



Foundation *for*  
Healthy Communities

# 2019 Novel Coronavirus: Extended Response

## After Action Report Executive Summary

Granite State Health Care Coalition  
October 2021

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Throughout 2020 and 2021, health care, public health, emergency medical services, and emergency management agencies have continued to develop and implement strategies to control and mitigate the impacts of COVID-19. While some partners began to see a much needed reprieve, planning for subsequent surges of COVID-19 infections and the administration of vaccines became the focus of partners statewide. At the writing of this Report, partners and members are still fighting to protect the public's health, more than 18 months into the pandemic.

The purpose of the *2019 Novel Coronavirus: Extended Response After Action Report* is to:

1. capture and share the response experiences of GSHCC members and partners;
2. offer an updated analysis of response from October 2020 through June 2021; and
3. provide recommendations to enhance current and future planning efforts.

It is important to note that there are variances in every GSHCC member and partner organization's capabilities and resources. Not all recommendations contained within the *2019 Novel Coronavirus: Extended Response After Action Report* and *Executive Summary* will apply to every organization. Not all strengths and areas for improvement may be applicable to each individual agency or organization, and individual experiences may vary. Identified strengths and areas for improvement represent the collective experience of members and partners during extended response to COVID-19 between October 2020 and June 2021.

Continued evaluation and assessment of the healthcare response to the COVID-19 pandemic in New Hampshire will continue through the event's Recovery Phase. However, the *Report* contributes to the Granite State Health Care Coalition's effort to support members and partners in improving emergency preparedness and response capabilities statewide.

As an initiative of the Foundation for Healthy Communities, the Granite State Health Care Coalition led the development of the *2019 Novel Coronavirus: Extended Response After Action Report* and *Executive Summary* under a contract with the State of New Hampshire Department of Health and Human Services (NH DHHS) in partnership from the New Hampshire Department of Health and Human Service, Division of Public Health Services, Bureau of Emergency Preparedness, Response, and Recovery. The United States Department of Health and Human Services (HHS) provided grant funding to the state, which financed this project.

## Methodology

The GSHCC team collected data and feedback from various sources using multiple methods. Each subsequent activity aimed to gather additional detail on emerging themes and shared experiences.

### **GSHCC COVID-19 AAR Online Questionnaire**

The questionnaire included nearly 100 questions organized by HPP-PHEP Preparedness Domain that characterized the participant's direct involvement in the COVID-19 response, including specific questions regarding vaccination operations and vulnerable populations. The questionnaire included open-ended responses, rating scales, and multiple-choice questions.

### **Key Informant or Stakeholder Interviews**

Members of the GSHCC team conducted one-on-one interviews with select individuals that played a vital role in the COVID-19 response. Interviewees represented hospitals, public health, EMS, Emergency Management, and other healthcare and public health stakeholders and also

included perspectives from state, regional, and local jurisdictions. The one-hour interviews conducted in a conversational format included specific talking points and inquiries used to focus the discussion. These talking points were informed by themes identified in the GSHCC COVID-19 AAR Online Questionnaire. The review team assured participants their response would not be subject to attribution to support a candid dialogue.

The GSHCC team also reviewed open-source information to develop a common picture of response throughout New Hampshire. These sources include:

- NH DHHS Press Releases,
- NH DHHS Health Alert Network (HAN) Messages,
- NH Governor-directed Emergency Orders,
- NH State Emergency Operations Center (SEOC) Situation Reports, and
- Other Open-Source Reports and References.

On October 13, 2021, the GSHCC team facilitated an After Action Meeting with partners and stakeholders to review and validate the Report's observations. Additionally, the participants discussed noted areas for improvement and developed strategies to improve response efforts moving forward.

### Organization of Report

The findings in the Report address the “Six HPP-PHEP Domains of Preparedness” adopted and modified by the GSHCC. Domains include Community Resilience “Preparedness,” Incident Management, Information Management, Surge Management, and Countermeasures and Mitigation.<sup>1</sup> Vaccination Operations is highlighted outside of these domains to capture the multiple intricacies involved in planning for, conducting, and demobilizing mass vaccination efforts. Strengths and areas for improvement are presented by Public Health Emergency Preparedness (PHEP) capability, covering Medical Materiel Management and Distribution, Vaccine Administration, and Volunteer Management.

Successes and areas for improvement may not be universally experienced across every sector. For some, a listed success was experienced as an area for improvement. Key findings are associated with a domain based on a root-cause analysis of participant observations and experiences. Additional analysis of identified strengths and areas for improvement with accompanying observation statements and narrative provides a further context within each key finding statement.

The full *2019 Novel Coronavirus: Extended Response After Action Report* also contains several appendices to provide additional references and supporting data.

This *Executive Summary* and the *2019 Novel Coronavirus: Extended Response After Action Report (AAR)* supports the ongoing efforts of the Granite State Health Care Coalition to support members and partners through continued response and recovery efforts. For more specific and detailed information surrounding these topics, members and partners are encouraged can be found in the full AAR listed above. Additionally, an evaluation of prior activities can be found in the *2019 Novel Coronavirus Response Mid-Event After Action Report* from February 2021.

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<sup>1</sup>Centers for Disease Control and Prevention. (2020). HPP-PHEP Preparedness Domains. <https://www.cdc.gov/cpr/whatwedo/phep.htm>

## Summary of Notable Successes and Areas for Improvement

### Notable Successes

The COVID-19 pandemic resulted in an unprecedented response effort by hospitals, healthcare, public health, EMS, and emergency management. In general, inter-agency collaboration contributed to an integrated healthcare system response. This collaboration must continue to sustain mitigation efforts and preserve partners' and members' ability to maintain essential healthcare services.

The review team identified the following examples that represent notable successes throughout the healthcare system:

- Locally forged relationships have been successfully leveraged to fill gaps in healthcare and public health infrastructures.
- The use of professional associations and other industry leaders has proven to be an effective and necessary mechanism for information sharing and operational coordination.
- Partners and members exhibited creative problem solving and out-of-the-box thinking to stabilize healthcare delivery in conjunction with shifting resources and regulations.

### Areas for Improvement

Initial response to the COVID-19 pandemic also required GSHCC members and partners to implement plans and supporting procedures during a demanding and resource-intensive event. There are several key opportunities for improvement (not all-inclusive) that may improve future response if addressed.

- The ineffective implementation of core principles outlined within the National Incident Management System (NIMS), including concepts of chain of command, Joint Information Systems (JIS), and unity of command challenged the ability of partners to coordinate a timely and efficient response.
- A general lack of inclusion of appropriate stakeholders in strategy and operational planning efforts created significant challenges for partners between jurisdictions.
- Local public health infrastructure lacks systems, staffing, resources, and funding that could support ongoing COVID-19 response activities that include but are not limited to vaccination operations.
- Partners have struggled to implement systems to monitor responder safety and health, identify needs, and provide services to support responder mental and behavioral health.

## Strengths and Areas for Improvement by Domain

### Community Resilience

#### Strengths

1. Pre-existing community partnerships contributed to a more efficient and collaborative response effort at the local level.
2. Prior collaboration with state public health, ESF-8, professional associations, the GSHCC, and emergency management contributed to a smoother exchange of information and decision making.

#### Areas for Improvement

1. The duration of this response has far surpassed assumptions made in existing emergency plans.

2. Partners lacked sufficient equipment and supplies to address the needs specific to a pandemic response.
3. Prior training and exercises did not adequately address the competencies or capabilities required for a pandemic response and identified corrective actions to improve gaps in capabilities were not consistently implemented.
4. Strategy and operational directives that addressed the current response environment were often in conflict with or contradictory to pre-existing plans developed at the agency or community level.

## Incident Management

### Strengths

1. The value of the National Incident Management System and implementation of the Incident Command System (ICS) has been reaffirmed or is now understood by many partner agencies.

### Areas for Improvement

1. Significant confusion surrounding chain of command and incident leadership statewide persists across community sectors and jurisdictions.
2. Strategy decisions did not always incorporate appropriate stakeholder input, appeared disjointed, and lacked transparency.
3. Changes in leadership and structure of ESF-8 changed the response dynamic that was expected by healthcare and public health partners.

## Information Management

### Strengths

1. Partner agencies leveraged professional associations and affiliations to consolidate and streamline strategy discussions and operational guidance.
2. The NH DHHS Health Alert Network was leveraged successfully as a tool to disseminate critical information directly to those who need it.
3. Leveraging Juvare as an information management system, though with challenges, proved to be a useful tool for maintaining situational awareness and fulfilling federal reporting requirements.

### Areas for Improvement

1. A Joint Information System was not effectively implemented to integrate incident information to provide consistent, coordinated, accurate, accessible, timely, and complete information across activated Emergency Operations Centers, within the established incident command structures, and senior leadership or public officials.
2. Public information and communications resource needs were not always addressed, experienced delays, and were not always answered with content in accessible formats.:
3. Governor press events incited frustration for partners when content presented did not align with known operational objectives and tactics.
4. Essential Elements of Information (EIs) were not established for pandemic response across healthcare agencies.

## Surge Management

### Strengths

1. Overall, partners felt that there were appropriate partnerships, relationships, or agreements in place at the community level to be able to effectively and efficiently manage ongoing medical surge. If needed these resources were or could have been called upon.

### Areas for Improvement

1. Pre-existing strategies, assumptions, and plans for alternate care sites (ACSs) are largely viewed as implausible to implement without significant modifications and augmentation of available resources.
2. Roles and responsibilities of alternate care site (ACS) functions are not well known by all those who would support or manage alternate surge facilities.
3. Staffing requirements for managing medical surge internally and at external sites remains a major barrier to implementation of internal surge plans and external surge facilities.
4. While a draft plan to outline a concept of operations for Crisis Standards of Care (CSC) was developed towards the beginning of response, it did not appear to be operationally useful.

## Countermeasures and Mitigation

### Non-Pharmaceutical Interventions/Community Mitigation Measures

#### Strengths

1. State (NH DHHS) support with testing and responsiveness to outbreaks in congregate living facilities was instrumental to ongoing containment and mitigation efforts among vulnerable populations.

#### Areas for Improvement

1. Non-pharmaceutical interventions were not implemented effectively or properly enforced among partner agencies and local jurisdictions.

## Responder Safety and Health

#### Strengths

1. Agencies that addressed the physical, social, and emotional needs of staff proactively have seen better outcomes in staff retention and morale.

#### Areas for Improvement

1. Many agencies lacked systems to monitor staff for physical, mental, and behavioral health needs or failed to anticipate or provide accessible mental and behavioral health services to staff.

## Medical Materiel Management and Distribution

#### Strengths

1. NH ESF-8 and the NH Immunization Program successfully acquired equipment, supplies, and pharmaceuticals necessary for vaccination operations at fixed sites, through mobile clinics, vaccine providers, and public health networks.

#### Areas for Improvement

1. The global supply chain continues to have significant vulnerabilities and exhibit inconsistencies in both quality and quantity.

2. Protocols to request vaccines and materials were not established in pre-existing plans

### Vaccine Administration

#### Strengths

1. The flexibilities provided to leverage EMS personnel significantly augmented the number of personnel within the workforce who were authorized to administer vaccinations.
2. State-managed fixed sites and supersites were effective mechanisms to administer a large number of vaccinations to a high volume of patients over a short period of time.

#### Areas for Improvement

1. The operationalized vaccination plans differed significantly from existing plans that partners had developed and trained partners to implement.
2. Vaccination documentation systems were not adequate to meet the needs of responding agencies “in the field” administering vaccines.

### Volunteer Management

Volunteer management is the ability to coordinate with emergency management and partner agencies to identify, recruit, register, verify, train, and engage volunteers to support the jurisdictional public health agency’s preparedness, response, and recovery activities during pre-deployment, deployment, and post deployment.

#### Strengths

1. Some agencies noted a significant number of volunteers who wanted to contribute in some way to this event.

#### Areas for Improvement

1. Not all volunteers were properly vetted to ensure they possessed the basic competencies required for the tasks assigned at vaccination clinics.
2. The existing volunteer management systems were not conducive to managing a large number of spontaneous volunteers.
3. The legalities and process around extending workers compensation or liability coverage to volunteers through ESF-14 was unclear and often presented significant delays, reducing the ability of agencies to leverage these volunteers as workforce.

## Conclusions and Next Steps

Sustained response to the COVID-19 pandemic has continued to demand a conscious focus and effort from partners and members from across the health care and public health continuum. The toll of extended response has not gone unnoticed and is felt by all. The perseverance, grit, and dedication of health care workers, public health practitioners, EMS, first responders, and emergency managers to serve the residents and visitors of the State of New Hampshire is commendable.

At the time of writing for this report, the COVID-19 pandemic response is still active as communities addresses additional waves of cases and hospitalizations driven by the delta variant. Health care and public health partners are actively engaged in mass vaccination clinics to ensure all who would like to receive a vaccine have the opportunity to do so.