

# Social Vulnerability

## Summer Academy 2007

### Megacities as Hotspots of Risk

### The Failure in Identifying the "Special Needs Population"

In the actual planning for emergencies, social vulnerability is captured under the heading of "special needs populations." While small communities can identify their special needs populations, it becomes a daunting task in major cities. What is the homeless population and where are they? How many tourists are there that may need evacuation help? How full are the large hospitals, outpatient clinics, and mental health care facilities? What about nursing homes? Prisons? The healthy poor are rarely considered as a special needs population, even though they lack the financial resources to respond to emergencies.

### Evacuation and the Power of Repression

As a global phenomenon before and during natural disasters, people tend to repress negative aspects and to neglect warnings. Reasons why people do not escape include:

- Underestimation of the power of the event
- Hope or set of beliefs
- Fear of pilferage
- Age\*
- Disability\*
- Inability to organize (e.g. large families or clans)\*
- Lack of appropriate transportation\*
- Lack of willpower\*

\* often linked to age or poverty aspects

### Warning! Should I leave the city or not?

Terms used by local authorities in the evacuation processes:

- Precautionary evacuation
- Voluntary evacuation
- Recommended evacuation
- Highly recommended evacuation
- Highly suggested evacuation
- Mandatory evacuation

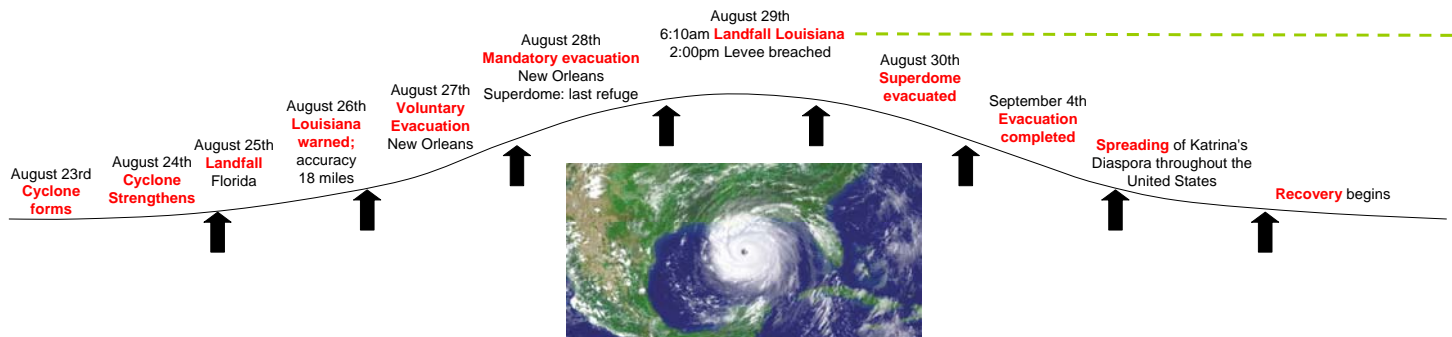
This unclear highly subjective communication hampered the answer for many families to decide whether to leave the city or not. This was even worsened for non-english speaking communities.

# Hurricane Katrina

## an American disaster

Social Vulnerability Aspects

Munich Re Foundation Poster Series



### Victims of Katrina

Fatalities: 1 855  
Homeless: ~ 1 000 000  
Evacuated: ~ 1 500 000

- 40 % of the bodies found in New Orleans and St. Bernard parishes were from neighborhoods with poverty rates higher than 30 %
- African Americans outnumbered whites 61 % to 36 %

### Age Distribution of 729 Victims

- 50 % of the victims were in their 70s or 80s
- Only 39 people under the age of 40 died, less than 6 % of all victims listed

### Conclusions

- Technical warning systems are important but they only represent one element of successful evacuation
- The well discussed governmental shortcomings in evacuation were only one key factor for the tragedy
- Surviving a natural disaster such as Katrina is linked with many different facets, people-centered approaches and research there before disasters strike is essential
- Society reflects different patterns, the age and poverty profile are important parameters of social vulnerability

### New Orleans Statistics

#### City Population New Orleans 450 000

African Americans 67,8 %  
White Americans 28,6 %  
Hispanics 3,2 %  
dark figure ~ 15 %

#### Elderly residents

- 7,400 aged 85
- majority live in non-institutional Households
- 2,500 reside in nursing homes

#### Poverty Rates

National Rate 12,7 %  
New Orleans 23,2 %  
35 % of black residents are considered poor, compared with 11,5 % of white residents

#### Household income

Median \$ 27 408  
African American [3 pers.] \$ 21 461  
White American [2 pers.] \$ 40 496

- 120,000 residents lack cars

### A Success Story – Strong Social Networks are Key

by Byron Real Summer Academy 2006

The Hispanic minority in New Orleans features multiple classic indicators for social vulnerability:

- lack of legal status
- lack of social security and access to health services
- lack of education
- language barriers
- little access to private transportation
- non-unified socioeconomic group
- poverty

Posing up to 15 % of the city's population, the Hispanics made up only 2 % of the total casualties. This group managed to evacuate nearly all of its members in a safe and timely manner. Although the evacuation followed by the Hispanics was unplanned, it was nevertheless effective.

The main characteristics of the Hispanic community to lower social vulnerability are a high sense of community and fellowship, intensive internal communication in the decision making process, declaration of evacuation as a social event, and peer pressure on evacuation laggards.