Background and Overview

35 years experience in community, major teaching and academic medical centers

Not an expert in disaster planning...but...

Experience leading disaster response as a CEO:
Hurricanes Katrina, Irene and Sandy

Katrina strikes New Orleans--7th day on job as CEO of Touro Infirmary...

Preparation, evacuation and recovery....lessons learned

ARE YOU READY...for the unexpected?
Irene, Sandy and Katrina

Hurricane Irene

Landfall Date: August 28, 2011 (NJ)
Post-tropical cyclone winds; landfall in NJ (Cat 1; landfall in NC)
Top Wind Speed: 120 mph
Diameter (size): 500 miles
Atmospheric Pressure: 942 millibars
Deaths: 56
Estimated Cost: $16B
Power Outages: 9 million in 15 states.

Rainfall: Up to 14 inches in some areas
Flooding: River flooding records broken in at least 29 rivers — 11 in NJ; 14 in NY; 4 in VT
Flooding: Multiple rivers in NY reached 500-year flooding levels
Flooding: Rivers in 6 states reached 100-year flooding levels
Vermont: Nearly every river & stream flooded
In the Eye of the Storm: Lessons in Leadership from Hurricane Katrina

Katrina “vs” Sandy
Katrina Facts

Most Destructive and Costliest Natural Disaster in U.S. History, $81.2 Billion (in 2005 $); A 396 Year Storm

3rd Strongest Hurricane to Make Landfall in US History; 6th Strongest Atlantic Hurricane Ever Recorded

Severe Destruction Along Mississippi and Alabama Coast 100 Miles From Storm’s Center

1836 Confirmed Deaths, 705 Missing; 5th Deadliest in U.S. History; Deadliest Hurricane Since 1928

80% of New Orleans area Flooded

Federal Disaster Declarations Cover 90,000 Square Miles; Area Almost the Size of United Kingdom

Katrina “vs” Sandy

<table>
<thead>
<tr>
<th>Katrina</th>
<th>Sandy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Kinetic Energy* (IKE):</td>
<td>IKE: 140—ranks 2nd of all hurricanes</td>
</tr>
<tr>
<td>121 at landfall</td>
<td>at landfall</td>
</tr>
<tr>
<td>Landfall Date: August 29, 2005 (LA)</td>
<td>Landfall Date: October 29, 2012 (NJ)</td>
</tr>
<tr>
<td>Category 3 winds at landfall</td>
<td>Post-tropical cyclone winds</td>
</tr>
<tr>
<td>Top Wind Speed: 125mph</td>
<td>Top Wind Speed: 94mph</td>
</tr>
<tr>
<td>Diameter (size): 400 miles</td>
<td>Diameter (size): 940 miles; largest</td>
</tr>
<tr>
<td>Estimated Cost: $108-148 billion</td>
<td>ever in U.S. mid-Atlantic &amp; N.E.</td>
</tr>
<tr>
<td>Power Outages: 3 million in 8 states; 1 million + displaced</td>
<td>Estimated Cost: $60-75 billion</td>
</tr>
<tr>
<td>Storm surge: 14 feet (funneling to 28 feet in New Orleans)</td>
<td>&quot;Perfect storm&quot; impacts 24 states; power outages-8.5 million in 16 states...100,000+ displaced; 250 deaths</td>
</tr>
<tr>
<td></td>
<td>Storm surge: 12.5 feet</td>
</tr>
</tbody>
</table>

* Metric that quantifies the energy of a storm based on how far out tropical storm force winds extend from the center.
Saint Clare’s and northern N.J.
Community hospital/health system in northern NJ includes retirement community; Morris County location about 30 miles west of NYC

Power outages—generator power in 3 of 4 hospitals, MOB; 3 days to >week; majority of hospitals in the state on emergency power at some point

CCRC evacuated due to generator failure; >200 seniors

Devastation across region caused power outages throughout the state for weeks

Major impact—shortage of gasoline unlike anything since the 1970s
“Common thread” between Katrina, Irene and Sandy...

Full evacuation of facilities due to generator failure
Monday:
August 22, 2005

First day on the job at Touro Infirmary, New Orleans, LA

Founded in 1852...Only non-profit faith-based health system in New Orleans...2nd oldest Jewish hospital in U.S. Over 2000 employees
Tuesday:
August 23, 2005

Tropical depression forms near the Bahamas

Wednesday:
August 24, 2005

Katrina becomes "Tropical Storm Katrina"
Heads toward and crosses south Florida
Thursday:
August 25, 2005

Katrina strengthens to a Category 1 Hurricane in the Gulf of Mexico

Friday:
August 26, 2005

Katrina attains major hurricane status:
Management team meets
Saturday:
August 27, 2005

Katrina hits *loop current*, strengthens to Category 4-
Doubles in size, aims at Louisiana:
Hospital
Emergency Plan activated

Sunday:
August 28, 2005

New Orleans braces for direct hit: Katrina at peak
strength, Category 5
Command Center established
Essential personnel report
Shelter in Place or Evacuate? (in retrospect)

Sunday Night Situation Report:

250 patients
Over 1700 employees, families and pets
Monday:
August 29, 2005

Katrina slams City; landfall at 6:10 AM, southwest LA, Category 3, 125 MPH Winds, 120 miles from the center

Emergency Power As Of 3 AM
Hospital battens down flood gates
Did New Orleans Dodge a Bullet Again?

Initial assessment of damage
Touro and Garden District escape major flooding damage

Hope for the best...but....
Always prepare for the worst
Things can change very quickly...and they did
Tuesday: August 30, 2005

Levees collapse, City floods
Touro emergency generators begin to fail...tainted fuel?
Tuesday: August 30, 2005
Worst-Case Scenario Comes True

Emergency generators failing..."losing the building"; loss of lights, air conditioning and equipment already on emergency power
Patient safety threatened...high risk for loss of life
Internal and external communications fail
No cable TV...no cell phones
One telephone line to the "outside world"
Loss of City water supply; first time during a hurricane

Tuesday: August 30, 2005
Worst-Case Scenario Comes True

Massive effort needed to evacuate...eerie feeling of being alone sets in...
No contact with any governmental agencies; no response on HEAR radio...is anyone there to help?
Where is the National Guard and FEMA?
Conditions worsening inside; high heat and humidity
Conditions deteriorating in the City...reports of violence
Fear begins to set in with staff...losing hope...
A moment of truth...time to lead
Leaders have heroes too...

John Matessino, President and CEO, Louisiana Hospital Association....

Only link to “outside world”
Vital contact with authorities and transportation
Wednesday:
August 31, 2005

Evacuation Begins: Over 24 hours to complete
When things are going well...look out for the unexpected
Thursday:
September 1, 2005

“Fort Touro” Armed and Ready
Finally...the “calvary” arrives
Thursday: September 1, 2005

Full Evacuation and Hospital Closed approximately 1pm

11th Day at Touro
Thursday:
September 1, 2005

"Retreat...Hell...We're just advancing in another direction"

* Quote from a US Army General in Korean War after being asked about withdrawal

We're closed...
Now what do we do?
Time to rebuild...

Disaster To Recovery--Immediate Issues and Concerns

Importance of decisions already made...temporary office Baton Rouge

Relocating IT Equipment: Servers Moved to Siemens Location in Atlanta

Interim office to conduct business operations is in Baton Rouge is set up; payroll; A/R; A/P and cash management

Interim Housing purchased in Baton Rouge for Key Staff

New communications infrastructure needed to re-connect with employees, medical staff and patients' families; everyone is displaced

Decision made to retain communications firm in NJ and outsource; communication, communication, communication...

Advance 4 Weeks Pay to All Employees; and then 4 more...
Dear Touro Family,

We begin this with a fervent wish that everyone within our Touro Family, and their families, are well and safe. This has been an extraordinary moment in the history of Touro Infirmary and the greater New Orleans region. Your response has been just as extraordinary.

Given that our ability to maintain operations in the first few days following the storm was strained and compromised, and in view of the dangerous situation that public health workers and patients in the City face due to civil unrest, we realized that a full resumption was the best alternative. To this end, we have mobilized all the resources of the hospital, including the University of New Orleans and Touro Foundation, and we are now operating our hospital as a full service hospital.

In the weeks and months ahead, we will continue to add new information as it becomes available. It is critical that we locate all employees and medical staff, as we will be regularly posting contact information on this website. Please share this information with others if you are able.

Another immediate concern is the issue of the levee. We have made the residing of our ability to deal with a levee a very high priority and should have that function operational by the end of this week. The levee systems for the next few days will be a priority to help ensure a safe and secure environment during the period ahead. In that regard, it is critical that we locate all employees who do not have direct access to email or an email address to forward our alerts to know that their safety and the safety of their families are in good hands.

We have all been through a lot during the past week and it is clear that all of us are more than capable for the task that you have set before us. Let us all work to bring Touro back to its historic place in the New Orleans community.

Please trust that we are doing all in our power to get the information you need to us as soon as possible. May God bless Touro and all of us.

Sincerely,

[Signature]

CEO & Chief Executive Officer
Disaster To Recovery—Immediate Issues and Concerns

Organizing for property damage and business interruption insurance, and FEMA claims

Over $60 million recovered in insurance and FEMA

Things move faster than expected...

We need to get back to New Orleans
Disaster To Recovery--Immediate Issues and Concerns
Understanding the “new landscape”... communication and collaboration with new “partners”: City, State and Federal (US Army, US PHS, FEMA), National Guard
Re-establishing a presence at Touro and restoring power
Assess Plant Operations...why did the Generators Fail?
Mayor’s rush to re-open New Orleans...then comes Rita...“just in time”...

Disaster To Recovery - Planning to Re-Open Touro
Retaining Touro staff and recruiting staff from closed hospitals
Housing and schools a significant obstacle; FEMA trailers and living at the hospital
Workforce: Making a Necessary but Difficult Decision
Keeping Physician Base Intact...Meetings with Medical Staff in Baton Rouge
Keeping the Board of Directors informed of progress
Disaster To Recovery - Planning to Re-Open Touro

Regulatory approvals to re-Open: Federal (CMS), State DHH, JCAHO

Overcoming public health obstacles…no potable water yet

Marketing communications/media relations; letting the community know Touro is back; telling the story

Rehearsal and executing the reopening plan…thank You 82nd Airborne…
Wednesday:
September 28, 2005

Touro is first hospital in City to re-open
RESTORING HEALTH. 
AND HOPE.
TOURO EMERGENCY CARE OPENS 
SEPTEMBER 26TH.

We are pleased to announce that 
TOURO is now open for emergency medical services.

Please note that this is for 
emergency care only. 
Information on inpatient care will be 
anounced soon.

As part of New Orleans for over 130 years, 
TOURO is dedicated to restoring healthcare to our city.

We extend our heartfelt thanks to everyone who has 
helped us take this important first step.

For news of future progress and 
developments, please visit our website: 

TOURO 
FOUNDATION

WELCOME HOME, NEW ORLEANS

Inpatient and 
Emergency Services 
NOW OPEN

Physicians' Offices 
NOW OPEN

504.867.7011

TOURO 
FOUNDATION

TOURO 
FOUNDATION
In the Eye of the Storm: Lessons in Leadership from Hurricane Katrina

Wednesday:
October 12, 2005

Touro resumes inpatient medical services with 50 beds and outpatient diagnostic services
Update - Thursday, October 13, 2005

INPATIENT AND SURGICAL SERVICES HAVE RETURNED TO TOURO

Just a few weeks ago, it would have seemed impossible.

Now it's some of the best news New Orleans has heard in a long time.

Inpatient and surgical services have returned to Touro.

On Wednesday, October 12, Touro Infirmary resumed its full medical, surgical, obstetrical and neonatal intensive care services. In addition, other areas such as endoscopy, infusion therapy, magnetic resonance imaging (MRI), computed tomography (CT) and home care services were also made available.

This step marks an important advance toward our goal of resuming full operations as soon as possible. A goal that will be even closer to reality by the end of this month — when we hope to resume elective surgical services — including neurosurgery, orthopedic, cardiac, and general surgery.

To have come this far in so little time, and against such overwhelming obstacles, is a tribute to the dedication and determination of our staff. What you have accomplished will, I'm certain, be an inspiration for many, many years to come.

I can't thank you enough.

Sincerely,

Leslie B. Hinich
President and Chief Executive Officer

---

IN THE EYE OF THE STORM: LESSONS IN LEADERSHIP FROM HURRICANE KATRINA

Next Time We'll be Ready

Revised Hurricane Plan; new policies; pay practice

New Command Center; HEICS (Hospital Emergency Incident Command System); more frequent drills

Communications enhancements: satellite telephones; GETS; Ham radio

New IT infrastructure; Redundancy; IT strategic plan; EMR

Increased Security Capability

Evacu-Sleds

Increased Coordination with State and Local Gov't
Next Time We’ll be Ready

Generators and supporting infrastructure reconfigured post-Katrina:

- Two new 1000 KW and one 800 KW generators replace two 500 KW generators; pre-Katrina 7 generators, post-Katrina 5 generators
- Multiple-system set-up—cross connections between generators allow for transferring of load if one fails or to rotate usage
- Emergency capacity to operate AC at 50% and 100% of patient care units post-Katrina vs 25% capacity and not all patient care units pre-Katrina
- Pre-Katrina—auxiliary generator on rental basis in anticipation of major storms needed to run chillers (failed during Katrina)...post-Katrina Touro purchased 800 KW back-up generator; mobile unit available for any Touro facility

Source: Scott Landry, Vice President Facilities, Touro Infirmary, New Orleans, Louisiana, September 16, 2013
Next Time We’ll be Ready

Generators and supporting infrastructure reconfigured post-Katrina:

- Redundant fuel system installed with two separate fuel pumps and fillers for each generator; not dependent on one large pump feeding the whole system; pumps are above ground level and on emergency power
- Post-Katrina fuel capacity 9 days vs 3 days pre-Katrina; new fuel tanks in and above ground

Since 2006—annually Touro goes on complete emergency generator power (no normal power supply) for 16 hours to test full loss of power conditions

Water well—emergency water supply for chillers and building functions

Source: Scott Landry, Vice President Facilities, Touro Infirmary, New Orleans, Louisiana, September 15, 2013
After Katrina...Ongoing Recovery Issues

Forging a new culture; culture “eats strategy” every time

Operating in an aberrant environment; cost of labor, insurance and housing; extreme operating losses

Rebranding

Importance of government relations/advocacy

Testifying before congress...$135 M for New Orleans hospitals

"Katrina fatigue"
Leadership

Never compromise your integrity or ethics; always “do the right thing”

Requires courage, tenacity, perseverance, mental toughness and vision

Must be ready make difficult decisions, but with compassion...keep an open mind...listen...see the “big picture”

Be inspirational; create a sense of hope, enthusiasm and optimism about the future...even in the face of great challenge

Relationships matter...communication...pushing boundaries

Be calm in a crisis or any challenging situation...follow your instincts

Remember....it always takes a great team effort

On October 29, 1941, U.K. Prime Minister Winston Churchill visited Harrow School to hear the traditional songs he had sung there as a youth, as well as to speak to the students. When he was invited to give a speech, Churchill stood before the students and said,

“Never, ever, ever, ever, ever, ever, ever, ever, give up. Never give up. Never give up. Never give up.”
TOGETHER
WE CAN DO ANYTHING
Touro Infirmary

IN THE EYE OF THE STORM: LESSONS IN LEADERSHIP FROM HURRICANE KATRINA

Are You Ready?
Failure is Not an Option!
Thank you
IN THE EYE OF THE STORM: LESSONS IN LEADERSHIP FROM HURRICANE KATRINA

References: