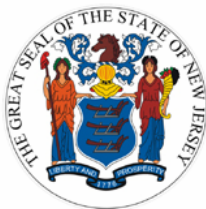


# Hippocrates

## New Jersey's Health System Situational Awareness Application

*ESRI*

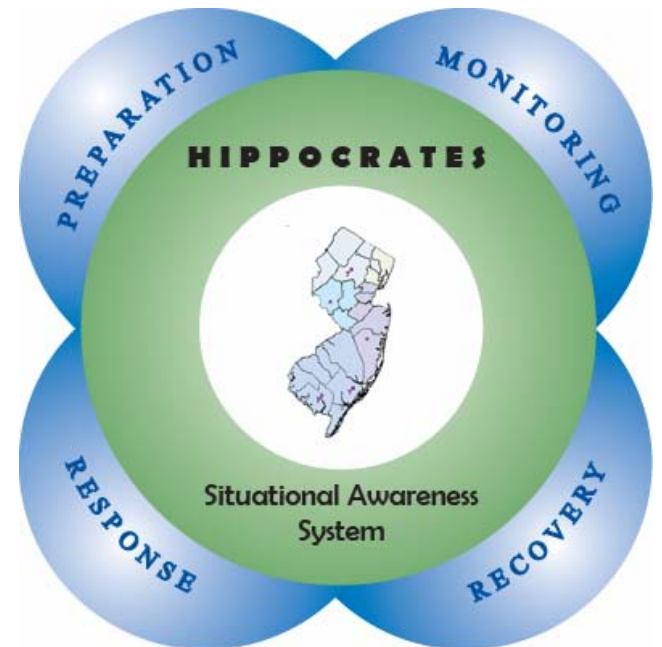
*October, 2007*



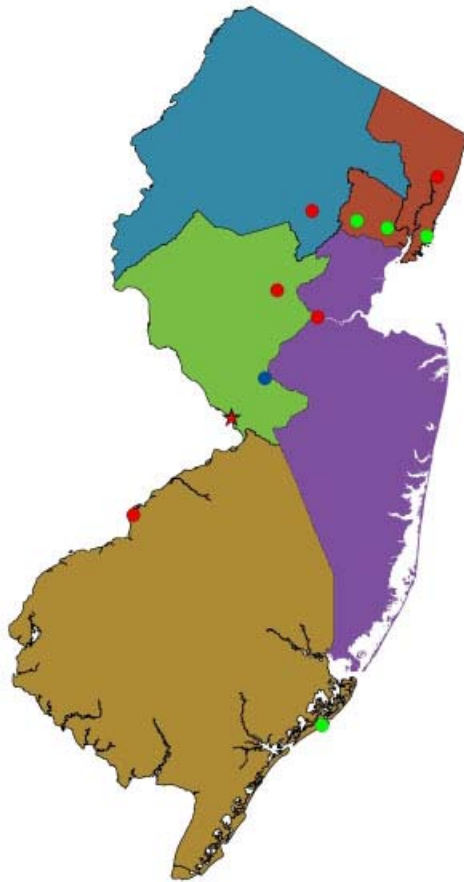
Jon S. Corzine  
Governor



Fred M. Jacobs, M.D., J.D.  
Commissioner

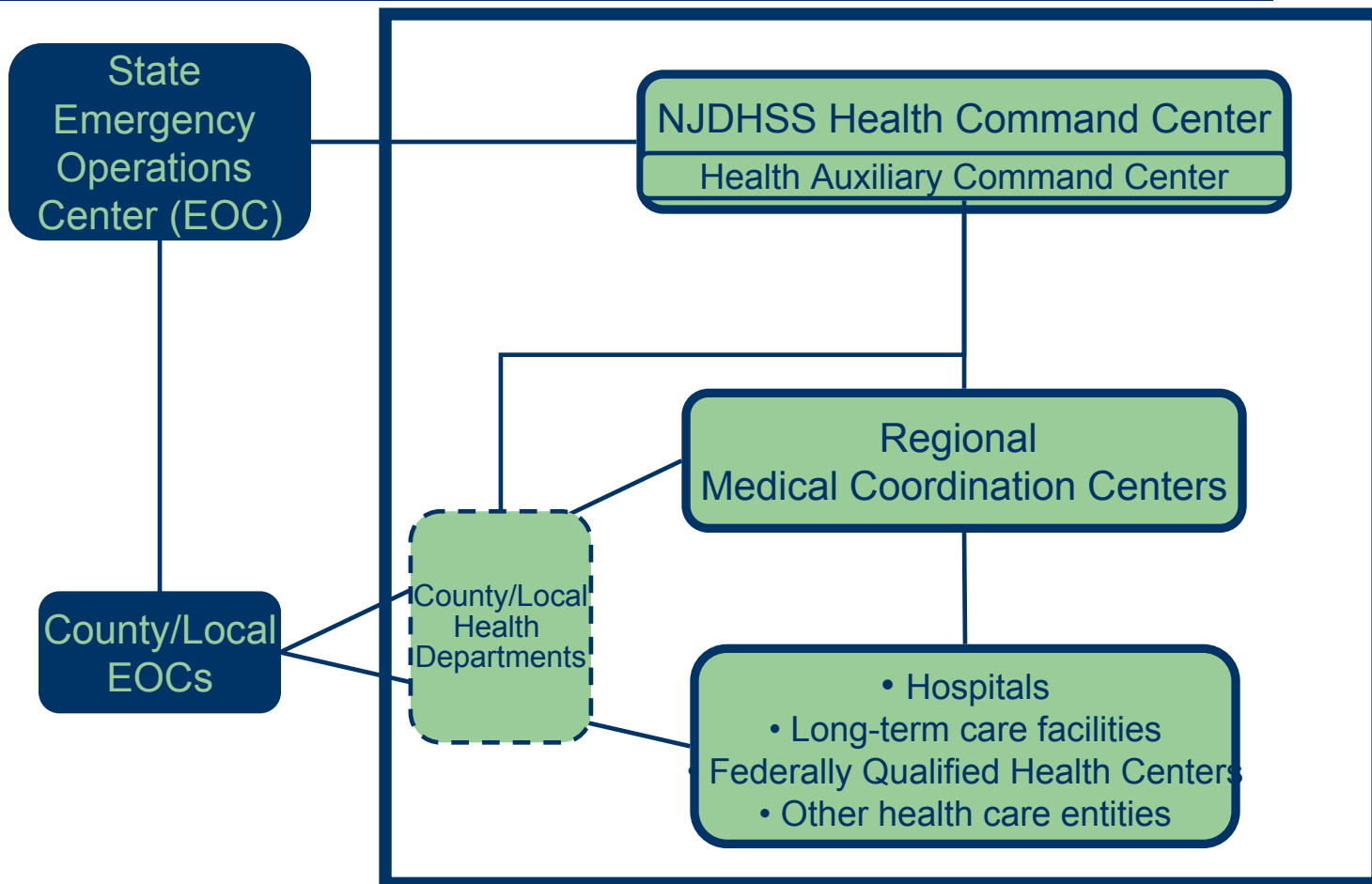


# New Jersey's Health System



- 8.7 million people
- 566 municipalities
- 114 local health departments
- 21 counties
- 22 lead health agencies
- 5 planning regions
- 79 acute care hospitals
- 9 Medical Coordination Centers
- 1 Health Command Center

# New Jersey's Health Response System



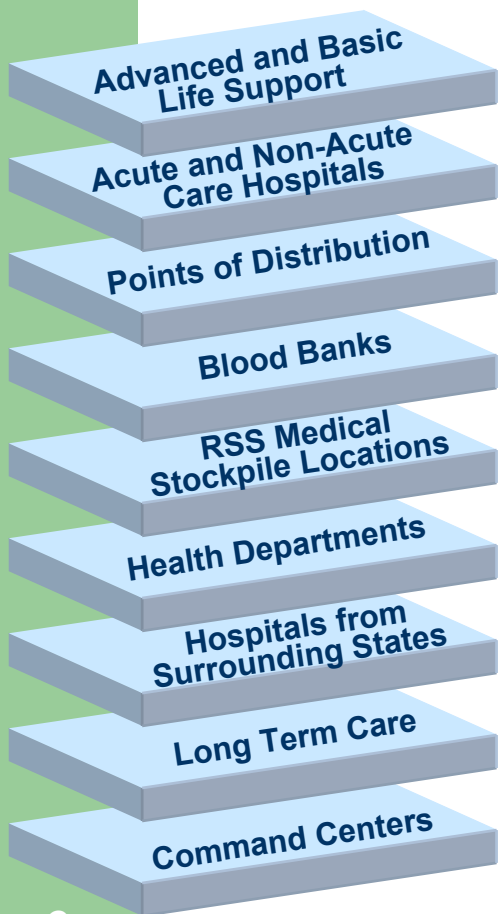
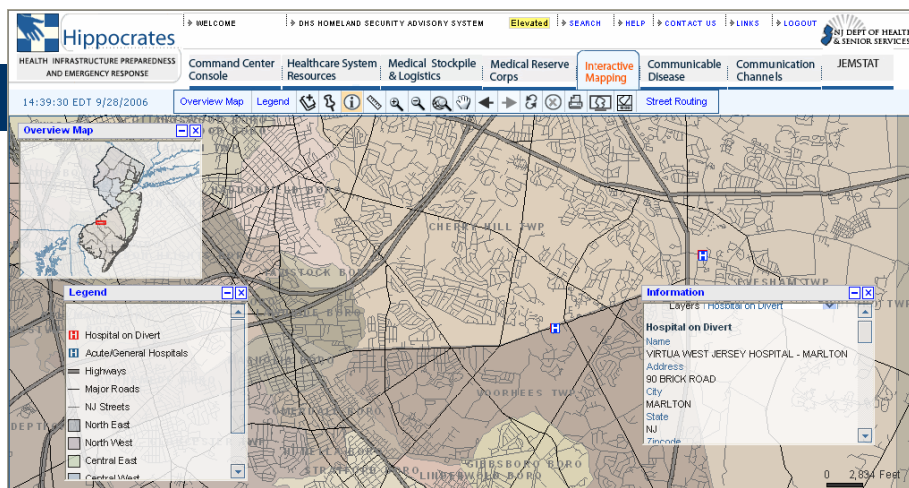
# Application Development

- Initiated development in 2003
- Piloted during TOPOFF 3 in April 2005
  - Identified additional requirements
    - **Seamless integration** of additional health applications
    - **Increased map area**
    - **New functions** such as search
    - **Bi-directional** Email communication and document sharing
    - **Additional reporting** and summary statistics
    - New opportunities for **advanced analysis**
- Refined Version 1.0 requirements in Fall 2005
- User Acceptance Testing in Summer 2006
- Launched Version 1.0 in December 2006

# Hippocrates Version 1.0

- **Connects** New Jersey's Health Response System
- Integrates and analyzes **real time and static health data**
- Maintains **situational awareness** before, during, and after natural and man-made emergencies
- Monitors **health system status** on a daily basis
- Supports **informed decision-making** during a health emergency
- **Customizes access** on an individual or group basis – users see only the information they need
- A **web-based application suite** developed and owned by the NJ Department of Health & Senior Services

# Dynamic Data Integration



**HEALTH LAYERS**

6

**HIPPOCRATES**



**BASE MAP LAYERS**

**Incidents**

**Events**

**Weather/Traffic**

**Medical Stockpile**

**SitStat Surveys**

**Hospital Divert Status**

**Ambulance Locations**

**REAL-TIME FEEDS**


# Application Modules

- Command Center Console
- Healthcare System Resources
- Interactive Mapping
- Communication Channels
- Burn Center Module
- Poison Control Center Module

# Command Center Console Features

- Incident and Event **tracking**
- Customized **email notification**
- Electronic **Shift Change Notes**
- Command Center **Sign In/Out**
- **Status** of statewide Command Centers
- Task assignments through **action items**
- **Log** of command center activities
- Canned and customized **reports**

# Command Center Console




**Hippocrates**

HEALTH INFRASTRUCTURE PREPAREDNESS AND EMERGENCY RESPONSE

WELCOME **REBECCA**

HOMELAND SECURITY ADVISORY SYSTEM Elevated

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Command Center Console

Healthcare System Resources

Medical Stockpile & Logistics

Medical Reserve Corps

Interactive Mapping

Communication Channels

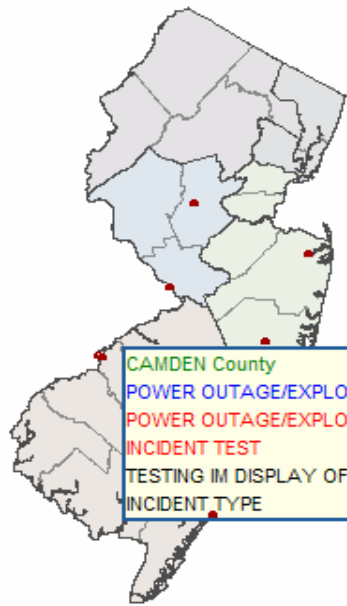
15:02:58 EDT 8/21/2007

Incidents
Events
Logs
Action Items
Image / Video Gallery
Sign In/Out
Shift Notes
Reports

Recent Log Entries

- SALEM HOSPITAL POWER FAILURE  
COOPER UNIVERSITY HOSPITAL  
08-21-2007 02:19:54
- TEST INCIDENT AUG 21 - 001  
HEALTH COMMAND CENTER  
08-21-2007 02:17:42
- TEST INCIDENT AUG 21 - 001  
HEALTH COMMAND CENTER  
08-21-2007 02:17:15
- SALEM HOSPITAL POWER FAILURE  
COOPER UNIVERSITY HOSPITAL  
08-21-2007 02:15:58
- TEST INCIDENT AUG 21 - 001  
HEALTH COMMAND CENTER  
08-21-2007 02:02:42
- TEST EMAIL NOTIFICATION  
HEALTH COMMAND CENTER  
08-21-2007 10:59:37
- CHEM INCIDENT TEST  
COOPER UNIVERSITY HOSPITAL  
08-02-2007 09:04:00
- CHEM INCIDENT TEST  
COOPER UNIVERSITY HOSPITAL  
08-02-2007 09:03:27
- CHEM INCIDENT TEST

Incidents



CAMDEN County  
POWER OUTAGE/EXPLOSIVE  
POWER OUTAGE/EXPLOSIVE  
INCIDENT TEST  
TESTING IM DISPLAY OF  
INCIDENT TYPE

August 2007						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			01	02	03	04
05	06	07	08	09	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Signed-In Personnel

**COOPER UNIVERSITY HOSPITAL**

- MCC LIAISON - ROBERT SAUNDERS
- MCC LIAISON - RYAN MILLER

**HEALTH AUXILIARY COMMAND CENTER**

- EMS LIAISON - KENNETH BEYM
- HCC MANAGER - KEVIN HAYDEN

Shift Change Notes

HURRICANE LUCAS 15 AUG 1600 TO 16 AUG 0800

HEALTH COMMAND CENTER  
DUTY OFFICER  
07-30-2007 15:05:13  
TEST


↑ ↓
▢▢▢▢▢▢▢▢
CHEM INCIDENT TEST[09:31:23 - 07/31/07]
◇ HURRICANE LUCAS (JERSEY CITY MEDICAL CENTER

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# Healthcare System Resources Features

- Medical facility **baseline information** including contacts, bed counts, medical supplies
- Hospital **diversion** status
- Canned and **dynamic** surveys
- Advanced survey **scheduling**
- **Customizable email** list for survey recipients
- **Multiple report types** for survey analysis

# Healthcare System Resources

 **Hippocrates** WELCOME REBECCA

HEALTH INFRASTRUCTURE PREPAREDNESS AND EMERGENCY RESPONSE

HOMELAND SECURITY ADVISORY SYSTEM **Elevated** SITE ADMIN | SEARCH | HELP | LINKS | CONTACT US | LOGOUT 

Command Center **Healthcare System Resources** Medical Stockpile & Logistics Medical Reserve Corps Interactive Mapping Communication Channels

8:20:13 EDT 8/23/2007 Surveys Medical Facility Information Medical Facility Capabilities Divert Status Reports

[View all Surveys](#) [Create Survey](#) [Find / Modify Survey](#) [My Surveys](#)

Survey Title \* TEST Survey Survey Type \* Select One

Survey Jurisdiction \* REGION Incident Name Select One

**Survey Notification List**

Municipalities/Countries/Regions and Facilities: CENTRAL EAST, CENTRAL WEST, NORTH EAST, NORTH WEST, SOUTH

Select All, DeSelect All, Select, De-Select

Selected Facilities: HACKETTSTOWN COMMUNITY HOSPITAL, KESSLER INSTITUTE FOR REHABILITATION - WELKIND FA, MORRISTOWN MEMORIAL HOSPITAL

Add Additional Contacts

Last Name: [ ] First Name: [ ] Email: [ ]

Medical Facility: Select One [Add/Edit Contact](#) [Save Draft](#) [Next](#) [Reset](#)

**Survey Questions**



ISTOWN MEMORIAL HOSPITAL)[12:45:58 - 07/31/07] HURRICANE LUCAS (ROBERT WOOD JOHNSON UNIV

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# Interactive Mapping Features

- Floating, transparent windows **maximize viewing** area
- Over 50 **data layers** w/ data from multiple state agencies
- **Dynamic data** layers, including:
  - Weather and traffic
  - Medical stockpiles
  - Hospital diversion
  - Incidents
- **Plume modeling**
- Static and dynamic **thumbnails**
- Add **custom locations**

# Interactive Mapping

 **Hippocrates** | WELCOME REBECCA | HOMELAND SECURITY ADVISORY SYSTEM **Elevated** | SITE ADMIN | SEARCH | HELP | LINKS | CONTACT US | LOGOUT | 

HEALTH INFRASTRUCTURE PREPAREDNESS AND EMERGENCY RESPONSE | Command Center Console | Healthcare System Resources | Medical Stockpile & Logistics | Medical Reserve Corps | **Interactive Mapping** | Communication Channels

15:01:44 EDT 8/21/2007 | Overview Map | Legend |  | Street Routing

**Legend**

- All Incidents
- HCC/MCCs
  - HCC
  - HACC
  - Focal MCC
  - Satellite MCC
- Hospitals on Divert
- Acute/General Hospitals
- Custom Locations
- Counties

**Map Labels:** Test, Brackman M.S., Southern Regional H.S., Kessler

**Overview Map**

**Thumbnails**


- 13:36:16 02/20/07
- 12:50:31 02/20/07
- 12:45:19 02/20/07
- 12:14:40 02/20/07
- 12:14:31 02/20/07

**Status Bar:** [12:45:58 - 07/31/07] ♦ HURRICANE LUCAS (ATLANTIC CITY MEDICAL CENTER - CITY)[12:45:58 - 07/31/07]

# Communication Channels Features

- Quick, efficient, bi-directional **communication**
- **Share and disseminate** information including documents, images, sound and video files
- **Calendar display** of statewide and regional activities, including trainings, exercises and meetings
- **Image gallery** to post videos, documents, spreadsheets, etc.
- Lists users currently **online**
- Shows user **positions** in Command Center

# Communication Channels




**Hippocrates**

HEALTH INFRASTRUCTURE PREPAREDNESS AND EMERGENCY RESPONSE

WELCOME **REBECCA**

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15:37:16 EDT 8/21/2007

Command Center Console
Healthcare System Resources
Medical Stockpile & Logistics
Medical Reserve Corps
Interactive Mapping
Communication Channels

Create New Conversation
Image/Video Gallery
Chat/Users Online
Surveys
Send a File
Calendar

**List of Users Online** [-] [x]

- ATUL VERMA
- Anbarasu Thiruv
- Beth Jacob
- Carline Dixon
- David Gruber
- USER 2
- Victoria Roza
- Yong Lim

**RWerbel's Conversation**

**SYSTEM::[03:34:20 EDT 08/21/2007]**RWerbel's Conversation

**SYSTEM::[03:34:27 EDT 08/21/2007]:**DGruber has joined the conversation, say hi...

**RWerbel::[03:35:59 EDT 08/21/2007]:**Hi, Dave. What is the activation level of the HCC?

**DGruber::[03:36:21 EDT 08/21/2007]:**Level 1, but considering elevating to Level 2

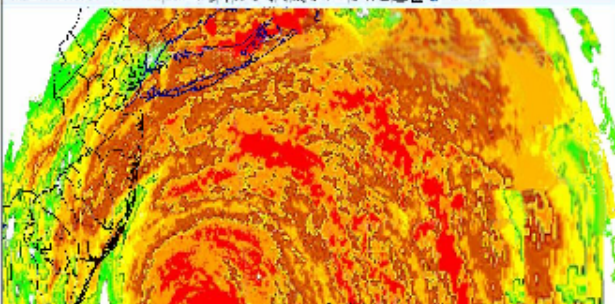
**DGruber::[03:36:28 EDT 08/21/2007]:**Will have a decision shortly

**RWerbel::[03:36:49 EDT 08/21/2007]:**Thanks. will there be add'l activations of the MCCs?

**DGruber::[03:37:08 EDT 08/21/2007]:**yes, southern mcc activated at Level 2

Send a File
Invite User(s) to Conversation
Send Email

**Image Gallery**



**061005 1001 EST WEATHER MAP** Next

Last Updated date 07-02-2007 15:18:44

Last updated by BJacob

Incident Name HURRICANE LUCAS

↑ ↓ **1/07** ♦ **HURRICANE LUCAS (HEALTH COMMAND CENTER)[12:45:58 - 07/31/07]** ♦ 4.8% of Hospitals are on co

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# Version 1.0 Rollout

- User Acceptance Testing
- User Groups & Privileges
- Training Program
  - Materials
  - Tailored trainings
- Phased Production Launch
- Help Desk Support

# Hippocrates Users

- NJ Department of Health & Senior Services
  - State Health Command Center (HCC)
  - Regional Medical Coordination Centers (MCCs)
- Acute Care Facilities & Healthcare Systems
- LINCS Agencies (County/City Health Departments)
- NJ State Police (e.g. State Emergency Operations Ctr)
- Federal agencies (e.g. USDHHS Region II)
- External partners (e.g. New Jersey Hospital Association)

# Warren Grove Forest Fire – May 2007

**Hippocrates** | HOME LAND SECURITY ADVISORY SYSTEM **Elevated** | CONTACT US | LINKS | HELP | SEARCH | LOGOUT | NJ DEPT OF HEALTH & SENIOR SERVICES

WELCOME REBECCA

HEALTH INFRASTRUCTURE PREPAREDNESS AND EMERGENCY RESPONSE

**Command Center Console** | Healthcare System Resources | Medical Stockpile & Logistics | Interactive Mapping | Communication Channels

15:47:23 EDT 8/21/2007 | Incidents | Events | Logs | Action Items | Image / Video Gallery | Sign In/Out | Shift Notes | Reports

[View all Incidents](#) | [Add Incident](#) | [Find / Modify Incident](#)

Incident Type \*

Incident Title \*

Incident Description \* FROM JIM KELLY, MCC COORDINATOR:  
BOTH SOUTHERN OCEAN COUNTY HOSPITAL AND ATLANTICARE, MAINLAND DIVISION WERE CONTACTED AND NEITHER HAS BEEN AFFECTED

Incident Location

Incident Description Details

Incident Associated Events

Incident Status \*

ATLANTIC CITY MEDICAL CENTER - CITY

**↑ ↓ ATUS: ROIC LEVEL-2, HCC LEVEL-1, MCC LEVELS: NE-2**

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**Hippocrates** | WELCOME DAVID | HOME LAND SECURITY ADVISORY SYSTEM **Elevated** | SITE ADMIN | SEARCH | HELP

HEALTH INFRASTRUCTURE PREPAREDNESS AND EMERGENCY RESPONSE

**Command Center Console** | Healthcare System Resources | Medical Stockpile & Logistics | Medical Reserve Corps | Interactive Mapping

13:39:23 EDT 5/16/2007 | Overview Map | Legend

**Brackman M.S.**  
**Southern Regional H.S.**

**↑ ↓ 3.0% of Hospitals are on complete divert [13:23:00 - 05/16/07]**

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# Contact Information

New Jersey Department of Health & Senior Services  
Division of Health Infrastructure Preparedness  
& Emergency Response

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[rebecca.werbel@doh.state.nj.us](mailto:rebecca.werbel@doh.state.nj.us)