

# Health Care Coalition Extended Downtime Health Care Delivery Impact Assessment

## Introduction

Any hazard, whether an isolated system failure or widespread community disaster, may result in prolonged interruptions to critical services such as utilities or information infrastructure. Health Care Coalitions (HCCs) must be prepared to rapidly transition to extended downtime protocols or modified operational states. While technology-dependent functions provide critical lifesaving capabilities, reliance on connected networks, systems, and utilities can leave coalitions and their members vulnerable. Recent high-profile cyberattacks on health care infrastructure and devastating natural disasters have shown the harmful and often long-term consequences such outages can have on patient care and health service delivery.

Using the [HCC Cybersecurity Assessment](#) alongside this impact assessment can help HCCs evaluate the current state of **cybersecurity resilience** within their jurisdictions. It supports identifying gaps, promising practices, and existing policies at the HCC level.

Access the [Health Care Coalition Resource Page](#) for related plans, tools, and templates.

The growing use of sophisticated modern technology in health care and increased prevalence of outages and cyberattacks require the incorporation of extended downtime preparedness measures. The U.S. Department of Health and Human Services (HHS) Administration for Strategic Preparedness and Response's (ASPR) Hospital Preparedness Program (HPP) recognizes that managing major downtime events requires consistent planning, training, and coordination of resources across various internal and external operational components to mitigate impacts on health care operations.

The 2024-2028 HPP Notice of Funding Opportunity (NOFO) incorporates new activities that emphasize preparation for extended downtime (including cyber incidents), among other critical priorities. While HCCs may also be affected by these outages, in some cases, they may be able to support the health care system (HCS) and individual HCC members during downtime.

## Purpose and Scope

This assessment can help HCCs and their members evaluate the current state of downtime readiness in their jurisdictions and identify gaps, promising practices, and current policies at the

HCC level.<sup>1</sup> As part of the current HPP cooperative agreement, HCCs are expected to complete an Extended Downtime Health Care Delivery Impact Assessment focusing on preparedness and response functions. Although this assessment is focused *on the functions of the HCC itself*, the process can help identify common themes that affect members. *While this assessment can be used to meet that requirement, the use of this specific template is not mandatory.*

This assessment can be used to evaluate various systems at multiple levels to identify key areas for downtime planning. It includes considerations for key utility failures (electrical and water) in addition to IT systems, as cascading failures frequently compromise multiple systems. HCCs are encouraged to share this tool and the HCC-level results with the HCSs and facilities they support to identify gaps, especially opportunities for regional exercises, education, and information-sharing.

### Objectives

This assessment is designed to help identify priority areas at the HCC level to reduce risk and improve overall downtime readiness. It is not intended to be used to compare HCCs, “score” the HCC, or be used for regulatory or other administrative purposes. It is designed to allow maximum transparency of key issues while protecting sensitive information. HCC leadership can use the results of this assessment to inform future downtime support needs, including preparedness and response planning among coalition members.

The objectives of the assessment are to:

- ✓ Assess current downtime practices
- ✓ Determine efficacy of current downtime contingencies
- ✓ Describe community impact of extended downtime
- ✓ Identify potential mitigation strategies
- ✓ Support future utility failure and downtime operations needs
- ✓ Understand and define the role of the HCC and region during a downtime event

### Assessment Process

HCCs should identify a lead assessor to complete the questionnaire and serve as the main point of contact. The assessor will likely need to engage with multiple other individuals to determine accurate responses and may wish to create a workgroup for ongoing activities.

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<sup>1</sup> The [National Institute of Standards and Technology \(NIST\) Cybersecurity Framework](#) defines downtime readiness as the comprehensive state of an organization's preparedness to respond to, contain, and recover from a disruption that causes an information system or business process to become inoperable.

Assessors should provide an answer for each question, based on an approximation of the overall perceived level of completion from the perspective of **HCC functions and activities** (“yes,” “no,” “partial,” “not applicable”). HCCs vary significantly in their physical and virtual systems, so some questions may not apply to certain coalitions. Assessors should note these omissions by indicating “not applicable” in response to the question/domain that does not apply to their operations. Additional details for each question may be added to the “Notes” column. Including multiple agencies, facilities, and care disciplines is recommended to evaluate the current aptitude of extended downtime preparedness. Sensitive information from the assessment should be deidentified before sharing assessment results.

## Assumptions

**This document assumes the individual completing the assessment has:**

- General understanding of current downtime initiatives relevant to the HCC. This includes awareness of previous downtime incidents or utility-related threats and vulnerabilities.
- Basic understanding of extended downtime practices already being implemented within the coalition and within the health care delivery systems that make up the coalition.
- Already been exposed to, or is aware of, critical health care downtime principles and practices that may be referenced in this assessment. This includes any major HPH guidance materials, operational downtime reference documents, or industry best practices.
- Knowledge (or the ability to engage partners that have such knowledge) of the basic health care-related downtime best practices being utilized in their health care facility, system or jurisdiction/region, or at the coalition level.

### **Additional Assumptions:**

- HCC members have mechanisms in place to maintain awareness of current utility threats and vulnerabilities, and the HCC has a mechanism to share and update situational awareness information.
- Core HCC activities such as information coordination and support will often provide critical assistance during a utility failure event. This assessment does not assess usual coalition activities.
- Health care facilities, systems, and the HCC understand their integration into ESF-8 for information sharing, resource requests, and other emergency management support.
- Health care facilities, systems, and the HCC have mechanisms for developing internal and external communications relevant to an incident and will work with a Joint Information System if one is activated in the jurisdiction.

- Health care facilities, systems, and the HCC have incident command processes that are understood and practiced.
- Health care facilities have facility-specific incident response plans in place including surge staffing plans; HCCs understand their supportive role as practical.

## Related ASPR TRACIE Resources

- [Electronic Health Records and Downtime Procedures Topic Collection](#)
- [HCC Resource Page](#)
- [Utility Failures in Health Care Toolkit](#)
- [Utility Failures Topic Collection](#)
- [Cybersecurity Resources Page](#)
- [Cybersecurity Topic Collection](#)
- [HCC Cybersecurity Assessment](#)
- [Healthcare System Cybersecurity: Readiness & Response Considerations](#)

## Additional Related Resources

- [ASPR's Office for Cybersecurity and Infrastructure Protection Bulletins](#)
- FEMA [Resilience to Power Outages in Healthcare Facilities](#) and [Healthcare Facilities and Power Outages: Guidance for State, Local, Tribal, Territorial, and Private Sector Partners](#)
- [HHS emPOWER Program](#)
- CISA: National Cyber Awareness System-[Bulletins](#), [Alerts Subscription](#), [Cybersecurity Services and Tools](#), and [Tabletop Exercise Packages](#)
- [Health Sector Coordinating Council Cybersecurity Working Group](#)
- [HHS 405\(d\)](#)
- [HHS Cyber Gateway](#)
- [HHS HPH Cybersecurity Performance Goals](#)
- [NIST Cybersecurity Framework \(CSF\) 2.0](#)

## Acknowledgements

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The following questions are specific to the activities planned by HCCs in the event of long-term downtime that is a result of a utility failure (e.g., electrical, water), or cyber-related event which affects the function of the HCC.

HCC Downtime Activities	Yes/No/Partial/ NA	Additional Notes
<b>1. General Downtime Preparation and Practices</b>		
1.1. Does the HCC have an updated external member contact list, in electronic and hard copy, for use during HCC service interruptions and downtime needs?		
1.2. Does the HCC have plans for obtaining additional staff and resources (e.g., contract staff, supplemental administrative staff, retired staff, Medical Reserve Corps) needed to support a downtime event?		
1.3. Does the HCC's downtime planning address the possible need to prioritize and limit, determine alternatives for, or temporarily suspend HCC services?		
1.4. Is there a secondary location for HCC activities?		
<b>2. Downtime Communications</b>		
2.1. Is there an established plan for how HCC members or partners will communicate and share information during primary system downtime?		
2.2. Does the HCC have multiple communication modalities prepared for use during a downtime event?		
2.3. Is the downtime backup plan for information sharing and resource requests known to members?		
2.4. Does the HCC have a Common Operating Picture or Situational Awareness Tool to collect and exchange critical information when the primary system is down?		

HCC Downtime Activities	Yes/No/Partial/ NA	Additional Notes
2.4.1. Does this tool consider hospital, EMS, skilled nursing, LTC, and dialysis facility/agency status, and strain/surge data per coalition agreement?		
2.5. If services are impacted, does the HCC have an alternate plan for how coalition members and the community will be informed about impacted services?		
2.6. Are there on-site and/or contracted assets that can be used (e.g., radios, downtime phones, “hotspots,” portable cellular connectivity case, satellite internet device, and/or requesting deployable resources from cellular carriers’ disaster assistance teams) to restore functionality for loss of internet or phone systems?		
2.7. If the HCC is located within or reliant on a health care system’s IT infrastructure, are there alternate systems or physical locations that can be used to maintain operations in the event of a system failure at the host organization?		
<b>3. Downtime Impact</b>		
3.1. Do you have a method for assessing severity of downtime impact, including consideration for the following: <ul style="list-style-type: none"><li>• Available alternative or functioning services</li><li>• Anticipated duration</li><li>• Risk to:<ul style="list-style-type: none"><li>○ Community</li><li>○ Workforce</li><li>○ Business operations</li><li>○ Technical infrastructure</li><li>○ Physical structure(s)</li></ul></li></ul>		
3.2. Does the HCC have or have access to backup systems or contingency plans for critical building infrastructure (e.g., fire suppression and access control systems)		

HCC Downtime Activities	Yes/No/Partial/ NA	Additional Notes
in the event of a failure? For example, are fire watch protocols or manual key access procedures established and ready to deploy?		
3.3. Is there a process in place to assess the impact of utility or cyber-related downtime on coalition member major supply chains (e.g., medical supplies, food, blood, oxygen, pharmaceuticals, devices such as ventilator, personal protective equipment)?		
3.4. Does the HCC have a process to assess how a downtime event will impact at-risk populations?		
3.4.1. Does the plan address related outreach strategies?		
3.4.2. Has the HCC worked with jurisdictional partners to identify populations who would be most impacted in the event of failures of IT-dependent systems (e.g., cellular/phone, internet, and 911)?		
3.4.3. Have any contingency plans been developed for such failures to meet these needs at the community level?		
3.4.4. Can the HCC identify what services (e.g., IT-based monitoring equipment, durable medical equipment) within the coalition would be most impacted in the event of a large-scale cyber event or systems failure?		
3.5. During downtime, does the HCC have processes to support patient transfers, hospital evacuations, or specialty patient movement?		
3.6. Does the HCC have plans to meet physical and psychological needs of HCC personnel of an affected facility or system during a prolonged downtime?		

HCC Downtime Activities	Yes/No/Partial/ NA	Additional Notes
<b>4. Cyber Downtime</b>		
4.1. Does the HCC have a cyber-specific downtime plan (for planned maintenance and unplanned incidents)?		
4.2. Does the HCC have IT professionals that are able to support it during downtime?		
4.3. Does the HCC downtime cyber planning include backup systems for critical technology?		
4.4. Do the systems have integrated backup/mirroring/redundancy?		
4.4.1. Can these be accessed during a system failure?		
4.4.2. Have staff been educated on accessing these systems?		
<b>5. Electrical Failure</b>		
5.1. Does the HCC have a good understanding of how electrical power is supplied to the HCC and its members (e.g., overhead vs. underground power lines, peak demand periods, natural disaster vulnerabilities)?		
5.2. Does the HCC have generator and/or battery backup for critical systems on-hand?		
5.2.1. If not, does the HCC have plans to quickly access generators/underground power sources (UPS) devices (e.g., availability, location, capacity, cost)?		
5.2.2. If UPS devices are used, do you have a list of who maintains them and where are they located?		
5.2.3. If the generator powers the HVAC system, is it in an area safe from threat of flooding?		

HCC Downtime Activities	Yes/No/Partial/ NA	Additional Notes
<p>5.3. Does the HCC have downtime plans in place in case of an electrical failure that address the following:</p> <ul style="list-style-type: none"><li>• Knowing which data systems are backed up.</li><li>• Identifying IT systems that are reliant on electricity (e.g., VoIP, wireless services, PA system, fire alarm system, phone system).</li><li>• Knowing what components are backed up to generator.</li></ul>		
<b>6. Water and Sewer</b>		
<p>6.1. Does the HCC review its potable and service water supply needs (e.g., how much potable/non-potable is needed, from where)?</p>		
<p>6.2. Does the HCC have a temporary and accessible supply of potable water?</p>		
<p>6.3. Has the HCC conducted planning for potable water supply disruption on members and specifically community dialysis services?</p>		
<p>6.4. Does the HCC have a water disruption incident alerting plan in place? Is there a specific threshold for activation?</p>		

HCC Downtime Activities	Yes/No/Partial/ NA	Additional Notes
<p>6.5. Does the HCC understand and practice general water utility failure promising practices such as:</p> <ul style="list-style-type: none"><li>• Working with the local water authority to determine secondary supply options, including those outside the region.</li><li>• Understanding available contracts and resources for water supply (tankers, bladders, contractors, vendor-supplied water, timeframes)</li><li>• Considering use of nearby surface water or non-traditional sources as backup methods.</li><li>• Understanding safe drinking water standards for secondary supplies.</li><li>• Installing external connections for import of water during a utility outage.</li><li>• Planning for a secondary or distributed virtual location for HCC functions.</li></ul>		