The purpose of this presentation:

- Establish common talking points
- Linking historical events to current and future risks
- What are the common challenges?
- Review the uniqueness of the role
- Provide you with insight into healthcare
- Discuss strategies for being successful
Introduction

- Let's start with **CHALLENGES:**
- Healthcare Facility Disaster Preparedness and Planning is *relatively new* as a specific discipline
- Historically safety, security or plant operations
- Why now?
  - Improved awareness – right thing
  - Real disasters
  - Revised requirements from The Joint Commission (TJC) (Det Norske Veritas) (State Facility Services)

First Challenge . . . Relevance!

So, if **YOU** are the Disaster Guy/Gal for your facility:

- Where is **YOUR** seat at the table?
- Are you **THE** disaster guy/gal?
- Can you speak **THE (THEIR)** language
  - (P/L, MDS, RUGs, DRGs, etc.)?
- Judgments -
  - Avoid Us/Them
  - This is not government service
  - What is your business acumen?
  - Do they ask your opinion?

Review our History

- **Ongoing disasters, new standards** by healthcare accreditation and regulatory bodies
- Let's be honest; disaster planning has been *neglected* by some healthcare systems
- Nevertheless, there is a need for **individuals** with specialized skills
This report is one example of our Historical Experiences. Objectives of this report included:

1. **Determine** the national and Gulf State incidence of **nursing home deficiencies** for lack of emergency preparedness.
2. **Examine** the experiences of selected Gulf State nursing homes during recent hurricanes.
3. **Review** the emergency **preparedness plans** of selected Gulf State nursing homes and evaluate nursing home use of plans.

www.snfdisaster.org and www.hospitaldisaster.org

1. Standard texting rates only (worst case US $0.20)
2. We have no access to your phone number
3. Capitalization doesn’t matter, but spaces and spelling do

**TIPS**
Several Historical Disasters

- Earthquakes
- Hurricanes
- Tornadoes
- Active Shooters
- Fires

CAN YOU RELATE HOW ONE OR MORE OF THESE DISASTERS WOULD IMPACT YOUR FACILITY IN THEIR LANGUAGE?

- Administrators are more likely to understand relevance, currency and shared risks

www.snfdisaster.org and www.hospitaldisaster.org
Earthquakes from the Atlantic to Arkansas and Tennessee

Text a CODE to 3760

Are typically small tremors when they do happen and have never been significant.

Were seldom but incredibly destructive in the 18th and 19th centuries.

Have you ever felt an earthquake... than a 6.0 magnitude?

Text a CODE to 37607

Yes 333723

Yes 333724

Has an earthquake of 6.8 or greater occurred in the Carolinas in the last 3 years?

Text a CODE to 37607

Yes 433443
Earthquakes

- So, let’s talk about earthquakes.

San Fernando Earthquake
February 9, 1971

- Magnitude 6.6
- Intensity XI
- Killed 65 (49 at VA)
- Injured 2000
- Olive View Hospital, new, earthquake resistant, construction

VA Hospital buildings 1 and 2 collapsed
49 died
Olive View Hospital
4 died (3 patients, 1 employee)
For 16 yrs. Olive View served its patients at an interim facility at MidValley in Van Nuys

Northridge Earthquake
January 17, 1994
- Magnitude 6.7
- Intensity IX
- Killed 57
- Injured 8700
- 11 Hospitals Damaged/Evacuated
Implications of Hospital Evacuation after the Northridge, California Earthquake

New England Journal of Medicine

Schultz MD, C.H., Koenig MD, K.L. and Lewis MD PhD, R.L.

82 question survey tool

91 Hospitals in the immediate area

Eight Evacuated

Six evacuated in the first 24 hours

Four completely, two partially

Table 1. Characteristics of the Eight Study Hospitals.

<table>
<thead>
<tr>
<th>Hospital No.</th>
<th>Type</th>
<th>No. of Inpatients at the Time of the Earthquake</th>
<th>Intensive Care Unit</th>
<th>No. of Stories</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Trauma center</td>
<td>310</td>
<td>Yes</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>General hospital (private)</td>
<td>87</td>
<td>Yes</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Veterans Affairs hospital</td>
<td>334</td>
<td>Yes</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Trauma center</td>
<td>176</td>
<td>Yes</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>General hospital (county)</td>
<td>280</td>
<td>Yes</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>General hospital (private)</td>
<td>295</td>
<td>Yes</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>Pediatric hospital</td>
<td>74</td>
<td>Yes</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>Psychiatric hospital</td>
<td>114</td>
<td>No</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 2. Evacuation Data.

<table>
<thead>
<tr>
<th>Hospital No.</th>
<th>Timing of Evacuation</th>
<th>Evacuation Status</th>
<th>Reason for Evacuation</th>
<th>No. of Patients Transferred to Other Hospitals</th>
<th>Management of Transfers</th>
<th>Time to Evacuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Immediate</td>
<td>Partial</td>
<td>Nonstructural damage</td>
<td>25</td>
<td>Hospital</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Immediate</td>
<td>Partial</td>
<td>Nonstructural damage</td>
<td>2</td>
<td>Hospital</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Immediate</td>
<td>Complete</td>
<td>Structural and nonstructural damage</td>
<td>320</td>
<td>Hospital</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>Immediate</td>
<td>Complete</td>
<td>Nonstructural damage</td>
<td>125</td>
<td>County</td>
<td>19</td>
</tr>
<tr>
<td>5</td>
<td>Immediate</td>
<td>Complete</td>
<td>Nonstructural damage</td>
<td>270</td>
<td>County</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>Delayed</td>
<td>Complete</td>
<td>Structural damage</td>
<td>202</td>
<td>Hospital</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>Delayed</td>
<td>Complete</td>
<td>Structural damage</td>
<td>46</td>
<td>County</td>
<td>12</td>
</tr>
<tr>
<td>8</td>
<td>Immediate</td>
<td>Complete</td>
<td>Nonstructural damage</td>
<td>76</td>
<td>Hospital</td>
<td>13</td>
</tr>
</tbody>
</table>

Note: Time to evacuation denotes the time from the beginning of the evacuation process to the departure of the last patient from the hospital grounds.
Do you have experience with a Healthcare Facility impacted by:

Text a CODE to 37607

Yes 333796

Hancock Regional Medical Center
Bay St Louis, Mississippi
The 246-page (EOP) document offered no guidance for dealing with a complete power failure or for how to evacuate the hospital if the streets were flooded.

At 12:28 p.m., a Memorial administrator typed "HELP!!1!" and e-mailed colleagues at other Tenet hospitals outside New Orleans, warning that Memorial would have to evacuate more than 180 patients.

“The doctors didn’t create that environment. The hospital created that environment,” said Joseph M. Bruno, one of the lead lawyers for the class-action plaintiffs.

“Are you telling us we are on our own and you cannot help?” Sandra Cordray, a communications manager at Memorial Medical Center, which sheltered some 1,800 people, wrote to officials at the Tenet Healthcare Corporation’s Dallas headquarters after begging them for supplies and an airlift.
Mark LeBlanc, one of the plaintiffs named in the class action, said he and his wife, Sandra LeBlanc, left work and went to the cemetery to put flowers on his mother’s grave after being told by the attorneys that the case had settled. “Mom can rest in peace now, and we will never have to tell this story again,” he said. LeBlanc’s mother was a patient at LifeCare, a long-term acute care hospital that leased space at Memorial, and died several days after being evacuated from the hospital. Mark LeBlanc said he settled a separate case against LifeCare for more than $200,000, a fact he was compelled to disclose in pre-trial proceedings. LeBlanc said he hopes the case sends a signal to health care companies to plan better for future disasters.

CHALMETTE, La., Sept. 6 - They nailed a table against one window, ran a heavy electric wheelchair with a table on top against another and pushed a couch against a door. These failed defenses are still in St. Rita’s nursing home, as are at least 14 swollen, unrecognizable bodies. St. Bernard Parish officials say that 32 of the home’s roughly 60 residents died on Aug. 29. There are myriad stories of heroism and rescues in St. Bernard Parish. But there is also St. Rita’s. “I just can’t understand how you don’t evacuate,” Mr. Melerine said.
Nursing home owners indicted for negligent homicide

Updated: 2006-09-21 08:47

CHALMETTE, La. - The owners of a nursing home where 35 patients died in the aftermath of Hurricane Katrina were indicted Wednesday on charges of negligent homicide and cruelty to the infirm.


Verdict:

Were the Manganos criminals?

They answered with a resounding "no," acquitting the owners of St. Rita's nursing home on all 35 counts of negligent homicide and 24 counts of cruelty to the infirm after four hours of deliberations.

What mattered most, several jurors said after the verdict, was that despite the tragic consequences of deciding to stay put as Katrina bore down on coastal Louisiana, the couple appeared to care for the residents of their nursing home near Poydras as if they were their own family members.

"A lot of mistakes were made, but they shouldn't be blamed on just two people," said juror Kim Maxwell, 46, a secretary at River Bend Nuclear Station.

Verdict, -cont.-

- 44 of the families who had loved ones at St. Rita’s sued the Manganos; 28 have settled.
- 6 weeks after the verdict, Louisiana Attorney General Charles Foti was voted out of office.
- Sal and Mabel Mangano say they will never run a nursing home again.


Hurricane Katrina Conclusion?

- Evacuate!!!!!
- Then along came Hurricane Rita.
Settlement over Hurricane Rita bus fire brings closure

By TERRI LANGFORD
Copyright 2009 Houston Chronicle

Nearly four years after 23 Bellaire nursing home residents died in a fiery bus while evacuating from Hurricane Rita, their families have reached a settlement awarding them $80 million.
Findings

- Nationwide, 94% of nursing homes met Federal standards for emergency plans and 80% for sufficient emergency training.
- In 2004-2005, compliance rates were similar for Gulf States.
- Multiple factors, including community evacuation orders, influenced the decision of selected nursing homes to evacuate or shelter.

Findings, -cont.-

- All 20 of the selected Gulf State nursing homes experienced problems, whether they evacuated or sheltered in place.
- Administrators and staff from selected nursing homes did not always follow emergency plans and plans often lacked suggested provisions.
- Lack of collaboration between State and local emergency entities and nursing homes impeded emergency planning and management.

Hurricane Irene
August 26, 2011

Hurricane Irene Impact on Healthcare Facilities

Total of 459 Healthcare Facilities in projected affected area.

Legend:
- Hurricane Irene Facility Any Type
- Power System (State)
About 250 patients were being transferred "with appropriate clinical staff" to other North Shore-LIJ hospitals and other facilities, Lynam said. The only other North Shore-LIJ hospital being evacuated is Staten Island University Hospital. In response to an evacuation order from the city and state, the 775-bed hospital was moving its patients to hospitals throughout the city.

In a statement, Good Samaritan said it too was "implementing a phased evacuation of its current patient population to area hospitals."

"In my career, I've never been in a situation where they said we're emptying the hospital," said Dr. James Speyer, medical director of the clinical cancer center at NYU Langone Medical Center.

"We've closed shutters, put boards over windows [and] we'll be sandbagging the doors later today," said Jarie Ebert, spokeswoman for North Carolina's Outer Banks Hospital.

Emma Inman, a spokeswoman for Sentara Norfolk General Hospital, VA, noted that the hospital has been testing backup generators and stocking supplies, medications, food, water and fuel to last several days.

For patients on dialysis, SUNY Downstate will extend Friday evening hours "so patients can get dialyzed who would normally come in Saturday," said Lucchesi.

Hospitals cannot be too prepared for disasters, said Lucchesi. After much criticism of the emergency response when Hurricane Katrina hit the gulf region in 2005, medical facilities and federal and state government agencies are not leaving anything to chance this time.

Emma Inman, a spokeswoman for Sentara Norfolk General Hospital, VA, noted that the hospital has been testing backup generators and stocking supplies, medications, food, water and fuel to last several days.
Hospital Struck by Tornado
March 7, 2007

- Sumter Regional Hosp.
  Americus, GA
- Moved/continue in a temporary facilities
- Total Cost to Rebuild
  $125 mil. 185,000 sq. ft.

Tentative completion date:
  > December 17, 2011

http://americustimesrecorder.com/local/x1091524722/Phoebe-
Sumter-names-new-regional-executive

www.snfdisaster.org and www.hospitaldisaster.org

Hospital Struck by Tornado
May 22, 2011

- St Johns Regional
- 4 Killed
- 115 Patients
  Transferred to other facilities

www.snfdisaster.org and www.hospitaldisaster.org
Aerial photographs from M.J. Harden/GeoEye show devastation across Joplin, Mo.

I have an image of rapid evacuation during a disaster:

"Blankets and medical supplies needed at destroyed nursing home St 26th & Jackson in Joplin, Mo"
Nursing Home Tornado Strike
- Update -

- 16 killed
- Greenbriar staff executed its protocol for tornado response — which involves moving residents out of their rooms and into a central, window-free hallway —
- One staff member was found holding two elderly residents in his arms, all three of them dead


www.snfdisaster.org and www.hospitaldisaster.org
Pinelake Health and Rehab
- March 29, 2009
- 10am Sunday Morning
- Carthage
- Estranged Spouse
- 8 Killed including staff
  - Jerry Avant Jr. USCG Vet
- 3 Injured
- Crime Scene

www.snfdisaster.org and www.hospitaldisaster.org

Bomb Threat
- SWANTON 81 patients and 15 health-care workers were evacuated for 3 hours last night from a Swanton nursing home after a telephone bomb threat.
- The decision to evacuate was made jointly by the Swanton police and fire departments.
- It was an easy decision to make because we considered it a credible bomb threat, Swanton Fire Chief James Guy said.
- There were too many people in that building to just leave them.

www.snfdisaster.org and www.hospitaldisaster.org

Deadliest Nursing Home Fires Since 1950
- 72 deaths • Kistle Jane Nursing Home
  - Warrenton, Missouri - February 1957
- 63 deaths • Golden Age Nursing
  - Fitchville, Ohio - November 23, 1963
- 33 deaths • Unspecified SNF
  - Largo, Florida - March, 1953
- 24 deaths • Unspecified SNF
  - Chicago, Illinois - January 1976
- 20 deaths • Unspecified SNF
  - Hillsboro, Missouri - October 1952
- 16 deaths • Greenwood Manor
  - Hartford, Connecticut - February 2003
- 14 deaths • Unspecified SNF
  - Nashville, Tennessee - September 2003

Source: NFPA files on major fire incidents
Residents of an assisted living facility for seniors in east Mesa were evacuated during a fire after someone noticed smoke coming out of a building and called 911 before helping people out of the burning building. 

Case study on Fire in a small space with limited fire protection
National Institute of Standards and Technology (NIST) Simulation

The Threat of Fire

0:00
Understanding History

- Relating the past to future potential disasters
- HVA

HVA

HVA...

Text a CODE to 3760

- I've completed an HVA regarding a facility where I work or have worked
- I'm aware of the HVA regarding a facility where I work or have worked
- I'm familiar with the HVA process but I've never seen one done or be a participant

Challenge...History

- Can you relate history or risks to your HVA?

- Hazards/Vulnerability Analysis
- Hazards (can't control)
- Vulnerabilities (can control)
  - Planning
  - Mitigation Strategies
  - Do you have an elevator speech?
  - (known information, no surprises!)
Hazards/Vulnerability Analysis

- HVA
  - Process
  - Inclusive, broad input
    - Staff
    - Local County/City Expertise
  - Source data
    - NFIP Mapping (water/wind)

Can you explain the basics?

Elevator speech?
  - Incident Command System (HICS)
  - National Incident Management System (NIMS)
  - Hazards/Vulnerability Analysis (HVA)
  - Emergency Operations Plan (EOP)
  - Pandemic and All Hazards Preparedness Act (PAHPA)

Where do you find good sources?
  - Accreditation Body (TJC)
  - Licensing Body (State facility services)
  - IAEM Healthcare email group
  - General disaster information
    - FEMA and State EM Agency
    - California Hospital Association
  - Veterans Administration Healthcare
Good outcomes are typically a product of good planning
Champion for disaster preparedness
Preparedness and planning **MUST** reflect escalations (limit and where possible, eliminate unique response solutions)
Plan Structure . . Who uses your plan?
Our Disaster Plan

- Text a **CODE** to **3760**
- Works, we've used/exercised it, and revised it and it works.
- We have a plan but I don't know much about it.
- We have a plan to meet the standard(s) for disaster.

---

Plan Basics (TJC Standards)

- Program Buy in and Sign Off
  - CEO and Executive Staff
- HVA
- Documentation/Records: EM Activities, meetings, exercise activities, training
- MOA/MOU
- EOP (Activation/Termination – scalability)
- Integration with Response Partners
- EOC, place, space, or virtual
Plan Basics (cont.)

- EOP
  - Critical Areas
    - Communications, Clinical operations, Resources, Safety, Staffing, and Utilities
  - Related Annexes, policies/procedures
    - Pandemic Flu/Infectious Disease/Etc.
    - Facility Surge (Absorption) /Evacuation/SIP
    - Mass Casualty; Trauma, Pediatrics, Burn
    - Mass Fatality
    - Functional HICS program (reasonable adjustments)
    - Policies using Licensed Independent Contractors, Volunteers to include Volunteer Practitioners

Plan Basics

- Does your plan reflect your threats?
- HVA and the Planning Process
- Natural Disasters
- Technological Disasters
- Terrorism
  - Active Shooter, Hostage
- Evacuation Trigger points
  - HVAC, loss of water, loss of power, etc.
  - Where do you go?
  - Where - depends on how quick you can return.

Plan Basics

- Shelter in Place
- Harden Facility:
  - flooding, wind, purposeful damage, electricity, water, communications (IT), digitize everything and have offsite storage, HVAC (Redundancy)
- Surge/Absorption Strategies
  - Employee/family protection, survivability, sustainability
Reframe the Argument from Cost to Investment

Return on Investment occurs when:
- A disaster occurs, and is successfully managed
- A disaster is averted due to planning or mitigation activities
- An accreditation visit is successful
- A refund of expenses during a federally declared disaster (Stafford Act and where applicable)

Cost/Investment challenges:
- Difficult to relate to the traditional mentality;
- Difficult to equate . . .
  - One diagnostic cardiac cath = one DRG = one reimbursement

Benefit:
- Community Image
- Compliance with Standards
- Disasters WILL HAPPEN!

Conclusions:
- **Hope** is not a substitution for disaster planning/preparedness
- **Shame/fear factor** is not a substitution for understanding the need
- **Compliance** with regulatory bodies
- **Atmosphere** of safety and preparedness
- **Return on Investment** of preparedness activities
The Dilbert Cartoon, Healthcare-Disaster logo, NEJM Tables, images used from USGS, personal collection from Hurricane Katrina, photos depicting the activity of responders during a disaster, all are and remain the property of their related sources. The images were used for the purpose of education and fall within “the fair use doctrine.” This presentation in no way should suggest there is any endorsement or connection other than a shared interest to improve the emergency management-related activities of the American healthcare system.