

# **DISASTER:**

## **Will Your Nurses Be Prepared?**

*Lessons From Katrina*

*Based On*

*The Touro Rehab Experience*

**By Susan B. Greco, RN, MSN, CRRN**

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*Touro Rehab Center has developed a self study on Disaster and Evacuation which is approved by the Association of Rehabilitation Nurses for 1.25 CEUs.*

Disaster: Will Your Nurses Be Prepared?  
(Lessons From Katrina)

Susan B. Greco, RN, MSN, CRRN

Objectives:

1. Discuss how essential services impact persons with rehabilitation needs during a disaster.
2. Describe the preparations that should be made to allow families to manage during a disaster.
3. Discuss the importance information that should be part of every nurses training related to disasters.

Hurricane Katrina struck with full force just east of Touro Infirmary/Touro Rehabilitation Center at 3:00 a.m., on August 29, 2005. The hospital lost power, and within hours, two generators began to fail. We lost water, all communications systems failed, including the phone system and computer systems. There was no news within the City of New Orleans. Each hospital was isolated and on its own to take care of their patients, their staff, and family members. Then the flooding came to our area of town. Touro evacuated all the patients from their units 3 days after the storm and our patients were evacuated via helicopter on the 4<sup>th</sup> day. At that time there were no elevators in operation, little air conditioning, no fire alarm system, little lighting, and very little to work with in providing patient care. We learned much from our experience, both in closing a hospital and in re-opening the first hospital for adults in Orleans Parish.

I would like to share what we learned to help others prepare for disaster in their community. Our creditors have always stated that we have to know how to evacuate our hospital; we now know better what that means.

With special thanks to the entire staff of Touro Infirmary who made our successful evacuation possible.

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## *Location, Location, Location*

- Touro weathered many hurricanes in the past and never closed the hospital in 153 years.
- Touro Infirmary is located about six blocks from the Mississippi River and runs one block parallel to historic St. Charles Avenue on the edge of the Garden District in New Orleans.
- Touro Rehabilitation Center (TRC) consists of 63 beds and is located on several floors of the hospital, including 10<sup>th</sup>, 9<sup>th</sup>, 6<sup>th</sup>, 4<sup>th</sup>, and 1<sup>st</sup>. All spinal cord injury (SCI) patients are on the 9<sup>th</sup> floor except those on vents which are located on the 6<sup>th</sup> floor.
- Touro has a heliport on the 4<sup>th</sup> floor of one of the parking garages directly across the street from the hospital. A bridge connects the 3<sup>rd</sup> floor of the hospital to the parking garage.

## ***We Had Been Prepared for Hurricanes Prior to Katrina***

- TRC had evacuation plans for our units and the hospital which were reviewed annually and after every hurricane.
- Staff practiced our evacuations plans annually.
- We met the standards of JCAHO and CARF for disaster planning and evacuation. Participated in state and local disaster drills
- All TRC employees practiced and demonstrated competency in physical evacuation annually; i.e.: Patients down stairs in their wheelchairs or on carry boards. We all knew some lifts using one or two employees to carry the small patients down. Down the stairs in a blanket was another method if needed for larger patients.

## *For Fire Evacuation*

- We planned not to use the elevators during a fire.
- Horizontal evacuation first on the same floor, behind the fire walls, then vertically down one floor. We used elevated walkways to move patients into the two garages. Gathering places were designated to check on patients once they were evacuated.
- Our plans did not include transfer to other hospitals, or not having any close hospitals to transfer to. All the hospitals in Orleans Parish were evacuated by the 5<sup>th</sup> or 6<sup>th</sup> day after the storm, and of the 10 large hospitals in Orleans Parish, two (Touro and Children's) reopened in late September or early October, 2005. One opened in February, 2006.

## *Other Parish Hospitals*

- St. Bernard Parish has one large hospital which has not re-opened.
- Jefferson Parish had a few hospitals that closed; however, the four large hospitals remained opened as they were not flooded.
- St. Tammany Parish had several hospitals to close in Slidell, but the two in the western areas of the Parish remained opened.

### ***Hurricane Preparation Included:***

- We listed essential staff annually who had to come into the hospital, assigning a Team A essential and a Team B recovery team, and switching these annually except for some key positions who have to be there at all times. Included in clinical staff are: Nursing, Pharmacy, Diagnostic Services, Infection Control, Lab, Cardiology, Pulmonary, Surgery, Case Management, and Physicians.
- Non clinical essential personnel are: Information Services, Medical Records, Admitting, Materials Management, Facilities Services, Housekeeping, Dietary, Chaplains, Risk Management, and Marketing.
- Those coming in brought all supplies like they were camping. Generally they stayed a maximum of one to two nights.
- At set time all people report; then lockdown the facility and wait. All employees and visitors are checked in and have an armband with identifying colors. All patients have identification.

- Brought in extra supplies of food, water, gasoline, diesel, oxygen. Brought in extra security.
- Allowed employees to bring in their immediate families. Pets could be brought in cages and were kept in a separate building. Pet supplies were provided by owners.
- We keep a current list of all employee addresses and phone numbers including contact numbers. We maintain a website to post information for our employees.
- Hospital has emergency power via generators which runs all essential electrical services including some air conditioning and some chillers.
- Discharged as many of the patients who were safe to leave and those who could tolerate the 12-14 hours sitting in traffic trying to get out of town. Encouraged patients' families to leave.

## *Hurricane Preparation*

- Registration lists were readied, and preparation was made for all units to go to paper documentation if necessary. We have back up to all our computer data in a far away city and back up data daily. We shut down computers at 2:00 a.m. Sunday night to prevent computer damage.
- Emergency weather radios and cell phone technology, hospital cell phone system and walkie-talkie system as well as a land line communication system and an emergency backup communication line.
- We cooled down the building to very cold on Sunday night and tried to lock in the cool. We put chillers on every patient unit which ran on emergency power. We had fans for most rooms and the hallways.
- Nursing staffing lists were maintained and all staff staked out their sleeping territory mostly as assigned.
- We planned to move the patients out in the hall by the wall with doors closed during the storm since we have all glass walls in each patient room on our SCI unit.

## *So What Really Happened?*

- Katrina was the worse hurricane to hit the Gulf Coast in 100 years.
- The storm was projected to go to Western Florida as late as Thursday afternoon, and on Friday we still expected it to turn.
- Friday at our 6:30 p.m. meeting we were still not absolutely certain that the hurricane would reach New Orleans.
- We received a phone call Sat at 8:00 a.m. to come to the hospital to get ready for the hurricane. All Directors went to the hospital to complete essential lists and to make contact with all the staff.
- We phoned all essential personnel, talked to those who were working and assured that we had enough people. Several of the weekend staff agreed to stay so they would not miss their week's pay.
- We phoned all essential staff to come in, and they began arriving on Sunday morning to work the hurricane schedule on the 6:15 p.m. shift.

- We advised families of our visitor policy and encouraged them to take shelter elsewhere. We only allowed family who insisted on staying and one family member per patient was allowed.

## *Sunday*

- Sunday morning all essential personnel reported to the hospital with their families. I brought my Mother who is 84 with me and found a place for her to sleep comfortably on one of my units.
- The stable patients who wanted to go home to evacuate with their families were discharged. The 12-14 hour trips on clogged roadways were a discourager.
- Sunday evening we had a chapel service in the cafeteria which was well attended. We prayed, had inspirational readings and heard some familiar hymns on the violin.
- Winds started to pick up late Sunday evening. At about 7:00 a.m. Monday we dressed our patients and put them in the hallways away from flying glass (Our walls are solid glass on the 9<sup>th</sup> floor.) We had to decide which of the patients required oxygen using the portable tanks.

## *Sunday... Still*

- Sunday evening we put the patients back in their rooms, as Touro had no flooding.
- All power lines were down. The cell phones and land line phones did not work. The broadcast stations radio and television did not work, except one station.
- We walked around and viewed the devastation. There was plenty. We thought we had been essentially spared.
- Our building had some windows blown out, and we had large leaks; however, the building was solid.

## *Hospital Emergency Incident Command System*

### **Adopted HEICS**

- HEICS is an emergency management system made up of positions on an organizational chart. Each position has a specific mission to address an emergency situation. Each position represented has an individual checklist designed to direct the assigned individuals in disaster recovery tasks.
- Hospital VPs, CEO, CFO, and CNO and many of the Directors have an assigned role on the HEICS organizational chart. Of their essential personnel they have persons assigned to assist them in their roles.

## *Incident Command Center*

- The Command Center is implemented at the designation of the CEO. Touro's is in the core of the building on the 2<sup>nd</sup> floor.
  
- Objectives:
  - Direct operation of the hospital during the preparation and strike of a hurricane.
  - Monitor all severe weather developments
  - Provide hurricane advisories to Department directors
  - Maintain a hurricane tracking chart.
  - Recommend and announce hurricane condition codes
  - Provide hurricane briefing to the hospital staff
  - Provide a system of documenting and reporting all emergency response activities
  - Establish and maintain emergency communications during a hurricane threat
  - Communicate with local civil disaster and environmental authorities
  - Assist Department directors as required toward hurricane preparations
  - Ensure adequate security for the buildings and property during the hurricane threat
  - Oversee recovery efforts after the storm

## *Improvements Made Since Katrina*

- **Communications**

- Satellite phone-equipped Communications Center
- Executive briefings open to all staff at designated times during the event
- Written updates posted throughout the hospital
- Remote information posted on the Touro website and the Touro hurricane website
- Direct connection through two-way radio with local authorities
- Touro hurricane information telephone number 1-888-Touro411

- **Improved back-up systems**

- More generators
- More backup in the system, and more reliability of emergency power
- More functions on the backup power system
- Testing the system for longer periods
- More fuel storage tanks
- New water well on Touro property connected to our own water supply. (Well water can be used to cool the building and provide back up water for hand washing and toilet flushing.)

- **Policy Changes**

- Improved hurricane plan based on experience
- Additional on-site security officers
- Reduced patient volume by early discharges, evacuation of high risk patients and cancellations of elective surgery
- No family members or pets will be sheltered at the hospital. Essential personnel must make arrangements prior to the event.
- Volunteers to be trained and sent to specific departments to provide assistance.
- New evacuation protocol for patients and families
- Advance patient preparation protocol if an evacuation is necessary.
- Revised distribution protocol for drugs and supplies
- Purchase of hands-free lights, lanterns, push lights and glow sticks
- New sleeping arrangements utilizing the air conditioned meeting rooms
- Premium pay for all essential employees

- **Employees Come Prepared to Stay**

- All personnel have their hospital identification badge and other forms of identification
- Essential personnel designation to get through city blockades

- Bedding, toiletries, prescription medicines for at least 1 to 2 weeks
- Games and books can be brought along with additional food and water
- Parking one car allowed in the elevated garages, with all vehicles identified and garages locked down 96 hours prior to event
- Check-in procedures in place to assure only our employees, patients, volunteers, and a few patients' family member are in the building. Colored arm bands to designate role will be work during disaster
- Meals are provided at no charge to essential employees and patients
- Essential employees allowed to leave when the second team (recovery team) returns to take over their shifts

## *Evacuation*

**Tuesday, 8/30** Because we had little communication, due to neighborhood flooding, power losses, water issues, and the heat, we decided to evacuate our sickest, most vulnerable patients.

- 22 NICU babies were evacuated via helicopter to other receiving NICUs.
- All other mothers and babies had been sent early on 8/31 either to evacuate with their families or to other safe places to recover.
- Our sickest ICU patients were evacuated to pre-arranged receiving hospitals. (The windows of the 6<sup>th</sup> floor ICU broke on 9/29, and we had to move these patients to PACU which lost power, then to ED which we feared would flood.)

## **SCI Patients on 9<sup>th</sup> floor**

- Our SCI patients stayed through the storm. Most had one family member with them.
- We began evacuating them on Wed morning, 8/31. These patients were carried by nursing and therapy staff down 6 flights of stairs to the parking garage. They took their medical record with them and one large suitcase or bag with their supplies. They took their environmental control equipment and wheelchairs.
- One male police officer with SCI was from Baton Rouge, and the police sent an ambulance for him and his wife and brought him to a hospital in Baton Rouge.
- A 2<sup>nd</sup> SCI patient left with his wife and mother in their van accompanied by the same police escort to Baton Rouge.

## **Wednesday Morning**

We loaded our wheelchair accessible van with 4 patients including two with SCI. One was sent to a special needs shelter in a town about two hours away with his mother; another went to a rehab unit in Terrebonne General Hospital along with two other patients.

- Touro loaded 2 vans with 15 ambulatory patients/passengers and sent them to a special needs shelter where they could be cared for until they reached their evacuation destination.
- Every patient took their chart and, if possible, their medicines and their adaptive equipment. Many took their hospital wheelchairs with them.

## ***SCI Evacuation Notes***

- One SCI patient refused evacuation so he and his two companions left when we evacuated the hospital. We recommended outpatient therapy and sent his records and orders to his destination.
- Wednesday morning, 8/31 – We heard from FEMA that they were going to start evacuating our hospital, so we needed to move all our patients outside to our heliport.
- We had already prepared all the charts to take with us labeled in envelopes and assured that all patients were correctly identified. We identified the status of our patients who were going to the deck based on their need for care. The census was used to track the patients who remained. Prior to this time we had sent all patients to a designated location.

### ***Most Difficult Physical Task – the Stairs***

- We began moving the patients from all the units at 12:30 p.m. Wed. We moved the closest units first. Those further away from the heliport and higher in the building, we moved last. In retrospect I would do that in reverse.

- Some stairwells had no lighting; the one we took the SCI patients down was lit.
- One elevator on the 4<sup>th</sup> floor was working to go down one flight to the 3<sup>rd</sup> floor.
- Most patients were carried by two people. Two patients from the 9<sup>th</sup> floor who weighed over 350 lbs. each required a hard board and were carried down by six people.
- One of these patients had Gilliam Barre Syndrome and was functionally tetraplegic. The physical therapists and rehab techs, our nurses, men from Facilities Dept, our physicians, the police, and at the end of the day, the National Guard, helped us carry down each of the patients. We moved 33 patients from the 9<sup>th</sup> and 6<sup>th</sup> floors on Wed mostly between 12:30 p.m. and 5:30 p.m.
- At the same time, over 100 patients from the acute side of the hospital were carried down the stairs by the acute care staff.

## *New Hurricane Plan*

- We will discharge our stable patients prior to the storm and in time to evacuate with their families.
- Some of the more critical needs patients we will send out to other facilities prior to the storm.
- If necessary due to heat (hyperthermia was a problem during Katrina), and if the need to evacuate is possible, we will move all our patients in the hospital down to the lower floors but above the 3<sup>rd</sup> floor BEFORE the elevators stop working.

## *Evacuation from the Building*

- The patients were brought to the heliport where they were loaded 2-3 at a time in helicopters and flown initially to area hospitals about 45-60 minutes flying time away.
- This occurred until about 11:30 p.m., then was to start back in the early morning but actually began again at 8:30 a.m.
- Many of the patients spent the evening and night in their wheelchairs in the parking garage during the day under the overhang for shade and at night we moved all to the open air to catch the breeze.
- All patients were given food, and water, and taken to bedside commodes for a bathroom. We used the portable oxygen tanks for those in need of oxygen. We emptied Foley bags, changed Attends, and ran IV's. We brought supplies down from the hospital and drugs from the Pyxis machines. We gave mostly emergency medicines and medications for pain.

- In the afternoon we wet sheets with water and put them on the patients who were too hot to cool them off. In the evening we dried them and changed the sheets. The sickest patients were lying down on stretchers or in reclining Geri chairs, but the majority sat up all night in their wheelchairs.

## **Everyone helped**

- The RN's, LPN's, and CNA's went from patient to patient meeting needs, as did people from Finance, Therapy, Facilities, and Security.
- Many of the staff stayed up all night providing care. Some of the physicians slept on the roof to be close if needed.

## **Evacuated**

- We had contacted Evacuated prior to 2005 and were discussing putting these in our budget for 2006.
- We now have an Evacuated on each of our beds and all hospital staff is required to complete education on the use of the device.
- The device is used to bring patients down the stairs and can be used as a resting place for patients as they await the next level of transportation.
- It took 5 hours to clear the building, and this was fine since we had to wait up to 20 hours afterwards to actually leave, however, in a fire it would be tragic if the building had to be cleared.

## **Evacuated Advantages**

- The Evacuated is contained under the mattress, ready to deploy. Every staff member is prepared to help evacuate patients in an emergency.
- Safe transit down the stairs for patient and staff.
- Saves a great deal of time and allows for quick evacuation.
- If the patient has to wait for further transport, they have a comfortable surface to wait on - their hospital mattress.

## **Evacusled Disadvantages**

- May lose hospital mattresses
- Care provided at ground level is hard on staff
- The vinyl cover may contribute to hyperthermia, therefore, it may need to be loosened if the patient will be in the sled for a long time
- Evacusled is made for a one time use, so training sleds get damaged after much use
- [www.evacusled.com](http://www.evacusled.com)

## Lesson Learned

- Prepare for quick evacuation
- Have a comprehensive plan
- Tracking patients who left on helicopters on Thursday morning was difficult. They went to the airport to be triaged, then to many different places.
- Need a statewide system to track patients and a centralized medical record would really help in providing care for the patients.
- Have an alternative place to set up your offices in case you can't return quickly.
- Tracking staff after they left and those who evacuated was difficult and occupied much time.
- Have direct deposit for all employees. It was difficult to distribute pay checks to the 300 employees without direct deposit.
- Learn to text message. It's the only system that was reliable for the first 4 days.

- Medical Staff must be involved in planning, implementation, triage, and tracking.
- During evacuation walkie-talkies were used on each unit to communicate with the Command Center. They were the link in emergencies. Fire alarm systems run on emergency power and can go down.

## **Communications**

- Communication with staff is key to getting the job done. A meeting in the cafeteria to reassure everyone and getting the staff ready to leave as soon as the patients were out was key.
- Everyone who wanted to leave had the opportunity to connect with those going to Baton Rouge and from there they were picked up by family and friends.

## Care for Employees

- Many employees stayed together in groups for many weeks and returned together.
- Touro had a plan to help our employees to return. Touro provided temporary housing to over 50 families and other single employees.

## **Help to Re-Open**

- Provided housing for travelers who came in to help us.
- Provided a place for police and National Guard during the storm and when we reopened.

## Care for Self

- Essential papers in fireproof/waterproof containers, i.e., insurance papers, last will and testament, social security information, etc.
- Generator
- Way to move belongings higher
- Determine what supplies needed ahead of time
- Determine what valuables you would like to take with you ahead of time, i.e., photographs, credit cards, etc.

## God's Grace

- Only faith-based hospital in New Orleans
- We did not flood in the hospital itself. The street flooding allowed us to drive out of our parking garages and there was a route out of the City of New Orleans.
- The Fire Chief is the husband of one of Touro's Nursing Directors. The President of the Medical Staff has a relative who is a sheriff in a nearby town and he sent us police escorts to caravan out of town.
- We had police housed in our building during the storm.
- We had many family members and some visitors in our building but had no major incidents.
- We had some employees who experienced illness and dehydration but all were able to leave, one via helicopter

## **God's Grace, cont'd.**

- We have had many people helping our hospital and employees and it has been so gratifying to have such an outpouring of help.

## **DEVELOP A COMPREHENSIVE PLAN:**

A Hurricane Plan allows for preparation time versus a sudden disaster.

Develop your plan in association with the Parish/County, Region, State, and National authorities. The New Orleans metro area had 1,292,774 people prior to Hurricane Katrina. Evacuation was not just about our hospital, but was set in a context of a large metropolitan area.

Touro Infirmary has chosen to use HEICS as the organizational framework to use during a disaster.

## **THE MEDICAL STAFF MUST BE INVOLVED IN PLANNING, IMPLEMENTATION, IN TRIAGE, AND TRACKING.**

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## **HEICS:**

- HEICS is an emergency management system made up of positions on an organizational chart. Each position has a specific mission to address in an emergency situation. Each position represented has an individual checklist designed to direct the assigned individuals in disaster recovery tasks.
- Hospital VP's, CEO, CMO, CFO, CNO, and many of the Directors have an assigned role on the HEICS Organizational Chart. The leaders assign from their essential personnel, people to assist them in their roles.

## **Established a permanent Incident Command Center:**

- The Command Center is implemented at the designation of the CEO (Touro's is in the core of the building on the 2nd Floor). It is permanently set up and ready for use plus stocked with needed supplies.

## **OBJECTIVES:**

- Direct operation of the hospital during the preparation and strike of a hurricane Monitor all severe weather developments
- Provide hurricane advisors to Department Directors
- Maintain a hurricane tracking chart. Recommend and announce hurricane condition codes
- Provide hurricane briefing to hospital staff

- Provide a system of documenting and reporting all emergency response activities
- Establish and maintain emergency communications during a hurricane threat
- Communicate with local civil disaster and environmental authorities
- Assistant Department Directors as required toward hurricane preparations
- Ensure adequate security for the buildings and property during the hurricane threat
- Oversee recovery efforts after the storm

#### **IMPROVED BACKUP SYSTEMS:**

- Communications
- Satellite phone equipped communications center
- Executive briefings open to all staff at designated times during the event
- Written updates posted throughout the hospital
- Remote information posted on the Touro website and the Touro hurricane website
- Direct connections through 2-way radio with local authorities
- Touro hurricane information telephone number: 1-888-TOURO-411

#### **ENVIRONMENTAL CHANGES:**

- New well on Touro property connected to our water supply. Well water can be used to cool the building and provide backup water for hand washing and toilet flushing
- Doubled number and capacity of the generators, more redundancy in the system, and more reliability of emergency power. Backup now includes more lighting, air conditioning and elevators. Testing the system for longer periods. More diesel fuel storage tanks with 5 to 6 days of fuel.
- Additional on site security officers
- Volunteers to be trained and sent to specific departments to provide assistance
- Revised distribution protocol for drugs and supplies moved to the floors where patients will receive care Purchase of hands-free lights, lanterns, push lights and glow sticks
- Food storage of non-perishable items moved to patient care areas. More MRE's supplied and less cooking by our staff

**PATIENT SPECIFIC CHANGES:**

- Reduce patient volume by early discharges, evacuation of high risk patients and cancellations of elective surgery. New evacuation protocol for patients and families, inform all admitted patients about our evacuation plan.
- Advance patient preparation protocol if an evacuation is necessary.
- If necessary, due to heat (hypothermia can be a problem) and if the need to evacuate is possible as we will move all our patients to the hospital down to the lower floors but above the 3rd floor before the elevators stop working.
- Each unit assigned an alternate place to provide patient care to await evacuation, if necessary.

**ESSENTIAL EMPLOYEES:**

- No employee family members or pets will be sheltered at the hospital (Essential personnel must make arrangements prior to the event)
- New sleeping arrangements utilizing the air conditioned meeting rooms
- Premium pay for all essential employees
- Meals are provided at no charge to essential employees
- Essential personnel designation to get through blockades
- Parking: can park 1 car in the elevated garage, all vehicles are identified, garages locked down 96 hours prior to event.

**BRING WITH YOU:**

- Your hospital identification badge and other forms of identification
- Bedding, toiletries, prescription medicines for at least 1-2 weeks
- Games and books; can bring additional food, water
- Any medical supplies required by employees should be brought with you to the hospital
- Send with family your essential papers, valuables, clothing and medicines for later, family heirlooms, pictures
- Check in procedures to assure only our employees, patients, volunteers, and few patient's family are in the building. Colored arm band to designate role during disaster

- Essential personnel lists are maintained in a computer data bank and updated as often as needed to provide coverage, and are printed prior to computer shut downs
- Essential employees can leave when the second team "the recovery team" of employees can return and take over their shifts
- Recovery team can evacuate but must stay in contact with the hospital and be ready to come back as soon as feasible

#### **EVACUSLED:**

- We had contacted Evacusled prior to 2005 and were discussing putting these devices in our budget for 2006 We now have an Evacusled on each of our beds and all hospital staff is required to complete education on the use of the device
- The device is used to bring patients down the stairs and can be used as a resting place for patients as they await the next level of transportation
- Five hours to clear a building may work in a hurricane. We had to wait many hours afterwards to leave.
- However, if there were a fire it would be tragic if the building had to be cleared, and it took 5 hours. Clearing the building during a fire would have to be done in a much shorter time frame

#### **ADVANTAGES OF EVACUSLED:**

- Already under the mattress, ready to deploy. Every staff member is prepared to help to evacuate patients in an
- emergency
- Safe transit down the stairs for patient and staff
- Saves much time and allows for a quick evacuation of all patients who need assistance on the stairs
- If the patient has to wait for further transport, they have a comfortable surface to wait on.

#### **CONSIDERATIONS IN USE:**

- Hospital may lose their hospital mattresses
- Nursing Care is provided at ground level which is hard on staff backs

- The vinyl cover may contribute to hyperthermia so it may need to be removed from covering the patient if the patient will be in the sled for a long period of time
- [www.evacusled.com](http://www.evacusled.com)

#### **HAVE A PLAN THAT IS COMPREHENSIVE:**

- Tracking patients who left on helicopters on Thursday morning was very difficult. They went to the airport to be triaged then to many different places. (Generally: Wednesday we sent patients to pre-determined hospitals or shelters who had agreed to receive them)
- Need a statewide system to track patients and a centralized medical record would really help in providing care for the evacuated patients.

#### **HAVE AN ALTERNATIVE PLACE TO SET UP YOUR OFFICES IN CASE YOU CAN'T RETURN QUICKLY:**

- Tracking staff after they left and those who evacuated was difficult and occupied much time - maintain current cell phone numbers and contact phone numbers
- Have direct deposit for all employees. It was difficult to distribute paychecks to the 300 employees without direct deposit. National banks were better than local credit unions/banks in getting help for their customers
- Learn to text message, it's the only system that was reliable for the first 4 days. Ham radios worked at other hospitals in getting the message out
- During evacuation we used walkie-talkies which were on each unit to communicate with the Command Center. They were out link in emergencies. Fire alarm systems run on emergency power and can go down, Cell phone towers run on electricity and cannot transmit
- Communication to staff of what is happening is key to getting the job done and preventing panic. Meetings in the cafeteria to reassure everyone keep all informed and getting the staff ready to leave as soon as the patients were out was key.
- Everyone who wanted to leave had the opportunity to leave. Most connected with those going to Baton Rouge and from there could be picked up by family and friends
- Many employees stayed together in groups for many weeks and returned together

- Touro had a plan to help our employees return and provided some temporary housing to over 50 families and additional other single employees.
- Provided housing for travelers who came in to help us
- Provided a place for the Police and National Guard during the storm and when we reopened. We plan to continue that practice. Touro plans to house approximately 100 Police, Firefighters, and First Responders during and immediately after the event.

Touro Infirmery/Touro Rehab Center now has a lengthy policy concerning preparation for hurricanes or floods. The plan includes:

- the process for identifying essential and recovery personnel;
- clearly delineates which services we can provide;
- all aspects of facility access;
- how food and water will be supplied to patients and staff;
- how all needed supplies, medical and physical will be handled;
- preparation of our patients and their families including letters to be distributed to all inpatients and their families;
- preparations for medical records for transfer;
- relocation plan for patients from the top floors of the hospital;
- process for patient and staff evacuation if necessary.

Websites have been established off-site which will allow all employees contact with the hospital during and after the disaster. The policy includes a time line of tasks to be completed within specific time frames prior to the hurricane and a re-entry plan should we have to evacuate.

Touro has invested much time and thought into the preparation for any future hurricanes. We have used our experience to change our practice to allow us to be better prepared not only for hurricanes but for unexpected disasters like fire. Our staff and facilities are ready to safely manage our patients.