

# Hurricane Sandy

## Lessons Learned from Frankenstorm

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November 8, 2013

### Agenda

Introductions

Background

Hospital Strengths

Hospital Opportunities

MHS Strengths

MHS Opportunities

Closing Remarks

## About me...

Emergency!

Cadet (Explorer)

UMBC Emergency Health Services

Montgomery County, Maryland

Newark, NJ

Native Air

STAT Flight

Robert Wood Johnson University Hospital



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## RWJUH Now: At-A-Glance

610 beds

1,750 Medical Staff

5,315 employees

34,200 inpatient admissions

1,100,000 outpatient visits

96,400 emergency department visits

- 71,600 adult
- 24,800 pediatric

2,900 trauma cases



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## RWJUH Now: At-A-Glance

19,000 surgeries

13,000 cardiac procedures

2,300 births

Approximately 90 Heart, Kidney & Pancreas transplants

15,000 radiation therapy treatments



5/  
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## Specialty Centers for the People of New Jersey



- International Center for Terror Medicine
- University Center for Disaster Preparedness and Emergency Response
- The Gamma Knife Center at RWJ



6/  
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## RWJUH Campus



7 /  
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## The Power of Collaboration

Our remarkable campus is comprised of:

- RWJUH
- Rutgers Robert Wood Johnson Medical School
  - Child Health Institute
  - Cardiovascular Institute
  - Eric B. Chandler Health Center
- Rutgers Cancer Institute of New Jersey
- Bristol-Myers Squibb Children's Hospital
- PSE&G Children's Specialized Hospital



8 /  
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## The Power of Collaboration

- Rutgers University:
  - College of Nursing
  - Ernest Mario School of Pharmacy, and
  - Institute for Health, Health Care Policy and Aging Research
- Ronald McDonald House
- Embrace Kids Foundation
- New Brunswick Health Sciences Technology High School

*This is what makes our academic medical center truly unique!*



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## RWJ Health System

RWJ-Rahway



Children's Specialized Hospital



RWJ-Hamilton



Bristol-Myers Squibb Children's Hospital



## RWJ Mobile Health Service

Comprehensive system

Regional  
Communications

Tiered System

- BLS
- ALS
- SCT
- Education
- Research



11 /  
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## RWJ Mobile Health Service

### **BLS**

Non-Emergency Transports

4 municipalities

112 square miles

266,000 residents

13 units at peak

20,000 responses annually

### **ALS**

2 Counties

230 square miles

440,000 residents

7 units at peak

19,000 responses annually



12 /  
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## RWJ Mobile Health Service

- Research
- Special Events
- TEMS Unit
- NJ EMS Task Force
  - Central Host Agency



## NJ EMS Task Force

“To provide New Jersey and the region with a highly trained, equipped and *specialized* EMS resource to support operations at major incidents and pre-planned events using a well coordinated, robust all-hazards approach through the State’s Emergency Management System”



Saturday, October 20<sup>th</sup>

United Airlines Flight  
4397 from EWR to MCI

RWJ Ladies Auxiliary 53<sup>rd</sup>  
Autumn Ball



15 /  
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Monday, October 22<sup>nd</sup>

1200 UTC (0800hrs) –  
Tropical Depression 18  
develops

1800 UTC (1400hrs) –  
Tropical Depression 18  
intensifies into Tropical  
Storm Sandy



16 /  
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## Wednesday, October 24<sup>th</sup>

1200 UTC (0800hrs) –  
Cat 1

1900 UTC (1500hrs) –  
First landfall

RWJUH Formal Pre-  
planning



## Thursday, October 25<sup>th</sup>

0000 UTC (2000hrs  
10/24) – Cat 2

0525 UTC (0125hrs  
10/24) – Cat 3

0900-1200 UTC (0500-  
0800hrs) – Cat 2

2000hrs – Cat 1

RWJ MHS Formal Pre-  
Planning



## Friday, October 26<sup>th</sup>

0000 UTC (2000hrs  
10/25) – Cat 1



## Saturday, October 27<sup>th</sup>

0000 UTC (2000hrs  
10/26) – TS

1530 UTC (1130hrs) –  
UA Flight 4559 from MCI  
to EWR.

1200 UTC (0800hrs) –  
Cat 1

Executive Order 104



## Monday, October 29<sup>th</sup>

1200 UTC (0800hrs) – Cat 2,  
RWJUH EOP Activated

1215 UTC (0815hrs) – HCC  
Opened

1800 UTC (1400hrs) – Cat 1

2100 UTC (1700hrs) -  
Extratropical Cyclone

2330 UTC (1930hrs) –  
Landfall



## Other Hospital Happenings

Elective Surgeries

Helipad damaged

Blood donations

Physical Therapy

EHS

Same day chemotherapy

Molecular testing

## MHS Other Happenings

Generator power

Loss of internet/email

## By the numbers...

7.0 million

2.5 million

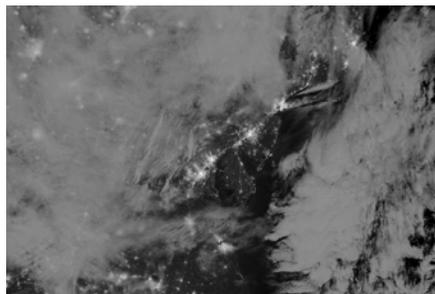
346,000

116,000

17,000

600

127



## Hospital Strengths

1. Essential services.
2. Reporting for duty.
3. Cooperation.
4. Pre-storm planning

## Hospital Strengths

5. Text messaging
6. Potable water
7. Generator system
8. Satellite Staff

## Hospital Opportunities

Communications	Facilities
HCC/EOP	Labor Pool
Materials Management	UMDNJ
Staffing	General

## Communications

1. Situational Awareness with Partners
2. Situational Awareness for Staff
3. URG Calling system
4. Outpatients
5. Physicians
6. Department Director Briefings
7. Department info to staff
8. External communications

## HCC/EOP

1. ICS 214
2. Standard form for reporting.
3. Joint Command
4. Admin Staff
5. IMT
6. Satellite locations
7. Restricted access
8. ED/MHS/Trauma Medical Directors
9. State of Emergency Policy
10. Incident Planning
11. Status boards
12. Technology

## HCC/EOP

13. Reporting requirements.
14. Phones
15. Planning Section Chief
16. Reference binders
17. Boil water advisories
18. Fuel
19. Inclement weather policy.
20. Intranet EOC folder

## Materials Management

1. Vendor supplied linen
2. Disposable linen
3. Linen conservation
4. Bottled water
5. Boil water advisory



## Staffing

1. Schedule
2. Accommodations
3. Ancillary staff
4. Food/beverages
5. Displaced staff
6. Booking process
7. Police – Access
8. Inclement weather policy – non-clinical staff

## Facilities

1. Backup generator – Core Building
2. Generator for 181 Somerset Street.
3. Generator at 10 Plum Street
4. Backup generator cables.

## Facilities

5. Complete facility water loss contingency plan
6. Cooling diesel fuel generators
7. External water hookup for boilers.
8. E-Power for RN Supervisors Office
9. On-site well.



## Labor Pool

1. Requirements and Unit Leader JAS
2. Hospital layout
3. Utilization
4. Communication

## UMDNJ

1. Communications with EOC
2. Clinical Academic Building
3. CAB Power Failure
4. CINJ Generator Fuel Supply

## General

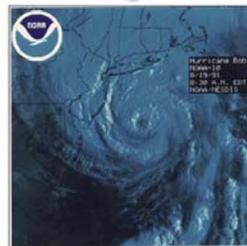
1. Walgreens open 24/7
2. Local physicians
3. Charging Policy
4. EOPs for all critical vendors

## MHS Strengths

### Pre-Planning

1. NJ Tropical Storm/  
Hurricane Management  
Plan for EMS
2. RWJ MHS Extreme  
Weather Policy
3. Lessons Learned from  
Hurricane Irene

State of New Jersey  
Tropical Storm/Hurricane Management Plan for  
Emergency Medical Services



Emergency Medical Services Task Force  
State of New Jersey  
Department of Health and Senior Services  
Health Infrastructure Preparedness and Emergency Response  
PO Box 3505, E0811  
Trenton, New Jersey 08646-0355

## Looking Back...Hurricane Irene



## MHS Strengths

### Preparation

1. Station Assignments
2. Materials Management
3. Fleet cards
4. Vehicles

## MHS Strengths

### Coordination

1. Hospital Command Center
2. Partner EMS Agencies
3. NJ EMS Task Force
4. Medical Coordination Center



41 /  
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## MHS Strengths

### Continuity of Operations

1. Staff
2. Generators

### Safety

1. No injuries
2. Driving Restrictions
3. Protective/Hi-Viz Gear



42 /  
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## MHS Opportunities

Communication

Continuity of Operations

Logistics

Response

Special Needs

Populations

Needs of Others



43 /  
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## Communication

Email – sporadic

Internet

1. ePCR
2. Aircards



44 /  
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## Continuity of Operations

### Station 5

1. Power
2. Security

### Staffing



45 /  
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## Logistics

### Fuel

### Spare Tires



46 /  
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## Response

Road closures

Generators



## Special Needs Populations

Special Needs Children

Identification of

1. Website
2. Data mining

## Needs of Others

### Hospital

1. HCC
2. Discharges

### EOCs



49 /  
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Internet Access

EOC representation

MCC representation

Stations without power

CO

Winds

Pre-storm evacuations

Medical Shelters - DMAT

Water pump failure

Pets

Vent patients

Road Closures



50 /  
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