



Our nation faces real and serious threats that represent a looming risk to health care delivery. This system offers a powerful way to form alliances and build specialized capabilities that save more lives in overwhelming, catastrophic emergencies. The system draws on the existing U.S. health care infrastructure, pulling together private sector and federal resources in a way that has never been done.

Robert Kadlec, MD HHS Assistant Secretary for Preparedness and Response

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Pictured above-right: Local high-school student participated in a full-scale mass casualty drill that tested hospitals surge capability planning.

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The grant provided learning opportunities about other layers/ methods our members can use to respond to, document and report on disasters/emergencies encountered. It provided a jump off point for discussion on where TRIMRS (Tri County Medical Response System) is in terms of being prepared to respond to a large scale mass casualty incident and the various array of tasks that will need to be addressed post-incident.

Cody Samuelson TRIMRS Healthcare Coalition Coordinator Despite continued efforts in emergency preparedness, disasters have risen in frequency and magnitude in the last decade. Lessons learned from recent disasters have showcased gaps in planning as they relate to triage, transport and health system surge capacity.

In 2018, Nebraska Medicine received a competitive \$3 million grant through the U.S. Department of Health and Human Services' Office of the Assistant Secretary for Preparedness and Response (ASPR) for the creation of a Regional Disaster Health Response System. To execute this pilot project, Nebraska Medicine and its academic partner, University of Nebraska Medical Center, utilized an ecosystem model to ensure inclusivity, interconnectedness, redundancy and self-sustainment.

This report illustrates the creation of the Nebraska Regional Disaster Health Response Ecosystem (NRDHRE), the methodology used to develop and evaluate the system, gaps and areas of improvement identified in disaster preparedness as well as commonalities found in planning and exercising. Overall, the NRDHRE program tested and expanded medical surge capacities within the six healthcare coalition (HCC) communities and helped to identify sustainable solutions for the coordination of patient care and resource management.

YEAR ONE Goals



Integrating Medical Response Capabilities

to include community-based and non-traditional response



Expanding Specialty Care Expertise

telepresence and mobile teams for trauma, chemical, biological, radiological, nuclear and pediatric injuries



Coordinating Medical Response

through increased situational awareness and information sharing



Integrating Measures of Preparedness

into daily priorities through health care and community system incentives



Building on Regional Health Care Coalitions

and better integrating public and private sector partners to improve preparedness and response

All About the NUMBERS

Nebraska Facts

Nebraska is comprised of:

93 counties

1.92 million residents

6 healthcare coalitions

80% of Nebraska EMS personnel are volunteers





26

Nebraska counties are WITHOUT a hospital

NRDHRE Actions



participants attended workshops geared to review regional medical surge





800+

trained in the Knowledge Center incident management technology platform



Community Engagement

NRDHRE leadership engaged with and solicited input from a variety of non-health system stakeholders, including:

- » Executives of community based organizations such as Red Cross and United Way
- » Private insurance companies
- » Public utilities
- » State government leadership, including Nebraska Emergency Management Agency (NEMA), Department of Health and Human Services
- » Volunteer organizations and public-private partnerships, such as Civil Air Patrol and Nebraska Preparedness Partnership

The Nebraska Emergency Management Agency (NEMA) has fully embraced the goals associated with the ASPR project due to the heightened awareness regarding the role of the University of Nebraska and the public health stakeholder organizations in disaster response. NEMA has been actively engaged with UNMC/Nebraska Medicine with efforts to implement the NHRDHRE program goals and looks forward to helping build out the response network within our Region.

Bryan Tuma
Assistant Director, Nebraska Emergency Management Agency

Capability-Based Approach

ASPR outlined a capability-based approach to address gaps identified in health system preparedness and expand upon progress that has been made by healthcare coalitions. The Regional Disaster Health Response System (RDHRS) structure is intended to improve bidirectional communication and situational awareness, develop highly specialized regional clinical capabilities, and integrate key stakeholders of the HCCs.















Build a disaster health response network

Capability 2

Align plans, policies, processes and procedures related to clinical excellence in disasters

Capability 3

Increase statewide and regional medical surge capacity

Capability 4

Improve statewide and regional situational awareness

Capability 5

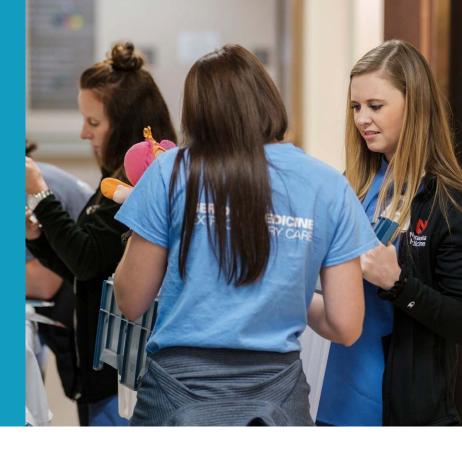
Develop readiness metrics and conduct an exercise to test capabilities

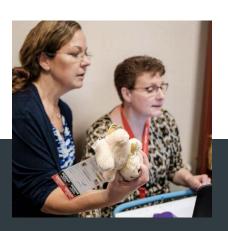


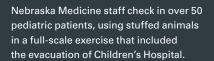
YEAR ONE Review

Through collaborative efforts readiness metrics were created, medical surge capabilities within the state were further defined, an information sharing platform was initiated and the HCC's benefited through workshops and trainings specific to surge capabilities and planning gaps.

Coalition Surge Workshops conducted in each of the six HCC's focused on triage, transportation, hospital surge, outpatient clinics, the use of alternative care sites, enabling at-home supportive care and communication/coordination.









Local high-school students participated in a full-scale evacuation exercise that tested medical surge capabilities in several of the Omaha area hospitals.



Local emergency managers track resources while hospital personal track patients using the information sharing platform Knowledge Center in a full-scale exercise in northeastern Nebraska.

YEAR ONE Successes

Information Sharing

The Knowledge Center incident management platform provides a common operating picture for every hospital, long-term care facility, and health department in the state, as well as all 93 counties' emergency management and EMS responders, the Nebraska Emergency Management Agency, and various state agencies.

Collaboration

- » Poison Control Center to assist with toxicology related events.
- » Development of the Nebraska Emergency/Disaster Health and Medical Volunteer Plan.
- » A clinician appointed to the Governor's Policy Group.
- Engagement of the six HCC's, who contributed to the Response
 Readiness Designation Program.

Knowledge Center could have been invaluable during the Bomb Cyclone Blizzard/Flooding event that occurred in March 2019 as a tool to aid in gathering and sharing of information for status reports and situational awareness...

It will be a great time saver for things like the Hazard Vulnerability
Assessment (HVA) at the local and regional level.

Dennis Colsden Healthcare Coalition Leader Rural Region One Medical Response System (RROMRS)

Policy

Knowledge

A legal reference guide
related to emergency declarations,
1135 waivers, Health Insurance
Portability and Accountability Act
(HIPAA), the Emergency Medical
Treatment and Active Labor Act
(EMTALA) and the Emergency
Management Assistance
Compact (EMAC), was
created.

Readiness Metrics

Disaster health response readiness metrics were developed and shared with all 6 HCCs for critical review and input to ensure applicability.

The readiness metrics form the basis from which a disaster health response readiness designation program can be established for coalitions, states and regions. Health response related metrics and a response ready designation program provide the objective means by which systems can be established and evaluated. It is the evaluation of baseline readiness using standardized metrics that creates the impetus for affecting change, which ultimately results in advanced capability to respond effectively to disasters or other incidents which threaten the lives of our citizens.

Regina Nailon PhD, RN | Nebraska Medicine, NRDHRE Readiness Metrics Co-Author

For year two, we will continue our efforts to create a new paradigm for health system preparedness that is centered on the concept of a regional ecosystem... Ultimately, we aim to achieve a sustainable ecosystem of healthcare preparedness that reengineers health system actions and coordination during response, taps into the vast human capital and logistical resources of non-traditional responders, and provides economic incentives to weave preparedness into the fabric of community.

James Lawler, MD | Principle Investigator
Unviersity of Nebraska Medical Center

YEAR TWO Opportunities

Year two will be expanded to Region VII as we reach across the borders of our state coordinating activities with Iowa, Missouri and Kansas. Continued efforts from year one will include:

- » Continued development and refinement of the readiness metrics.
- » Enhancement of the specialized teams within the state and expanding into Region VII.
- » Expanding the telehealth community and capabilities.
- » Creation of pilot communities to test the preparedness/response system and readiness designation.

Regional opportunities will include:

- » Further enhancement of multi-state regional partnership for disaster health response.
- » Increase regional capacity for clinical preparedness and response.
- » Build out situational awareness and information sharing capabilities.
- » Refinement and inclusion of essential elements of information.

We're honored to have been a part of this effort and certainly benefited from the experience. We find ourselves feeling isolated and vulnerable sometimes and then these types of events occur that remind us of the many caring people who apply their time and talents to supporting access to high quality care in rural areas. Thanks for all you do.

> John Werner CEO, Brown County Hospital Ainsworth Nebraska







This demonstration grant provides an incredible opportunity to further advance preparedness in our state and region. The activities of the grant will create a sustainable model of communication, coordination, and collaboration between coalitions, EMS, public health, health care, emergency management, and various other community organizations and resources. We have the opportunity to innovate and create a model that will not only serve Nebraska and Region VII but will be an example for others across the nation.

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