Emergency Preparedness
Our Objective

• Review the emergency preparedness system
• Benchmark emergency systems considered “best in class”
• Recommend state-wide disaster planning options
Our Approach

• Examined emergency preparedness reports and hurricane after action reviews

• Reviewed Louisiana’s existing emergency operation plans

• Studied national and international emergency preparedness systems

• Reviewed disaster medicine and public health emergency preparedness literature

• Interviewed Louisiana emergency response officials
The 2005 Hurricane Season:
A Louisiana catastrophe....

- Hurricane Katrina was the most destructive natural disaster in United States history.
  - Impacted nearly 93,000 square miles across Louisiana, Mississippi, Alabama and Florida
  - Flooded 80% of New Orleans
  - Killed an estimated 1,330 people
  - Displaced over 700,000 people
    - Over 2,000 people still missing
    - Over 200,000 suffered from chronic medical conditions
  - People over the age of 51 accounted for 84% of the bodies identified at St. Gabriel morgue

Both Hurricanes Katrina and Rita and the ensuing flood demonstrated why disasters are considered a public health emergency.

- Caused an unexpected number of deaths, injuries, or illnesses in the affected community.
- Exceeded the therapeutic capacities of the local health services and required external assistance.
- Destroyed local health infrastructure such as hospitals and nursing homes, which were unable to respond.
- Disrupted the provision of routine health services and preventative activities.
- Increased the potential risk for communicable diseases and environmental hazards.
- Affected the psychological and social behavior of the stricken community.
- Caused a large population movement.
Pre-2005 Disaster Planning

• Incident Management

• Trauma Care

• Patient Movement and Care
• ESF #8 provides public health and sanitation; emergency medical, dental, and hospital services; crisis counseling and mental health services to disaster victims and workers. The purpose of the function is to supplement and support disrupted or overburdened local medical personnel and facilities and relieve personal suffering and trauma.

• In the 2005 version of the State EOP, DHH and LSUHSC shared primary responsibility for ESF-8.

• DHH was responsible for public health, sanitation, medical and health assistance to Special Needs shelter operations, mental health and crisis counseling.

• LSUHSC was responsible for hospital care and shelter for nursing home and home health patients, as well as casualties of emergencies and disasters.
• A 2002 HRSA report on trauma system development and disaster readiness showed that Louisiana had significant shortfalls – no standardized triage protocol, no plan for professional shortages, no communications system, and no surge capacity plan.

• In 2004, the Louisiana Legislature established the Louisiana Emergency Response Network (LERN) – a time-sensitive illness, regional response, statewide trauma system. The act was passed unfunded.

• Pre-hurricane season, two ACS-verified trauma centers were registered with the State Department of Health Standards – the first in New Orleans and the second in Shreveport.
Pre-2005 Disaster Planning
Patient Movement and Care

• LSUHSC as the lead state agency for regional hospital emergency operations was responsible for support of Special Needs patients and hospital-based evacuees who could not be accommodated elsewhere. LSUHSC would work with DHH, the Louisiana Hospital Association, the Metropolitan Hospital Council of New Orleans, and other hospital and healthcare organizations to formulate acceptance and allocation procedures during emergencies.

• Louisiana hospitals and nursing homes were responsible for implementing their own emergency evacuation plans. The primary priority for all hospitals was to “shelter in place” rather than evacuate. Parish and state government authorities, according to the plan, would encourage the evacuation of vulnerable populations with their families well before calling for mandatory evacuation of the general population.

• Special Needs shelters were primarily for medically dependent individuals who did not require care in a hospital setting and whose pre-arrangements had failed and left them with no other recourse. Regional shelters were used to support the local Special Needs shelter but only after the local parish resources have been totally exhausted.

• Nursing homes were expected to make all arrangements to evacuate and shelter their patients in emergencies. Nursing homes could not use Special Needs shelters as a planned option for patient care.
Five Key Findings

• Louisiana lacked the type of "preparedness culture" of nations such as Israel and United Kingdom, and states such as Florida and California, that routinely deal with disasters. The 2005 hurricane season proved that disasters are not only quantitatively different, they are also qualitatively different from everyday emergencies.

• Louisiana had no shortage of disaster plans which gave the illusion of preparedness. However, the planning assumptions were not valid, they lacked an inter-organizational perspective, and they were not accompanied by the needed funding and resources.

• Since 2002, the Department of Health and Hospitals in Louisiana has received approximately $17.5 Million in Health Resources and Services Administration bioterrorism grants. DHH did not provide any additional funding for disaster planning.

• Pre-hurricanes, Louisiana had two trauma centers. Post-hurricane, it has one. By contrast, Colorado, whose population size is similar, has 62. On a per-capita basis, Texas had 19 times more trauma capacity than pre-hurricane Louisiana.

• Despite massive planning efforts by federal, state and local governments to prepare for future disasters, the lessons learned were strikingly similar to the lessons learned from the California wildfires of 1970 – more than 30 years ago.
Recommendations
Immediate opportunity for positive change

1. Fund the Louisiana Emergency Response Network (LERN) at an estimated cost of $26.5 million over a three-year period.

2. Formalize the ESF-8 incident command structure in accordance with the National Response Plan and the National Incident Management System.

3. Establish long-term funding and planning mechanisms to sustain the preparedness of the Louisiana health system by creating an “Bureau of Emergency Preparedness” as its own entity within the Department of Health and Hospitals with an appropriate budget and the resources required to develop and sustain realistic disaster plans.
Recommendation 1: LERN Operations

• The LERN will function in a dual capacity as a time-sensitive illness response system linking homeland security initiatives with healthcare operational standards and trauma care requirements. It will function on a daily basis in accordance with well established guidelines and will expand during an emergency to provide the required elements of disaster medical care.

• The LERN will be connected to pre-hospital, hospital, post-acute and injury programs across the state via nine regional command centers. Operating out of existing EMS facilities, the nine regional centers will be linked together by a tenth state-level command center.

• The LERN will be a valuable partner to the Office of Homeland Security and Emergency Preparedness and the Louisiana National Guard. Using its information analysis and reporting capabilities, the LERN will facilitate evidence-based planning and help resolve issues pertaining to surge capacity, evacuation routes, and staging areas.

• By facilitating the development of standardized triage criteria, uniform data sets, enhanced communications, and real-time asset management, the LERN will become a critical component of the public health and medical services emergency support function (ESF-8).
Recommendation 1: LERN Funding

• The Louisiana Emergency Response Network (LERN) should be funded to allow for the "level of readiness" necessary to provide appropriate time-sensitive services for all injured patients.

• At an average cost of $8.84 Million per year, implementation of the LERN will cost approximately $26.5 Million over a three year period.

• This estimate includes costs to implement (i) Nine Regional Commissions; (ii) One State Command and Control Center; and (iii) Nine Regional Command and Control Centers.

• The three-year estimate does not include the costs associated with the implementation of the LERN Information Technology System.

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Recommendation 2: ESF-8
Formalize the Incident Command Structure

• The ESF-8 command structure will use an incident action planning process that is systematic and comprehensive; integrating multiple agencies and emergency response disciplines into a common organization using the process. The unified command concept will provide the most effective means of coordinating and directing multiple disciplines during major Louisiana public health emergencies.

• Comprised of five major management activities, the structure will be modular and designed to help organize and allocate medical personnel, services, and resources in a timely manner.

• The structure will consolidate existing DHH EOCs into one unified Department EOC which will house all the appropriate offices and bureaus according to their incident command role.
Recommendation 3: Sustaining Emergency Preparedness Long-Term Planning Mechanism

• Create a Bureau of Emergency Preparedness as its own agency within DHH to serve as the Secretary’s principal advisory staff on matters related to emergencies and to coordinate all disaster planning initiatives within the department. The Bureau will serve two primary functions:

• Planning will be responsible for the development of policies, plan assessment, and implementation of analytical products. This bureau will be responsible for promoting public-private disaster planning.

• Emergency Operations will be responsible for implementation of the ESF-8 command structure. The Bureau will be responsible for achieving a desired level preparedness, coordination with federal agencies and maintaining positive media-relations.

Bureau of Emergency Preparedness

Planning
- Coordinate disaster planning and program development
  - Surge Capacity
  - Mass Fatality
  - Shelters
  - Bioterrorism
- Assess preparedness and response capacity
- Acquire medical supplies and equipment

Emergency Operations
- Lead DHH response activities under ESF-8
- Manage the DHH EOC
- Implement and evaluate inter-agency exercises
- Coordinate with
  - OHSEP
  - LANG
  - DOTD
  - DSS
  - LSUHSC
  - LERN
  - LHA
  - LNHA
Conclusion

A unified incident command; a time-sensitive response system integrated with homeland security; and sustained funding and improved planning mechanisms are required for a “preparedness culture” and a resilient health system.