Foundation for Healthy Communities

# 2021-2022 Hazard Vulnerability Analysis 

 Granite State Health Care CoalitionMarch 2022

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## Acknowledgements

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The Granite State Health Care Coalition would also like to acknowledge the partners that contributed to this process along the way. Your input matters and helps us be a better partner organization for you.

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## Background

## Purpose

This report presents and discusses the results of the 2021-2022 Granite State Health Care Coalition (GSHCC) Hazard Vulnerability Analysis (HVA).

An HVA is a systematic approach to identifying hazards or risks that are most likely to have an impact on the demand for health care services or the health care delivery system's ability to provide these services. ${ }^{1}$ Through the identification of hazards and impacts to these systems, participants develop strategies to mitigate the impacts of the identified hazards. HVAs inform future planning and serve as a foundation for the implementation of mitigation strategies across the healthcare, public health, and behavioral health systems. The GSHCC has created an HVA process that can be built upon year by year to show progress in mitigating top identified risks.

The goals of the HVA process are to:

- Identify and understand the overall likelihood, impact, and planning implications of identified hazards;
- Propose potential GSHCC systemwide mitigation strategies and review and update these strategies and accompanying mitigation strategies annually as required.
- Fulfill federal and state requirements to conduct an annual HVA.


## Assumptions

This report considers a number of planning assumptions in its design:

- Not all staff are trained at the same level and training will remain as an on-going priority for all organizations.
- Each organization should perform their own HVA to determine their greatest internal risks.
- Certifying agencies, stakeholder demand, and/or current events may require hazard specific planning not noted in this report. These planning efforts may require sector specific elements.
- Past and current event history around facilities and organizations may elevate certain planning initiatives over others.
- Staffing and funding needs may impact current and future risks which could alter overall hazard scenario importance.
- Environmental design may greatly impact hazard scenario ratings and should be closely considered.


## HVA Approach

The GSHCC conducted the HVA following the general principles outlined in the 2017-2022 Health Care Preparedness and Response Capabilities:

- GSHCC members and partners should participate in the HVA process;
- The HVA should be coordinated with state and local emergency management organization assessments (e.g., Threat and Hazard Identification and Risk Assessment [THIRA]) and public health hazard assessments (e.g., jurisdictional risk assessment [JRA]);

[^1]- Health care facilities, emergency medical services (EMS), emergency management, public health, and other healthcare organizations should provide input into the development of the Coalition HVA;
- Assessment components should include regional characteristics, such as risks for natural or man-made disasters, geography, and critical infrastructure;
- The assessment should address population characteristics (including demographics), and consider those individuals with access or functional needs, including people with disabilities, vulnerable populations, and those who may require additional help in an emergency;
- The HVA should be regularly reviewed (annually) and shared with members; and
- At least seven (7) hazards must be addressed in the HVA.


## Methodology

## Approach

The 2021-2022 GSHCC HVA process was built upon the initial 2020-2021 GSHCC HVA process which was adapted from two similar HVA processes established by New York City and the State of Connecticut. The 2020-2021 GSHCC HVA process resulted in the following outcomes.

Table 1
Granite State Health Care Coalition 2021 Hazard Vulnerability Analysis Outcomes

| Likelihood of Occurrence | Human Impact | Healthcare Impact | Mental Health Impact | Planning in Reducing Risk |
| :---: | :---: | :---: | :---: | :---: |
| Most to Least Probable | Most to Least Catastrophic |  |  | (High to Low Priority) |
| Extreme Winter <br> Weather | Pandemic | Pandemic | Pandemic | Pandemic |
| Pandemic | Active Shooter | Extreme Winter <br> Weather | Active Shooter | Extreme Winter <br> Weather |
| Cyber Attack | Radiological <br> Dispersion Device | Radiological <br> Dispersion Device | Radiological <br> Dispersion Device | Cyber Attack |
| Hurricane | Extreme Winter <br> Weather | Active Shooter | Hurricane | Chemical Incident |
| Active Shooter | Hurricane | Hurricane | Chemical Incident | Active Shooter |
| Chemical Incident | Chemical Incident | Cyber Attack | Extreme Winter <br> Weather | Hurricane |
| Radiological <br> Dispersion Device | Cyber Attack | Chemical Incident | Cyber Attack | Radiological <br> Dispersion Device |

The 2021-2022 GSHCC HVA process was comprised of two phases beginning with a survey sent to GSHCC partners and a 90-minute virtual meeting in which participants were briefed on results of the HVA survey and mitigation strategy implementation activity process. At the meeting attendees came to a consensus to keep the original GSHCC mitigation strategies moving forward. Attendees also made suggestions for additional mitigation strategy implementation activities.

## Participant Survey

Participants from across the GSHCC membership were invited to complete a brief, twenty-one question survey that evaluated whether the planning priority hazard rankings as established in the 2020-2021

HVA remained accurate. The top three hazards prioritized for planning effort are pandemic, extreme winter weather, and cyber-attack. The survey results concluded that these hazards are appropriately ranked. The survey also examined internal preparedness efforts relative to the top-rated hazards. Finally, the survey evaluated the GSHCC mitigation strategy and implementation activity progress over the last year.

## Virtual Meeting

## Overview

Partners from across the healthcare, public health, EMS, emergency management, and many other sectors were invited to participate in the 2022 GSHCC Virtual HVA Meeting. A full list of participants is available in Appendix B- GSHCC HVA Participants.

## Methodology

Meeting participants were brought together to accomplish the following objectives:

1. Determine mitigation strategies for upcoming year
2. Determine how mitigation strategy implementation activities can be executed further and determine any additional implementation activities that should be considered

This was accomplished by reviewing the HVA survey results, reviewing mitigation strategy implementation activity progress, and validating original mitigation strategies. Participants also suggested additional implementation activities for 2022 which the GSHCC team brought to the GSHCC Leadership Team for review.

Strategies, suggestions, and thoughts were captured through discussion, Zoom chat, and Poll Everywhere boards. Participants were asked to make recommendations on mitigation strategy implementation activities.

## Virtual Meeting

A total of sixty-eight representatives participated in the virtual meeting, representing each of the four core disciplines as well as additional sectors.

## Mitigation Strategies

The representatives participating in the virtual meeting engaged in a discussion around whether or not the mitigation strategies as established in 2021 remained relevant. The group voted via Poll Everywhere and determined the following mitigation strategy should remain for 2022. Poll Everywhere results can be found in Appendix D- Poll Everywhere Survey Results.

1. Provide additional trainings of value to all partners.
2. Provide additional planning guidance to all partners.
3. Strengthen partner engagement in GSHCC exercises.

Meeting attendees made many suggestions in Poll Everywhere relative to additional mitigation strategy implementation activities.

## Implementation

The GHSCC Leadership Team was presented with the findings from this process to help determine implementation steps and future planning priorities. The GSHCC Leadership Team discussed prioritizing
these implementation activities and ultimately decided to disseminate a survey to the entire GSHCC membership to decide upon three additional implementation activities for each mitigation strategy moving forward. Selected activities have been added in bold to Table 2: Granite State Health Care Coalition 2022 HVA Mitigation Strategy Implementation Activities.

The following implementation activities have been identified and prioritized by partners via survey and the GSHCC Leadership Team for future efforts.

Mitigation Strategy 1: Provide additional trainings of value to all partners.

- Implementation Activities:
- Explore offering CEUs, CMEs, and certifications for training.
- Offer on-demand training/canned training for organizations to conduct independently.
- Conduct region-specific training.


## Mitigation Strategy 2: Provide additional planning guidance to all partners.

- Implementation Activities:
- Provide annex/plan templates, checklists, and guidance for all-hazard and hazardspecific annexes.
- Conduct training on planning processes and resources.
- Establish professional peer groups to discuss planning initiatives and troubleshooting in a learning environment.
- Provide planning guidance from regulatory bodies.


## Mitigation Strategy 3: Strengthen partner engagement in GSHCC Exercises.

- Implementation Activities:
- Conduct exercises that can assist facilities in meeting CMS requirements.
- Invite guest subject matter experts from external organizations to participate in the exercise.
- Conduct mock tabletop exercises for partners new to emergency preparedness.
- Conduct regional exercises.

The proposed activities may be prioritized based on need and availability. These activities may be integrated into the BP4 deliverables for the GSHCC and may be completed concurrently. Many activities are already ongoing and are subject to change. When possible, the GHSCC Team will evaluate hazardspecific considerations to supplement an all-hazards approach to emergency preparedness.

## Table 2

Granite State Health Care Coalition 2022 HVA Mitigation Strategy Implementation Activities

| Strategy 1: Provide additional trainings of value to all partners. |  |
| :---: | :---: |
| Objectives | Activities |
| 1. Promote hazard-specific training and educational opportunities from industry leaders. | - New: Explore offering CEUs, CMEs, and certifications for training. <br> - New: Offer on-demand training/canned training for organizations to conduct independently. <br> - New: Conduct region-specific training. <br> - Provide list of training resources in the GSHCC newsletter. <br> - Maintain a GSHCC Training and Exercise Calendar (on GSHCC website). <br> - Publish available training opportunities in the Statewide Training and Exercise Program (STEP) calendar. <br> - Disseminate upcoming webinars, State, Federal, and partnersponsored training, and education opportunities in member email updates. |
| 2. Work in collaboration with NH DHHS to promote the use of the Statewide Training and Exercise Program (STEP) calendar to increase visibility of applicable training and exercise opportunities for partners. | - Contribute to and participate in the NH PHEP-HPP Multi-Year Training and Exercise Plan development. <br> - Promote the STEP calendar with partners. |
| 3. Identify and address training and education needs of partners through after action reviews of real world events, exercises, surveys, etc. | - Continue COVID-19 After Action Review activities. <br> - Develop and disseminate an AAR/IP template for reporting on real-world events. <br> - Work collaboratively with other HHS Region 1 healthcare coalitions and the Regional Disaster Health Response System (RDHRS) to identify and provide training and educational opportunities to partners. |
| 4. Facilitate or support opportunities that address identified training and education gaps. | - Host a GSHCC Conference. <br> - Facilitate the GSHCC Annual General Membership Meeting. <br> - Provide additional stand-alone training opportunities in topics of interest e.g., public information, NIMS, real-world event after action reporting, cyber-security and safety, and other topics. |

## Strategy 2: Provide additional planning guidance to all partners.

| Objectives | Activities |
| :---: | :---: |
| 1. Disseminate tools, guidance, and templates to GSHCC members as appropriate to aid in all-hazards emergency planning. | - New: Provide annex/plan templates, checklists, and guidance for all-hazard and hazard-specific annexes. <br> - New: Conduct training on planning processes and resources. <br> - Identify and disseminate reference materials for partners for Emergency Operations Plans (EOPs), communication plans, and continuity of operations (COOP) plans. |
| 2. Offer additional support, trainings, and/or technical assistance to planning initiatives regionally or statewide. | - New: Establish professional peer groups to discuss planning initiatives and troubleshooting in a learning environment. <br> - Post guides, training, and other aids on the GSHCC website for members to access. <br> - Collaborate with members and professional associations to offer additional planning education to members. |
| 3. Work collaboratively with NH Health Facilities Administration to communicate planning priorities and requirements to partners. | - New: Provide planning guidance from regulatory bodies. <br> - Conduct seminars or workshops that address changing planning priorities, expectations, and requirements. |
| Strategy 3: Strengthen partner engagement in GSHCC exercises. |  |
| Objectives | Activities |
| 1. Encourage participation of coalition partners in the annual Medical Response and Surge Exercise (MRSE), including those from longterm care, home health, EMS, hospitals, public health, and emergency management. | - Engage long-term care, home health, public health, EMS, emergency management, and other unique partners in the conduct of the MRSE. |
| 2. Promote participant diversity in planned coalition exercises, including but not limited to crisis standards of care concept of operations, radiation surge, and burn surge. | - New: Conduct exercises that can assist facilities in meeting CMS requirements. <br> - New: Invite guest subject matter experts from external organizations to participate in the exercise. <br> - New: Conduct mock tabletop exercises for partners new to emergency preparedness. <br> - Ensure all coalition exercises include representation from each of the four core disciplines (hospitals, public health, EMS, emergency management). <br> - When appropriate, invite additional healthcare partners to participate in exercises. |


| 3. Support or provide technical |  |
| :--- | :--- |
| assistance to members on <br> regional exercises as | - New: Conduct regional exercises. <br> - Provide planning support with regard to scope, scenario, and <br> appropriate. |
|  | objectives development. |
|  | - Serve as exercise controller/evaluator for member exercises. <br> processes. |

## Appendices

Appendix A Acronyms and Abbreviations
Appendix B GSHCC HVA Participants
Appendix C GSHCC HVA Survey Questions
Appendix D Poll Everywhere Survey Results

Appendix A Acronyms and Abbreviations

| AAR/IP | After Action Report/ Improvement Plan |
| :---: | :---: |
| ACS | Alternate Care Site |
| ASPR | Office of the Assistant Secretary for Preparedness and Response |
| CEU | Continuing Education Unit |
| CHC | Community Health Center |
| CMS | Centers for Medicare \& Medicaid Services |
| COOP | Continuity of Operations |
| CSC | Crisis Standards of Care |
| CST | Coalition Surge Test |
| DHHS | Department of Health and Human Services |
| ED | Emergency Department |
| EMS | Emergency Medical Services |
| EOP | Emergency Operations Plan |
| FQHC | Federally Qualified Health Center |
| GSHCC | Granite State Health Care Coalition |
| HICS | Hospital Incident Command System |
| HPP | Hospital Preparedness Program |
| HSEEP | Homeland Security Exercise and Evaluation Program |
| HVA | Hazard Vulnerability Analysis |
| ICS | Incident Command System |
| JRA | Jurisdictional Risk Assessment |
| MRSE | Medical Response \& Surge Exercise |
| NGO | Nongovernmental Organization |
| NIMS | National Incident Management System |
| PHEP | Public Health Emergency Preparedness |
| PIO | Public Information Officer |
| PTSD | Post-Traumatic Stress Disorder |
| RDHRS | Regional Disaster Health Response System |
| SME | Subject Matter Expert |
| STEP | Statewide Training and Exercise Program |


| TA | Technical Assistance |
| :--- | :--- |
| THIRA | Threat and Hazard Identification and Risk Assessment |
| TTX | Tabletop exercise |

## Appendix B GSHCC HVA Participants




## Appendix C GSHCC HVA Survey Questions

## Introduction

The Granite State Health Care Coalition (GSHCC) completes an annual Hazard Vulnerability Analysis (HVA) to inform planning priorities relative to the public health and healthcare system in New Hampshire. The GSHCC performs this task as part of the Office of the Assistant Secretary for Preparedness and Response (ASPR) grant. For continuity purposes, this process consists of a multi-year approach.

The GSHCC conducted the 2020-2021 Hazard Vulnerability Analysis (HVA) with much stakeholder input. This new streamlined process focused on healthcare system mitigation efforts to drive improvement on existing processes as well as determine the greatest vulnerabilities to bolster planning, revise training plans, and enhance exercise efficacy.

The following hazards were identified (in order of highest to lowest planning priority):

1. Pandemic
2. Extreme Winter Weather
3. Cyber Attack
4. Chemical Incident
5. Active Shooter
6. Hurricane
7. Radiological Dispersion Device

The following mitigation strategies were identified:
4. Provide additional trainings of value to all partners.
5. Provide additional planning guidance to all partners.
6. Strengthen partner engagement in GSHCC exercises.

Please complete this survey assessment validating, and potentially re-ranking, hazard planning priorities and assessing GSHCC implementation of mitigation strategies. Please consider your facility/organization HVA as you respond to each hazard as well as sector impacts.

Through this survey we are asking members and partners to assess how well the GSHCC and partner organizations have applied the top hazards and mitigation strategies to efforts, plans, and projects throughout the last year. This process will determine if planning priorities remain feasible and whether the implementation strategies have made an impact. This process will also analyze if these efforts have been improved upon and how these efforts can be further refined and integrated into GSHCC projects.

The results of the survey will be shared with GSHCC membership in aggregate. Questions with response agreement of $80 \%$ or greater will be considered final.

Those questions with variation of response agreement less than $80 \%$ will be further discussed at the GSHCC HVA Meeting. At the end of each discussion point, participants will be asked to submit their responses in real time polling and then consensus process will take place to finalize the results for the assessment report.

A virtual meeting will follow the survey in early 2022. Save-the-date to be released soon.

## Demographic Questions

1. What is your name?
2. What is your title?
3. Of which organization are your employed?
4. What is your email address?
5. Which healthcare or public health sector do you represent?
a. Ambulatory Surgical Center
b. Association level organization
i. Long-Term Care
c. Dialysis
d. Emergency Management
e. Emergency Medical Services (EMS)
f. Federally Qualified Health Center (FQHC), Community Health Center
j. Mental Health or behavioral health
k. Nongovernmental organization (NGO)
I. Public Health (CHC), or Rural Health Clinic
m. Public Safety
g. Home Health Care and Hospice Care
n. Primary Care
h. Hospital
o. Urgent Care Center
p. Other (please specify)

## Hazard Questions

1. Are the following hazards (ranked from highest to lowest in planning priority) as established in the GSHCC 2020-2021 HVA still accurate?

- Pandemic
- Extreme Winter Weather
- Cyber Attack
- Chemical Incident
- Active Shooter
- Hurricane
- Radiological Dispersion Device

If not, please rank the following hazards from (high to low planning priority) as appropriate.

- Pandemic
- Extreme Winter Weather
- Cyber Attack
- Chemical Incident
- Active Shooter
- Hurricane
- Radiological Dispersion Device

2. Has the GSHCC adequately incorporated the top-ranked hazards (pandemic, extreme winter weather, and cyber-attack) into trainings, exercises, meetings, conferences, plans, projects, and other preparedness efforts in the last year?

- If not, how can the GSHCC improve processes to include these hazards?


## Internal Preparedness Efforts Questions

1. Through which of the following initiatives has your organization enhanced pandemic preparedness in the last year?
a. Planning
b. Internal organizational changes
c. Exercises
d. Training
e. Equipment and supply purchases
f. Capital improvements
g. N/A
h. Other (please specify)
2. Through which of the following initiatives has your organization enhanced extreme winter weather preparedness in the last year?
a. Planning
b. Internal organizational changes
c. Exercises
d. Training
e. Equipment and supply purchases
f. Capital improvements
g. N/A
h. Other (please specify)
3. Through which of the following initiatives has your organization enhanced cyber preparedness in the last year?
a. Planning
b. Internal organizational changes
c. Exercises
d. Training
e. Equipment and supply purchases
f. Capital improvements
g. $N / A$
h. Other (please specify)

## Mitigation Questions

1. In your experience, have the trainings conducted by the GSHCC In the last year been valuable?
a. If not, how can the GSHCC improve processes to increase training value?
2. Has the additional planning guidance disseminated by the GSHCC been of value?
a. If not, how can the GSHCC improve processes to increase value through planning guidance?
3. Do you feel GSHCC partners and members are adequately engaged in exercises?
a. If not, what mechanisms could the GSHCC potentially implement to increase outreach and engage additional partners?

## Implementation Objectives and Activity Questions

1. In your opinion, has the GSHCC provided adequate training information via the GSHCC newsletter and regular emails on federal, state, and local webinars and engagement opportunities?
2. Have you had the opportunity to participate in GSHCC After-Action Review (AAR) Processes for real-world events (COVID-19) and exercises?
3. If you have had the opportunity to attend the GSHCC General Meeting and/or GSHCC Conference, have they been valuable experiences?
4. Are you satisfied with ongoing technical assistance (on Juvare, exercise development, training guidance and planning guidance etc.) provided by the GSHCC team?
5. If given the opportunity, would your organization be willing to participate in the Medical Response \& Surge Exercise (MRSE)? The MRSE is the newly redesigned Coalition Surge Test (CST).
6. Which of the following trainings would be of value to your organization (please select all that apply)?
$\square \quad$ Continuity of Operations (COOP) Planning
$\square \quad$ Public Information Officer (PIO)
$\square$ Hospital (healthcare) Incident Command System (HICS)
$\square \quad$ ICS 101 (introductory)
$\square$ Emergency Operations Plan (EOP) development, including hazard-specific annexes (i.e., Pandemic Annex, Extreme Winter Weather Annex, or Cyber Annex)?
$\square$ Burn Surge
$\square \quad$ Pediatric Surge
$\square$ Infectious Disease Surge
$\square \quad$ Radiation Surge
$\square$ Chemical Surge
$\square \quad$ Other (please specify)
7. Which types of planning guidance would your organization find most valuable?
$\square \quad$ Emergency Operations Plan (EOP)
$\square \quad$ Pandemic/Infectious Disease Annex planning
$\square \quad$ Extreme Winter Weather Annex planning?
$\square \quad$ Cyber Threat Annex planning?
$\square \quad$ Crisis Standards of Care (CSC)
$\square \quad$ Alternate Care Sites (ACS)
8. What types of exercises would your organization be most interested in participating in (please select all that apply)?
$\square \quad$ Medical Response \& Surge Exercise (MRSE)- formerly the coalition Surge Test (CST)
$\square$ Burn Surge Exercise
$\square \quad$ Radiation Surge Exercise
$\square \quad$ Chemical Surge Exercise
$\square$ Crisis Standards of Care (CSC) Exercise
$\square \quad$ Other (please specify)

## Appendix D Poll Everywhere Survey Results

Implementation Activity Suggestions
Meeting participants were asked if the three mitigation strategies identified in 2021 were still relevant for addressing the top hazards identified. About $89 \%$ of meeting participants responded that the strategies still applied.


Implementation Activity Suggestions
Meeting participants had the opportunity to recommend or suggest activities to continue implementing each of the selected mitigation strategies in 2022. Summary results are presented in the tables below. The larger GSHCC membership was asked to further prioritize activities for each mitigation strategy. The top three priority activities identified through the follow-up survey are indicated below.

What actions could the GSHCC take to provide additional planning guidance to all partners?

Provide on-demand training and webinars relative to planning

Provide annex/plan templates, checklists, and guidance (especially on EOP and hazard specific annexes)

Include EOP guidance in newsletters and publications

Conduct exercise evaluator/planning training (HSEEP)
Assist partners with planning initiatives

Conduct training on planning processes including planning resources

GSHCC to survey partners to see which sector needs training most and provide tailored guidance to that sector

Provide planning guidance from regulatory bodies

Hold peer work groups to allow partners to support and learn from each other

What actions could the GSHCC take to provide additional trainings of value to partners?

Provide trainings associated with CEUs, CMEs, certifications etc.

Keep members informed of scheduled training and training on the horizon
Offer on-demand/ canned training for organizations to conduct independently

Build and maintain a training calendar
Conduct shorter and more frequent trainings
Provide training flexibility and availability
Offer on-demand trainings

Work with partners to conduct co-facilitated trainings

Training attendees should have a tools and resources to leave the training with

Training should include real-time TA/ hands on elements

Conduct sector-specific training
Offer training in the evenings (after work hours)
Conduct region-specific training

What actions could the GSHCC take to strengthen partner engagement in GSHCC exercises?

Invite guest SMEs from external organizations to participate in exercises

Conduct exercises that can assist facilities in meeting CMS compliance
Schedule exercises in advance to allow for staff commitment

Conduct a mock TTX for partners new to EP
Trainings and exercises should provide takeaway tools for organizations

Conduct regional trainings and exercises
Provide exercise flexibility and availability
Conduct smaller scale TTX exercises with fewer objectives and a shorter period
Always provide virtual options for exercise participants

Conduct training on exercise design and development (HSEEP)

Engage partners from different geographical areas in exercises

Disseminate training and exercise calendar monthly

Conduct exercise planning over several months
Include diverse partners in exercise planning processes

Build exercise templates that apply to each sector Include all stakeholders in exercises

Build exercise templates that apply to various hazards

Conduct in-person exercises as they are more valuable

Conduct a training on AAR/IP development


[^0]:    The Granite State Health Care Coalition is an initiative of the Foundation for Healthy Communities financed under a contract with the State of New Hampshire, Department of Health and Human Services, with funds in part by the State of New Hampshire and/or such other funding sources as were available or required, e.g., the United States Department of Health and Human Services.

[^1]:    ${ }^{1}$ U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response. (2016). 2017-2022 Health Care Preparedness and Response Capabilities. https://www.phe.gov/Preparedness/planning/hpp/reports/Documents/2017-2022-healthcare-pr-capablities.pdf

