

Carolinas MED-1

Mobile Emergency Department



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Carolinas MED-1

- ❖ Mission
- ❖ Capabilities
- ❖ History
- ❖ Future and innovation

Carolinas MED-1

Mission Statement:

Carolinas MED-1 functions as a full spectrum community response asset, providing advanced clinical care capabilities to build community resilience and respond to large scale disasters.

Carolinas MED-1

A unique, advanced **mobile treatment facility** capable of augmenting existing healthcare resources in a community that can provide patient care services for a finite period of time should those existing resources be incapacitated



Carolinas MED-1

Organization and Governance

1. Carolinas Healthcare System (CHS)
2. State of North Carolina- NCOEMS, Healthcare Preparedness
3. Emergency Management Assistance Compact (EMAC)
 - ❖ Governor declared states of emergency allow states to send personnel, equipment, and commodities to help disaster relief efforts in other states
4. \$ Who Pays?

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Missions

1. Terrorism Response
2. Natural disaster or mass casualty incident
3. Medical augmentation during surge capacity
4. Sustained medical care to support damaged hospital infrastructure or renovations
5. Community outreach asset for improved access to care

Carolinas MED-1

Missions

1. Active Terrorist incident involving a WMD:

- ❖ Mobilize to the incident site to provide high-level triage and initial treatment
- ❖ Continue to provide patient care services on-scene if local medical facilities become overwhelmed (surge capacity)
- ❖ Alt site if hospital compromised
- ❖ Organic security and local LEO liaison

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Missions

2. Natural disaster or mass casualty incident:

- ❖ External Resilience:
 - ❖ Medical support for mass casualties that overwhelm the capability of regional facilities
- ❖ Internal Resilience:
 - ❖ Serve as a satellite medical facility should there be a disaster at a CHS or other hospital until essential services can be restored
- ❖ National Response:
 - ❖ Deploy to the Charlotte-Douglas International Airport if the **NDMS** Charlotte Casualty Reception Center is activated

Carolinas MED-1 Missions

3. Medical augmentation during surge capacity:

- ❖ External and Internal Resilience:
 - ❖ Overflow, satellite facility (e.g. H1N1)
 - ❖ Ambulatory medical care
 - ❖ Medical support during isolation or containment associated with a pandemic
- ❖ Stand by for large events (e.g. DNC)

Carolinas MED-1 Missions

- 4. Sustained medical care to support damaged hospital infrastructure or renovations**
 - ❖ Provide suitable facility that is capable of sustaining medical services for a finite period until essential services are restored

Carolinas MED-1 Missions

5. Improved access to healthcare (urban or rural settings)

- ❖ Preventive medical care (H1N1 vaccinations)
- ❖ Ambulatory / outpatient services
- ❖ Ambulatory surgical services
- ❖ Cancer screening
- ❖ Occupational health
- ❖ Women's and children's health
- ❖ Immunizations and well-baby care
- ❖ Dental care

Carolinas MED-1 Model of Response



Carolinas MED-1 Capabilities

1. Damage Control Surgery (DCS)
2. Emergency stabilization of traumatic or medical life threats
 - ❖ Hemorrhage control
 - ❖ Advanced airway and ventilatory management
 - ❖ Advanced cardiac care including cardioversion and thrombolytics
 - ❖ Shock: Blood products, vasopressors and central access
3. Conscious sedation
4. Minor Surgical Procedures
5. Obstetrical emergency care and deliveries
6. Dental, eye, ear, nose, and throat care
7. Telemedicine
8. 200 bed holding facility

Carolinas MED-1

Design Concept

- ❖ Two 53 foot tractor-trailers:
 - ❖ Patient care facility
 - ❖ Support unit for equipment and supplies







Operating Room / Critical Care



14:45
Central Eastern

Carolinas MED-1
Carolinas MED-1

MARQUET

A&M

Carolinas MED -1

Damage Control Resuscitation and Surgical Care





Critical Care

Operating Room / Critical Care

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4 Intensive Care Beds



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Ventilator Support



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Central Monitoring Stations



General Emergency Care



Critical Care

Operating Room / Critical Care



Intravenous Medication Pumps



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Digital Radiology





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Orthopaedic & Suturing



Pharmacy



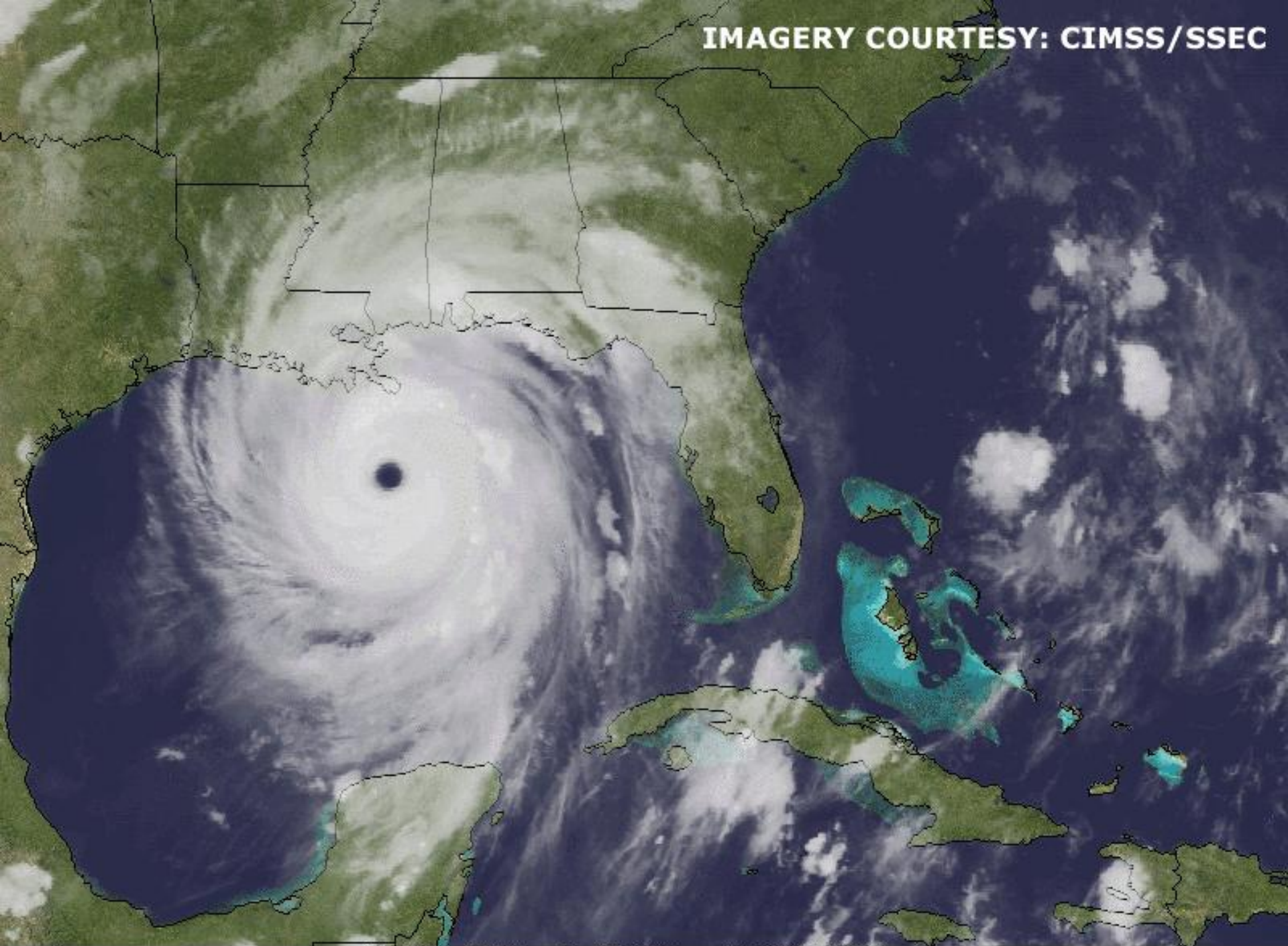
2005
Medical Response

Hurricane Katrina



Waveland - Bay St. Louis
Mississippi
Sept. 2 - Oct. 14

IMAGERY COURTESY: CIMSS/SSEC



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Hancock Medical Center





Alabama Church

FEMA

Showers

Sleep

Triage

MED-1

CT Scanner

Mess

Ice

Sleep

Sleep

Supply

Command

Pharmacy

Refuse

Helipad



Katrina

An aerial photograph of a large medical camp set up in an open area, likely a parking lot or fairground. The camp consists of numerous white tents of various sizes, some with blue awnings. Several ambulances and other vehicles are parked throughout the site. In the background, there are more tents and what appears to be a large building. The overall scene depicts a busy, organized medical facility.

Duration: 6.5 weeks

Patients: Approximately 7500

Volume: 50-350 patients/day

Acuity: Rashes

Wound infections and abscesses

Acute Heart Attacks and Strokes

Asthma and COPD

Respiratory distress

Motor Vehicle Crashes

Lacerations

Burns

Chronic pain syndromes



2006

Medical Response
City of New Orleans

Feb. 22 - Mar. 7





Carrollton
MED-1

MED-1

NDMS
DMAT

NEW ORLEANS
EMS



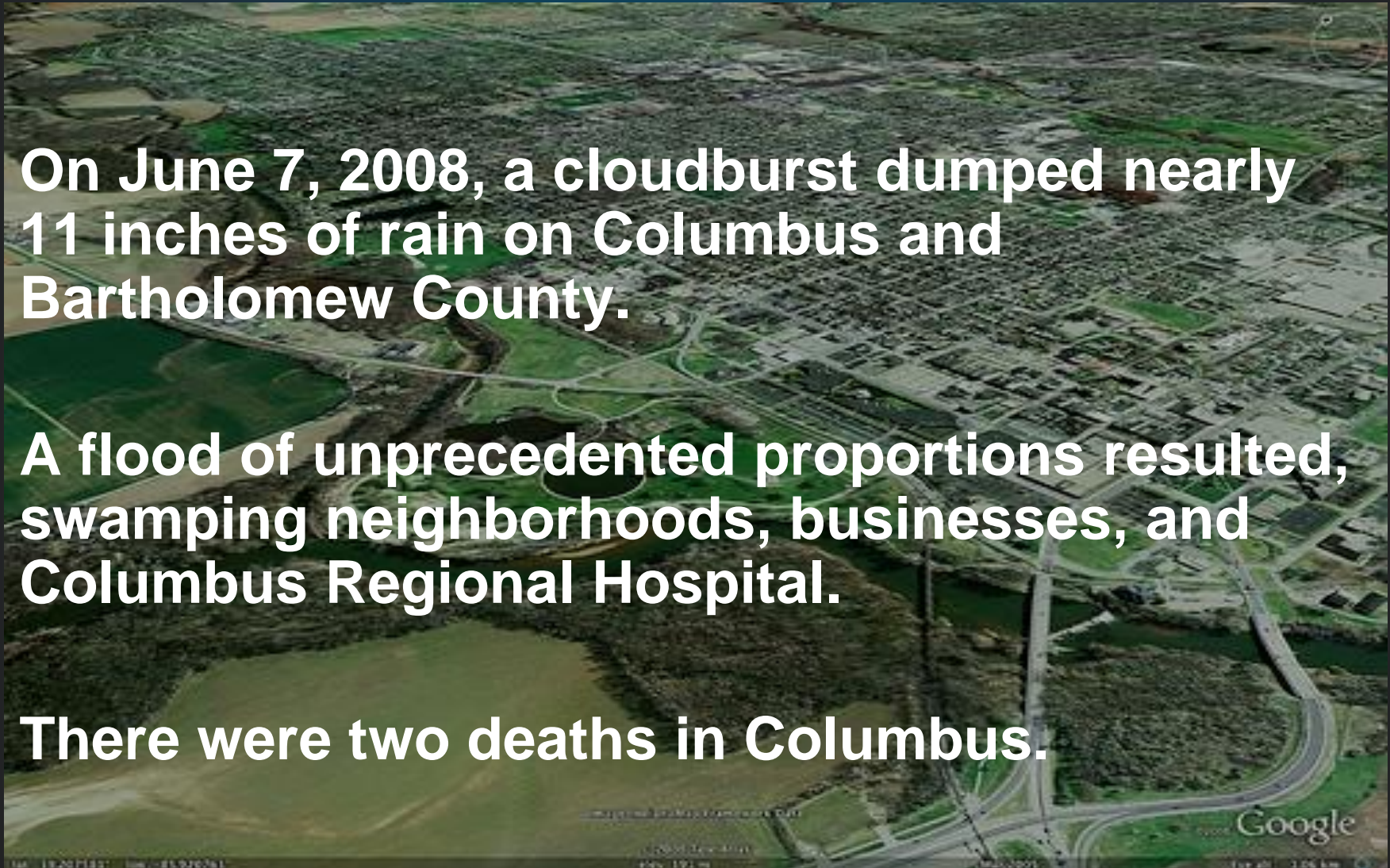
Carolinas MED-1, Columbus, Indiana

June 21-August 4, 2008

On June 7, 2008, a cloudburst dumped nearly 11 inches of rain on Columbus and Bartholomew County.

A flood of unprecedented proportions resulted, swamping neighborhoods, businesses, and Columbus Regional Hospital.

There were two deaths in Columbus.



Columbus Regional Hospital



Carolinas MED-1



2012 Democratic National Convention



Carolinas MED-1 Deployment Structure

Modular response capabilities

- ❖ Hospital facility/ vehicle
- ❖ Housing and staging facility
- ❖ Leadership team
- ❖ Recon teams
- ❖ Communication suite

Carolinas MED-1: The Future

MED-1

Innovation

Carolinas MED-1 Innovation

1. MED 1 Green

- ❖ Energy audit
- ❖ Energy Conservation Measures
- ❖ Distributed Generation
- ❖ Mobile Microgrid

2. Technology refresh

- ❖ Communication suite
- ❖ EMR and patient tracking
- ❖ Integrated wireless patient care



 **Carolinas
MED-1**
www.med1green.org

 **Carolinas
MED-1**
Our vision is to drive innovation and investment in mobile medicine and other solutions.
SEWW ENERGY

 lime energy
SEWW ENERGY
UN-EARTH-WIND-WATER

 **Carolinas Medical
Mobile Emergency**

39209

Innovation

1. Multi sector collaboration

- ❖ Health care and energy industry
- ❖ Health care and technology industry

2. Public- private partnerships

- ❖ MED-1 and NC SMAT

3. Action oriented

Conclusions

1. MED-1 provides a cost effective solution for planned mass gathering events, facility downtimes or crisis response
2. MED-1 maximizes Public- Private Partnerships
3. MED-1 Continues to Drive Innovation
4. MED-1 team maintains focus on service

Questions ?



ZOMBIE APOCALYPSE

Chances are, you're already surrounded by mindless, bloodthirsty, half-alive, subhuman wretches. An actual zombie outbreak would just give you an excuse to do something constructive.



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