



# Health Care Readiness 2020 Annual Report



**ASPR**  
ASSISTANT SECRETARY FOR  
PREPAREDNESS AND RESPONSE

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**NOTE:** The activities and quantitative data discussed in this report cover the calendar year of 2020. For clarity, FY 20 fiscal year data is noted when used, which covers October 1, 2019 through September 30, 2020. Additionally, all descriptive statistics concerning the Hospital Preparedness Program Cooperative Agreement (e.g., number of Health Care Coalitions and ASPR Capability progress) is as of June 30, 2020.

# Reflection from ASPR Health Care Readiness Leadership



Dear Reader,

During 2020, our nation faced unprecedented challenges, including COVID-19 and other concurrent disasters and emergencies, that required coordinated local, regional, and national responses. ASPR's Health Care Readiness Portfolio grew significantly this year to better support the nation in protecting the health of Americans.

In this inaugural annual report, we are excited to share with you how each of the Health Care Readiness Programs was activated in 2020 to build the preparedness and response capabilities of the U.S. health care system.

This includes, but is not limited to:

- Built the **National Special Pathogen System** that expands on prior efforts during and following the 2014 Ebola response;
- Established a **third pilot site to address health care preparedness challenges** at the regional level; and
- Initiated three new programs to **support health care practitioners nationwide in meeting increased demand for telemedicine**.

Our work would not have been possible without the herculean effort of all who are involved in the Health Care Readiness Programs and in health care preparedness and response across the nation. **Thank you for your hard work and dedication!**

We remain dedicated to supporting local to national COVID-19 and concurrent disaster response efforts and building a national system of health care readiness across the U.S. for every kind of disaster and emergency. We are focused on identifying innovative solutions to address existing gaps in health care readiness and support our recipients and partners across the health care continuum.

We hope you will take a moment to celebrate this year's progress, and then join us in our continued efforts to advance health care readiness across the nation. We look forward to continuing to partner with you!



**Jonathan Greene**

Deputy Assistant Secretary  
and Director

Office of Operations and  
Resources

HHS ASPR

# Health Care Readiness 2020: BY THE NUMBERS

**6**  
Cooperative Agreements

**130+**  
Cooperative Agreements Recipients

**\$526M**  
in emergency funding distributed to address COVID-19 response

## HOSPITAL PREPAREDNESS PROGRAM (HPP)



**\$231.5M**  
FY20 Appropriation Funding

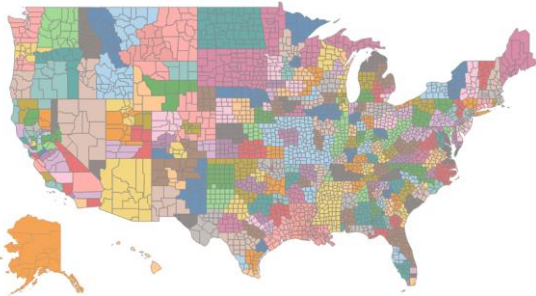


**62** Recipients in all 50 states, 8 territories and freely associated states, Los Angeles County, Chicago, New York City, and Washington, D.C.

## HEALTH CARE COALITIONS (HCCs) BY THE NUMBERS

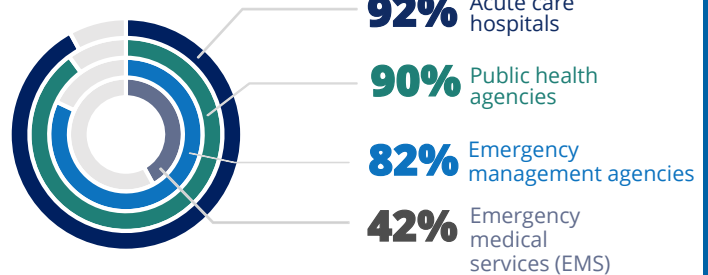
**326**      **42,128**

HCCs across the nation      HCC members nationwide



## NATIONAL PARTICIPATION RATE OF HCC CORE MEMBERS


The percentage of organizations across the U.S. that are members of a coalition (e.g., 5,030 acute care hospitals participate in HCCs, which represents 92% of all U.S. acute care hospitals)




## NATIONAL SPECIAL PATHOGEN SYSTEM (NSPS)

**\$350M**  
Amount invested to establish the NSPS

**10**  
Regional Ebola and Other Special Pathogen Treatment Centers (RESPTCs)



**62** Hospital Preparedness Program (HPP) Recipients



**55** Special Pathogen Treatment Center Sub-recipients

**1** National Emerging Special Pathogens Training and Education Center (NETEC) consisting of 3 academic medical centers

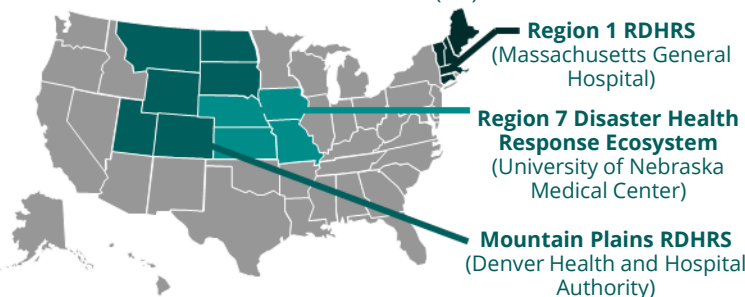


**53**  
Hospital Associations



## REGIONAL DISASTER HEALTH RESPONSE SYSTEM (RDHRS)

In FY18, ASPR awarded 2 demonstration sites (NE, MA) and in 2020, ASPR added a third site (CO).



**\$6M** invested in 2020 (continued funding for existing demonstration sites and \$3M to establish the Mountain Plains RDHRS)

**60+** partners (e.g., state health departments, hospital associations, community health centers, regional and national specialty organizations)

**21** regional webinars hosted with over **3,000** participants in Region 1 and Region 7

**673** incidents entered into the Region 7 Knowledge Center, a RDHRS-hosted interoperable information-sharing platform, representing **97** unique jurisdictions



The [Hospital Preparedness Program](#) establishes the foundation for national health care readiness, promotes a consistent national focus to improve patient outcomes during emergencies, supports health care resilience, and enables rapid recovery. Learn more about each recipient in the [HPP Recipient Fact Sheets](#).



HPP investments in health care coalitions (HCCs) have **improved regional and individual health care entities' preparedness and have built a system for coordinated health care system readiness and response**. HCCs and other partnerships coordinate activities across local, state, regional, and federal levels to ready health care systems for disasters and emergencies.

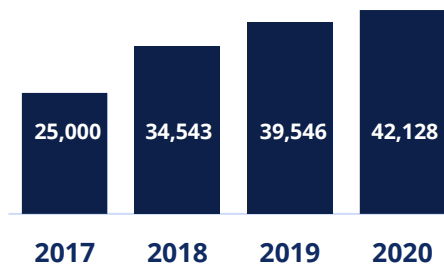
### Overview of HCCs

HCCs are composed of diverse, and sometimes competitive, organizations who, during a disaster, become interdependent for supplies, transportation, personnel, and more.

Each HCC must include four core members: acute care hospitals, public health agencies, emergency medical services, and emergency management agencies. **HCC membership of these core members has increased over time, likely due to more frequent exposure and encouragement to join HCCs.**

### Change in Total # of HCC Members

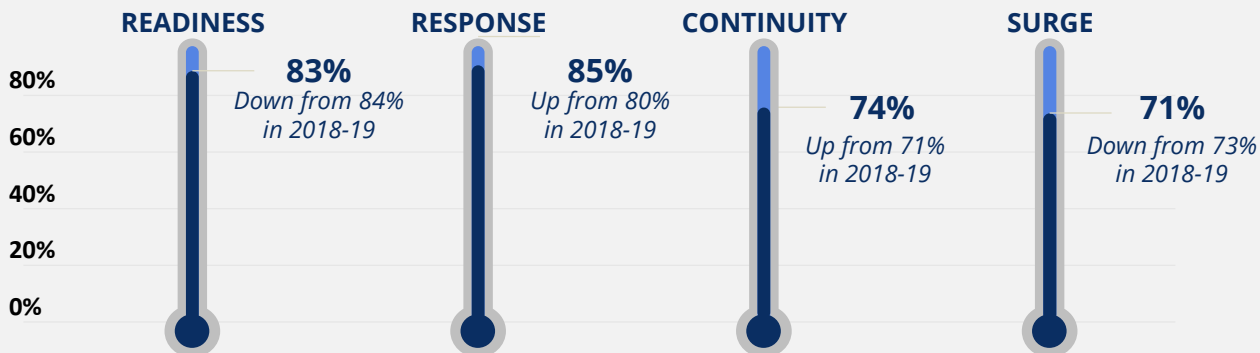
The number of HCC members nationwide has increased every year for the past four years



### Progress on ASPR Health Care Preparedness and Response Capabilities

ASPR developed the [2017-2022 Health Care Preparedness and Response Capabilities](#) to describe what the health care system, which includes HCCs, must do to effectively prepare for and respond to emergencies that impact the public's health. HCCs develop shared preparedness plans, conduct exercises, and collaborate to prepare and respond to real-world events to make progress on the four capabilities and advance ASPR's goal of nationwide health care readiness.

### Average HCC Capability Progress Scores Nationwide (2019 - 2020)



**While progress on two of the four capabilities did not improve in this past year, average progress in the four capabilities has shown overall improvement since 2016.**



In 2020, HPP recipients and HCCs have worked tirelessly to prepare for and respond to disasters and emergencies, including distribution of critical resources, responding to concurrent disasters, and dissemination of information. Find additional stories on the [Health Care Readiness in Action webpage](#) and in the [HPP Recipient Fact Sheets](#).

### Rural HCC in Maryland Accelerates Information Sharing During the COVID-19 Pandemic



As the rate of hospitalizations increased, health care facilities across Maryland, and particularly those in rural areas, experienced elevated demand for personal protective equipment (PPE). To proactively anticipate reduced capacity to treat COVID-19, the Regions I & II Healthcare Coalition played an instrumental role in maintaining situational awareness amongst coalition members of the spread of COVID-19 and resources shortfalls. In addition to funneling information on case counts, testing volume, and bed capacity to its core members, the HCC conducted coalition meetings, which provided health care facilities the critical opportunity to share resources – a support mechanism that may not have been in place otherwise.

### Michigan HCCs Coordinate to Facilitate Safe COVID-19 Treatment



In October 2020, as COVID-19 case counts increased in the state of Wisconsin and Michigan’s Region 8 Healthcare Coalition, the Upper Peninsula Health System (UPHS) Marquette, the only tertiary care center in Michigan’s Upper Peninsula, needed to expand its capacity for isolation beds. Region 8 Healthcare Coalition coordinated with Michigan’s Region 1 Health Care Coalition to ask Region 1 hospitals for available HEPA (high efficiency particulate air) units, which would allow the facility to convert traditional patient rooms into negative pressure rooms to prevent viral spread, and to transfer the units to UPHS Marquette. These units, which were previously purchased with HPP funding, allowed the health care system to create an isolation surge unit.

### California Addresses COVID-19 Surge Amidst Ongoing Wildfire Response Efforts



California (CA) was one of the first states to respond to COVID-19, open an operations center, and initiate shelter-in-place. HPP funding supported the response in CA through HCC participation, the use of software to collect bed usage reports, and warehouse space. State and local counties assisted with early federal COVID-19 quarantine operations at military bases in CA by providing PPE. California Department of Public Health (CDPH) supported staff deployment, call centers, resource requests, laboratory testing, and advanced planning. CDPH and CA EMS Authority, alongside local health departments, also assisted in standing up several Federal Medical Stations and alternate care sites with a combined surge potential of >5,000 beds.

On August 18, 2020, the CA Medical and Health Coordination Center (MHCC) was activated at level 1 (high) in response to wildfires. MHCC and CDPH objectives including monitoring and supporting resource requests, supporting local shelter operations, and coordinating response efforts with local, state, and federal partners to ensure timely and accurate public information and information sharing.



# National Special Pathogen System

The [National Special Pathogen System \(NSPS\)](#), established in 2020, builds on existing infrastructure and investments for infectious disease preparedness, such as the former Regional Ebola Treatment Network. In 2020, NSPS provided support for special pathogen readiness through **education, regional coordination, and surge activity funding**, and includes the following components:



**10** Regional Ebola and Other Special Pathogen Treatment Centers (RESPTC)

**1** National Emerging Special Pathogens Training and Education Center (NETEC) consisting of 3 academic medical centers

**62** Hospital Preparedness Program (HPP) Recipients

**53** Hospital Associations



**Feb 2020** - Washington's designated RESPTC, the Providence Sacred Heart Medical Center, applied its expertise as a first responder to the COVID-19 pandemic and hosted 4 COVID-positive passengers from the Diamond Princess cruise ship.



**Sept 2020** - Through shared stories and emerging promising practices, hospitals in Missouri began to reflect on COVID-19 and its impact on health care and the community, while looking forward to help prepare for what may yet come. The Missouri Hospital Association released a new report, "Mid-Response Assessment: Missouri Hospitals' Response to the COVID-19 Pandemic," highlighting the clinical and operational lessons learned from the COVID-19 pandemic response among Missouri hospitals. The findings of this report are based on a broad membership survey conducted in July.

**Jan 20:** First case of COVID-19 identified in Washington

**Mar 13:** National Emergency declared

**Jul 7:** U.S. surpasses 3 million infections

**Oct 23:** U.S. enters 3<sup>rd</sup> phase of pandemic

**Dec 18:** FDA approves Pfizer and Moderna vaccines

**Feb 6:** First U.S. death in California

**May 21:** Global cases surpass 5 million

**Sept 22:** U.S. deaths surpass 200,000



**Apr 2020** - NETEC began hosting webinars on COVID-19 best practices, response efforts, and guidance for health care providers including those involved in NSPS, such as how to transform normal/positive rooms into negative pressure rooms to care for COVID-19 patients, including pediatric COVID-19 patients.



**Spring 2020** - Early in the COVID-19 pandemic, the West Virginia Department of Health and Human Resources launched an information hotline to address questions and concerns from medical providers and the public. In support of West Virginia's "Operation Save Our Wisdom" vaccination program, this information line has received calls on topics including vaccine registration, vaccination locations, and adverse reactions related to COVID-19 vaccination, as well as general COVID-19 inquiries. West Virginia also launched a COVID-19 Vaccine Information Line to help residents get information on vaccine distribution and availability.

Find additional stories on the [Health Care Readiness in Action webpage](#) and in the [HPP Recipient Fact Sheets](#).



# Regional Disaster Health Response System

The [Regional Disaster Health Response System](#) (RDHRS) establishes regional partnerships to develop promising practices in coordinating disaster readiness, expanding access to specialty clinical care, and increasing medical surge capacity. Currently, ASPR funds and supports three demonstration sites. Learn more about the RDHRS program and demonstration sites in the [July 2020 Report to Congress](#).

*“The global pandemic provided an unprecedented opportunity for our team to rapidly pivot from theory to actual mobilization of RDHRS response capabilities in support of our local, state, and regional partners – highlighting the inherent value of an RDHRS to identify and address gaps within coordinated patient care during disasters.*

- **Region 1 RDHRS**, Year 2 Final Report



## 2020 Overview

In 2020, existing RDHRS demonstration sites based in Massachusetts ([Region 1 RDHRS](#)) and Nebraska [[Region 7 Disaster Health Response Ecosystem \(DHRE\)](#)], pivoted from plans to enhance steady state capabilities to COVID-19 response. They rapidly matured RDHRS partnerships and capabilities to effectively coordinate their response to COVID-19.

Both sites significantly improved clinical collaboration across the health care sector in their states and initiated strategies to expand collaboration across their regions. For example:

- Region 7 DHRE supported specialized teams that visited high risk sites and developed specialized guidance for its partners.
- Region 1 RDHRS visited preparedness and response entities in each Region 1 state to align disaster response mechanisms.

The sites also collaborated to create the future of RDHRS and share promising practices, strengthening their partnership and COVID-19 response.

## New Demonstration Site

In September 2020, [ASPR funded a new partnership](#), the **Mountain Plains RDHRS**, based in **Colorado**. While Region 1 and Region 7 RDHRS sites continue to expand and establish a multi-state presence through the integration of additional

partners, Region 8 will stand up their RDHRS and complete foundational activities.

## COVID-19 Response

During the COVID-19 pandemic, RDHRS sites quickly engaged networks and relationships built during the first year of the demonstration to **mobilize resources, develop trainings, and coordinate local response partners**.

### EXAMPLE COVID-19 ACTIVITIES



Region 1 RDHRS mobilized clinical experts and state health authorities to support **distribution of over 400 surge ventilators**.



The Region 7 DHRE **Knowledge Center** conducted **over 110 COVID-19 events** and maintained a common operating picture for local and regional partners.



Both sites developed and tested **pilot disaster telemedicine systems and shared clinical expertise** with state, regional, and federal partners.



Both sites developed a **combined 8 novel disaster response approaches** which were posted publicly to support partners across the health care spectrum.





The Health Care Readiness Portfolio also enhances health care workforce preparedness and response capacity and capability through knowledge transfer, trainings, and sharing of promising practices.



## Health Care Coalition Response Leadership Course (HCRL)

Through a partnership with the Federal Emergency Management Agency (FEMA) Center for Domestic Preparedness in Anniston, AL, ASPR provides instruction and practical experience in proven procedures for preparing and responding as an HCC leadership team to community and regional public health emergencies through the [HCRL course](#).

The three-day course offers insights and lessons learned in establishing an effective HCC framework, conducting HCC planning, and strengthening jurisdictional disaster readiness and preparedness.

From September 2016 through March 2020, 72 HCCs from 30 states, the District of Columbia, Puerto Rico, U.S. Virgin Islands, and six of the U.S. Pacific territories and freely associated states participated in the HCRL course.



## Medical Response to Overwhelming No Notice Mass Trauma Course

HPP, FEMA, the National Highway Traffic Safety Administration (NHTSA) Office of EMS, the American Burn Association, the American College of Emergency Physicians, and the American College of Surgeons are developing a “Medical Response to Overwhelming No Notice Mass Trauma” course to improve clinical response to overwhelming no-notice mass trauma events.



The audience for this course includes clinical care providers (e.g., trauma surgeons, emergency physicians, EMS), and the curriculum integrates lessons learned from past large-scale events, such as the 2017 Las Vegas mass shooting.

While in-person trainings for spring of 2020 were postponed, the public-private partnership that led the development of the curriculum plans to begin trainings in the future.



As COVID-19 surged, the Health Care Readiness Portfolio initiated and executed workforce engagement and information sharing-programs to support health care practitioners nationwide.

## ASPR/PROJECT ECHO COVID-19 CLINICAL ROUNDS

During the COVID-19 response, it was critical to establish mechanisms for clinical providers to rapidly share promising practices for treatment and other response activities. HHS ASPR and Project ECHO initiated the **COVID-19 Clinical Rounds, a series of sessions designed to provide peer-to-peer, real-time knowledge-sharing regarding challenges and successes in COVID-19 treatment for frontline, primarily pre-hospital and hospital-based clinicians.** Each Clinical Rounds session includes presentations from experienced expert clinicians complemented by discussion among expert panelists in response to Q&A from participants.

**103** Clinical Rounds sessions

**10,866** Session recording views

**40,826** Total participants

All data as of December 22, 2020

## TELEMEDICINE HACK

HHS ASPR, Project ECHO, and the Public Health Foundation's TRAIN Learning Network partnered to create the **Telemedicine Hack, a ten-week, virtual, peer-to-peer learning community to support wide adoption of telemedicine for ambulatory providers.** This series included five teleECHO sessions on key topics highlighting promising practices and case studies from the field, five virtual "office hour" discussion panels, and inter-session peer-to-peer learning sessions facilitated via virtual discussion boards and ad hoc interest groups.

**> 8,500**

Unique registrants

**45+**

Practice areas represented

**1,688**

Attendees per session (on average)

Data covers all of Hack

## MEDSCAPE VIDEO SERIES

The Health Care Readiness Portfolio provided funding to **MedScope** which developed a **10-part video series covering** a range of topics, including how best to **use telemedicine to provide clinical services to patients, procedures for billing, assessing symptoms, diagnosing, discussing and prescribing therapies, and more.** The content also explores how to effectively interact with patients and families using telemedicine, as well as non-clinical subjects, including types of telemedicine platforms available.

**13,933**

Total learners

**4,096**

Total MD learners

**1,558**

Total nurse practitioners & physician assistant learners

All data as of January 13, 2021



# Additional COVID-19 Mitigation Activities

In addition to launching the National Special Pathogen System and providing COVID-19 supplemental funding, ASPR's Health Care Readiness Portfolio expanded to meet the needs of the community by providing funding and expertise to the National Emergency Tele-Critical Care Network, the National American Red Cross, and the Health Care Resilience Working Group's Hospital Team.

## National Emergency Tele-Critical Care Network (NETCCN)

In 2020, a coalition of telemedicine stakeholders initiated the [National Emergency Tele-Critical Care Network](#) (NETCCN), an evolving network of clinical care teams that provide expert medical advice to anyone who needs it, wherever they may be, using network enabled mobile devices. ASPR served as the sole funding source for four clinical-technical teams. Each of these teams completed a six-month, three phase, competitive down-selection process to develop and deploy effective tele-critical care solutions for use at scale and for rapid deployment during a disaster. As NETCCN continues to expand, it can serve as a critical first step in establishing a broader National Emergency Telemedicine Network (NETN) that could provide high-quality, low-resource telemedicine and tele-critical care across the health care continuum.



## National American Red Cross Support

During the COVID-19 pandemic, ASPR established a \$118M cooperative agreement with the American Red Cross through the Health Care Readiness Portfolio. This cooperative agreement aimed to maintain blood operations, enabling **hospitals and other health care entities to meet demand for blood and avoid shortages of this lifesaving medical resource**. Specifically, ASPR's support contributed to:



**140K**

**Blood drives, distributing 3.5M units of red blood cells**

**2M**

**Antibody tests (of the 4M conducted)**

**5.57M**

**Units of PPE (e.g., masks, face shields, wipes, gloves, disinfectant)**

## COVID-19 Healthcare Resilience Working Group (HRWG)

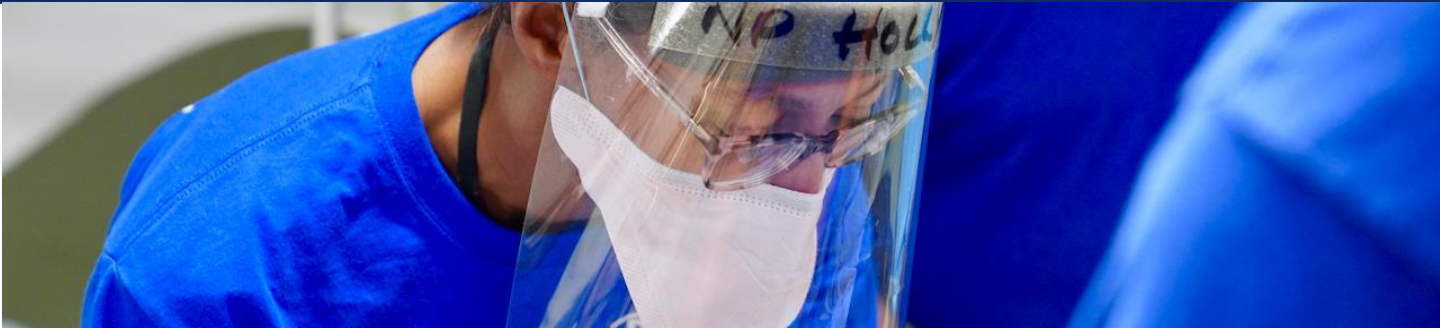
Experts from ASPR's Health Care Readiness Portfolio led the HRWG's Hospital Team to support the hospital and health care systems response to COVID-19 by monitoring health care resilience issues for action, preparing health care for patient surges, and emphasizing workforce resilience. The Hospital Team worked with other federal partners to create an analysis framework for hospital bed capacity data and developed methods to analyze hospital resourcing measures. Additionally, the hospital team released the following resources to support hospitals in need of frameworks for surge operations:

- [Medical Operations Coordination Cells \(MOCC\) Toolkit](#)
- [Alternative Care Site Toolkit](#)
- [Patient Safety Webinar](#)
- [Rural Health Care Surge Readiness Portal](#)
- [COVID-19 Hospital Resource Package](#)





# Health Care Readiness Partner Community



The Health Care Readiness Partner Community consists of over 70 organizations including national trade associations, foundations, academic institutions, health care entities, companies, and other non-profits. A special thanks to highly engaged partners who have fundamentally contributed to the formulation and success of the health care readiness programs mentioned throughout this report.

- Alliance for Biosecurity
- American Academy of Ambulatory Care Nursing
- American Academy of Emergency Medicine
- American Academy of Pediatrics
- American Academy of Physician Assistants
- American Ambulance Association
- American Association of Blood Banks
- American Association of Critical-Care Nurses
- American Association of Nurse Practitioners
- American Association on Health and Disparity
- American Burn Association
- American College of Chest Physicians
- American College of Emergency Physicians
- American College of Health Care Administrators
- American College of Health Care Executives
- American College of Preventive Medicine
- American College of Surgeons
- American Health Care Association
- American Hospital Association
- American Nurses Association
- American Psychological Association
- American Public Health Association
- American Red Cross
- American Society for Microbiology
- American Trauma Society
- America's Blood Centers
- America's Essential Hospitals
- Association for Professionals in Infection Control and Epidemiology
- Association of American Medical Colleges
- Association of Healthcare Emergency Preparedness Professionals
- Association of Public Health Laboratories
- Association of State and Territorial Health Officials
- Biotechnology Innovation Organization
- Children's Hospital Association
- Council of State and Territorial Epidemiologists
- Denver Health and Hospital Authority
- Emergency Nurses Association
- Emory University
- Federation of American Hospitals
- George Washington University
- Health Industry Distributors Association
- Healthcare Ready
- Infectious Diseases Society of America
- International Association of Emergency Managers
- International Enviroguard
- International Safety Equipment Association
- Johns Hopkins Bloomberg School of Public Health Center for Health Security
- Kidney Community Emergency Response Program
- LeadingAge
- Massachusetts General Hospital
- MedStar Washington Hospital Center
- Medxcel Facilities Management
- National Association of Accountable Care Organizations
- National Association of Community Health Centers
- National Association of County and City Health Officials
- National Association of EMS Physicians
- National Association of Home Care and Hospice
- National Association of State EMS Officials
- National Association of State Mental Health Program Directors
- National Business Group on Health
- National Council for Behavioral Health
- National Emergency Management Association
- National Governors Association
- National Homeland Security Association
- National Public Health Information Coalition
- National Rural Health Association
- New York Health and Hospitals – Bellevue System
- Pacific Island Health Officers Association
- Pharmaceutical Research and Manufacturers of America
- Society for Healthcare Epidemiology of America
- The Joint Commission
- Trauma Center Association of America
- Trust for America's Health
- University of Nebraska Medical Center
- Urgent Care Association



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**A special thank you to all those involved in the Health Care Readiness Portfolio for their incredible work over the past year including recipients, sub-recipients, program participants, and public and private sector partners**