

## Enhancing Patient Transport Systems in the U.S. Department of Defense's National Disaster Medical System (NDMS) Pilot Program



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### What is the National Center for Disaster Medicine and Public Health (NCDMPH)?

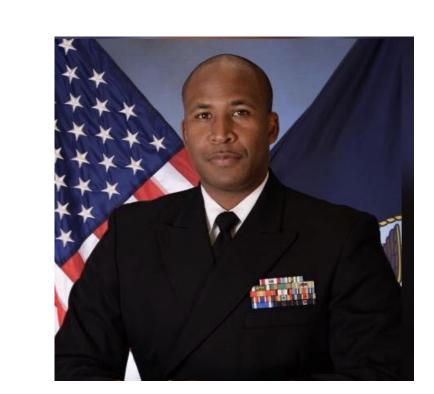
An academic center of excellence that leads organizations in disaster medicine and public health from government, academia, and industry. Through the intersecting application of science, operations, and education, the Center aims to mobilize partnerships to advance the nation's readiness for medical and public health disasters.



Jeff Freeman, PhD, MPH Director, NCDMPH

### What is the National Disaster Medical System (NDMS) Pilot Program?

A Congressionally-authorized, Department of Defense-led program to increase medical surge capabilities and capacities of the National Disaster Medical System (NDMS) to more effectively respond to the medical needs of combat casualties resulting from an overseas wartime contingency, via the strengthening of military-civilian interoperable partnerships across the NDMS.



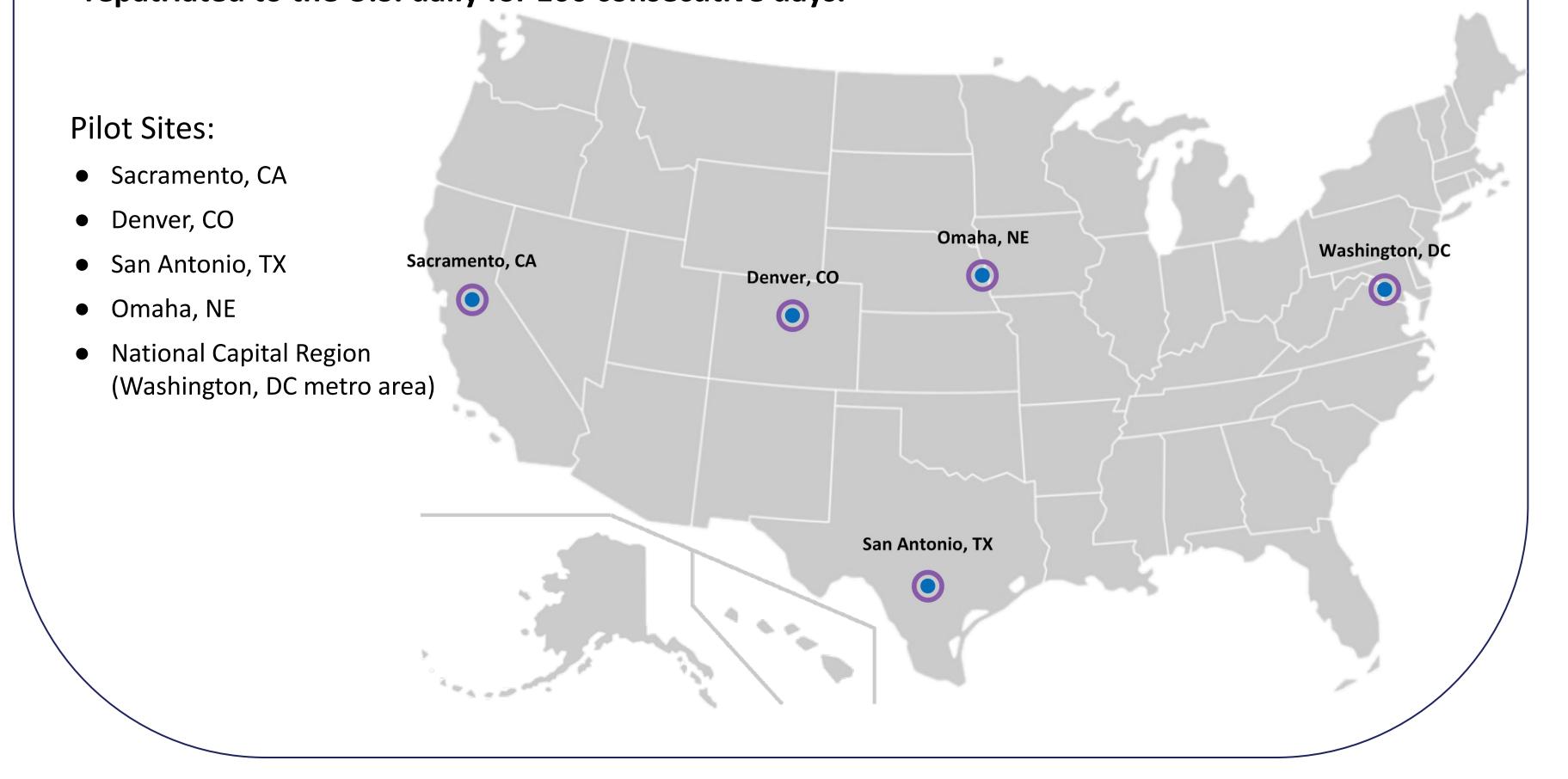
CAPT Clemia Anderson
Director, NDMS Pilot Program

### OBJECTIVE: NDMS PILOT PROGRAM BACKGROUND

Military-civilian healthcare partnerships are an essential resource for the U.S. One of these partnerships, The National Disaster Medical System (NDMS), was established in 1984 at the height of the Cold War to ensure the American healthcare system could respond to an influx of combat casualties produced from an overseas war. Today, the NDMS comprises a coalition of 1,900+ civilian hospitals and five government agencies (DOD, HHS, VA, DoT, and DHS) that agree to provide patient movement and definitive medical care to combat casualties repatriated to the U.S. in the event of war.

The NDMS definitive care network has never been activated at full scale, so it is unclear if this system can handle the complex expansion of capacity required to manage the medical surge and patient transfers that occur during mass casualty events.

In response to this concern, Congress directed the U.S. Secretary of Defense to conduct an NDMS Pilot Program, which aims to strengthen the interoperability and medical surge capabilities and capacities of the NDMS. Launched in 2020, this DoD-lead Pilot Program is being conducted over the course of five years at five regional sites comprising local networks of military and civilian healthcare entities. Each site was selected based on factors including their proximity to military transportation hubs, demonstrated surge capacity, and established expertise in disaster health response, advanced trauma care, and combat casualty care. The Pilot's work uses the hypothetical but realistic scenario of providing definitive care for 1,000 military casualties repatriated to the U.S. daily for 100 consecutive days.



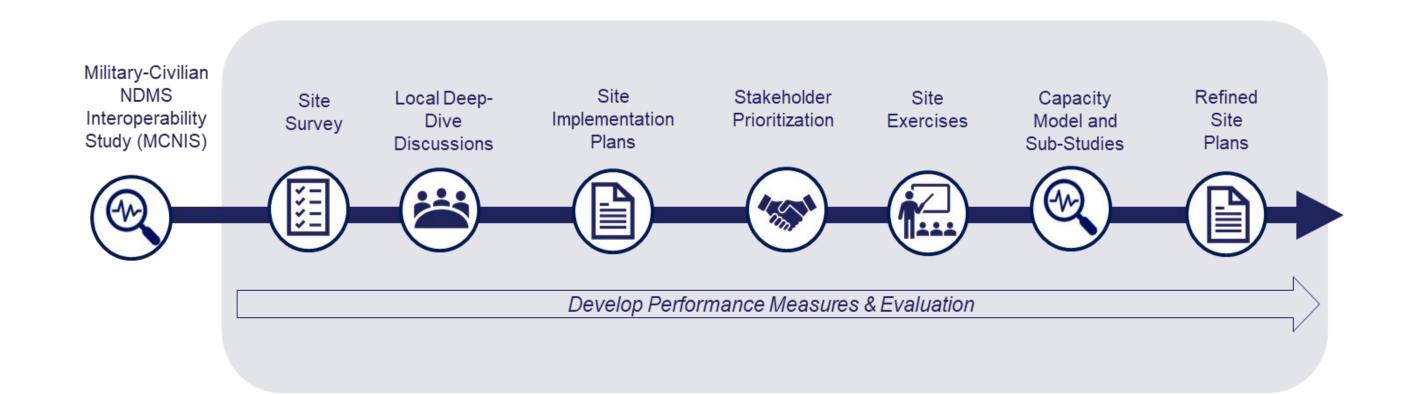
### **METHODS**

### Year-0: The Military Civilian Interoperability Study (MCNIS)

Exploratory research study conducted to specify both potential weaknesses and opportunities for improvement within the NDMS, aligning with interagency stakeholder interests

### **Year-1 Activities**

- Established five Pilot site field implementation teams
- Partnered with over 200 local stakeholders to develop site-specific implementation plans
- Prioritized 95 opportunities for innovation and military-civilian solutions
- Conducted five local military-civilian NDMS exercises with 240+ participants
- Conducted multiple sub-studies including: NDMS definitive care capacity modeling, COVID-19 innovations, federal legislative and policy landscape.



<u>NDMS</u> <u>PARTNERS:</u>







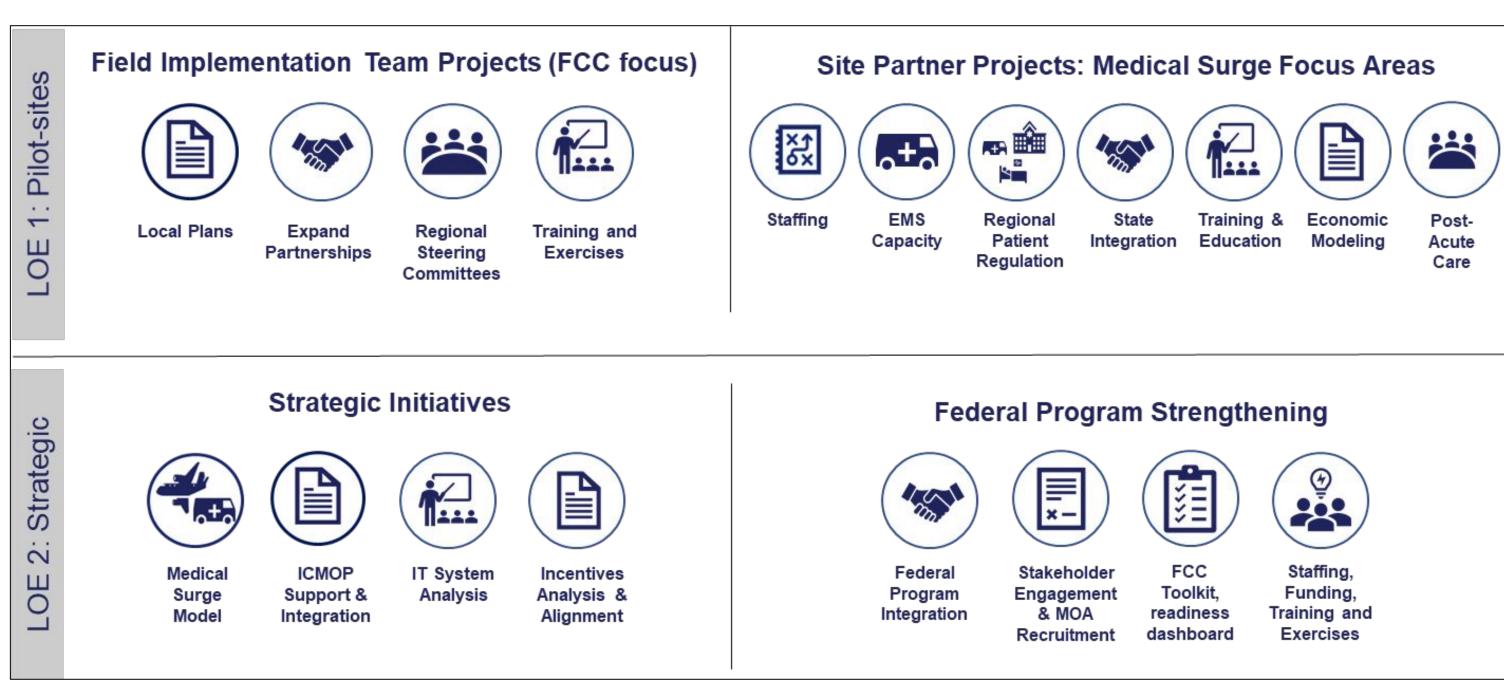
# Phase II: Implementation Phase II: Implementation December 2023 Phase III: Expansion

#### **Year-2 Activities**

Implement projects along two lines of effort (LOE)

Year 2

- Partnered with USNORTHCOM to support the development of the Integrated CONUS Medical Operations Plan (ICMOP) and ensure alignment with the NDMS
- Hosted NDMS Pilot Consortium with all field implementation teams and site partners









### RESULTS: NDMS PILOT PATIENT MOVEMENT

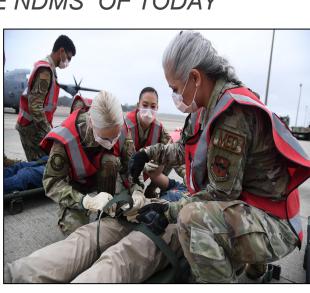
- As the DoD provides essential support for the patient movement component within NDMS, the results highlighted areas for improvement between receiving patients at an airfield and moving them to NDMS definitive care partners during a large medical surge event. This includes patient tracking capabilities, transportation processes and patient placement.
- To enhance NDMS patient load balancing, the NDMS Pilot is developing processes for regional NDMS distribution of patients optimizing available resources.
- Strengthening communication and care processes used in patient tracking information to decrease military-civilian variances.
- Creating regional patient journey maps using Enterprise Architecture familiar to DoD and VA, prompting follow-on work at the local level to create a common operating picture around patient movement in the region.

### CONCLUSION: FUTURE NDMS PILOT EFFORTS

**Ultimate Goal:** In collaboration with HHS, DHA, DoT, and the VHA, the NDMS Pilot Program will submit a detailed report to Congress at the completion of Year-5 eliciting interoperable solutions to transform our nation's medical surge capabilities.

### **Develop**

SOLUTIONS FOR FORTIFYING THE NDMS OF TODAY



## **Propose**RECOMMENDATIONS FOR IMPROVING THE NDMS OF TOMORROW



Prepare

FOR BUILDING ON THE FLY BY DESIGN
WHEN THE RULES NO LONGER APPLY



