not until after the release of vaccine. The need for so much non-public health support to staff IMTs. This improved over time.

1	Other (public health) issues occuring and taking precedence	1	--

R14 Multiple other issues occurring at the same time, including the advent of adult-use marijuana and news-making issues related to licensed care facilities.

Q3a. What challenges did you face that public health professionals might have been able to control or influence?			
N=38	**Challenges we could control/influence**	**A=20**	**NotA=18**
9	Information sharing/collaboration	5	4
7	Nuanced communication when information is unclear, difficult to understand, or where opposition exists	4	3
5	Lack of clear and consistent message nationwide	4	1
5	Timeliness - getting messages to field and to public more quickly	2	3
4	Variety of communications methods	2	2
2	Lack of staff and lack of replacement staff	2	0
2	Enforcement of public health orders or decisions regarding vaccine rollout	1	1
2	No answer	1	1

9	Information sharing/collaboration	5	4

R4 Information sharing with our partners - we were soon looked upon as the truth and source of knowledge closest to the action and our community for the most part trusted and expected updates because of trust and the precedent we set with information sharing.

R15 Better and more frequent and widespread internal messaging. More work across teams to help

provide staffing for crucial tasks.

R18 I feel there was a lack of coordination or knowledge-sharing among states. I'm sure no one would have felt they had time to share with each other, but we have been in a reactive stance for nearly the entire response, and it makes our work more challenging that it maybe needs to be.

R20 Collaborating on communication with local partners.

R24 Receiving information prior to release to the public would have been helpful. IL released restaurant guidance that local health depts were not aware of & could not answer food managers' questions.

R33 Giving us truthful, timely information.

R34 We could have influenced how well our non-public health colleagues were to support us through better cross training, integration of CERC principles into FEMA trainings/IMT course work and full scale exercises across multiple ESFs. There's still a significant culture gap between emergency management, military, fire and the health and medical fields that needs to be closed through similar efforts. Public health is far more collaborative and bottom up...others are top down.

R35 With strong relationships, public health communicators can have an influence with local politician messaging - i.e.county commissioners inviting Health Commissioners on press conferences - rather than citizens hearing health info from a politician.

R36 Lack of understanding of the value and role of communications. Leadership in our region thinking that they are the "experts" on communications. At the beginning of the pandemic it was almost impossible for our local health communicators to reach the state or federal contacts doing COVID communications.

7	Nuanced communication when information is unclear, difficult to understand or where opposition exists	4	3

R6 More recognition that attitudes were different in some areas of the country than in others. Nationally, I think there could have been more prioritization rather than so much emphasis on details. There was an assumption that everyone would listen and, eventually, that they would want the vaccines. They didn't and many of them don't. We weren't just facing hesitancy; we were facing opposition.

R10 There has never been a real risk communications response. I talked to several well known risk communicators and all agreed the risk communication messages were not there. Messaging was but not how we do public health.

R16 The science community doesn't really like to say "we don't know" but I think that we could have communicated with the public that we are observing and ready to respond as we know more that we may have appeared more forthcoming. It was a delicate balance of sharing information backed by science and also the political landmines that sometimes made it harder for public health to do its work.

R25 The type of communication we shared to the community was sometimes not understood. The science vernacular is not recognized by community people. We usually talk in codes e.g., social determinants of health, social distancing vs. physical distance, rapid test vs. antigen test vs. PCR test. These concepts are difficult to understand for most community people so change in terms of vaccination effectiveness and so on are difficult to internalize.

R26 Helping the public better understand why the recommendations were changing may have increased compliance with recommendations.

R34 We could have more strongly indicated what we didn't know and what we were doing to try to find answers, and set the public up for changes to science.

R37 The tone of messaging. We have to make sure we don't "tell people what to do." We need to make recommendations.

5	Lack of clear and consistent message nationwide	4	1

R1 Stay on message....say what you know and perhaps even more important, what you don't know. Keep politicians away from science messages.

R2. We could have had one consistent message for each state instead of taking the guidance each day from [another state] or CDC and then creating our own branded guidance. Very time consuming. One central message could have been better.

R13 Confusing messaging. Miscommunication from the top to state to local; not sure why such a disconnect. Let the health officials relay the messaging without political backlash or influence.

R28 Inconsistent messaging. Messaging that could have been more transparent when more information was still being gathered.

R34 We could have done a better job indicating that the mRNA vaccine platform had been studied for a decade. Even as a public health communicator, that wasn't brought to my attention or known early enough. I would have liked to have Pfizer and CDC emphasize that more to us.

5	Timeliness - getting messages to field and to public more quickly	2	3

R7 I vividly remember not trusting reports coming out of Wuhan initially. Debating with our public health director about what was accurate - virulence, symptoms, prevention. Also, timeliness in reporting updates. As a local Health Department, it felt like it took too long for federal level decisions to get implemented down to us, especially at initial vaccine roll out (those phases will haunt me).

R8 Better use of early PH messaging. Seem to get it just a week late; so we had to make our own Facebook etc posts. at times.

R12 Early messaging - establishing trusted sources at the start of lockdown. NOT something supported locally at the time but it would have been so much easier from there if we'd had the buy in.

R19 The timing of policy change announcements -- and advance notice of those changes to state public health agencies -- caused problems.

R38 If we would have been provided more information prior to announcements being made we could have been prepared to amplify vs. trying to figure out what our state reaction to the change was going to be.

4	Variety of communications methods	2	2

R8 More posts with graphics.

R8 More equity messaging dealing with underserved populations fears.

R9 The JIC made a decision to turn on social media comments on our Facebook page as a way to engage and respond to people. Once that support fell away, our internal team did not have the capacity to respond to all comments and the comment section, because of the 1st amendment rules, ended up being filled with misinformation. We eventually did get approval to turn off comments.

R14 Access to subject-matter experts during an intensely busy time when other sources with political agendas and more time were very willing to offer sound. We addressed with regular Zoom briefings with our director.

R27 Translations and reaching communities of newly arrived populations were a challenge. Boots on the ground and continued outreach were and remain a key.

2	Lack of staff and lack of replacements staff	2	0

R32 Number of staff

R34 There are only so many public health professionals and only some jobs that can be filled by non-public health staff to rotate in behind us to help us avoid burn out. We need to build a stronger career track and pipeline of professionals. This isn't something we can control in the middle of a pandemic, but we can influence it over time.

2	Enforcement of public health orders or decisions regarding vaccine rollout	1	1

R29 Access to the vaccines was difficult in the beginning. In my opinion we should have allowed people who work to get the vaccine first as we could have gotten our economy up and running faster. Senior citizens have a much easier time quarantining as they don't have to work.

R31 Public health didn't have the resources to enforce stay-at-home orders and other mitigations. Law enforcement refused to enforce them. Then, the whole pandemic turned political and we lost control of the message because we weren't believable because we didn't start with the absolute truth.

Q3b. How did these change over the course of the pandemic?			
N=38	**How did this change in the pandemic?**	**A=20**	**NotA=18**
10	Lost credibility or control of messaging (politicization, misinformation)	6	4
2	Funding increased	--	2
1	Improved understanding of communications	1	--

10	Lost credibility or control of messaging (politicization, misinformation)	6	4

R11 Misinformation and uncertain messages at federal level.

R16 Public trust. I think that because we were so hesitant to put anything out that we were not sure about that in the beginning the public thought we were hiding things.

R17 Overcoming bad information or rumor during the pandemic. It was a challenge to combat the misinformation.

R21 Early statements that cloth masks weren't effective undermined all future statements encouraging mask-wearing.

R22 As the political nature of the debate continued and grew, the ability to build consensus became more of a challenge. At first it was a simple task to bring people together, at least through meetings and discussions. Then as positions hardened and solidified, this became more difficult and eventually impossible.

R23 If CDC had been able to maintain its credibility and speak with authority and truth from the start perhaps we could have avoided a health crisis becoming a political tool and means of dividing the country. CDC is now speaking out but unfortunately a lot of damage has been done to all of public health's credibility.

R30 We did our best to control and influence the course of the pandemic but, unfortunately, politics and bad actors made that impossible. As the pandemic continues, we have less and less influence.

R31 Public health didn't have the resources to enforce stay-at-home orders and other mitigations. Law enforcement refused to enforce them. Then, the whole pandemic turned political and we lost control of the message because we weren't believable because we didn't start with the absolute truth.

R33 Not having the information be politicized.

R35 As time went on - politicians continued to maintain visibility in the spotlight - and the voice of science/ PH was silenced, as it was consistently undermined by misinformation.

2	Funding increased/but too slowly	--	2

R8 Funding to locals sooner.
R15 Funding streams provided support for additional staffing as the pandemic has gone on, but that was a slow process and can be difficult to implement at the agency level.

1	Improved understanding of communications	1	--

R36 Over the course of the pandemic, with persistence, networking, and advocacy, [understanding of the role of communications] has greatly improved. Our state health agency now has a monthly call of local health department PIOs, and 12 months ago a representative of our regional health communicators collaborative was invited to sit on a state-level COVID vaccine communications advisory group, which meant our local health communicators had more consistent information about what was happening, and we had more of a voice about our local and regional needs and ideas.

Q4. From your perspective, what one factor most impacted the effectiveness of public health communications?

N=38	Category	A=20	NotA=18
15	Politics, politicians, political climate	9	6
11	Poor leadership, interference by elected officials, bad information from government/not PH	4	7
8	Misinformation/disinformation, quick spread	5	3
6	Changing guidance, inconsistent information, lack of coordination (PH)	5	1
3	Lack of trust/damaged credibility	1	2
2	Consistency (+)	1	1
2	Transparency/Honest communications (+)	1	1
1	Mainstream media (+)	--	1
1	Nature of the event (pandemic)	--	1

15	Politics, politicians, political climate	9	6

R1 Politics/politicians. Very painful to watch during the pandemic and its aftermath will be even worse.
R3 As mentioned in an earlier response, the lack of trust in institutions among many Americans, combined with severe political divisions of our country have made our work extremely difficult. These factors have also taken a huge toll on the emotional and mental health of public health communicators.
R6 Interference from political leaders.
R9 Fear of the unknown, misinformation, political alignment and associated news broadcasts, and social media. The Facebook and YouTube actions should have happened sooner. Once people made up their minds about the vaccine it was incredibly difficult to reach them.
R10 Politics plain and simple. Lead to so much misinformation. Dr. Fauci was the worst. His messaging was like a fish out of water with all the flip flopping he has done. No credibility with many now.

R14 The willingness among much of the public to see public health advice as an infringement on their liberties and way of viewing the world.

R19 The perception that politics drove public health policy made it more difficult to communicate frankly and openly.

R21 The constantly changing guidance and politicization of the pandemic harmed credibility in public health.

R22 The political nature of the debate overtook science and drowned out what we were trying to say.

R25 Politization and cultural values from different segments of the population.

R26 Political divisiveness. In years of preparing for a pandemic, we never considered that response would divide on party lines.

R29 The Political climate influenced public health and policy. It was and still is quite disgusting.

R30 Former President Trump.

R31 Mixed mask messaging. We needed to have a clear message from the beginning that cloth face coverings will help. We knew it was a respiratory virus and that masks would work. Starting with a consistent mask message would have saved many lives and maybe the message wouldn't have taken a political turn. I understand that Trump played a major role in this.

R33 Political agendas and bad information by officials.

11	Poor leadership, interference by elected officials, bad information from government/not PH	4	7

R4 Federal and state misinformation.

R7 I have 2: Public leaders (for better and for worse), and the chaotic and global nature of the event.

R10 Politics plain and simple. Lead to so much misinformation. Dr. Fauci was the worst. His messaging was like a fish out of water with all the flip flopping he has done. No credibility with many now.

R12 Federal mismanagement in early days.

R15 Lack of control over messaging, messaging not led by public health communications and other experts. We were not allowed to drive our own bus.

R18 High-level input and intervention from state leadership into our messaging, which limited our ability to make the best decisions we could have made.

R20 False information coming from political leaders and local officials that have no knowledge of public health.

R30 Former President Trump.

R31 Mixed mask messaging. We needed to have a clear message from the beginning that cloth face coverings will help. We knew it was a respiratory virus and that masks would work. Starting with a consistent mask message would have saved many lives and maybe the message wouldn't have taken a political turn. I understand that Trump played a major role in this.

R33 Political agendas and bad information by officials.

R34 Poor political leadership.

8	Misinformation/disinformation, quick spread	5	3

R5 Rampant misinformation, disinformation, malinformation.

R9 Fear of the unknown, misinformation, political alignment and associated news broadcasts, and social media. The Facebook and YouTube actions should have happened sooner. Once people made up their minds about the vaccine it was incredibly difficult to reach them.

R13 Social media.

R17 Misinformation. It negatively impacted the effectiveness of public health communications.

R24 Misinformation campaigns.

R32 Mis/disinformation; making information easy to understand and act on.
R35 Misinformation on social media platforms.
R37 Social media.

6	Changing guidance, inconsistent information, lack of coordination (PH)	5	1

R16 People were very interested in data and wanted everything to be data driven however there was a huge blockade in data sharing between entities. To this day the data collected by our office does not match that of the CDC.
R21 The constantly changing guidance and politicization of the pandemic harmed credibility in public health.
R28 Lack of messaging that addressed the speed of the pandemic and how quickly things were changing.
R31 Mixed mask messaging. We needed to have a clear message from the beginning that cloth face coverings will help. We knew it was a respiratory virus and that masks would work. Starting with a consistent mask message would have saved many lives and maybe the message wouldn't have taken a political turn. I understand that Trump played a major role in this.
R36 My perception is that a lack of timely, innovative, message tested health communications at the national and state level resulted in many, many siloed approaches across the country. We missed a huge opportunity at the national level to have shared approaches, shared resources, and shared learning.
R38 Recommendation changes. Although highly necessary, based on what we were learning, there needed to be a more unified approach to getting this information out to the public. Our website would often have information contrary to what CDC just released as we could not pivot that quickly.

3	Lack of trust/damaged credibility	1	2

R3 As mentioned in an earlier response, the lack of trust in institutions among many Americans, combined with severe political divisions of our country have made our work extremely difficult. These factors have also taken a huge toll on the emotional and mental health of public health communicators.
R10 Politics plain and simple. Lead to so much misinformation. Dr. Fauci was the worst. His messaging was like a fish out of water with all the flip flopping he has done. No credibility with many now.
R21 The constantly changing guidance and politicization of the pandemic harmed credibility in public health.

2	Consistency (+)	1	1

R2. Consistently, never giving up.
R11 Consistent messaging in various communications vehicles.

2	Transparency/Honest communications (+)	1	1

R8 Transparency of our local daily/weekly press briefings.
R23 Sharing information as we knew it with honesty and sincerity aided communication in our state.

1	Mainstream media (+)	--	1

R27 Generally positive coverage from the mainstream news media. They have been overall extremely helpful.

1	Nature of the event (pandemic)	--	1

R7 I have 2: Public leaders (for better and for worse), and the chaotic and global nature of the event.

Q5. What areas do you feel are still major vulnerabilities in our public health communications infrastructure?			
N=38	**Category**	**A=20**	**NotA=18**
13	Staff shortages, burnout, challenges attracting new talent to field, lack of needed skill sets	7	6
9	Lack of trust/credibility	5	4
9	Politicization; interference from politicians	6	3
8	Lack of two-way communications between federal and state/local; information not timely or reliable	6	2
7	Misinformation, disinformation, social media, lack of PH ability to “compete”	4	3
7	Equity, messaging to underserved audiences	4	3
5	Lack of technology, access to technology	4	1
1	Media corps	1	--
1	Need to simply complex messages	1	--
1	No response	--	1

13	Staff shortages, burnout, challenges attracting new talent to field, lack of needed skill sets	7	6

R3 Staffing, staffing, staffing. Existing employees are burned out and demoralized, and it is going to be very hard to recruit a new generation of workers to this field.

R4 Skill for staff to manage scalable processes - we have to go beyond answering the phone to commanding a phone bank; from writing a Facebook post to managing a Facebook presence - those skills are needed.

R13 Inadequate funding to health departments, especially local, county level, to hire Health Educators, those with communications expertise, backgrounds, etc. to do the job. And hiring those with data analysis skillsets. When new funding streams became available, most would not allow you to hire Health Educators, etc., it was all nursing related.

R15 Critical shortage of staff, and no surge capacity. Lack of financial resources and agile processes to quickly implement public campaigns. Limited access to tools/staff for design/creation of materials, especially in languages other than English.

R18 Executive overreach and micromanagement threatens our messaging, puts the public's trust in

public health at risk, and fosters a toxic working environment that has people reconsidering their professional path. These are fundamental threats to our ability to do the best work we can in the interest of public health.

R27 Staffing also is a challenge. Often, we simply need more bodies.

R30 Public health communicators are not valued. We are at the front lines of abuse and yet we are paid low wages, not included in important conversations, and public health agencies continue to hire people for communication jobs who do not have communications experience. It's frustrating and demoralizing.

R31 Public health is local, but our local health departments have been gutted over the last 10-plus years (probably longer.) We do a great job at funding things we can see. Public health prevents outbreaks, so there's nothing to see. That's the point. In our own health department, my job used to be done by 4 total people. I do it all. In the last 10 years, we've lost about half of our workforce – we used to have 80 people and now we have fewer than 50. Our biggest hurdle is we have 10 nurses total. No one else on our staff is qualified to give vaccines. We need more funding to stay competitive with pay and to hire more staff.

R32 Staff.

R34 Burn out. I think some staff have held out on quitting out of a sense of public service and loyalty to teammates...but I don't think we've seen the full toll on our workforce yet.

R35 Lack of funding for relevant tech tools/staffing to maintain relevancy and current population needs.

R36 I'm concerned that many state HDs brought in external agencies to run campaigns, and when the funding dries up all of the knowledge, skills, and resources will go with it. Our region has worked to invest our funds back into our region, and build shared learning and capacity that we will use towards other critical health issues.

R38 Funding and staffing. We are losing public health staff at an alarming rate and attracting anyone into this field right now is difficult.

9	Lack of trust/credibility	5	4

R1 Now, unfortunately, it is trust and the need to completely rebuild.

R8 Equity messaging; trust of underserved populations.

R9 Lack of trust is undermining other communication efforts.

R10 Public trust and credibility.

R11 We need to be right when we put out communications. Changing messages leads to distrust at the federal level and trickles downward to the states.

R14 The pandemic has exacerbated much of the public's distrust of science and fact-based public health guidance. It's difficult to communicate effectively when the starting point for many is accusing you of making things up.

R16 There are many communities that we need to reach and identify the right voice to talk to them as there is so much distrust in government agencies.

R23 Equity issues in all communities continues to be a problem and leads to mistrust and makes people vulnerable to conspiracies.

R34 Politics has damaged our public health institutions tremendously. Recovering our credibility will take YEARS.

R34 Community trust....I worry that we've thrown a lot of money at community engagement, language access, etc. that has elevated what our communities expect of us and that as with most disasters, funding will trail off. I worry that as funding erodes, the community trust we've built up will erode with it.

9	Politicization; interference from politicians	6	3

R6 I think it's in trouble all the way around. We are not nimble. We let politics take over.
R17 Navigating political opinions that interfere with the appropriate response to the pandemic.
R18 Executive overreach and micromanagement threatens our messaging, puts the public's trust in public health at risk, and fosters a toxic working environment that has people reconsidering their professional path. These are fundamental threats to our ability to do the best work we can in the interest of public health.
R21 Politicization and social media that allows loudest voices, often unscientific, to drown out the science. Inability to be more transparent about what we don't know.
R23 It is unfortunate the public health is governed by politicians.
R25 Message polarization due to political values, cultural values, religious values and vaccination, social determinants of health in terms of access to economic access for low and middle income population and vulnerable communities
R29 The political climate.
R33 The information being politicized and not feeling that we are hearing the truth.
Politicians should not be in charge of public health decisions
R34 Politics has damaged our public health institutions tremendously. Recovering our credibility will take YEARS

8	Lack of two-way communications between federal and state/local; information not timely or reliable	6	2

R2 Communicating with other states.
R9 CDC should be willing to say when information is unknown, rather than changing positions as new information comes about (i.e., masks don't work instead - help us save masks for health care workers because they work!, or the vaccine will keep you from getting COVID to vaccines protect against illness, we don't know the exact protection but vaccines in the past have been shown to reduce spread and lessen impact.) We need to be willing to be honest and to recognize that we don't know all things. Until we can find ways to be transparent, we will have difficulty regaining trust.
R19 As some media entities noted, the public's demand for immediate information and data sometimes conflicted with the more methodical scientific approach to data delivery.
R20 Lack of communication from the federal level to the local level. No funds to improve communication infrastructure for locals.
R21 Politicization and social media that allows loudest voices, often unscientific, to drown out the science. Inability to be more transparent about what we don't know.
R24 CDC lagging with data. Vaccination numbers have not been updated for weeks often times.
R36 Lack of support for innovation. Our region has innovated an approach, and we have ideas for how our approach can be scaled nation-wide, but have not been able to gain support for these ideas.
R36 A top-down approach that means that federal and state health agencies are not truly listening and learning to local health communicators to understand their challenges and lessons learned. Even NPHIC is primarily (I believe) state-level health communicators. We need to be speaking to local public health communicators, including (and especially) community health workers.
R37 Delays in CDC website updates.

7	Misinformation, disinformation, social media, lack of PH ability to “compete”	4	3

R7 Reaching people across the MYRIAD of digital communications platforms, adapting messaging for different populations.
R12 Social media. It's really hard to direct people to factual info with SO many sources.
R13 Also, battling misinformation on social media. So challenging!
R16 There is a lot of mis-information, especially on Social Media. However, I don't think that having social media "block" them or even flag them is helpful. The comments I see are actually more supportive or the misinformation when a message is flagged. We need to flood social media with the correct message and acknowledge and address the mis-information. Mis-information stems from a kernel of truth.
R21 Politicization and social media that allows loudest voices, often unscientific, to drown out the science. Inability to be more transparent about what we don't know.
R26 The inability to sufficiently impact the social media narrative is a major stumbling block in fighting misinformation.
R28 More needs to be done to address the rampant mis and disinformation around COVID-19 vaccines.

7	Equity; reaching underserved audiences	4	3

R8 Equity messaging; trust of underserved populations
R13 Also, reaching those without social media; how are we doing this effectively especially with information changing so much?
R16 There are many communities that we need to reach and identify the right voice to talk to them as there is so much distrust in government agencies.
R23 Equity issues in all communities continues to be a problem and leads to mistrust and makes people vulnerable to conspiracies.
R25 Message polarization due to political values, cultural values, religious values and vaccination, social determinants of health in terms of access to economic access for low and middle income population and vulnerable communities.
R34 We're overly dependent on digital media still, and need to get back to grassroots efforts to engage community if we're really going to achieve equity. And in this public health emergency we had all of our technology. That's not always the case in an earthquake, winter storm, or hurricane, etc.
R35 Lack of funding for relevant tech tools/ staffing to maintain relevancy and current population needs.

5	Lack of technology, access to technology	4	1

R2 Systems, such as the Tiberius system.
R27 That will vary but technology changes rapidly and we need to know how and when to use that.
R32 IT.
R35 Lack of funding for relevant tech tools/staffing to maintain relevancy and current population needs.
R36 Funding for communications infrastructure. Our rural region has huge challenges with LHDs even having functioning websites. We need support and investment in broadband, communications technology, training, innovative approaches & tools, funding to do health communications for COVID and beyond.

1	Media corps	1	--

R6 The media corps is largely shuttered and shattered.

1	Need to simply complex messages	1	--

R22 The ability to simplify complex information/messaging into more easy to understand material that the

public can digest.

Q6. What changes have you seen in public health communications during the response that must be maintained?			
N=38	**Category**	**A=20**	**NotA=18**
9	Frequent, fast, flexible, and consistent messaging	5	4
9	Creative methods for message delivery (graphics, platforms, languages, audiences)	5	4
8	Collaboration/relationships with other agencies/media	4	4
6	Focus on equity	3	3
5	More strategy to combat misinformation, drive the message	2	3
4	Continued training and funding to build capacity	3	1
2	Transparency with data and information (showing, not telling)	2	--
1	Nothing that changed should be maintained	--	1
1	We should not be mandating anything	--	1
1	No answer	1	1

9	Frequent, fast, flexible, and consistent messaging	5	4

R1 Flexibility and the need to adapt messaging based on learning.

R2 The need for daily, consistent messaging.

R9 The introduction of live town hall events done digitally with Q&As from the public, engaging local and regionally known physicians as trusted partners, building partnerships with communities and community leaders, recognizing and addressing public health disparities, and funding public health communications (including growing team members) so we can be proactive in communication.

R10 Getting the right information out to the right people at the right time. Just hasn't happened enough.

R13 Developing talking points, infographics, messaging sooner than later.

R22 During the pandemic, elected officials, the public and leadership learned how critical providing accurate information is and that must be maintained.

R24 More timely/trendy information.

R29 There is more communication than before. I think factual information only should be communicated. Too much opinion has been involved.

R37 Live broadcasts about the latest information. More news conferences.

R38 Robust and complete information.

9	Creative methods for message delivery (graphics, platforms, languages, audiences)	5	4

R7 Working together and working quickly. Also, utilizing community partners/ stakeholders in getting messages to hard-to-reach populations (yes, health equity lens, but also using a principal to talk to parents b/c that's who their relationship is with).
R8 More local weekly press briefings with Q&A; continued social media posts.
R9 The introduction of live town hall events done digitally with Q&As from the public, engaging local and regionally known physicians as trusted partners, building partnerships with communities and community leaders, recognizing and addressing public health disparities, and funding public health communications (including growing team members) so we can be proactive in communication.
R11 Creative methods for streaming messages to general pop and those with vulnerabilities.
R19 Public health officials need to be accessible. Communications should be direct and as close to in-person as possible. Communication by news release does not meet current needs.
R24 Graphics are easier to understand by general public.
R25 The use of more story telling, testimonial communication (how people translate the COVID-19 messages and how they communicate) needs to be recognized and utilized to accelerate internationalization of messages.
R26 Broadcasting press conferences live, making it possible for the general public to get full information and not just the portions selected by a media outlet.
R35 Use of 'push' messages. i.e. - messages directly to citizen's cell phones for items that are relevant to them - i.e. - 'vaccines are available for your age group..."

8	Collaboration/relationships with other agencies/media	4	4

R5 Building relationships with neighboring health departments, hospitals when it comes to communications.
R7 Working together and working quickly. Also, utilizing community partners/ stakeholders in getting messages to hard-to-reach populations (yes, health equity lens, but also using a principal to talk to parents b/c that's who their relationship is with).
R9 The introduction of live town hall events done digitally with Q&As from the public, engaging local and regionally known physicians as trusted partners, building partnerships with communities and community leaders, recognizing and addressing public health disparities, and funding public health communications (including growing team members) so we can be proactive in communication.
R18 Much stronger virtual collaboration should be maintained; we have been extremely agile in our work and I would love to see that continue, but out from underneath the intense scrutiny we face currently.
R20 Information calls with the CDC to give us a nationwide picture and discusses MMWRs that have large significance/impact.
R31 We have a great relationship with local media. They know that they can come to us now for many health-related issues. We make ourselves as available as possible in the hope we bolster our reputation both now and in the long run.
R32 Relationships with media/partners.
R36 I have seen more attempts to come together to share strategies & approaches, and to listen to what is working. This needs to continue and expand and be built into our way of working. I've seen more listening session research and message testing - but far from enough. This is critical, even when we have to move quickly.

6	Focus on equity	3	3

R7 Working together and working quickly. Also, utilizing community partners/ stakeholders in getting messages to hard-to-reach populations (yes, health equity lens, but also using a principal to talk to parents b/c that's who their relationship is with).
R8 More targeted equity messaging.
R15 Growing acknowledgement of needs for messaging in languages other than English and for those with low health or general literacy.
R25 Understanding that social inequality has a major role in messaging.
R28 The increase in equity as a focal point.
R34 The focus on equity and language access needs to be not just maintained but continue to grow.
R34 Re-emergence of an interest in community engagement. We do need to continue to grow this area and move to have our planning, operations, logistics and health advisors and other IMT colleagues embrace it more deeply if we're really going to achieve health equity and equity in communication.

5	More strategy to combat misinformation, drive the message	2	3

R12 The constant flow of intentional misinformation.
R13 Battling and confronting misinformation. More oversight on social media misinformation.
R14 I came in midway through the pandemic, but I believe the role of communications has become much more strategic in terms of leveraging with news outlets to amplify important messages. I'd imagine all of us have gotten a lot savvier.
R16 We have built up communication strategies as a reaction to COVID. We need to have these in place BEFORE there is an emergency and continue to be proactive rather than reactive.
R27 We have gained a higher visibility and need to make the most of that. The world has our attention and we can do good things with that.

4	Continued training and funding to build capacity	3	1

R4 Knowing how to interact with the media, with the public, training staff on interacting with the public
R20 Funding a full time communications person at the local level for EVERY department. More funding for collaborative trainings that are on-going. More exercises.
R23 Creating materials with various audience needs (languages, plain language, various formats) in mind must continue and continue to be supported with sufficient funding.
R32 Increased funding

2	Transparency with data and information (showing, not telling)	2	--

R17 A willingness to be more transparent with data. While some people would argue or disagree with information it is hard to argue with data.
R21 More transparency and accessibility to evidence-based information. Better use of social media to inform.

1	Nothing that changed should be maintained	--	1

R30 Nothing that has changed should be maintained. We need to work like we did in the beginning of the pandemic when we were all aligned.

1	We should not be mandating anything	--	1

R33 Truthful information. No mandating of anything.

Q7. Is there anything else the leaders at NPHIC or CDC Communications need to know from your perspective that would help strengthen our nation's public health communications capacity?			
N=38	**Category**	**A=20**	**NotA=18**
10	Continued collaboration and assistance - NPHIC resources, CDC calls, state networks	6	4
10	More heads up on anticipated messaging coming down from CDC/More proactive approach to get information out quicker, be consistent, combat misinformation	4	6
7	More investment in public health communications professionals (training, funding)	4	3
6	Separation of public health and politics	2	4
5	Improve public health messages and messengers - for public and media - to achieve better equity	3	2
2	Deeper societal issues have complicated ability to "fix" divides in our country	1	1
6	No answer	5	1

10	Continued collaboration and assistance - NPHIC resources, CDC calls, state networks	6	4

R2. Collaborative calls with other communicators would have been greatly helpful. I actually created one for [our state's] public health communicators which has done very well and gotten a ton of engagement.

R9 The NPHIC summaries that come out after big announcements are SO helpful. Please continue to provide these resources and toolkits. The CDC trainings and meetings with the states were very helpful, the polling data, vaccine confidence information, has been SO valuable to us as we developed our outreach strategy.

R8 Thank you for the NPHIC weekly key messages.

R13 Please continue to talk to the locals (Local health departments) and developing materials we can use or adapt to our own in a timely fashion.

R15 Any "air-ready," deployment-ready, street-ready messages and materials that NPHIC and/or CDC can provide are welcomed and appreciated by under-resourced government agency practitioners - if you can give us something ready to go, we'll use it.

R22 Meet more often (either in person or virtually) with those who are working face-to-face with the community.

R23 More information should be translated at the national level. State should not be translating vaccine information sheets for example.

R27 Increased collaboration and sharing are important and within our ability to do. Shared materials proved to be very helpful.

R34 We need CDC to loop the states and locals in early and often.

R36 I'm so glad to see this survey, and to know that a symposium is coming. I hope the facilitators will create ample opportunities for bi-directional sharing of lessons learned, best practice, and ideas for innovations that will move us forward. Ideally this would have taken place every 3-6 months during the pandemic - but there's no reason why we can't continuously evaluate and improve how we do our work together. We have so much to learn, and a more unified, collaborative approach (NOT a top-down approach) will result in healthier communities and a healthier nation.

10	More heads up on anticipated messaging coming down from CDC/More proactive approach to get information out quicker, be consistent, combat misinformation	4	6

R5 More advanced talking points to local health departments related to major changes to guidance and vaccines would have been helpful. By the time that info goes out deadlines have already passed for media.

R7 Having messaging ready as CDC makes recommendations. The 5-11 vaccine roll out was so much less chaotic than initial vaccine roll out. Better vertical communications - even "we expect the recommendation to be this..."

R11 We must have correct, consistent messaging at the start of an event.

R16 Public Health needs to continue to be engaged even in a non pandemic time. We should be proactive and not reactive.

R20 We need more lead time. When we have gotten lead time on things, it makes a HUGE difference.

R23 Understanding the speed at which information must be created and shared—we need streamlined clearance processes to keep up with the vacuum of information in an event like this. We must be willing to get out in front even when we don't know everything.

R28 Please prioritize addressing mis- and disinformation.

R31 Disease tracking builds from local public health, but messaging needs to be from the top down -- there needs to be clear guidance from the CDC, through the states, and then to the locals.

R34 Operation Warp Speed was held too closely to the pocket, and put states on their heels in preparing for vaccine release...either that or CDC and the federal government need to have a stronger set of communications materials ready out of the gate and in all the languages the states need.

R37 Graphics and messaging are designed to clearly communicate changes in guidance.

7	More investment in public health communications professionals (training, funding)	4	3

R3 We should be investing more in communications in public health institutions across the board. It is not a "support function" - it is a direct public service in the very same way as other public health services.

R4 Please implement communications training and support (funding), other requirements that are strategically aligned with addressing this in all programs and grants - folks whose day to day in other areas, were then shifted to COVID-19 response - we need these folks to build these skills in the 'off season'.

R15 Anything that can be done to underscore the importance of trained, experienced health communicators would be helpful. Additional resources are needed to support training other public health practitioners in basic health communications principles and tactics, so we can have more people prepared to step up as messengers.

R30 Hire communicators who are actually trained in communications.

R32 More crisis communication training of SHOs and other public health/state leaders.

R34 Much of our public information officer pool comes from media. While that is helpful in managing the media, it doesn't always result in strong practice in crisis and emergency risk communication. We need to strengthen and expand public health communications programs at the university level and expand them beyond just health education. We also need to require public health agencies to have not just their PHEP programs trained in Risk Communications, but their entire external affairs staff.

R34 [Achieving health literacy] takes sustained funding. Our political leaders need to know that...we can't have a taper off in funding like most disasters have. We've been chronically underfunded for years.

R35 Advocacy, adequate funding, and support is MUCH needed to improve public health communication.

6	Separation of public health and politics	2	4

R1 I realize CDC is a governmental organization with political appointees. However, because of politics, trust is now gone and I'm afraid it will be unable to be rebuilt under the current format of governmental intervention.

R10 Give the best guidance you can to political leaders and share the best messaging you can with them. Do not let Washington put gag orders on CDC. Also, not having a Director for the FDA was a big mistake as well.

R16 Public health should also stay out of anything political. I think that the appearance of aligning with one political side or the other really hurt us. Public health needs to stand on its own as public health is everyone's concern.

R17 Identify more "ambassadors" to share the message and not always individuals from the CDC or NIH that were unfortunately seen more as political figures than doctors and scientists. There needs to a separation so that those who need to receive the message connect better with those delivering the message.

R29 The CDC needs to have more succinct communication and not be influenced by the political climate or any politicians. Dr. Fauci got too caught up in getting his 15 minutes of fame. NO one person should be in his position for that long as practicing medicine took a back seat. He was too politically influenced.

R33 Politicians should NOT be involved. The info should be given and people should be able to make their own decision based on the truthful information.

5	Improve public health messages and messengers - for public and media - to achieve better equity	3	2

R3 We should be working with third party partners in the business community, faith community and elsewhere to get key messages to those who are not going to listen to government.

R12 Clarity for the public on what federal vs. state/local jurisdictions influence. MANY do not know how much control exists at the local level.

R19 This pandemic has shown that, with a few exceptions, journalists lack basic understanding of public health culture, principles, and protocols. More "training" or other ways to help journalists gain at least a rudimentary understanding of infection control, data analysis, and other important public health tools and concepts would be useful.

R25 Include more community engagement strategies and learn from community in terms of how community/different cultural groups are communicating. Probably more anthropological/sociological/ethnographic/qualitative analysis will need to happen to improve our communication.

R34 We need to do more to engage reporters in understanding science and scientific reporting. The decreased staffing in newsrooms has affected the quality and accuracy of reporting. We also need them to remember their ethical obligations; some of the tactics used in the name of transparency harmed patient privacy and hindered response efforts.

R34 Achieving health literacy will require stronger training in plain language, funding for translation and interpretation services and grassroots work.

R34 We need scientists and clinicians to be humble and trained in plain language as an equity issue. We need culture change in this area if we're to achieve health equity through health literacy.

2	Deeper societal issues have complicated ability to "fix" divides in our country	1	1

R3 When it comes to low vaccination rates and opposition to masking and other mitigations, we are suffering from the larger trends affecting our society, and there is no communications or messaging "magic wand" strategy that will fix that.

R6 Not everyone thinks like you want them to think. Missing this essential truth has helped create a new, large angry group of disenfranchised people. We are in danger of a significant backward shift in geographic areas such as mine.