Community Hazard Vulnerability Assessment (CHVA) and Resource Gap Analysis (RGA) 2023-2024

Arizona Coalition for Healthcare Emergency Response

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Executive Summary

Statewide Community Hazard Vulnerability Assessment and Resource Gap Analysis

The Arizona Coalition for Healthcare Emergency Response (AzCHER) conducted a Statewide Community Hazard Vulnerability Assessment (CHVA) and Resource Gap Analysis (RGA) from September to November 2023 to identify the healthcare coalition's most significant risks and resource gaps. The CHVA/RGA process is an analysis of capacities and capabilities to address healthcare delivery system emergencies statewide and regionally. Subsequently, the results inform AzCHER's preparedness priorities in training, exercising, and planning. Our members can benefit by incorporating these results into their plans and exercises to better understand the healthcare community's hazard risks and resource needs. This report directly aligns with the standard healthcare hazard vulnerability analysis (HVA) and the public health jurisdictional risk assessment (JRA).

The objective of the CHVA/RGA is to represent the whole community and the collective needs through a member-driven process. Members were asked to report on their facility HVA results and current resources, through a survey (Appendix 1). Aggregated HVA survey data was then entered into the AzCHER CHVA tool for a comprehensive community analysis that included an in-depth evaluation of relative risk scores. Similarly, the summarized RGA plan data was entered into the ASPR TRACIE Resource and Gap Analysis tool to include composite risk scores. Results from both tools and aggregated resource data were presented to regional work groups, who led the process of identifying and prioritizing the likely hazards the region could face and discussed any gaps in plans and resources. Across the state, the CHVA/RGA process engaged 227 member organizations and consulted a CHVA/RGA work group from each region that was representative of the core healthcare sectors.

The lists below provide a high-level overview of the key findings described in detail in this report.

AzCHER Community Hazard Vulnerability List: Top 5 Healthcare Hazards (updated 2023-24)
1. Temperature Extreme (Heat)
2. Staffing Shortage
3. Severe Weather
4. Cyberattack
5. Communications/ Telephone/ Network Failure

AzCHER Top Gaps in Planning (Assessed in 2021-22):
- AzCHER Emergency Response Plan and Annexes
- Hospital Crisis Care/ Crisis Standards of Care Plan
- Healthcare Emergency Operations Plan
- Healthcare Training and Exercise Plan

AzCHER Top Gaps in Resources (Updated 2023-24):
- Transportation resources for specific emergency type (burn, pediatric, HAZMAT)
- Notification platforms for Outpatient, Home Health, and Hospice
- HAZMAT supplies (patient redress kits, chemical assets)
- Documentation of transportation resources across all member types
- PPE in hospitals for highly infectious disease

Introduction

Community Hazard Vulnerability Assessment and Resource Gap Analysis

The **CHVA** is a systematic approach to identifying the region's most significant risks – both natural and manmade –that are most likely to have an impact on the demand for healthcare services or the healthcare delivery system's ability to provide these services. As the healthcare coalition (HCC) serving the state of Arizona, AzCHER administers a CHVA to inform coalition priorities on an annual basis. The CHVA process is a member-engaged internal analysis of capacities and capabilities to address a medical surge and subsequently is intended to determine resource needs and gaps.

The **RGA** identifies the healthcare system's resources and services that are vital for the continuity of healthcare delivery during and after an emergency. The results are used to identify resources that could be coordinated and shared. The RGA is critical to uncovering resource and planning vulnerabilities relative to the CHVA that could impede the delivery of medical care and healthcare services during an emergency. Overall, both assessments assist in determining future planning, training, and exercises.

The outcome of this project is the AzCHER Healthcare CHVA/RGA Summary Report that serves as a baseline for future healthcare delivery system planning, training, mitigation, response, and recovery activities.

Purpose: A Foundation for Medical and Healthcare Readiness

A **CHVA** helps build a foundation for medical and healthcare readiness by strategizing healthcare coalition functions based on regional risks and needs based on the recommendations and requirements of the U.S. Health and Human Services (HHS), Hospital Preparedness Program (HPP) Cooperative Agreement, administered by the Arizona Department of Health Services (ADHS). This report will review the process for the regional chapters of Arizona's statewide healthcare coalition to aggregate organizational perceptions of hazard vulnerabilities and weigh them with a population-based, regional context. The objective of the CHVA is to represent the whole community and the collective needs of the Arizona health system. The CHVA represents the first step in identifying risks and needs: assess hazard vulnerabilities and risks (see Figure 1 below).

The **RGA** helps build a foundation for medical and healthcare readiness by identifying the healthcare resources and services that are vital for the continuity of healthcare delivery during and after an emergency. This information is used to identify resources that could be coordinated and shared, which is critical to uncovering resource vulnerabilities relative to the HVA that could impede the delivery of medical care and healthcare services during an emergency. The resource assessment data is different for various AzCHER member types but addresses resources required to care for all populations during an emergency, such as pediatric equipment and long-term care beds. The RGA represents the second step in assessing regional healthcare resources (Figure 1).
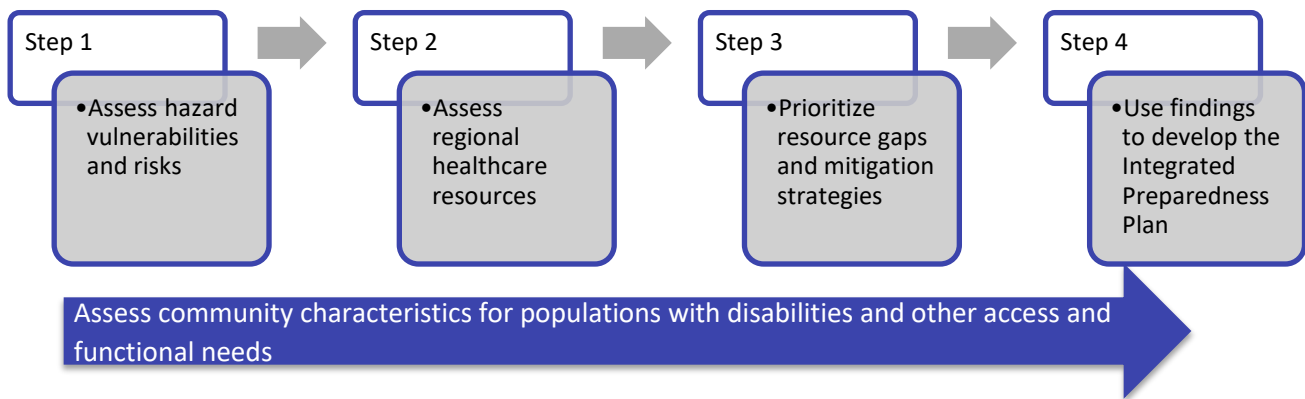
Figure 1. *Preparedness Planning Sequence. The CHVA represents the first step to build the foundation for medical and healthcare readiness, highlighted in gold above, of the risk identification process. The RGA, highlighted in red, represents the second step of the risk identification process. Populations with disabilities and other access and functional needs (DAFN) are considered throughout the entire process. The full process is outlined in the AzCHER Integrated Preparedness Plan (IPP).*

Planning Assumptions

- While there is likely significant overlap between the CHVA for AzCHER and the HVA for an individual healthcare organization or jurisdiction, these are separate and distinct processes.
- A specific vulnerability may not exist across all Coalition member organizations; however, Coalition members will generally face many of the same hazards.
- The CHVA/RGA is not a replacement for an organization- or facility-specific HVA or resource assessment.
- The CHVA/RGA is based upon responses received by participants and is not a comprehensive assessment of all partners. Survey respondents, while invited to complete the surveys via email, were self-selected based on interest. The data provided by these participants are influenced by their own organizational experience and planning efforts.
- The assessment of hazards and planning gaps across the regions and state are based on a combination of quantitative data (such as the occurrence of naturally occurring events) and qualitative estimations (such as Low-Medium-High consequence scales).
- This assessment does not provide details regarding the unique attributes and risks for individual counties. Threats and vulnerabilities in this assessment may appear to be more homogenous throughout the state than they are at the local level.
- It must be recognized that this assessment alone cannot represent the Coalition's knowledge of the state of plans, threats, and issues in an area and should only be used as a guide, with local leaders and subject matter experts having significant input into the decisions on priority gaps and actions.
- This CHVA/RGA process incorporates state and local emergency management organization assessments and other public health hazard assessments, though the primary focus of this assessment is the impact on healthcare.

Arizona's Healthcare Coalition

AzCHER facilitates collaboration among public health, healthcare, pre-hospital and transport entities, emergency management, and various other community partners to 1) build, strengthen, and sustain a healthcare

preparedness and response system in Arizona; and 2) assist Emergency Management and Emergency Support Function 8 (ESF-8) with meeting the National Preparedness Goal's five objectives: prevention, protection, mitigation, response, and recovery as related to healthcare disaster operations. AzCHER is a statewide healthcare coalition with four distinct regions: Central, Northern, Southern, and Western. Each region is described in further detail at the end of this report in Appendices 3-10.

As a sub-recipient of the HPP grant, overseen by ADHS, AzCHER is required to conduct an annual CHVA/RGA by the Administration for Strategic Preparedness and Response (ASPR), a division of the US Department of Health and Human Services.[1] ASPR requires core healthcare coalition capabilities for AzCHER, which informs the healthcare coalition's purpose and function.[1] The purpose of AzCHER is to build resilience in the state's healthcare delivery system so that it is prepared to respond to and recover from a large-scale emergency or disaster.

Methods

The methods of this report begin with a cross-sectional survey, administered to designated representatives from various coalition partners, aimed to assess hazard vulnerabilities and resource gaps within healthcare facilities across Arizona. Utilizing adapted tools from Kaiser Permanente (KP) and the ASPR Resource and Gap Analysis Tool, the survey covered a range of organizations, including hospitals, EMS entities, public health agencies, tribal nations, emergency management, behavioral health, and volunteer organizations. The survey delved into hazard probabilities, healthcare impacts, and mitigation measures, with results aggregated at both statewide and regional levels. Next, the Coalition staff disseminated the survey to general membership, collecting data through SurveyMonkey from September 1-29, 2023. Then, subsequent facilitated discussions by the CHVA/RGA Functional Work Group, representing the Coalition perspective, involved qualitative analysis of the data to identify top hazards and resource priorities, ensuring a comprehensive and collaborative approach to emergency preparedness and response. Lastly, the Coalition staff drafted and finalized this report.

AzCHER Staff, Work Group, and Member Responsibilities

The CHVA/RGA process involves actions from Coalition staff, work groups comprised of core members, and the general membership as outlined in Figure 3. The roles and responsibilities for each group are described below:
Coalition staff:
- The CHVA/RGA data collection survey was administered regionally by staff via emails and the monthly AzCHER newsletter.
- Staff recruited a statewide CHVA/RGA work group, reviewed/updated the regional vulnerability profile, and participated in CHVA/RGA meetings.
- The Statewide Planning Manager and Statewide Logistics Manager were responsible for outlining the process, providing subject matter guidance, templates, facilitating the work group meetings and general body meetings, analyzing data, and authoring the final statewide summary report.
Functional work groups:
- Comprised of core member representatives to produce a Coalition-specific risk and resource assessment consensus based on the survey results.
- Sort and prioritized hazards and vulnerabilities, considering the likeliness to result in a Coalition-wide response. These often overlapped with the hazards that members identified in their facility HVAs, but the work groups also considered statewide resources, public health statistics, and county hazard mitigation plans.

- Removed or adapted vulnerabilities to focus on community-wide and Arizona-specific risks and resource gaps impacting Arizona's healthcare delivery system.

General membership:
- Volunteered their time to complete the survey with their facility-specific emergency preparedness teams, so their data could be aggregated into a statewide and community perspective.
- Conduct their own HVA and resource assessments.
- Use this report to add a community perspective to their emergency preparedness programs.

Survey Administered to All Coalition Partners

A designated representative from each organization/facility (***Appendix 2: List of Participating Organizations***) was asked to complete an online survey (Appendix 1: CHVA/RGA Survey Questions) for each licensed facility. AzCHER's CHVA/RGA survey questions facilitate member reporting on their facility's most recent HVA and resources. The CHVA survey questions are adapted from the 2017 Kaiser Permanente (KP) HVA Tool and past AzCHER CHVAs. Although the KP HVA tool was initially developed for hospitals, it is a widely adaptable tool that specifically evaluates any facility's ability to provide healthcare services. The KP HVA employs a worksheet method to systematically evaluate hazard vulnerability based on value-based quantitative inputs. The completion of this survey fulfills the Centers for Medicare and Medicaid Services (CMS) and Joint Commission requirements for a healthcare facility's participation in a *Community* HVA.

The RGA survey questions were developed from the ASPR Resource and Gap Analysis Tool. This tool is designed to help Coalition partners develop a common understanding of their resources and existing gaps, and strategies for prioritizing which gaps to close. Gaps may include inadequate plans or procedures, staffing, equipment and supplies, skills and expertise, and/or services. AzCHER has modified the tool to reflect its members' resources and provide a Coalition-based perspective.

The survey was administered to designated member representatives through SurveyMonkey from September 1-29, 2023. All member representatives for organizations/facilities were instructed to report data from their current HVA and resource analysis. Only one response from each member organization/facility was recorded to reduce any duplication.

Member facilities that were invited to participate in the survey include (not limited to):

- Hospitals and healthcare organizations
- EMS / patient transport entities
- Local public health
- Tribal nations
- Local emergency management
- Behavioral health
- Community/volunteer organizations active in disaster

Survey Data Collection and Analysis

The survey asked facilities to report hazard vulnerabilities and resource gaps based on their facility/organizational perception, which included available resources and emergency planning questions specific to AzCHER member types (EMS, hospital, public health, long-term care, and outpatient care). Definitions for

each CHVA measure used to assess hazards are present in Table 1. The survey questions were tailored for healthcare emergency preparedness and response scenarios applicable to Arizona. A full list of questions and answers is available in ***Appendix 1: CHVA/RGA Survey Questions***.

The survey responses were aggregated statewide and by region to calculate mean scores for each hazard. The mean scores were entered into the KP adapted CHVA tool and ASPR adapted RGA tool for the state and each region. Commonly perceived hazard vulnerabilities, as well as the historical hazard incident responses, were equally weighted in ranking the top ten hazards by the risk of occurrence and risk of response. Additionally, the available resources and gaps were averaged by the number and type of responses at the regional and statewide levels.

The KP adapted CHVA tool calculated risk based on the below formula:

Risk: Probability x Severity (Impact – Mitigation)

Measure	Definition	Rating
Probability	Occurrence: Likelihood of the incident to occur	0 = Rare or N/A 1 = Low (Every 10-50 years) 2 = Moderate (Every 1-10 years) 3 = High (Annually)
Healthcare Impact	Percentage of population, properties, and business likely to be affected under an average occurrence of the hazard	0 = No impact expected 1 = Low, causes minimal disruption; managed at daily level (<1% affected) 2 = Moderate, causes disruption outside of normal means but does not threaten regional healthcare service delivery (1-10% affected) 3 = High, causes significant disruption and threatens regional service delivery (>10% affected)
Mitigation	Preparedness: Current level of planning, resources, and capacity at the organizational level	0 = Sustainability only- strong capability in place, with regular ongoing planning, testing/training, sufficient resources available 1 = Adequate planning requires minor modifications based on training, exercises, events, or other evaluation; resources are available to procure if needed 2 = Inadequate or possibly adequate planning / training / exercises (i.e. plan has not been evaluated, tested, and/or incomplete training), difficult to procure necessary resources 3 = No planning/training/exercises currently exist or not applicable; unable to procure necessary resources
	Response: healthcare system/ mutual aid staff and supplies required for a hazard response at the community level	0 = Negligible - no response (rare minor injury, no significant effects from information compromise, minor property/economic damage to the community) 1 = Moderate - a few major injuries/hospitalizations in the community, compromise of information with limited impact on community agencies, moderate damage/economic impact (e.g. 1-20% of assets damaged or lost) 2 = Significant - few deaths but multiple major injuries/hospitalizations in the community, significant property damage/economic impact (e.g. temporary closure, 25-50% of community assets damaged or lost) 3 = Extensive - multiple deaths, compromise of information with significant ongoing impact, extensive property damage/economic impact (e.g. potential emergency declaration, >50% loss of assets)

Table 1. *Definition of HVA measures used in the statewide survey.*

Facilitated Discussion by the CHVA/RGA Functional Work Groups

The statewide CHVA/RGA Functional Work Group was recruited from the general membership and the regional steering committees. The group met once to review the hazard vulnerability data and resource gaps by coming to a consensus on all CHVA/RGA data inputs (i.e., the regional vulnerability profiles and member surveys). During this process, qualitative data was obtained and is presented as part of the results.

The CHVA/RGA work group represented the Coalition's perspective, as opposed to being representatives of individual facilities, to ensure that the data reflected regional and statewide gaps and vulnerabilities. They used an open discussion forum and submitted feedback directly to the facilitators to evaluate the top coalition hazards and resource gaps.

The CHVA/RGA work group then considered the survey data, regional considerations/unique priorities, and the vulnerability profile to produce a list of top statewide hazards and a list of planning and resource priorities. Additional survey data listed by region are available in *Appendices 3-6: Regional Survey Results*.

All core member types were represented in the work groups and contributed to the discussion by adding sector-specific considerations to the hazard vulnerabilities and resource assessment deficiencies. The following members volunteer in the **CHVA/RGA Work Group**:

American Vision Partners	Maryland Gardens Post Acute
Archstone Care Center	Meridian Health Care Providers, Inc.
Assisteo Home Health	Mirabella at Arizona State University
Beatitudes Campus	Mohave County Public Health
Canyonlands Healthcare	Mt. Graham Regional Medical Center
Chiricahua Community Health Centers Inc.	Navajo County Public Health Emergency Preparedness
Cobre Valley Regional Medical Center	Pima County Health Department
Copper Queen Community Hospital	Pinal County Public Health Department
Eden Health	St. Joseph's Hospital
El Rio Health	Sunset Health
Gila River Healthcare	Tucson Medical Center Health
Hospice of Valley	Western Arizona Regional Medical Center
Kaibab Band of Paiute Indians	Winslow Indian Health Care Center
Little Colorado Medical Center	Yavapai County Community Health Services
Maricopa County Public Health Department	Yuma County Public Health Services District

Prioritization of Resource Gaps and Mitigation Strategies

This assessment of available resources and the current hazards identifies gaps and helps prioritize future activities, representing the first step in the Preparedness Cycle. The list of top hazards assists the Coalition in quickly identifying where to focus plans, training, and exercises. The resource gaps include a lack of, or inadequate, plans and procedures, staff, equipment and supplies, skills and expertise, services, or any other resources required to respond to an emergency. The resource assessment provides a way to prioritize needs for various member types. Members should prioritize gaps based on consensus and determine mitigation strategies based on the time, materials, and resources necessary to address and close any disparities. Deficiencies may be

addressed through coordination, planning, training, or resource acquisition, which can be accomplished through the Coalition activities. Ultimately, AzCHER will focus its time and resource investments on closing those gaps that affect the Coalition's ability to respond.

Certain response activities may require external support or intervention, as emergencies may exceed established preparedness thresholds. Thus, during the prioritization process, planning to access and integrate external partners and resources (i.e., federal, state, and/or local) is a key part of gap closure. A complete description of AzCHER's prioritization process can be found in the [Integrated Preparedness Plan.](Integrated Preparedness Plan)

Data Inputs

This report provides an Arizona healthcare community perspective by incorporating data from three main inputs: regional vulnerability profiles, member survey, and CHVA/RGA work group discussion:

1. The CHVA/RGA survey collects data from a wide range of healthcare partners, representing the healthcare community.
2. The regional vulnerability profiles contribute local context and population-based information under a healthcare system preparedness lens for the CHVA/RGA. AzCHER Regional Vulnerability Profiles can be found in *Appendices 7-10*. Below is a list of vulnerability profile contents:

    a. Review of county Multi-Jurisdictional Hazard Mitigation Plans to gather information on physical characteristics and infrastructure capabilities of the region, including geography, weather, roads, transportation, power, water, fuel, information technology, and communication.
    b. Collection of county and regional data on vulnerable populations such as children, seniors, pregnant women, persons with access and functional needs, persons with disabilities, and those with unique medical needs.
    c. Summary of healthcare facility assets including hospitals, licensed pharmacies, long-term care facilities, and bed capacity.

3. The functional work group discussion and qualitative analysis allows for discussion of unique regional considerations and confirmation of the survey results.

Results

Survey

The survey captured responses from 227 participants out of 571 member organizations, representing a 40% response rate. Diverse healthcare sectors are represented including ambulatory surgery centers (25%), skilled nursing/ long-term care facilities (16%), acute care hospitals (8%), home health (5%), hospice organizations (11%), public health agencies (4%), and emergency management (4%). There are strengths and gaps based on the variety of responses collected by member type. Strengths identified in survey responses are 48 Hospitals (includes all types), 47 LTC/SNF, and 41 Ambulatory Surgery Centers. Gaps identified are 1 Emergency Medical Services (EMS) agency and 2 Emergency Management (EM) organizations. Additionally, 10/17 tribal and county public health agencies responded to the survey. AzCHER will work to recruit additional members and develop partnerships with the member types missing from the survey responses. A limitation of the survey is that some healthcare organizations only filled out one survey, representing numerous facilities, however it was only counted as one facility in the table below. For instance, only 19 acute care hospitals filled out the survey, but several respondents only submitted one entry for over 10 individual hospitals that are part of a large healthcare system.

Statewide Responses by Sector Type

Member Type	Number of Responses	Percent of Total
Ambulatory Surgery Center	57	25.11%
Skilled Nursing or Long-Term Care Facility	36	15.86%
Hospice	26	11.45%
Hospital-Acute Care	19	8.37%
Home Health Agency	12	5.29%
Community Health Center / Federally Qualified Health Center	11	4.85%
Public Health Agency (County or Tribe)	10	4.41%
Hospital-Critical Access	10	4.41%
Emergency Management Organization (County or Tribe)	9	3.96%
Emergency Medical Services (EMS) / Fire Department	9	3.96%
Health Care Clinic	5	2.20%
Behavioral Health Facility	4	1.76%
Hospital-Specialty	3	1.32%
Hospital-Rehabilitation	3	1.32%
Hospital-Behavioral Health	2	0.88%
End-Stage Renal Disease Facility	2	0.88%
Hospital-Long term care	2	0.88%
CERT or MRC Organization	1	0.44%
Hospital-Post Acute Care	1	0.44%
Retail Pharmacy	1	0.44%
Correctional Health Facility	0	0.00%
Total	**227**	

Table 2. Statewide responses by sector type are shown by percentage out of the total number of responses.

Participation by Region

Participants from diverse geographic regions were also represented with 56.6% of respondents representing the Central Region (Gila, Maricopa, and Pinal counties), 23.7% from the Southern Region (Cochise, Graham, Greenlee, Santa Cruz, and Pima counties), 10.5% from the Northern Region (Apache, Coconino, Navajo, and Yavapai counties), and 9.2% from the Western Region (La Paz, Mohave, and Yuma counties).

County	Percent	Number
Central (Gila, Maricopa, Pinal)	56.6%	129
Southern (Cochise, Graham, Greenlee, Pima, Santa Cruz)	23.7%	54
Northern (Apache, Coconino, Navajo, Yavapai)	10.5%	24
Western (La Paz, Mohave, Yuma)	9.2%	20
	Answered	**227**

Table 3. Responses by coalition region are shown as a percentage out of the total number of statewide responses.

Statewide CHVA Results

The hazards are listed from largest to smallest risk exposure for overall risk and non-weighted risk (Table 3). In other words, the higher the percentage or number, the more relative threat is associated with a given hazard. The overall risk increases with percentage on a scale of 0-100%. The non-weighted risk increases with the number on a scale of 0-72. A total of 227 member organizations rated hazards.

In addition to the survey data, the hazard rankings were further developed with input from member-based work groups with an emphasis on healthcare partners. As such, it is not a comprehensive assessment of all members or disciplines and does not provide details regarding the unique attributes and risks for individual counties or facilities. The CHVA is not a replacement for an organization- or facility-specific HVA.

AzCHER Community Hazard Vulnerability List 2023-24

	Overall Risk			Non-Weighted Risk	
1.	Temperature Extreme (Heat)	58%	1.	Temperature Extreme (Heat)	14.83
2.	Staffing Shortage	54%	2.	Staffing Shortage	13.96
3.	Severe Weather	52%	3.	Severe Weather	13.61
4.	Cyberattack	48%	4.	Cyberattack	12.92
5.	Communications/ Telephone/ Network Failure	47%	5.	Pandemic/Epidemic	12.90
6.	Pandemic/Epidemic	47%	6.	Communications/ Telephone/ Network Failure	12.36
7.	Flood/Flash Flood	46%	7.	Flood/Flash Flood	12.04
8.	Wildfire	46%	8.	Supply Chain Failure	11.94
9.	Supply Chain Failure	45%	9.	Active Threat/Workplace Violence	11.73
10.	Active Threat/Workplace Violence	44%	10.	Wildfire	11.59

Table 4. List of Coalition-based hazards in order of highest risk of occurrence and non-weighted risk.
Note: we adapted the overall risk calculation by assigning more weight to healthcare impact because we combined impact to property with impact to services. One single healthcare impact category better describes the healthcare coalition.

Hazards with the Most Impact to Healthcare Services

Hazard	Healthcare Impact Score
1. Nuclear Incident	2.56
2. Mass Electrical Failure	2.51
3. Active Threat	2.49
4. Staffing Shortage	2.47
5. Extended Power Outage	2.45
6. Cyberattack	2.42
7. Pandemic	2.42

8. Supply Chain Failure	2.34	
9. Explosives Incident	2.34	
10. Act of Terrorism	2.32	

Table 5. *List of Coalition-based hazards in order of highest to lowest impact.*
Healthcare Impact: the highest rated hazards that impact the healthcare delivery system.

Definitions of Hazards

Below is a list of hazards and definitions as they appear in the list of top 10 hazards for the state.

- **Communications, Telephone, and Network Failure:** the complete or partial failure of a component or components in a network because of malfunction or natural or human-caused disasters.
- **Mass Casualty (Trauma):** an incident that generates a sufficiently large number of casualties whereby the available healthcare resources, or their management systems, are severely challenged or unable to meet the healthcare needs of the affected population.
- **Staffing Shortage:** staffing shortage occurs when there is a lack of employees within an industry. Healthcare often sees staffing shortages for physicians and nurses.
- **Temperature Extreme (Heat):** extreme heat is a period of high heat and humidity with temperatures above 90 degrees for at least two to three days. In extreme heat humans work extra hard to maintain a normal temperature, which can lead to death. Similarly, the limits of cooling systems and power grids are tested.
- **Pandemic (coronavirus, influenza, etc.):** a pandemic is a disease outbreak that spans several countries and affects a large number of people. Pandemics are most often caused by viruses, like Coronavirus Disease 2019 (COVID-19), which can easily spread from person to person.
- **Supply Chain Failure:** temporary or permanent loss of a key supplier. This might be due to material shortages or increased taxation, or it might be due to a business continuity issue faced by the supplier, such as production problems and bankruptcy.
- **High Consequence Infectious Disease Outbreak:** a disease that has the potential to cause a high mortality among otherwise healthy people, no routine vaccine exists, some types of direct clinical specimens pose generalized risks to laboratory personnel, and risk of secondary airborne spread or unknown mode of transmission.
- **Cyberattack:** any offensive maneuver that targets computer information systems, computer networks, infrastructures, personal computer devices, or smartphones.
- **Workplace Violence / Active Threat:** any act or threat of physical violence, harassment, intimidation, or other threatening disruptive behavior that occurs at the work site. An active threat incident is a dynamic, quickly evolving situation involving an individual (or individuals) using deadly physical force, such as firearms, bladed weapons, or a vehicle. An active threat incident typically involves an individual (or individuals) presenting an immediate threat or imminent danger to people by displaying a weapon, having made threats, and/or shown intent to cause harm or perform violence.
- **Information Systems Failure:** failure of a system designed to manage healthcare data. This includes systems that collect, store, manage and transmit a patient's electronic medical record (EMR), a hospital's operational management or a system supporting healthcare policy decisions.

Regional CHVA Results

The KP adapted CHVA tool was used to calculate high-risk hazards for each region. For comparison, the statewide hazards are listed side by side with the four regions.

Region-Specific Top 5 Hazard Vulnerabilities

Statewide	AzCHER-Central	AzCHER-Northern	AzCHER-Southern	AzCHER-Western
Temperature Extreme (Heat)	Temperature Extreme (Heat)	Staffing Shortage	Staffing Shortage	Temperature Extreme (Heat)
Staffing Shortage	Severe Weather	Wildfire	Temperature Extreme (Heat)	Staffing Shortage
Severe Weather	Staffing Shortage	Communications/ Telephone/ Network Failure	Communications/ Telephone/ Network Failure	Dust Storm
Cyberattack	Dust Storm	Cyberattack	Severe Weather	Cyberattack
Communications/ Telephone/ Network Failure	Drought	Severe Weather	Cyberattack	Communications/ Telephone/ Network Failure

Table 6. *Top five hazards for each region. These are ranked based on overall risk scores from a total of 227 responses across all member types.*

Statewide RGA Results

Resources and Assets

The below assets are identified by ASPR's Resource and Gap Analysis Tool as important when preparing for a healthcare system response. A total of 227 member organizations completed this section of the survey.

Coalition Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
Coalition Assets			
Communication Assets	226/227 (98%)	Number of survey participants that have the necessary equipment to provide redundancy in their communication (e.g., traditional phone lines, cellular, satellite, internet-based radios with 800mhz, amateur radio or other web-based systems, ability to receive HAN alerts, etc.)	Total responses = 227
Notification Platform	3 platforms	Electronic systems that provide notification to coalition leadership and partners. These systems are designed for event notification only.	AzCHER uses the Health Alert Network (HAN), AzCHER Connect listserv, Microsoft Outlook email lists
Arizona Health Alert Network (AzHAN)	205/227 (89%)	Number of members that receive alerts from AzHAN	There is still a barrier to the number of members who respond to AzHANs during AzCHER drills
Staff	6 team members	Designated coalition response staff / team	AzCHER has a staff of 6 full-time employees
Virtual Coordination	3 platforms	Platform for virtual coordination	Phone (FirstNet access, GETS card, Verizon wireless service), Zoom web-based platform, Microsoft Teams
County/Tribal Public Health Department Resources			
Alternate Care Sites	9/10 (90%)	Includes supplies or equipment for alternate care sites – may be managed by hospitals or local/tribal/state EM or federal	Some PH have mass cache equipment, PPE, and mobile clinic units. Most PH rely on support from local healthcare and state health department
Communication Assets	10/10 (100%)	Number of public health departments that possess communication assets for primary and back-up emergency communication.	PH has the following: two-way radios, Amateur radios, individuals' amateur radio certified, text alert system, email, Microsoft teams, phone lines (cellular and

Coalition Assets and Member Resources			
Item	Number (%)	Definition	Comments
			traditional), satellite phones, social media
Mass Mortuary / Body Bags	8/10 (80%)	Plans and/or resources for processing / identification / storage	Most PH will plan with the local Medical Examiner's Office or with nearby counties and tribes to increase fatality management capacity
Medical Countermeasures Administration/Distribution	8/10 (80%)	Includes physical assets that support Chempack, antidote, vaccination, prophylaxis operations and distribution of other countermeasures from the SNS and/or state and local assets that may include databases, electronic systems, as well as physical resources (signage, badging systems, coolers, etc.)	Some PH indicated the ability to receive and distribute vaccines or medical supplies through points of dispensing (PODS), while the assistance of staff and Medical Reserve Corp (MRC) volunteers.Most PH have vaccine coolers, refrigerators, or freezers to store vaccines, while others indicated no physical assets on hand.
PPE Stockpile	9/10 (90%)	Available supplies and storage capacity, PPE stockpile	Most PH have stockpiles of gowns, gloves, surgical masks, N95 masks, shoe covers, head covers, googles, safety glasses, etc. However, they are limited in storage space.
Healthcare Volunteer Management	8/10 (80%)	Healthcare volunteer management: Resources or MOUs for healthcare volunteers (e.g., CERT or MRC)	Several PH or other county departments have Medical Reserve Corp (MRC), Community Emergency Response Teams (CERT), or other volunteer programs (nursing students and COAD/VOAD partners)
Call Center Capability	10/10 (100%)	Call centers: Capability to set up a call center for a public health emergency	PH has the ability and equipment to set up call centers
County/Tribal Emergency Management Department Resources			
Communication Assets / Call Center Capability	10/10 (100%)	Number of county/tribal emergency management departments possess communication assets for primary and back-up emergency communication - may have the ability to receive community alerts	EM has the following: phone lines (landlines, cellular, and satellite), internet apps (Microsoft Teams, social media), email, two-way

Coalition Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
		Most EM partner with PH to set up a call center for a public health emergency	radios, Amateur radios and certified operators, text alert system
EMS/Fire Resources			
Response Transportation Resources	10/10 (100%)	Includes capabilities for agent identification, mass decontamination and throughput for ambulatory/non-ambulatory casualties, storage location, and contact info to request	ALS Ambulances 32 BLS Ambulances 52 Fixed Wing Units 4 Rotor Wing Units 22 Mass Casualty Bus/Vehicle 3 EMS agencies that don't have this resource are smaller, rural organizations
HAZMAT Response Vehicle/Trailer	3/10 (30%)	Includes capabilities for agent identification, mass decontamination and throughput for ambulatory/non-ambulatory casualties, storage location, and contact info to request. - antidote availability considered	The EMS agencies that don't have this resource are smaller, rural organizations
Community Paramedics	7/10 (70%)	Represents other community-based EMS personnel that may assume alternate roles in a disaster (e.g., paramedics are also firefighters, volunteer or paid, reserve personnel who can be called to assist with an MCI; those who are BLS or ACLS trained)	Community paramedics are more common in rural locations, have been used in vaccine clinics and as National Guard volunteers
Technical/ Swiftwater/ Collapse Rescue	7/10 (70%)	Resources that may be engaged locally or regionally to assist with technical/urban search & rescue situations	Agencies share this resource with each other
HAZMAT Radiation Assets	3/10 (30%)	Includes detection/survey equipment	No comments
Wildfire Response Team	8/10 (80%)	Team trained to respond locally or regionally to assist with wildfires	Agencies share this resource with each other
Evacuation Resources (Sleds, Stair Chairs, Pediatric Equipment, Evacuation Buses)	7/10 (70%)	Resources that may be engaged locally or regionally to assist with hospital or healthcare facility evacuation	Agencies share this resource with each other
Hospital Resources			
Morgue Capacity	214 spaces	Number of spaces to store decedents	41/41 hospitals reported, 13 hospitals report 0 spaces

		Coalition Assets and Member Resources	
Item	**Number (%)**	**Definition**	**Comments**
Platform to communicate with organization/system	26/41 (63%)	Number of hospitals that use a designated platform to communicate with other organizations or larger healthcare system	
System to communicate with families/patients	13/41 (32%)	Number of hospitals that have a designated system for communication with patients and families	
Mass Communication Platform	22/41 (54%)	Number of hospitals that use a mass communication platform to notify staff, patients, families, community partners, etc.	
Satellite Phones	12/41 (29%)	Number of hospitals that use satellite phones as back-up communication	
HAM Radio	19/41 (46%)	Number of hospitals that use HAM radios as back-up communication	
Two-way Radios	36/41 (88%)	Number of hospitals that use two-way radios	
Crisis Care Supplies	23/41 (56%)	Possession of cots that could be appropriately placed in flat space areas on hospital premises to create alternate care areas and including utilizing space where patients can be held awaiting treatment, actual treatment space (using cots, chairs, recliners, mobile vans, tents, air mattresses etc.).	
Hospital Emergency Response Team (HERT)	20/41 (49%)	Number of hospitals that have at least one HERT	
Hospital Emergency Response Team (HERT) Resources	29/41 (71%)	Hospital decontamination resources - may include hard showers and tents	
Hospital Emergency Response Team (HERT) Trained Employees	300 trained staff	Number of hospital employees trained to respond to decontamination situation	
Evacuation Resources (Sleds, Stair Chairs, Pediatric Equipment, Evacuation Buses)	41/41 (100%)	May be listed in Evacuation Plan annex from above. Equipment (may be facility or cache-based) including patient movement, triage/tracking supplies. Include availability of adult, child and infant evacuation equipment	19 sleds 16 stair chairs 5 pediatric equipment 15 bariatric equipment 8 wheelchair vans 3 evacuation buses 27 helipads
Personal Protective Equipment (PPE)– Highly Infectious Disease	32/41 (78%)	PPE ensembles for the care of a patient with suspects/confirmed highly infectious disease agent	20 hospitals have decontamination team PPE 14 hospitals have biohoods 24 have PAPRs 24 have Tyvek suits
PPE Ensemble for HAZMAT	23/41 (57%)	PPE ensembles for the decontamination team including respiratory protection.	
		Long Term Care/Skilled Nursing Facility Resources	

Coalition Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
Communication Assets	37/37 (100%)	Number of LTC/SNF that possess communication assets for primary and back-up emergency communication - primarily cellular phones	LTC/SNF have phones (landlines, cellular, and satellite), email, two-way radios, social media. None have HAM radios and very few have satellite phones
System to communicate with families/patients	30/37 (81%)	Number of LTC/SNF that have a designated system for communication with patients and families	
Ability to receive community alerts (mobile apps, email subscriptions, etc.)	34/37 (92%)	Number of LTC/SNF that receive community alerts	
Mass Communication Platform	12/37 (32%)	Number of LTC/SNF that use a mass communication platform to notify staff, patients, families, community partners, etc.	
PPE Cache	37/37 (100%)	Includes N95 masks, procedural/surgical masks, goggle, isolation gowns, and face shields	0/37 LTC/SNF have PAPRs 0/37 have Tyvek suits 1/37 have biohoods
Evacuation Resources (Sleds, Stair Chairs, Pediatric Equipment, Evacuation Buses)	28/37 (76%)	Equipment (may be facility or cache-based) including patient movement, triage/tracking supplies	53 LTC/SNF have wheel chair vans 16 have bariatric equipment 9 have sleds 32 have evacuation buses
Hospice and Home Health Resources			
Communication Assets	38/38 (100%)	Number of hospice and home health that possess communication assets for primary and back-up emergency communication.	Home health and hospice have phones (landline, cellular, and satellite), email, social media. Very few two-way radios and satellite phones with one reporting the use of HAM radio
System to communicate with families/patients	18/38 (47%)	Number of hospice and home health that have a designated system for communication with patients and families	
Ability to receive community alerts (mobile apps, email subscriptions, etc.)	34/38 (89%)	Number of hospice and home health that receive community alerts	
PPE Cache	38/38 (100%)	Includes N95 masks, procedural/surgical masks, goggle, isolation gowns, and face shields	0/38 hospice/HH have PAPRs 3/38 have Tyvek suits 1/38 have biohoods 2/38 has decon PPE

Coalition Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
Outpatient Care Resources			
Communication Assets	74/80 (93%)	Number of outpatient care facilities that possess communication assets for primary and back-up emergency communication.	Outpatient care has the following: landline and cellular phones, email, two-way radios, social media. One facility reported HAM radios with no satellite phones
System to communicate with families/patients	32/80 (40%)	Number of outpatient care facilities that have a designated system for communication with patients and families	
Ability to receive community alerts (mobile apps, email subscriptions, etc.)	70/80 (75%)	Number of outpatient care facilities that receive community alerts	
Mass Communication Platform	5/80 (1%)	Number of outpatient care facilities that use a mass communication platform to notify staff, patients, families, community partners, etc.	
PPE Cache	68/80 (85%)	Including N95 masks, training/fit-testing. Do not need to track masks at individual facilities but should reflect overall situation as well as any caches / specific assets	0/80 outpatient have PAPRs 2/80 have Tyvek suits 1/80 have biohoods 13/80 has decon PPE

Table 7. *List of Coalition and member-specific resources.*

Appendices

Appendix 1: CHVA/RGA Survey Questions

[see attached document]

Appendix 2: List of Participating Organizations

Participating organizations are listed alphabetically by organization name.

Organization Name	Facility Name
Abrazo	Abrazo Central
Accucare Home Health Services	Accucare Home Health Services
Advanced Spine and Pain, LLC	Advanced Spine and Pain, LLC
Advanced Surgery Center of Arizona, LLP	Advanced Surgery Center of Arizona
Advocate Hospice and Palliative Care	Advocate Hospice and Palliative Care
Agave Healthcare, LLC	Agave Hospice
Ageility Physical Therapy Solutions	Ageility Physical Therapy Solutions at Pueblo Norte
Arizona Kidney Disease and Hypertension Center	Arizona Kidney Disease and Hypertension Center
Allegiant Healthcare	Springdale Village Healthcare
American Premier Home Health Care	American Premier Home Health Care
American Premier Hospice	American Premier Hospice
American Vision Partners	Tucson 5th St Barnet Dulaney Perkins
Amsurg	Arizona Ophthalmic Outpatient Surgery
Amsurg	Thunderbird Endoscopy Center
Angels of Care	Angels of Care
Apollo Surgical Center, LLC	Apollo Surgical Center, LLC
Archstone Care Center	Archstone Care Center
Arizona Department of Veteran Services	Arizona State Veteran Home - Tucson
Arizona Department of Veteran Services	Arizona State Veteran Home - Yuma
Arizona Department of Veterans' Services	Arizona State Veterans Home - Flagstaff
Arizona Endoscopy Center	Arizona Endoscopy Center
Arizona Institute Of Medicine And Surgery	Aims Surgery Center
Arizona Skin Cancer Surgery Center, PC	Arizona Skin Cancer Surgery Center, PC
Arizona Spine & Joint Hospital	Arizona Spine & Joint Hospital
Arizona State Hospital	Arizona State Hospital
Arrowhead North Surgery Center	Arrowhead North Surgery Center
Arroyo Gardens Independent and Assisted Living	Arroyo Gardens Independent and Assisted Living
Aspire Transitional Care	Aspire Transitional Care
Assisted Home Health and Hospice	Assisted Home Health and Hospice
Assisteo Hospice, LLC	Assisteo Hospice, LLC
Assisteo North Hospice, LLC	Assisteo Hospice, LLC-North
A-Z Home Care Options	A-Z Home Care Options
Az Retirement Center	Sierra Winds
Banner Health	Banner Boswell Medical Center
Banner Health	Banner Del E. Webb Medical Center
Banner Health	Banner Thunderbird Medical Center
Banner Health Tucson	Banner University Medical Center Tucson Area

Benson Hospital	Benson Hospital
Buckskin Fire District	Fire Stations 11 and 12
Canyon Surgery Center	Canyon Surgery Center
Canyon Vista Medical Center	Canyon Vista Medical Center
Canyonlands Healthcare	Canyonlands Healthcare - Administration for all Sites
Cardiovascular Associates Surgery and Electrophysiology	Cardiovascular Associates Surgery and Electrohysiology
Carondelet Health Network	St. Mary's - St. Joseph's - Holy Cross Hospitals
Carrot Eye Surgery	Carrot Eye Surgery
Catalina Surgery Center	Catalina Surgery Center
ChangePoint Integrated Health	Psychiatric Hospital
Chiricahua Community Health Centers Inc.	SV Dental and Admin
Chiricahua Community Health Centers, Inc	Chiricahua Community Health Centers, Inc.
Christian Care Nursing Center	Christian Care Nursing Center
Circle the City	Circle the City
City of Avondale	City of Avondale Emergency Operations Center
Cobre Valley Regional Medical Center	Cobre Valley Regional Medical Center
Cochise County Health & Social Services PHEP	Cochise County Health & Social Services PHEP
Coconino County Health and Human Services	Coconino County Health and Human Services
Comfort Care Hospice	Savior Hospice & Palliative Care
Connections Health Solutions	Crisis Response Center
Copper Queen Community Hospital	Copper Queen Community Hospital
Coronado Surgery Center	Coronado Surgery Center
Covenant Physician Partners	Arizona Advanced Endoscopy
DaVita Dialysis	DaVita
DES Emergency Planning & Preparedness Administration	AZDES/OIG
Digestive Health Specialists	DHS Endoscopy- Suite 117
Dignity Health	Chandler Regional Medical Center and Mercy Gilbert Medical Center
Dignity Health	Dignity Health Arizona Specialty Hospital
Dignity Health East Valley Rehabilitation Hospital	Dignity Health East Valley Rehabilitation Hospital
El Rio Health	El Rio Health
Elevate Hospice and Palliative Care	Elevate Hospice and Palliative Care
Enhabit Hospice	N/A
Ensign	Chandler Post Acute
Ensign	Mountain View
Ensign Services	Park Avenue Health & Rehabilatation Center
Ensign Services	Shea Post Acute
Everest Hospice	Everest Hospice
Evernorth Care	Evernorth Care Outpatient Surgery
Eye Care Partners	Arizona Eye Institute & Cosmetic Laser Center

Eye Surgery Centers of Arizona	Eye surgery center at the Biltmore
Flagstaff Bone and Joint	Surgery Center at Flagstaff Bone and Joint
Fort Defiance Indian Hospital Board, Inc.	Tse hoo Tsooi Medical Center
Fort Yuma Quechan Indian Tribe	Office of Emergency Management
Fountain View Village	Fountain View Village
Friendship Village of Tempe	Friendship Village of Tempe
Gila County Health and Emergency Management	Central Heights
Gila River Indian Community	Office of Emergency Management
Golder Ranch Fire District	Golder Ranch Fire District
Good Samaritan Society	Good Samaritan Society-Prescott Village
Greenlee County	Health Department
Guardian Medical Transport	Flagstaff Medical Center
Hacienda Healthcare	Hacienda Healthcare ICF-IID
Havasu Nursing Center	Havasu Nursing Center
Haven Health	Haven Health Sky Harbor
Haven Health	Heaven Health Green Valley
Haven Health Group	Haven of Sierra Vista
Haven Healthcare	Haven of Sedona
Haven Home Health	N/A
Hayden Surgical Center	Hayden Surgical Center
Heart of Healing Hospice	Heart of Healing Hospice
Horizon Health and Wellness, Inc.	Horizon - Apache Junction
Hospice of Havasu	Hospice of Havasu
Hospice of Yuma	Hospice of Yuma
Humangood	The Terraces of Phoenix
Inbalance Home Health	Inbalance Home Health
Indian Health Service	Hopi Health care Center
Inspiring Home Health	Inspiring Home Health
Kingman Regional Medical Center	Kingman Regional Medical Center
KPC Promise Healthcare	KPC Promise Hospital of Phoenix
La Paz Co. Health Dept	County Health Dept
La Paz County Emergency Management	NA
La Paz Regional Hospital	La Paz Regional hospital
Laser Surgery Center	Laser Surgery Center
Life Care Center of America	Life Care Center of Yuma
Life Care Center of America	Heritage Health Care Center
Little Colorado Medical Center	Little Colorado Medical Center
Lumicare Hospice	Lumicare Hospice
Marana Health Center	Main
Maricopa County Department of Emergency Management	Maricopa County Department of Emergency Management
Mather	Splendido

Mayo Clinic Arizona	Mayo Clinic
Maricopa County Department of Public Health	Maricopa County Department of Public Health
Medical Reserve Corps of Southern Arizona	N/A
Mesquite Gastroenterology and Surgery Center	Mesquite Surgery Center
Minimally Invasive Spine Surgery Center of Paradise Valley	Minimally Invasive Spine Surgery Center of Paradise Valley
Mohave County Department of Public Health	Public Health Emergency Preparedness
Montecito Post Acute	Montecito Post acute
Mountain Park Health Centers	Mountain Park Health Centers
Mt Graham Regional Medical Center	Mt Graham Regional Medical Center
National Cardiovascular Surgery Center LLC	Peak Surgery Center of Avondale
Noble Hospice	Noble Hospice
North Country HealthCare	Flagstaff 4th St Clinic
North mountain medical & rehabilitation Center	North Mountain Medical
North Valley Endoscopy Center	North Valley Endoscopy Center
North Valley Orthopedic Surgery Center	The Orthopedic Surgery Center of Arizona
Northern Arizona Healthcare	Flagstaff Medical Center
Northern Arizona Healthcare	Verde Valley Medical Center
Northern Cochise Community Hospital, Inc.	Northern Cochise Community Hospital
Northwest Eye Specialists	Northwest Eye Specialists
Northwest Healthcare	Northwest Medical Center
Nurses Network	Nurses Network
Omegalife Hospice of Arizona, Inc.	Omegalife Hospice of Arizona, Inc-Location 1
Osborn	Osborn Health and Rehabilitation
Outpatient Surgical Care, Ltd.	Outpatient Surgical Care, Ltd.
PAM Health and Rehabilitation Hospital	PAM Health and Rehabilitation Hospital of Surprise
Parker Fire District	Fire Station 22
Patient Care Advocates	Patient Care Advocates
Peoria Fire Medical Department	PSAB
Phoenix Endoscopy	Phoenix Endoscopy
Phoenix Indian Medical Center	Phoenix Indian Medical Center
Pima County Health Department	Pima County Health Department
Pima County Office of Emergency Management	N/A
Plaza Healthcare	Plaza Healthcare
Ponderosa Family Care RHC	Ponderosa Family Care RHC
Prestige Home Health Care LLC	Prestige Home Health Care LLC
ProMedica Hospice- Tucson	ProMedica Hospice- Tucson
Rincon Ambulatory Surgery Center	Rincon Ambulatory Surgery Center
Rio Rico Medical & Fire District	N/A
Sage Hospice and Palliative Care	Sage Hospice and Palliative Care

San Carlos Apache Healthcare Corporation	SCAHC Main Hospital
San Carlos Apache Tribe	San Carlos Apache Tribe Department of Health and Human Services
Sante of Mesa	Sante of Mesa
Savior Hospice	Savior Hospice & Palliative Care
Scottsdale Center for Robotic Surgery	Scottsdale Center for Robotic Surgery
Scottsdale Eye Institute	Scottsdale Eye Institute
Scottsdale Eye Surgery Center	Scottsdale Eye Surgery Center
Select Medical	Select Medical
Shanti Hospice	Shanti Hospice
Sierra Winds	Sierra Winds
Solace Hospice	N/A
Solace Hospice	Solace Hospice and Palliative
Sonoita-Elgin Fire District	Sonoita-Elgin Fire District
Soreo Pathways LLC dba Aria Hospice Comfort Care	Aria Hospice Comfort Care
Soulistic Hospice	Soulistic Hospice
Southeast Valley Endoscopy Center	Southeast Valley Endoscopy Center
Sovereign Health Care	Honor Health Pain Management Center
Sovereign Healthcare	Deer Valley Surgical & Endoscopy Center
Sovereign Healthcare	North Valley surgery Center
Sovereign Healthcare	OrthoArizona Scottsdale Surgery Center
Speedway Surgical Specialists, LLC	Speedway Surgical Specialists, LLC
Squaw Peak Surgical Facility	Squaw Peak Surgical Facility
Steward Health Care	Mountain Vista Medical Center/Florence Hospital
Stoneridge Hospice	Stoneridge Hospice
Summit Healthcare Association	Summit Healthcare Association
Sun City Ophthalmology LLC	Eye Institute at Boswell
Sun Life Family Health Center	Sun Life Health
Suncrest Health Care Inc	Suncrest Health Care
Sunset Health	Sunset Health
Surgery Center of Gilbert	Surgery Center of Gilbert
Surgery Center of Scottsdale, LLC /USPI	Mountain View Surgery Center of Scottsdale
Swan Gastro & Surgery Center	Swan Surgery Center
Talas Harbor on Buckeye	Talas Harbor on Buckeye
The Boeing Co.	Boeing Mesa
The Citadel Senior Living	The Citadel Senior Living
The Evangelical Lutheran Good Samaritan Society	Good Samaritan Society - Quiburi Mission
The Mesa AZ Endoscopy ASC LLC	Desert Endoscopy Center
The PainMDs Inc	The PainMDs Ambulatory Surgery Center
The Palazzo	The Palazzo
TMC Health	Tucson Medical Center

Tohono O'odham Nursing Care Authority	Archie Hendricks Sr. Skilled Nursing Facility
Town of Gilbert Emergency Management	Fire Administration Building
Tri-city Surgery Center	Tri-city Surgery Center
United Community Health Center	UCHC
United Hospice and Palliative Care	United Hospice and Palliative Care
United Surgical Partners International	St. Joseph's Outpatient Surgery Center
Universal Health Services	Palo Verde Behavioral Health
US Renal Care	Avondale
USPI	Center for Advanced Surgery
USPI	Scottsdale Endoscopy Center ASC LLC
USPI	Surgery Center of Peoria
USPI	Urology ASC Phoenix - Downtown, Perimeter, DV
USPI	Westgate Surgery Center
USPI/Tenet	Camp Lowell Surgery Center
Valiant Hospice & Palliative Care	Valiant Hospice & Palliative Care
Valley of the Sun Home Healthcare	Valley of the Sun Home Healthcare
Veteran's Administration	Arizona State Veteran's Home - Phoenix
Veterans Health Affairs	Southern Arizona VA Health Care System
Virtuous Health	VHC 1, VHC II, VHC III VCH V
Vital Care Rehabilitation	Vital Care Rehabilitation
Walgreens	Walgreens
WD Recovery and Wellness Center	WD Recovery and Wellness Center
Welbrook Yuma Opco, LLC dba Ridgeview Transitional Rehab	Ridgeview Transitional Rehabilitation
Western Arizona Regional Medical Center	Western Arizona Regional Medical Center
White Mountain Regional Medical Center	White Mountain Regional Medical Center
Willcox Department of Public Safety	Willcox Department of Public Safety
Yavapai County Community Health Services	Yavapai County Community Health Services
Yavapai County Office of Emergency Management	N/A
Yuma Advanced Surgical Suites (USPI)	Yuma Advanced Surgical Suites
Yuma County Public Health Services District	Yuma County Public Health Services District
Yuma Regional Medical Center Inc	Yuma Regional Medical Center

Appendix 3: Central Region Survey Results

Highlighted CHVA Regional Results

This table lists the Central Region hazards in order of highest risk of occurrence and highest risk of response. These risk scores are weighted out of a total of 129 responses.

Hazard	Overall Risk	Hazard	Non-Weighted Risk
Temperature Extreme (Heat)	59%	Temperature Extreme (Heat)	14.85
Severe Weather	50%	Dust Storm	13.42
Staffing Shortage	50%	Severe Weather	13.21
Dust Storm	49%	Staffing Shortage	12.80
Drought	46%	Drought	12.71
Pandemic/Epidemic	46%	Pandemic/Epidemic	11.68
Communications/Telephone/ Network Failure	45%	Communications/Telephone/ Network Failure	11.52
Cyberattack	45%	Cyberattack	11.43
Supply Chain Failure	44%	Flood/Flash Flood	11.42
Extended Power Outage	43%	Extended Power Outage	11.10

Unique Regional Hazard Considerations:
- Temperature extremes: the potential for rising temperatures leading to worse droughts and wildfires
- Central, urban location with high population density
  - Population increases during the winter months
- Industrial hazards are frequent due to the nearby manufacturing facilities or plants
- Supply chain failure: what happens in the central region often affects all regions

Highlighted RGA Regional Results

This table lists the region-wide assets and member-specific resources available within the Central Region. A total of 136 responses were collected from this part of the survey.

Central Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
County/Tribal Public Health Department Resources			
Alternate Care Sites	2/2 (100%)	Includes supplies or equipment for alternate care sites – managed by hospitals or local/tribal/state EM or federal	PH processes resource requests and partners with state and federal officials
Communication Assets	2/2 (100%)	Number of public health departments that possess communication assets for primary and back-up emergency communication.	PH has phones (landlines and cellular), 800 MHz radios, AzHAN, and HAM radio
Mass Mortuary / Body Bags	1/2 (50%)	Plans and/or resources for processing / identification / storage	Maricopa Office of Medical Examiner has supplies and adequate space. Gila county has alternate storage facilities.
Medical Countermeasures Administration/Distribution	1/2 (50%)	Includes physical assets that support Chempack, antidote, vaccination, prophylaxis operations and distribution of other countermeasures from the SNS and/or state and local assets that may include databases, electronic systems, as well as physical resources (signage, badging systems, coolers, etc.)	Maricopa PH does not have physical assets on hand. PH processes resource requests for SNS and MCM. PH has a plan and systems in place for response. Gila PH has ability to distribute through PODS
PPE Stockpile	2/2 (100%)	Available supplies and storage capacity, PPE stockpile	Most PH have stockpiles of gowns, gloves, surgical masks, N95 masks, shoe covers, head covers, googles, safety glasses, etc.

Central Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
Healthcare Volunteer Management	2/2 (100%)	Healthcare volunteer management: Resources or MOUs for healthcare volunteers (e.g., CERT or MRC)	Several PH or other county departments have Medical Reserve Corp (MRC), Community Emergency Response Teams (CERT), or other volunteer programs (nursing students and COAD/VOAD partners)
Call Center Capability	2/2 (100%)	Call centers: Capability to set up a call center for a public health emergency	PH has the ability and equipment to set up call center
County/Tribal Emergency Management Department Resources			
Communication Assets / Call Center Capability	5/5 (100%)	Number of county/tribal emergency management departments possess communication assets for primary and back-up emergency communication - may have the ability to receive community alerts Most EM partner with PH to set up a call center for a public health emergency	EM has phone lines (landlines, cellular, and satellite), internet apps, email, two-way radios, Amateur HAM radios and certified operators
EMS/Fire Resources			
Response Transportation Resources	2/3 (67%)	Includes capabilities for agent identification, mass decontamination and throughput for ambulatory/non-ambulatory casualties, storage location, and contact info to request	ALS Ambulances 16 BLS Ambulances 10 Fixed Wing Units 1 Rotor Wing Units 5 Wheelchair Vans/ADA 5 Mass Casualty Bus/Vehicle 0 EMS agencies that don't have this

Central Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
			resource are smaller, rural organizations
HAZMAT Response Vehicle/Trailer	1/3 (33%)	Includes capabilities for agent identification, mass decontamination and throughput for ambulatory/non-ambulatory casualties, storage location, and contact info to request. - antidote availability considered	1 HAZMAT Response Vehicle/TrailerThe EMS agencies that don't have this resource are smaller, rural organizations
Community Paramedics	3/3 (100%)	Represents other community-based EMS personnel that may assume alternate roles in a disaster (e.g., paramedics are also firefighters, volunteer or paid, reserve personnel who can be called to assist with an MCI; those who are BLS or ACLS trained)	Community paramedics are more common in rural locations, have been used in vaccine clinics and as National Guard volunteers
Technical/ Swiftwater/ Collapse Rescue	2/3 (67%)	Resources that may be engaged locally or regionally to assist with technical/urban search & rescue situations	Agencies share this resource with each other
HAZMAT Radiation Assets	1/3 (33%)	Includes detection/survey equipment	No comments
Wildfire Response Team	2/3 (67%)	Team trained to respond locally or regionally to assist with wildfires	Agencies share this resource with each other
Evacuation Resources (Sleds, Stair Chairs, Pediatric Equipment, Evacuation Buses)	1/3 (33%)	Resources that may be engaged locally or regionally to assist with hospital or healthcare facility evacuation	Tribal EMS/Fire has pediatric equipment and wheelchair vans
Hospital Resources			
Morgue Capacity	63 spaces	Number of spaces to store decedents	16/16 hospitals reported, 3 hospitals report 0 spaces
Platform to communicate with organization/system	12/16 (75%)	Number of hospitals that use a designated platform to communicate with other organizations or larger healthcare system	

Central Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
System to communicate with families/patients	6/16 (40%)	Number of hospitals that have a designated system for communication with patients and families	
Mass Communication Platform	11/16 (69%)	Number of hospitals that use a mass communication platform to notify staff, patients, families, community partners, etc.	
Satellite Phones	3/16 (19%)	Number of hospitals that use satellite phones as back-up communication	
HAM Radio	4/16 (25%)	Number of hospitals that use HAM radios as back-up communication	
Two-way Radios	13/16 (81%)	Number of hospitals that use two-way radios	
Crisis Care Supplies	9/16 (56%)	Possession of cots that could be appropriately placed in flat space areas on hospital premises to create alternate care areas and including utilizing space where patients can be held awaiting treatment, actual treatment space (using cots, chairs, recliners, mobile vans, tents, air mattresses etc.).	
Hospital Emergency Response Team (HERT)	6/16 (38%)	Number of hospitals that have at least one HERT	
Hospital Emergency Response Team (HERT) Resources	8/16 (50%)	Hospital decontamination resources - may include hard showers and tents	
Hospital Emergency Response Team (HERT) Trained Employees	37 trained staff	Number of hospital employees trained to respond to decontamination situation	
Evacuation Resources (Sleds, Stair Chairs, Pediatric Equipment, Evacuation Buses)	8/15 (53%)	May be listed in Evacuation Plan annex from above. Equipment (may be facility or cache-based) including patient movement, triage/tracking supplies. Include	8 sleds5 stair chairs0 pediatric equipment6 bariatric equipment1 wheelchair vans 0 evacuation buses8 helipads

Central Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
		availability of adult, child and infant evacuation equipment	
Personal Protective Equipment (PPE)– Highly Infectious Disease	8/16 (50%)	PPE ensembles for the care of a patient with suspects/confirmed highly infectious disease agent	20 hospitals have decontamination team PPE 14 hospitals have biohoods 24 have PAPRs 24 have Tyvek suits
PPE Ensemble for HAZMAT	9/16 (56%)	PPE ensembles for the decontamination team including respiratory protection.	
Long Term Care/Skilled Nursing Facility Resources			
Communication Assets	21/21 (100%)	Number of LTC/SNF that possess communication assets for primary and back-up emergency communication - primarily cellular phones	LTC/SNF have phones (landlines, cellular, and satellite), email, two-way radios, social media. Very few have HAM radios or satellite phones.
System to communicate with families/patients	17/21 (81%)	Number of LTC/SNF that have a designated system for communication with patients and families	
Ability to receive community alerts (mobile apps, email subscriptions, etc.)	18/21 (86%)	Number of LTC/SNF that receive community alerts	
Mass Communication Platform	9/21 (43%)	Number of LTC/SNF that use a mass communication platform to notify staff, patients, families, community partners, etc.	
PPE Cache	21/21 (100%)	Includes N95 masks, procedural/surgical masks, goggle, isolation gowns, and face shields	0/21 LTC/SNF have PAPRs 0/21 have Tyvek suits 0/21 have biohoods

Central Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
Evacuation Resources (Sleds, Stair Chairs, Pediatric Equipment, Evacuation Buses)	14/21 (67%)	Equipment (may be facility or cache-based) including patient movement, triage/tracking supplies	14 LTC/SNF have wheel chair vans 8 have bariatric equipment 4 have sleds 6 have evacuation buses
Hospice and Home Health Resources			
Communication Assets	28/28 (100%)	Number of hospice and home health that possess communication assets for primary and back-up emergency communication.	Home health and hospice have phones (landline, cellular, and satellite), email, social media. Very few two-way radios and satellite phones with none reporting the use of HAM radio.
System to communicate with families/patients	15/28 (54%)	Number of hospice and home health that have a designated system for communication with patients and families	
Ability to receive community alerts (mobile apps, email subscriptions, etc.)	27/28 (96%)	Number of hospice and home health that receive community alerts	
PPE Cache	27/28 (96%)	Includes N95 masks, procedural/surgical masks, goggle, isolation gowns, and face shields	0/28 hospice/HH have PAPRs 2/28 have Tyvek suits 1/28 have biohoods 1/28 has decon PPE
Outpatient Care Resources			
Communication Assets	55/61 (90%)	Number of outpatient care facilities that possess communication assets for primary and back-up emergency communication.	Outpatient care has phones (landline and cellular), email, two-way radios, social media. One facility reported HAM radios with no satellite phones.

Central Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
System to communicate with families/patients	23/61 (40%)	Number of outpatient care facilities that have a designated system for communication with patients and families	
Ability to receive community alerts (mobile apps, email subscriptions, etc.)	43/61 (70%)	Number of outpatient care facilities that receive community alerts	
Mass Communication Platform	1/61 (>1%)	Number of outpatient care facilities that use a mass communication platform to notify staff, patients, families, community partners, etc.	
PPE Cache	48/61 (79%)	Including N95 masks, training/fit testing. Do not need to track masks at individual facilities but should reflect overall situation as well as any caches / specific assets	0/61 outpatient have PAPRs 1/61 have Tyvek suits 0/61 have biohoods 11/61 has decon PPE

Appendix 4: Northern Region Survey Results

Highlighted CHVA Regional Results

This table lists the Northern Region hazards in order of highest risk of occurrence and highest risk of response. These risk scores are weighted out of a total of 24 responses.

Hazard	Overall Risk	Hazard	Non-Weighted Risk
1. Staffing Shortage	59%	1. Staffing Shortage	15.19
2. Wildfire	59%	2. Wildfire	14.20
3. Communications/ Telephone/ Network Failure	54%	3. Severe Weather	14.12
4. Cyberattack	54%	4. Cyberattack	14.06
5. Severe Weather	53%	5. Communications/ Telephone/ Network Failure	14.01
6. Flood/Flash Flood	51%	6. Flood/Flash Flood	13.22
7. Temperature Extreme (Cold)	50%	7. Temperature Extreme (Cold)	13.18
8. Information System Failure	49%	8. Information System Failure	12.81
9. Pandemic/Epidemic	49%	9. Pandemic/Epidemic	12.26
10. Transportation Disruption	46%	10. Drought	12.08

Unique Regional Hazard Considerations:
- Severe weather (cold)
- Rural area
- Distance between healthcare services
- High traffic (highways, railway, gas lines, etc.)

Highlighted RGA Regional Results

This table lists the region-wide assets and member-specific resources available within the Northern Region. A total of 23 responses were collected from this part of the survey.

Item	Number (%)	Definition	Comments
Alternate Care Sites	2/2 (100%)	Includes supplies or equipment for alternate care sites – may be managed by hospitals or local/tribal/state EM or federal	Some PH have mass cache equipment, PPE, and mobile clinic units. Most PH rely on support from local healthcare and state health department.
Communication Assets	2/2 (100%)	Number of public health departments that possess communication assets for primary and back-up emergency communication.	PH has HAM radios and certified operators, desktop alerting system, landlines, cell phones and MiFi, two-way radios, Microsoft Teams, AzHAN, and internet
Mass Mortuary / Body Bags	2/2 (100%)	Plans and/or resources for processing / identification / storage	PH has adult and pediatric postmortem kits and body bags
Medical Countermeasures Administration/Distribution	2/2 (100%)	Includes physical assets that support Chempack, antidote, vaccination, prophylaxis operations and distribution of other countermeasures from the SNS and/or state and local assets that may include databases, electronic systems, as well as physical resources (signage, badging systems, coolers, etc.)	PH has the capability to set up PODS with staff (MRC volunteers) and one PH reports chempacks available
PPE Stockpile	2/2 (100%)	Available supplies and storage capacity, PPE stockpile	Most PH have stockpiles of gowns, gloves, surgical masks, N95 masks, shoe covers, head covers, googles, safety glasses, etc. However, they are limited in storage space.

(Table header: Northern Region Assets and Member Resources — County/Tribal Public Health Department Resources)

Northern Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
Healthcare Volunteer Management	1/2 (50%)	Healthcare volunteer management: Resources or MOUs for healthcare volunteers (e.g. CERT or MRC)	1 PH has volunteers
Call Center Capability	2/2 (100%)	Call centers: Capability to set up a call center for a public health emergency	PH has the ability and equipment to set up call centers
County/Tribal Emergency Management Department Resources			
Communication Assets / Call Center Capability	1/1 (100%)	Number of county/tribal emergency management departments possess communication assets for primary and back-up emergency communication - may have the ability to receive community alerts Most EM partner with PH to set up a call center for a public health emergency	EM has landlines and cellular phones, email, two-way radios, Amateur HAM radios with certified operators
EMS/Fire Resources			
Response Transportation Resources	1/1 (100%)	Includes capabilities for agent identification, mass decontamination and throughput for ambulatory/non-ambulatory casualties, storage location, and contact info to request	ALS Ambulances 3 BLS Ambulances 18 Fixed Wing Units 1 Rotor Wing Units 7 Mass Casualty Bus/Vehicle 0 EMS agencies that don't have this resource are smaller, rural organizations
HAZMAT Response Vehicle/Trailer	1/1 (100%)	Includes capabilities for agent identification, mass decontamination and throughput for ambulatory/non-ambulatory casualties, storage location, and contact info to request. - antidote availability considered	The EMS agencies that don't have this resource are smaller, rural organizations
Community Paramedics	1/1 (100%)	Represents other community-based EMS personnel that may assume alternate roles in a disaster (e.g., paramedics are also firefighters, volunteer or paid, reserve personnel who can be called to assist with an MCI; those who are BLS or ACLS trained)	Community paramedics are more common in rural locations, have been used in vaccine clinics and as National Guard volunteers
Technical/ Swiftwater/ Collapse Rescue	0/1 (0%)	Resources that may be engaged locally or regionally to assist with technical/urban search & rescue situations	Agencies share this resource with each other
HAZMAT Radiation Assets	0/1 (0%)	Includes detection/survey equipment	No comments

Northern Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
Wildfire Response Team	0/1 (0%)	Team trained to respond locally or regionally to assist with wildfires	Agencies share this resource with each other
Evacuation Resources (Sleds, Stair Chairs, Pediatric Equipment, Evacuation Buses)	0/1 (0%)	Resources that may be engaged locally or regionally to assist with hospital or healthcare facility evacuation	Agencies share this resource with each other
Hospital Resources			
Morgue Capacity	10 spaces	Number of spaces to store decedents	8/8 hospitals reported, 4 hospitals report 0 spaces
Platform to communicate with organization/system	3/8 (38%)	Number of hospitals that use a designated platform to communicate with other organizations or larger healthcare system	
System to communicate with families/patients	1/8 (13%)	Number of hospitals that have a designated system for communication with patients and families	
Mass Communication Platform	2/8 (25%)	Number of hospitals that use a mass communication platform to notify staff, patients, families, community partners, etc.	
Satellite Phones	4/8 (50%)	Number of hospitals that use satellite phones as back-up communication	
HAM Radio	3/8 (38%)	Number of hospitals that use HAM radios as back-up communication	
Two-way Radios	7/8 (86%)	Number of hospitals that use two-way radios	
Crisis Care Supplies	3/8 (36%)	Possession of cots that could be appropriately placed in flat space areas on hospital premises to create alternate care areas and including utilizing space where patients can be held awaiting treatment, actual treatment space (using cots, chairs, recliners, mobile vans, tents, air mattresses etc.).	
Hospital Emergency Response Team (HERT)	3/8 (36%)	Number of hospitals that have at least one HERT	
Hospital Emergency Response Team (HERT) Resources	8/8 (100%)	Hospital decontamination resources - may include hard showers and tents	
Hospital Emergency Response Team (HERT) Trained Employees	35 trained staff	Number of hospital employees trained to respond to decontamination situation	

Northern Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
Evacuation Resources (Sleds, Stair Chairs, Pediatric Equipment, Evacuation Buses)	8/8 (100%)	May be listed in Evacuation Plan annex from above. Equipment (may be facility or cache-based) including patient movement, triage/tracking supplies. Include availability of adult, child and infant evacuation equipment	2 sleds 3 stair chairs 2 pediatric equipment 2 bariatric equipment 3 wheelchair vans 0 evacuation buses 6 helipads
Personal Protective Equipment (PPE)– Highly Infectious Disease	7/8 (88%)	PPE ensembles for the care of a patient with suspects/confirmed highly infectious disease agent	4 hospitals have decontamination team PPE 3 hospitals have biohoods 4 have PAPRs 4 have Tyvek suits
PPE Ensemble for HAZMAT	4/8 (50%)	PPE ensembles for the decontamination team including respiratory protection.	
Long Term Care/Skilled Nursing Facility Resources			
Communication Assets	4/4 (100%)	Number of LTC/SNF that possess communication assets for primary and back-up emergency communication - primarily cellular phones	LTC/SNF have phones (landlines, cellular, and satellite), email, two-way radios, social media. None have HAM radios and 1 has satellite phones.
System to communicate with families/patients	3/4 (75%)	Number of LTC/SNF that have a designated system for communication with patients and families	
Ability to receive community alerts (mobile apps, email subscriptions, etc.)	4/4 (100%)	Number of LTC/SNF that receive community alerts	
Mass Communication Platform	2/4 (50%)	Number of LTC/SNF that use a mass communication platform to notify staff, patients, families, community partners, etc.	
PPE Cache	4/4 (100%)	Includes N95 masks, procedural/surgical masks, goggle, isolation gowns, and face shields	0/4 LTC/SNF have PAPRs 0/4 have Tyvek suits 0/4 have biohoods
Evacuation Resources (Sleds, Stair Chairs, Pediatric Equipment, Evacuation Buses)	4/4 (100%)	Equipment (may be facility or cache-based) including patient movement, triage/tracking supplies	4 LTC/SNF have wheelchair vans 1 have bariatric equipment

Northern Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
			0 have sleds 1 have evacuation buses
Hospice and Home Health Resources			
Communication Assets	3/3 (33%)	Number of hospice and home health that possess communication assets for primary and back-up emergency communication.	Home health and hospice have landline and cellular phones, internet and email
System to communicate with families/patients	1/3 (25%)	Number of hospice and home health that have a designated system for communication with patients and families	
Ability to receive community alerts (mobile apps, email subscriptions, etc.)	3/3 (100%)	Number of hospice and home health that receive community alerts	
PPE Cache	3/3 (100%)	Includes N95 masks, procedural/surgical masks, goggle, isolation gowns, and face shields	0/3 hospice/HH have PAPRs 1/3 have Tyvek suits 0/3 have biohoods 1/3 has decon PPE
Outpatient Care Resources			
Communication Assets	4/4 (100%)	Number of outpatient care facilities that possess communication assets for primary and back-up emergency communication.	Outpatient care has landline and cellular phones, email, internet, two-way radios, and HAM radio
System to communicate with families/patients	4/4 (100%)	Number of outpatient care facilities that have a designated system for communication with patients and families	
Ability to receive community alerts (mobile apps, email subscriptions, etc.)	4/4 (100%)	Number of outpatient care facilities that receive community alerts	
Mass Communication Platform	1/4 (25%)	Number of outpatient care facilities that use a mass communication platform to notify staff, patients, families, community partners, etc.	
PPE Cache	4/4 (100%	Including N95 masks, training/fit testing. Do not need to track masks at individual facilities but should reflect overall situation as well as any caches / specific assets	0/4 outpatient have PAPRs 1/4 have Tyvek suits 1/4 have biohoods 0/4 has decon PPE

Appendix 5: Southern Region Survey Results

Highlighted CHVA Regional Results

This table lists the Southern Region hazards in order of highest risk of occurrence and highest risk of response. These risk scores are weighted out of a total of 54 responses.

Hazard	Overall Risk	Hazard	Non-Weighted Risk
Staffing Shortage	58%	Staffing Shortage	15.13
Temperature Extreme (Heat)	55%	Temperature Extreme (Heat)	14.29
Communications/Telephone/ Network Failure	50%	Severe Weather	13.15
Severe Weather	49%	Drought	12.80
Cyberattack	48%	Flood/Flash Flood	12.72
Flood/Flash Flood	48%	Communications/Telephone/ Network Failure	12.70
Wildfire	47%	Cyberattack	12.38
Pandemic/Epidemic	47%	Wildfire	12.30
Drought	47%	Pandemic/Epidemic	11.93
Active Threat/Workplace Violence	45%	Supply Chain Failure	11.76

Unique Regional Hazard Considerations:
- Asylum seekers and border crossings
- Lots of illegal traffic near border-could take out employees driving to work, conversations about being vigilant (unique to home health—can't take on an influx of home health patients if something happens to a nurse)
- Active threat is a concern for the security side—increasing with behavioral health issues and increased immigration

Highlighted RGA Regional Results

This table lists the region-wide assets and member-specific resources available within the Southern Region. A total of 53 responses were collected from this part of the survey.

Item	Number (%)	Definition	Comments
Southern Region Assets and Member Resources			
County/Tribal Public Health Department Resources			
Alternate Care Sites	3/3 (100%)	Includes supplies or equipment for alternate care sites – may be managed by hospitals or local/tribal/state EM or federal	PH has multiple clinic locations and some supplies
Communication Assets	3/3 (100%)	Number of public health departments that possess communication assets for primary and back-up emergency communication.	PH has phones (landlines, cellular, and satellite), internet, two-way radios, MiFi/hotspots
Mass Mortuary / Body Bags	3/3 (100%)	Plans and/or resources for processing / identification / storage	PH has body bags and processing/identification supplies. Gila PH has mass casualty trailer
Medical Countermeasures Administration/Distribution	3/3 (100%)	Includes physical assets that support Chempack, antidote, vaccination, prophylaxis operations and distribution of other countermeasures from the SNS and/or state and local assets that may include databases, electronic systems, as well as physical resources (signage, badging systems, coolers, etc.)	Some PH indicated the ability to receive and distribute vaccines or medical supplies through points of dispensing (PODS), while the assistance of staff and Medical Reserve Corp (MRC) volunteers. Most PH have vaccine coolers, refrigerators, freezers, and generators to store vaccines, while others indicated little supplies.
PPE Stockpile	1/3 (33%)	Available supplies and storage capacity, PPE stockpile	Most PH have stockpiles of gowns, gloves, surgical masks, N95 masks, shoe covers, head covers, googles, safety glasses, etc. However, they are limited in storage space.
Healthcare Volunteer Management	1/3 (33%)	Healthcare volunteer management: Resources or MOUs for healthcare volunteers (e.g. CERT or MRC)	Several PH or other county department's have Medical Reserve Corp (MRC)

Southern Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
Call Center Capability	3/3 (100%)	Call centers: Capability to set up a call center for a public health emergency	PH has the ability and equipment to set up call centers
County/Tribal Emergency Management Department Resources			
Communication Assets / Call Center Capability	1/1 (100%)	Number of county/tribal emergency management departments possess communication assets for primary and back-up emergency communication - may have the ability to receive community alerts Most EM partner with PH to set up a call center for a public health emergency	EM has phone lines (landlines, cellular, and satellite), internet, email, two-way radios, HAM radios and certified operators
EMS/Fire Resources			
Response Transportation Resources	4/4 (100%)	Includes capabilities for agent identification, mass decontamination and throughput for ambulatory/non-ambulatory casualties, storage location, and contact info to request	ALS Ambulances 12 BLS Ambulances 24 Fixed Wing Units 0 Rotor Wing Units 0 Mass Casualty Bus/Vehicle 0 EMS agencies that don't have this resource are smaller, rural organizations
HAZMAT Response Vehicle/Trailer	1/4 (25%)	Includes capabilities for agent identification, mass decontamination and throughput for ambulatory/non-ambulatory casualties, storage location, and contact info to request. - antidote availability considered	The EMS agencies that don't have this resource are smaller, rural organizations
Community Paramedics	3/4 (75%)	Represents other community-based EMS personnel that may assume alternate roles in a disaster (e.g., paramedics are also firefighters, volunteer or paid, reserve personnel who can be called to assist with an MCI; those who are BLS or ACLS trained)	Community paramedics are more common in rural locations, have been used in vaccine clinics and as National Guard volunteers
Technical/ Swiftwater/ Collapse Rescue	3/4 (75%)	Resources that may be engaged locally or regionally to assist with technical/urban search & rescue situations	Agencies share this resource with each other
HAZMAT Radiation Assets	2/4 (50%)	Includes detection/survey equipment	No comments
Wildfire Response Team	4/4 (100%)	Team trained to respond locally or regionally to assist with wildfires	Agencies share this resource with each other

Southern Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
Evacuation Resources (Sleds, Stair Chairs, Pediatric Equipment, Evacuation Buses)	3/4 (75%)	Resources that may be engaged locally or regionally to assist with hospital or healthcare facility evacuation	Agencies share this resource with each other
Hospital Resources			
Morgue Capacity	69 spaces	Number of spaces to store decedents	13/13 hospitals reported, 3 hospitals report 0 spaces
Platform to communicate with organization/system	8/13 (62%)	Number of hospitals that use a designated platform to communicate with other organizations or larger healthcare system	
System to communicate with families/patients	4/13 (31%)	Number of hospitals that have a designated system for communication with patients and families	
Mass Communication Platform	6/13 (46%)	Number of hospitals that use a mass communication platform to notify staff, patients, families, community partners, etc.	
Satellite Phones	5/13 (38%)	Number of hospitals that use satellite phones as back-up communication	
HAM Radio	9/13 (69%)	Number of hospitals that use HAM radios as back-up communication	
Two-way Radios	12/13 (92%)	Number of hospitals that use two-way radios	
Crisis Care Supplies	9/13 (69%)	Possession of cots that could be appropriately placed in flat space areas on hospital premises to create alternate care areas and including utilizing space where patients can be held awaiting treatment, actual treatment space (using cots, chairs, recliners, mobile vans, tents, air mattresses etc.).	
Hospital Emergency Response Team (HERT)	9/13 (69%)	Number of hospitals that have at least one HERT	
Hospital Emergency Response Team (HERT) Resources	12/13 (92%)	Hospital decontamination resources - may include hard showers and tents	
Hospital Emergency Response Team (HERT) Trained Employees	213 trained staff	Number of hospital employees trained to respond to decontamination situation	
Evacuation Resources (Sleds, Stair Chairs, Pediatric Equipment, Evacuation Buses)	8/13 (62%)	May be listed in Evacuation Plan annex from above. Equipment (may be facility or cache-based) including patient movement, triage/tracking supplies. Include	6 sleds 8 stair chairs 3 pediatric equipment

Southern Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
		availability of adult, child and infant evacuation equipment	7 bariatric equipment 3 wheelchair vans 0 evacuation buses 9 helipads
Personal Protective Equipment (PPE)– Highly Infectious Disease	10/13 (77%)	PPE ensembles for the care of a patient with suspects/confirmed highly infectious disease agent	20 hospitals have decontamination team PPE 14 hospitals have biohoods 24 have PAPRs 24 have Tyvek suits
PPE Ensemble for HAZMAT	7/13 (54%)	PPE ensembles for the decontamination team including respiratory protection.	
Long Term Care/Skilled Nursing Facility Resources			
Communication Assets	8/8 (100%)	Number of LTC/SNF that possess communication assets for primary and back-up emergency communication - primarily cellular phones	LTC/SNF have phones (landlines, cellular, and satellite), email, two-way radios, and one reported HAM radio
System to communicate with families/patients	5/8 (63%)	Number of LTC/SNF that have a designated system for communication with patients and families	
Ability to receive community alerts (mobile apps, email subscriptions, etc.)	5/8 (63%)	Number of LTC/SNF that receive community alerts	
Mass Communication Platform	1/8 (13%)	Number of LTC/SNF that use a mass communication platform to notify staff, patients, families, community partners, etc.	
PPE Cache	8/8 (100%)	Includes N95 masks, procedural/surgical masks, goggle, isolation gowns, and face shields	0/0 LTC/SNF have PAPRs 0/0 have Tyvek suits 1/8 have biohoods
Evacuation Resources (Sleds, Stair Chairs, Pediatric Equipment, Evacuation Buses)	6/8 (75%)	Equipment (may be facility or cache-based) including patient movement, triage/tracking supplies	53 LTC/SNF have wheel chair vans 16 have bariatric equipment 9 have sleds 32 have evacuation buses
Hospice and Home Health Resources			
Communication Assets	5/5 (100%)	Number of hospice and home health that possess communication assets for primary and back-up emergency communication.	Home health and hospice have phones (landline and cellular), internet, email

Southern Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
System to communicate with families/patients	2/5 (40%)	Number of hospice and home health that have a designated system for communication with patients and families	
Ability to receive community alerts (mobile apps, email subscriptions, etc.)	4/5 (80%)	Number of hospice and home health that receive community alerts	
PPE Cache	5/5 (100%)	Includes N95 masks, procedural/surgical masks, goggle, isolation gowns, and face shields	0/5 hospice/HH have PAPRs 0/5 have Tyvek suits 0/5 have biohoods 0/5 has decon PPE
Outpatient Care Resources			
Communication Assets	15/17%)	Number of outpatient care facilities that possess communication assets for primary and back-up emergency communication.	Outpatient care has landlines and cellular phones, internet, email, two-way radios, and HAM radios
System to communicate with families/patients	5/17 (30%)	Number of outpatient care facilities that have a designated system for communication with patients and families	
Ability to receive community alerts (mobile apps, email subscriptions, etc.)	13/17 (76%)	Number of outpatient care facilities that receive community alerts	
Mass Communication Platform	3/17 (18%)	Number of outpatient care facilities that use a mass communication platform to notify staff, patients, families, community partners, etc.	
PPE Cache	14/17 (82%)	Including N95 masks, training/fit-testing. Do not need to track masks at individual facilities but should reflect overall situation as well as any caches / specific assets	0/17 outpatient have PAPRs 0/17 have Tyvek suits 0/17 have biohoods 1/17 has decon PPE

Appendix 6: Western Region Survey Results

Highlighted CHVA Regional Results

This table lists the Western Region hazards in order of highest risk of occurrence and highest risk of response. These risk scores are weighted out of a total of 20 responses.

Hazard	Overall Risk	Hazard	Non-Weighted Risk
Temperature Extreme (Heat)	63%	Temperature Extreme (Heat)	16.30
Staffing Shortage	58%	Dust Storm	15.39
Dust Storm	57%	Staffing Shortage	15.34
Cyberattack	57%	Cyberattack	14.59
Communications/Telephone/ Network Failure	56%	Severe Weather	14.53
Severe Weather	55%	Communications/Telephone/ Network Failure	14.52
Pandemic/Epidemic	52%	Drought	14.00
Extended Power Outage/Mass Electrical Failure	50%	Pandemic/Epidemic	13.25
Drought	50%	Flood/Flash Flood	12.90
Mass Casualty (trauma)	50%	Extended Power Outage	12.87

Unique Regional Hazard Considerations:
- Colorado River concerns – Dams, fault lines
- High potential for extreme earthquakes (Yuma and Mohave)
- Mohave – 5th largest county but only 3 city centers
- US/Mexico, Arizona/California, Nevada/California/Utah border considerations
- Extreme heat combined with drought
- Limited volunteer workforce

Highlighted RGA Regional Results

This table lists the region-wide assets and member-specific resources available within the Western Region. A total of 20 responses were collected from this part of the survey.

Western Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
County/Tribal Public Health Department Resources			
Alternate Care Sites	3/3 (100%)	Includes supplies or equipment for alternate care sites – may be managed by hospitals or local/tribal/state EM or federal	Most PH will assist hospitals - small supply of materials
Communication Assets	3/3 (100%)	Number of public health departments that possess communication assets for primary and back-up emergency communication.	PH has phone lines (landlines, cellular, satellite, and phone bank capabilities), county auxiliary communications, 900, MHz radios, HAM radio, two-way radios, VHF/UHF mobile radios, portable repeater systems, Wi-Fi, AzHAN, IPAWS, NXT alert system
Mass Mortuary / Body Bags	2/3 (67%)	Plans and/or resources for processing / identification / storage	PH has body bags and adult and pediatric post mortem kits
Medical Countermeasures Administration/Distribution	2/3 (67%)	Includes physical assets that support Chempack, antidote, vaccination, prophylaxis operations and distribution of other countermeasures from the SNS and/or state and local assets that may include databases, electronic systems, as well as physical resources (signage, badging systems, coolers, etc.)	PH has access to SNS for vaccination and prophylaxis - coolers and ultra-low temp coolers for storage
PPE Stockpile	3/3 (100%)	Available supplies and storage capacity, PPE stockpile	PH reports small stockpile to max capacity in storage
Healthcare Volunteer Management	3/3 (100%)	Healthcare volunteer management: Resources or MOUs for healthcare volunteers (e.g. CERT or MRC)	PH has MRC or CERT volunteers

Western Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
Call Center Capability	3/3 (100%)	Call centers: Capability to set up a call center for a public health emergency	PH has the ability and equipment to set up call centers
County/Tribal Emergency Management Department Resources			
Communication Assets / Call Center Capability	2/2 (100%)	Number of county/tribal emergency management departments possess communication assets for primary and back-up emergency communication - may have the ability to receive community alerts

Most EM partner with PH to set up a call center for a public health emergency | EM has the following: phone lines (landlines, cellular, and satellite), internet apps (Microsoft Teams, social media), email, two-way radios, and HAM radios |
| **EMS/Fire Resources** | | | |
| **Response Transportation Resources** | 2/2 (100%) | Includes capabilities for agent identification, mass decontamination and throughput for ambulatory/non-ambulatory casualties, storage location, and contact info to request | ALS Ambulances 0
BLS Ambulances 1
Fixed Wing Units 1
Rotor Wing Units 5
Mass Casualty Bus/Vehicle 0
MCI trailer 1

EMS agencies that don't have this resource are smaller, rural organizations |
| **HAZMAT Response Vehicle/Trailer** | 1/2 (50%) | Includes capabilities for agent identification, mass decontamination and throughput for ambulatory/non-ambulatory casualties, storage location, and contact info to request. - antidote availability considered | The EMS agencies that don't have this resource are smaller, rural organizations |
| **Community Paramedics** | 0/2 (0%) | Represents other community-based EMS personnel that may assume alternate roles in a disaster (e.g., paramedics are also firefighters, volunteer or paid, reserve personnel who can be called to assist with an MCI; those who are BLS or ACLS trained) | Community paramedics are more common in rural locations, have been used in vaccine clinics and as National Guard volunteers |

Western Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
Technical/ Swiftwater/ Collapse Rescue	2/2 (100%)	Resources that may be engaged locally or regionally to assist with technical/urban search & rescue situations	Agencies share this resource with each other
HAZMAT Radiation Assets	0/2 (0%)	Includes detection/survey equipment	No comments
Wildfire Response Team	2/2 (100%)	Team trained to respond locally or regionally to assist with wildfires	Agencies share this resource with each other
Evacuation Resources (Sleds, Stair Chairs, Pediatric Equipment, Evacuation Buses)	2/2 (100%)	Resources that may be engaged locally or regionally to assist with hospital or healthcare facility evacuation	Agencies share this resource with each other
Hospital Resources			
Morgue Capacity	32 spaces	Number of spaces to store decedents	4/4 hospitals reported, 1 hospitals report 0 spaces
Platform to communicate with organization/system	3/4 (75%)	Number of hospitals that use a designated platform to communicate with other organizations or larger healthcare system	
System to communicate with families/patients	2/4 (50%)	Number of hospitals that have a designated system for communication with patients and families	
Mass Communication Platform	3/4 (75%)	Number of hospitals that use a mass communication platform to notify staff, patients, families, community partners, etc.	
Satellite Phones	0/4 (0%)	Number of hospitals that use satellite phones as back-up communication	
HAM Radio	3/4 (75%)	Number of hospitals that use HAM radios as back-up communication	
Two-way Radios	4/4 (100%)	Number of hospitals that use two-way radios	
Crisis Care Supplies	3/4 (75%)	Possession of cots that could be appropriately placed in flat space areas on hospital premises to create alternate care areas and including utilizing space where patients can be held awaiting treatment, actual treatment space (using cots, chairs, recliners, mobile vans, tents, air mattresses etc.).	
Hospital Emergency Response Team (HERT)	2/4 (50%)	Number of hospitals that have at least one HERT	
Hospital Emergency Response Team (HERT) Resources	4/4 (100%)	Hospital decontamination resources - may include hard showers and tents	

Western Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
Hospital Emergency Response Team (HERT) Trained Employees	31 trained staff	Number of hospital employees trained to respond to decontamination situation	
Evacuation Resources (Sleds, Stair Chairs, Pediatric Equipment, Evacuation Buses)	4/4 (100%)	May be listed in Evacuation Plan annex from above. Equipment (may be facility or cache-based) including patient movement, triage/tracking supplies. Include availability of adult, child and infant evacuation equipment	3 sleds 0 stair chairs 0 pediatric equipment 0 bariatric equipment 1 wheelchair vans 1 evacuation buses 4 helipads
Personal Protective Equipment (PPE)– Highly Infectious Disease	3/4 (75%)	PPE ensembles for the care of a patient with suspects/confirmed highly infectious disease agent	3 hospitals have decontamination team PPE 1 hospitals have biohoods 4 have PAPRs 3 have Tyvek suits
PPE Ensemble for HAZMAT	4/4 (100%)	PPE ensembles for the decontamination team including respiratory protection.	
Long Term Care/Skilled Nursing Facility Resources			
Communication Assets	4/4 (100%)	Number of LTC/SNF that possess communication assets for primary and back-up emergency communication - primarily cellular phones	LTC/SNF have phones (landlines and cellular), internet, email, two-way radios, and HAM radios
System to communicate with families/patients	4/4 (100%)	Number of LTC/SNF that have a designated system for communication with patients and families	
Ability to receive community alerts (mobile apps, email subscriptions, etc.)	4/4 (100%)	Number of LTC/SNF that receive community alerts	
Mass Communication Platform	1/4 (25%)	Number of LTC/SNF that use a mass communication platform to notify staff, patients, families, community partners, etc.	
PPE Cache	4/4 (100%)	Includes N95 masks, procedural/surgical masks, goggle, isolation gowns, and face shields	0/4 LTC/SNF have PAPRs 0/4 have Tyvek suits 1/4 have biohoods

Western Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
Evacuation Resources (Sleds, Stair Chairs, Pediatric Equipment, Evacuation Buses)	4/4 (100%)	Equipment (may be facility or cache-based) including patient movement, triage/tracking supplies	3 LTC/SNF have wheel chair vans 4 have bariatric equipment 1 have sleds 1 have evacuation buses
Hospice and Home Health Resources			
Communication Assets	2/2 (100%)	Number of hospice and home health that possess communication assets for primary and back-up emergency communication.	Home health and hospice have phones (landline and cellular), internet, email
System to communicate with families/patients	0/2 (0%)	Number of hospice and home health that have a designated system for communication with patients and families	
Ability to receive community alerts (mobile apps, email subscriptions, etc.)	0/2 (0%)	Number of hospice and home health that receive community alerts	
PPE Cache	2/2 (100%	Includes N95 masks, procedural/surgical masks, goggle, isolation gowns, and face shields	0/2 hospice/HH have PAPRs 0/2 have Tyvek suits 0/2 have biohoods 0/2 has decon PPE
Outpatient Care Resources			
Communication Assets	3/4 (75%)	Number of outpatient care facilities that possess communication assets for primary and back-up emergency communication.	Outpatient care have phones (landlines, cellular, and satellite), internet, email, two-way radios, and HAM radio
System to communicate with families/patients	2/4 (50%)	Number of outpatient care facilities that have a designated system for communication with patients and families	
Ability to receive community alerts (mobile apps, email subscriptions, etc.)	3/4 (75%)	Number of outpatient care facilities that receive community alerts	

Western Region Assets and Member Resources			
Item	**Number (%)**	**Definition**	**Comments**
Mass Communication Platform	0/4 (0%)	Number of outpatient care facilities that use a mass communication platform to notify staff, patients, families, community partners, etc.	
PPE Cache	4/4 (100%)	Including N95 masks, training/fit-testing. Do not need to track masks at individual facilities but should reflect overall situation as well as any caches / specific assets	0/4 outpatient have PAPRs 0/4 have Tyvek suits 0/4 have biohoods 1/4 has decon PPE

Appendix 7: Central Region Vulnerability Profile

Appendix 8: Northern Region Vulnerability Profile

Appendix 9: Southern Region Vulnerability Profile

Appendix 10: Western Region Vulnerability Profile

Note: The Regional Vulnerability Profiles will be attached as separate documents.

References

1. 2022-23 Arizona Coalition for Healthcare Emergency Response (AzCHER) Statewide Community Hazard Vulnerability Assessment. Accessed November 2, 2023.

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7. Federal Emergency Management Agency. (2018). Comprehensive Preparedness Guide (CPG) 201: Threat and Hazard Identification and Risk Assessment (THIRA) and Stakeholder Preparedness Review (SPR) Guide. (Third Edition.)

8. Kaiser Permanente. (2017). Kaiser Permanente Hazard Vulnerability Analysis (HVA) Tool. https://www.calhospitalprepare.org/hazard-vulnerability-analysis

Glossary

Access and Functional Needs Plan or Appendix	*This plan defines populations in the community at risk of potential access/care based on emPOWER and other databases, demographic information, coordination with renal and other patient networks, liaison with cultural and advocacy groups, and defining challenges.*
Active Shooter/Armed Assailant/Active Threat Plan	This plan documents integration with law enforcement during a response to active shooter/blast event scenes prioritizing access to victims, the role of EMS providers, mass triage, rapid interventions including hemorrhage control, early evacuation, and treatment/transport.
Alerting /Notification Plan	This plan describes alert and notification of the following during an incident for public safety and private sector-based systems: 911 PSAP/dispatch centers, area hospitals, and EMS supervisors/management/ medical direction staff. Should include any indicators/triggers for activation of MCI plan.
ALS Ambulance	Advanced life support, level 1 (ALS1) is the transportation by ground ambulance vehicle and the provision of medically necessary supplies and services including the provision of an ALS assessment or at least one ALS intervention. They may include scheduled and 911 assets, critical care transport, scheduled assets, reserve rigs, specialized units (pediatric, bariatric, isolation, etc.).
Alternate Care Systems/Site	In the event of a disaster or public health emergency, Alternate Care Sites (ACS) may be created to enable healthcare providers to provide medical care for injured or sick patients or continue care for chronic conditions in non-traditional environments. It can include telephonic/telemedicine, screening/early treatment, and non-ambulatory care - EM and hospitals will have contributing responsibilities.
Alternate Care Systems/Sites Plan	An ACS plan that includes telephonic/telemedicine, screening/early treatment, and non-ambulatory care – EM and hospitals will have contributing responsibilities.
Ambulatory Surgery Centers	Ambulatory surgery centers—known as ASCs—are modern healthcare facilities focused on providing same-day surgical care, including diagnostic and preventive procedures. ASCs may be used for overflow acute care, overflow outpatient care.
Assisted Living Facilities	Facilities that include the continuity of long-term care services and provide housing, personal care services, and healthcare designed to respond to individuals who need assistance with normal daily activities.
Behavioral Health Plan	This plan includes critical incident stress support, access to information about normal stress responses, psychological first aid training, and professional behavioral health support to providers. Ideally, this should also include tracking and follow-up of at-risk employees after critical incidents.
Blood Bank Plan	This plan details support for hospitals during a mass casualty incident including delivery during access-controlled situations.
BLS Ambulance	Basic life support (BLS) is transportation by ground ambulance vehicle and the provision of medically necessary supplies and services, including BLS ambulance services as defined by the state. These may include scheduled and 911 assets.

Burn Center Beds	A burn recovery bed or burn bed is a special type of bed designed for hospital patients who have suffered severe skin burns across large portions of their bodies. These are dedicated burn beds.
Chempack/SNS Plan	In jurisdictions/organizations hosting Chempack assets, the plan should document hospital and EMS actions related to storage, maintenance, notification mechanism of need for release of assets and authority by whom to release them, accompanying security to a distribution point, resupply method. All jurisdictions should have an SNS receipt and distribution plan. Include SNS receipt, distribution, and replacement.
Closed POD Plans	Plans for internal vaccination/prophylaxis of healthcare personnel. May be helpful to quantify the number of employees who would require vaccination or prophylaxis depending on role/job class.
Communication Assets	These assets may include traditional phone lines, radios, cellular, satellite, internet-based – at least one primary and one redundant system.* Radios (800mhz, amateur radio, other), web-based system, ability to receive HAN alerts, etc.
Community Paramedics	This includes other community-based EMS personnel that may assume alternate roles in a disaster (e.g., paramedics are also firefighters, volunteer or paid reserve personnel who can be called to assist with an MCI; those who are BLS or ACLS trained). In large metro areas may summarize / list agencies rather than specific resources.
COOP, Recovery/Business Continuity Plan	Recovery activities and continuity of operations (COOP) response functions including backup for personnel, communication systems, and logistical support (assets).
Crisis Care	Number of cots that could be appropriately placed in flat space areas on hospital premises to create alternate care areas and including utilizing space where patients can be held awaiting treatment, actual treatment space (using cots, chairs, recliners, mobile vans, tents, air mattresses, etc.).
Crisis Standards of Care Plan	This plan details facility and regional approach to coordination of service and resource management, interface with State plans, and plans for on-site and community-based alternate care systems/sites. Including relevant facility and regional triggers where defined. Should also address 1135 waivers, and modifications of other pertinent local/state rules and regulations to address surge issues, ACS, volunteers, etc.
Decontamination Capacity - Ambulatory	Patients / hour based on exercises - assume 10 minutes/person through process (e.g. 6 patients/hour per decon station)
Decontamination Capacity - Non-Ambulatory	Patients/hour based on exercises - assume 10 minutes/person at each decon station
Dialysis Centers	Dialysis does the work of the kidneys by cleansing the blood – removing waste and excess water. There are two types of dialysis: hemodialysis and peritoneal dialysis. In hemodialysis, the patient's blood is passed through an artificial kidney machine, and the procedure is performed in a hospital or similar facility.

Dry Decontamination Kits	Redress kits that allow a patient to disrobe under a large bag/cover and therefore remove contaminated clothing that can then be sealed in another bag. Limits continued exposure and potential for secondary contamination of EMS/hospital assets.
Emergency Department (ED) Capacity	Bed capacity based on usual spaces used for patient care for hospital-based EDs.
ED Isolation (AIIR) Rooms	ED Isolation rooms may be ED Positive /Negative pressure rooms. Formerly, negative pressure isolation room, an AIIR is a single-occupancy patient-care room used to isolate persons with a suspected or confirmed airborne infectious disease.
ED Surge Beds	These are beds in addition to usual ED beds – overflow/surge capacity only – may include adjacent procedure or other areas used for ED care.
Emergency Operations Plan	The jurisdictional emergency management plan should specify the lead agency for health and medical issues. Either this plan or the Public Health Emergency Operations Plan should specify the integration of the hospitals and EMS into the jurisdictional plan. This should include how information is shared with and between agencies, the process for resource requests, and the role of Public Health and Emergency Management relative to the coalition partners.
EMS Agencies	Emergency Medical Services (EMS) transport agencies – includes all emergency transport agencies, may consider including scheduled BLS provider services if applicable.
Evacuation Plan	This plan describes the role and coordination efforts during an evacuation of a healthcare facility and its repatriation (when needed).
Evacuation Resources	Equipment (facility or cache-based) including patient movement, triage/tracking supplies (NOTE: this may only apply to ambulatory surgery centers and freestanding emergency rooms for non-ambulatory patients).
Evaluation Resources (Sleds, Stair Chairs, Pediatric Equipment, Evaluation Buses)	These resources may be listed in the Evacuation Plan annex from above. Equipment (facility or cache-based) including patient movement, triage/tracking supplies. Include availability of adult, child, and infant evacuation equipment.
Exercise Plan	Exercises should meet the needs of regulatory agencies/accrediting bodies and are coordinated between the coalition disciplines to assure a community-based exercise at least yearly involves the four core coalition stakeholders and ideally more.
Family Assistance Center Plan	This plan is integrated with hospitals, EOCs, and support organizations (e.g. ARC) – may include physical and virtual operations for re-unification and notifications.
Fixed-Wing Units	Fixed-wing units can respond within 60 minutes response time to the area, specific for flight time to scene/facility. Assure contact information is available for all agencies.

Group Homes	A home where a small number of unrelated people in need of care, support, or supervision can live together, such as those who are elderly or have disabilities and access/functional needs.
Hardware/Connectivity	Computers and other material resources to facilitate virtual or physical coordination center activities, including internet/data access.
HAZMAT Radiation Assets	Assets that include radiation detection/survey equipment.
HAZMAT Response Vehicle/Trailer	HAZMAT response vehicles/trailers include capabilities for agent identification, mass decontamination and throughput for ambulatory/non-ambulatory casualties, storage location, and contact info to request. Consider antidote availability.
HAZMAT/ Decontamination Plan	This plan describes roles of EMS and Fire including agent identification, setting up hot, warm and cold zones, capability for mass decontamination, and use of medical countermeasures for chemical, biological, and radiological incidents. Include use of available antidotes (including CHEMPACK reference). Addresses delivery of contaminated patients to specialty care hospitals when needed and available.
Home Health Agencies / Home Hospice	A Home Health Agency (HHA) is an agency or organization that: Meets the federal requirements in the interest of the health and safety of individuals who are furnished services by the HHA; and. Meets additional CMS requirements necessary for the effective and efficient operation of the program. May approximate in large metro areas.
Infectious Disease Plan	This plan includes guidelines for situational awareness and notification of outbreaks associated with seasonal and emerging infectious disease agents, dispatch communication to crews, hospitals, and PH, personal protective equipment, infection prevention, and control measures, specialized transport and response protocols to tiered levels of treatment facilities.
Inpatient Isolation (AIIR) Rooms	Formerly, negative pressure isolation room, an AIIR is a single-occupancy patient-care room used to isolate persons with a suspected or confirmed airborne infectious disease. Include capacity for AIIR's and cohorting.
Inpatient Psychiatry Beds	Include capacity including for adults and pediatric patients.
Intensive Care Bed Adult	Beds that have availability of mechanical ventilation and some form of renal support and other organ support for adult patients.
Intensive Care Bed Pediatric	Beds that have availability of mechanical ventilation and some form of renal support and other organ support for pediatric patients.
Intensive Care Surge Beds	Intensive care surge beds may include doubling, use of step-down areas (therefore may count stepdown and some monitored beds twice), and procedure areas. Must have dedicated cardiac monitors, appropriate medical gases, etc. Include capacity for NICU, PICU, and Adult beds. Do not include PACU space here (list under PACU-specific line) – include both PICU and adult ICU potential surge beds.

Intensive Care Unit	Bed and staff can support above plus mechanical ventilation, sedation, hemodynamic support (pressor agents), and similar advanced care for unstable or dangerously ill patients. There is not an expectation that the facility has ventilators for each identified ICU surge bed but monitors are expected. Adult and pediatric beds are bundled together as a listed resource for disaster planning purposes. Coalitions may wish to break out pediatric ICU beds for their regional planning efforts to understand conventional capabilities.
IS/IT System Failure/Compromise Plan	This plan outlines response to downtime, cyberattacks (e.g. denial of service attack on 911), redundancy measures, training, PHI substitutions, and recovery measures.
Legal Regulatory Plan	This plan defines powers of State vs. local jurisdictions and local ordinances that may affect disaster response (e.g. disaster declarations, emergency orders, seizure powers, isolation and quarantine, changes to usual rules/requirements in disasters).
Level 1 / Level 2 Trauma Centers	Level I Trauma Center is a comprehensive regional resource that is a tertiary care facility central to the trauma system. A Level I Trauma Center can provide total care for every aspect of injury – from prevention through rehabilitation. A Level II Trauma Center can initiate definitive care for all injured patients.
Level 3 / Level 4 Trauma Centers	A Level III Trauma Center has demonstrated an ability to provide prompt assessment, resuscitation, surgery, intensive care and stabilization of injured patients and emergency operations. May include other/non-designated in this category if receive trauma. A Level IV Trauma Center has demonstrated an ability to provide advanced trauma life support (ATLS) prior to the transfer of patients to a higher level trauma center. It provides evaluation, stabilization, and diagnostic capabilities for injured patients.
Long-Term Acute Care Facilities	Long-term acute care hospitals (LTACs) provide inpatient services for patients with complex medical problems requiring extended hospital stays. LTACs are defined by their average duration of stay, not by the type of patients admitted or the services provided. For prolonged, high-intensity management of chronic conditions.
Long-Term-Care Beds	Long-term care beds in skilled nursing facilities are hospital beds accommodating patients requiring long-term care due to chronic impairments and a reduced degree of independence in activities of daily living.
MAC/EOC	Emergency Operations Centers (EOCs) are the entity from which the coordination of information and resources to support incident management at the Incident Command Post (on-scene or field level activities) occurs. Multi-Agency Coordinating (MAC) Groups are policy setting entities typically comprised of agency administrators/executives, or their designees. Physical and backup location for coordination efforts.
Mass Mortuary / Body Bags	A body bag, also known as a cadaver pouch or human remains pouch, is a non-porous bag designed to contain a human body, used for the storage and transportation of shrouded corpses. Body bags can also be used for the

	storage of corpses within morgues, including processing / identification / storage.
Mass Mortuary / Fatality Plan	This plan includes the role of the facilities, medical examiner/coroner and roles and responsibilities of the local agencies.
Mass Transit	Buses (school, public) and other contingencies should be documented – does not require a specific number. Assure points of contact and timeframe available. Include mass transit and paratransit assets and their capacities, contact info, and potential timeframe to mobilize them.
MCI Bus/Vehicle	Mass Casualty Incident (MCI) Bus/Vehicles include contents, the estimated number of casualties that can be treated/transported, location, contact agency.
MCI Trailers	Mass Casualty Incident (MCI) trailers include contents, the estimated number of casualties that can be treated, location, contact agency.
Medical Countermeasures Administration/Distribution	Physical assets that support Chempack, antidote, vaccination/prophylaxis operations, and distribution of other countermeasures from SNS and state and local assets that may include databases and electronic systems as well as physical resources (signage, badging systems, coolers, etc.).
Medical Countermeasures Plan	This plan includes mass vaccination/prophylaxis (closed and open PODs), Chempack, and plans for receipt and distribution of other countermeasures from the SNS and other assets.
Medical/Surgical Beds	General medical/surgical ward bed - bed and staff can provide basic interval vital sign monitoring, oxygen, inhaled, oral, and intravenous or intramuscular medications. Patients on these units are generally stable with limited potential for acute deterioration. Pediatric and adult beds are bundled together.
Mental Health Providers	Mental health providers are professionals who diagnose mental health conditions and provide treatment. Most have at least a master's degree or more-advanced education, training, and credentials. Document interface of major associations/provider groups/MRC or other assets with coalition activities.
Military Assets	Include assets that can be state or federally activated to support a medical response (National Guard, ground/air assets including ambulances, CERF-P units, CST, etc.). Key resources may be activated by the state.
Mutual Aid Plan	This plan specifies the request process, commitment, notification, etc. between agencies and details other services/assets. Include any written MOA/MOU and other agreements.
NICU Beds	Beds that provide neonatal intensive care unit (NICU) care. Consider Level in the case of evacuating NICU to other NICUs.
Notification Platform	Electronic systems that provide notification to leadership and partners. These systems are designed for event notification only, distinct from communication platforms listed below which are designed for ongoing, interactive information sharing.
Number of Hospitals Include Critical Access Hospitals	Total hospitals in coalition providing emergency care/acute care services.

Operating Rooms	Operating rooms are specially equipped rooms, usually in a hospital, where surgical procedures are performed.
Other Response Vehicles	Other response vehicles may include, supervisor, physician, 'jump' vehicles, etc. In large metro areas may summarize/list agencies rather than specific resources.
Outpatient Clinics	An outpatient department or outpatient clinic is the part of a hospital designed for the treatment of outpatients, people with health problems who visit the hospital for diagnosis or treatment but do not at this time require a bed or to be admitted for overnight care. These also include clinics not at hospitals.
Patient Distribution Plan	This plan specifies role in conducting inter-facility transports and patient distribution to hospitals and other healthcare facilities – coordinated to minimize overload on a single facility when possible. Integrated with hospital MCI plans.
Patient Redress/Dry Decon Kits	Redress kits allow a patient to disrobe under a large bag/cover and therefore remove contaminated clothing that can then be sealed in another bag. Limits continued exposure and potential for secondary contamination of EMS/hospital assets.
Patient Tracking and Movement Plan	This plan documents the responsibilities of EMS/PH/Hospitals/EM for tracking incident-related patient tracking during field triage, emergency evacuation, and transport. Includes patient redistribution activities to minimize surge and promote load-balancing among reception and treatment facilities. Include planning for activation by NDMS as a host or reception site. Specify process to obtain multimodal patient transport assets including ground, vehicular, and marine options.
Pediatric MCI Plan	This plan includes local and regional supplies and patient distribution, pediatric referral centers, and resources. Detail the hospital's level of preparedness to manage pediatric casualties.
Personal Protective Equipment (PPE) - Infectious Disease	Infectious disease PPE includes baseline stocks that should be maintained and identify resources/caches that could be used and/or purchase caches if reasonable. Consider an acceptable par level of 20% above daily use. Includes surgical masks and N-95 masks. Consider adding the number of PAPR kits (Butyl and Biospecific), spare Tyvek suits of various sizes, and Bio hoods.
PPE HAZMAT	PPE ensembles for the decontamination team including respiratory protection.
Pre/Post Anesthesia Beds (PACU)	To be used for trauma, ICU overflow/boarding.
Public Health Agencies	A Public Health Authority is an agency or authority of the United States Government, a State, a territory, a political subdivision of a State or territory, or an Indian tribe, that is responsible for public health matters as a part of its official mandate.

Resource Plan/Annex	This plan describes the resource request and sharing process. This includes a list of specific assets purchased with federal or state funds or under the direct control of HCC partner members. Includes cache materials, response resources for CBRNE, MCI's or emergency evacuation, specific adult and pediatric patient care items, and other assets to support facility operations.
Response Equipment and Supplies (e.g., PPE, Evacuation, Medications, ventilators, mass casualty and specialty equipment)	These resources may be tracked through inventory management systems – these should be coalition-owned/managed resources.
Response Plan	This plan describes who will be notified, how, and when (specifying indicators and triggers) during a community incident; specific mechanisms for information sharing and coordination among coalition partners; responsibilities of coalition members, response partners, and HCC "Response Team" members. Document Regional Patient Tracking and Mutual Aid Plans or agreements (e.g., MOU, MOA, MAA) between coalition members or partners.
Retail Pharmacy	A pharmacy in which drugs are sold to patients, as opposed to a hospital pharmacy. Also known as a community pharmacy. Number optional – document major chains and interface with coalition activities.
Risk Communications Plan	A plan that is integrated with community/state JIS and coalition partners
Rotor-Wing Units	Rotor-wing units respond within 60 minutes response time to the area, specific for flight time to scene/facility. List contact information/agencies and priority ring down based.
Security Plan	Facility Security plans may be supported by jurisdictional EM and law enforcement. Facility plans must include access controls and policies (for example, media and family access), as well as policies and training for workplace violence, active shooter, suspected explosive devices, and civil unrest.
Shelter Support Plan	This plan outlines the provision of medical care/support in shelter environments.
Skilled Nursing Facilities	A skilled nursing facility is an in-patient rehabilitation and medical treatment center staffed with trained medical professionals.
Skilled Nursing Facility as Part of Hospital	SNF (included in the total above) that are physically connected to an acute care hospital.
Specialty Hospitals	Specialty hospitals include long-term care hospitals, psychiatric or other specialty hospitals that do not provide emergency services.
Specialty Mass Casualty Plans (e.g., MCI, Pediatrics, Burn)	Plans for specialty situations should specify coordination, patient distribution, primary and surge facilities and resources, and coordination with specialty centers.
Staff and Resource Sharing Plan	This plan details how staff and resources will be shared between facilities and policies/protocols. Include a written plan for how needed assistance will be reported to others (phone, information-sharing platform, etc.) and the hospital's role in HCC MOU/MAA to support emergency staffing and resource support.

Stepdown	Stepdown beds and staff can provide cardiorespiratory monitoring (cardiac monitor, oxygen saturation monitoring) and intravenous medications and fluid support for currently stable patients with significant oxygen or other needs and potential for dangerous rhythm disturbances and deterioration. Pediatric and adult beds are bundled together.
Stepdown (Intermediate Care) Beds	Stepdown (intermediate care) beds refer to intermediate care including cardiovascular drip medications, potentially BiPAP but not mechanical ventilation or pressor support.
Stepdown Surge Beds	Stepdown beds that can be used during a disaster event. These must include cardiorespiratory monitoring capability including remote telemetry.
Surge Beds	Beds that can be used during a disaster event. This may involve making appropriate single rooms double, using observation, pre or post-anesthesia care areas, or opening closed units. The facility should only declare the number of beds it has on hand and could achieve within 24 hours, though the Coalition may wish to track potential additional beds that could be opened with leased/supplied beds and over a longer timeframe (e.g. some remodeling / temporary walls would be constructed, etc.).
Surge Discharge Potential (beds)	The number of beds that could be made available via early discharge based on exercises or real-world events.
Surge Discharge Potential (patients)	The number of patients that could safely be moved to a discharge holding area/out of their usual rooms pending discharge to make room for incoming patients. A hospital needs to have a process for selecting these patients and generate a point estimate of the number of beds that could be made available based on exercises or real-world activation of the process. The aggregate number of beds made available across the coalition hospitals should be listed.
Surge Supplies	Surge supplies do not need to include specifics of facility supplies but each facility should be accountable to be prepared according to their role in a disaster.
Surgical/Burn MCI Plan	This plan includes local and regional supplies and patient distribution and protocols and training policies. Surgical burn mass casualty incident (MCI) plans can address events such as active shooter or bombings.
Technical/Swiftwater/Collapse Rescue	Resources and agencies that may be engaged locally or regionally to assist with technical / US&R situations. List point of contact and timeframe for rescue missions.
Telephone / Web-Based Care	Local system providers are documented and describe how they interface with coalition activities.
Urgent Care Center / Freestanding Emergency Rooms	Urgent care is a category of walk-in clinics in the United States focused on the delivery of ambulatory care in a dedicated medical facility outside of a traditional emergency department. They are not at hospitals and can be approximated in large metro areas – note they may have significant differences in the level of service/capabilities, particularly for imaging. May also include the number of ORs.

Ventilators (Hospital Owned)	A ventilator is a machine that provides mechanical ventilation by moving breathable air into and out of the lungs, to deliver breaths to a patient who is physically unable to breathe or breathing insufficiently. Do not include anesthesia machines in OR. Include transport ventilators with high/low pressure and other alarms suitable for longer-duration simple ventilation situations. Quantify adult & pediatric vents. Also, ECMO.
Virtual Coordination	A platform for virtual coordination.
Volunteer Management Plan	This plan includes capabilities, deployment parameters/priorities, and processes inclusive of Medical Reserve Corps as applicable.
Wheelchair Vans	Wheelchair vans should include private services.