

# On the Edge: Children and Families Displaced by Hurricanes Katrina and Rita Face a Looming Medical and Mental Health Crisis



#### **EXECUTIVE SUMMARY**

Prepared by David Abramson, PhD MPH & Richard Garfield, RN DrPH National Center for Disaster Preparedness & Operation Assist RELEASE DATE: April 17, 2006

## **Louisiana Child & Family Health Study**

David Abramson, PhD MPH <sup>1</sup>	Principal Investigator
Richard Garfield, RN DrPH <sup>2, 6</sup>	Co-Principal Investigator
Barbara Bennet <sup>1</sup>	
Lauren Jewell <sup>1</sup>	Assistant to the Field Director
Andrea King, MPH <sup>1</sup> ,	Data Manager
Gunjeong Lee, PhD <sup>1</sup>	Senior Programmer
Sara Berk'	Research Assistant
Evelyn Choudhury <sup>1</sup> & Dave Hunter <sup>1</sup>	Data Editors
Lorenzo Williams <sup>6</sup>	Operation Assist Public Health Field Office

Interviewers: Angela Aidala, PhD¹, Sarah Allenby³, Alison Bateman-House³, Megan Bronson⁴, Jeanne Campbell¹, Caricia Catalani³, M. Claire Dillavou³, Danae DiRocco³, Sophie Faris³, Lauren Granen⁴, Tiffany Humbert-Rico³, Brooke Lauten³, Toni Marie Jones⁴, Philip Josephs³, Sara McKelvey³, Kimmi McMinn⁵, Alba Mota³, David Norman¹, Prathima Nagireddy⁴, Jed Oppenheim³, Hilary Parton³, Connie Pun¹, Sarah Sahl³, Pacience Smith⁴, Azure Thompson³, Catherine Tridico⁴, Catherine Trimbur³, Terrenda White³, Donya Williams³, Candice Wilson⁴, Summer Wright³, Michelle Yacoob³

Columbia University Department of Sociomedical Sciences, <sup>2</sup> Columbia University School of Nursing <sup>3</sup> Columbia University volunteer, <sup>4</sup> Louisiana State University volunteer, <sup>5</sup> Tulane University volunteer, <sup>6</sup> Operation Assist

This study was approved by the Columbia University Medical Center Institutional Review Board.

We are particularly grateful to all the people in Louisiana who shared their time and their experiences with us. We take their trust in us seriously, and hope that our project serves to amplify the voice of the displaced populations throughout the Gulf Coast, and speed their recovery.

Project oversight was provided by Irwin Redlener, MD, Director of the National Center for Disaster Preparedness and President of The Children's Health Fund, and Alison Greene, JD, Director of Operation Assist. Considerable guidance, support, and assistance was provided by Drs. Erin Brewer, Jimmy Guidry, Roxeane Townsend, and Fred Cerise, of the Louisiana Department of Health and Hospitals; Dr. Eric Baumgartner of the Louisiana Public Health Institute; Drs. Stephanie Tortu, Ed Peters, and Dean Elizabeth Fontham, of the Louisiana State University School of Public Health; and Dr. Tom Farley of the Tulane University School of Public Health and Tropical Medicine. Extensive operational and logistical support was provided by Kate Hurowitz and Jeb Weisman of Operation Assist and The Children's Health Fund. Mapping and GIS support was donated by Laura Kurgan and Sarah Williams of the Spatial Information Design Lab of Columbia University's School of Architecture, Planning and Preservation. The study benefitted tremendously from the volunteer effort of public health graduate students from the three partnering universities, and their professionalism, compassion, and fortitude bodes well for the coming generation of public health professionals. The cover photograph of a devastated house in the Lower Ninth Ward was taken by Jed Oppenheim on Feb. 21, 2006.

This study is a public health assessment and research project of the National Center for Disaster Preparedness, supported by Operation Assist and The Children's Health Fund. Its contents are solely the responsibility of the authors and do not necessarily represent the views of The Children's Health Fund or the National Center for Disaster Preparedness. Please address all correspondence to Dr. David Abramson, Columbia University Mailman School of Public Health, 722 West 168<sup>th</sup> Street, New York NY 10032, <a href="mailto:d

### **Executive Summary**

■he individuals and families who were displaced by Hurricanes Katrina and Rita and who have ended up in FEMA-subsidized community housing in Louisiana are facing a second crisis, one in which untreated and undertreated chronic medical problems and incipient mental health issues will overwhelm patients and providers. Among the displaced, children may be particularly vulnerable. In New Orleans alone, approximately 110,000 children under age eighteen – 85% of the pre-Katrina pediatric population – have not returned to the city since the hurricanes. These children, and others from outside of New Orleans, have been scattered throughout the Gulf Coast and across the fifty states. Louisiana's school enrollment dropped by 70,000 students, many of whom have resettled in other states, some who have not yet returned to school in Louisiana. The Louisiana Child & Family Health Study focused on the displaced population living in FEMA-subsidized housing in Louisiana, and who may be among the most needy. According to interviews with adults in 665 randomly selected households at trailer communities and hotels throughout the state, this displaced group of children and families suffers from a constellation of serious medical and mental health problems. Parents report high rates of asthma, behavioral problems, and learning disabilities among their children. Despite that, access to continuous medical care, appropriate mental health care, medications, specialized medical equipment, and specialty medical care, is either fragmented at best, or absent altogether.

The medical and mental health needs documented in this report may be regarded as the consequence of inadequately treated chronic diseases, psychological and emotional traumas secondary to the chaos and despair of a massive dislocation, and the social deprivations of the chronically-poor and the newly-impoverished. At a deeper level, though, the problems relate to the loss of stability in people's lives: families that are increasingly fragile, children who are disengaged from schools, and the wholesale loss of community, workplace, and health care providers and institutions.

## How the Study was Conducted

During the period of February 11 through February 20, 2006, the Columbia-led Louisiana Child & Family Health Study, working in partnership with the Louisiana Department of Health and Hospitals, conducted a rapid assessment among Louisiana residents displaced by Hurricanes Katrina and Rita. The purpose of the study was to gather information that could inform local, state, and federal policymakers about the health and social service needs of displaced populations living in transitional community-based settings, such as trailer parks and hotels. Following a multi-stage sampling strategy based on lists of trailer parks and hotels with FEMA-subsidized housing units, 665 randomly-selected households were recruited in to the study, establishing a cohort representative of the over 12,000 displaced households living in FEMA-sponsored community-based housing as of January 31, 2006. The study also collected data on a randomized selection of children within the sampled households.

### **Key Findings**

# Children suffer from high rates of chronic health conditions and poor access to care

• 34% of children living in FEMA-subsidized community settings have at least one

diagnosed chronic medical condition, a rate one-third higher than that of the general pediatric population in the United States. Compared to children surveyed in urban areas in Louisiana in 2003, the displaced children are more likely to suffer from asthma, behavioral or conduct problems, developmental delay or physical impairment, and learning disabilities.

- Nearly half the children who had a personal medical doctor who knew their
  medical history a "medical home" before Katrina did not have one after the
  hurricane. Several parents who reported that their child still had a personal
  medical doctor noted that they had not tried to contact the doctor since the
  hurricane, and were not sure where the doctor had moved or how to contact the
  physician.
- A number of parents reported that they had a child who was either hospitalized or required repeated visits to the emergency room for acute asthmatic episodes because they could not get their child's asthmatic medications. The reasons cited included the loss of medical records, lack of insurance coverage accepted at local pharmacies, inability to get to pharmacies, and medical providers who would not prescribe the medications because they were unfamiliar with the child's past medical history. One parent noted that her child could not receive medications for ADHD and depression until the social worker had completed a 45-day evaluation period, again a consequence of lost medical records and discontinuous medical care.
- Among the children who needed prescription medication in the prior three months, 14% did not receive all their prescribed medications, a rate seven times as high as that reported by parents of children surveyed in Louisiana in 2003.
- Parents in the displaced population are more likely to report that their children's health is fair or poor (11%), a rate over three times as high as the general pediatric population in the US, as reported by parents surveyed in 2003.
- Among children who needed specialized medical equipment, such as nebulizers, 61% of the parents reported that it proved to be a "big" or "moderate" problem to get the equipment. Among the parents surveyed pre-Katrina in urban areas of Louisiana, only 17% reported such problems.

### Mental health is a significant issue for both parents and children

- Nearly half of the parents surveyed reported that at least one child in their household had emotional or behavioral difficulties that he or she didn't have before the hurricane, such as feeling sad or depressed, being nervous or afraid, or having problems sleeping or getting along with others.
- Parents, and mothers in particular, scored very low on a standardized mental health screening tool, one which has been widely used to measure the extent to which poor mental health interferes with daily activities. Over half of the women caregivers scored at levels consistent with clinically-diagnosed psychiatric problems, such as depression or anxiety disorders. Children whose parents scored very low on this mental health score were two and a half times as likely to have experienced emotional or behavioral problems after the hurricane, according to the parents. Additionally, women caregivers were six times as likely to report that they were not coping well with the daily demands of parenting when compared to parents in a pre-Katrina survey of urban Louisianans.

Several parents and caregivers reported difficulties finding appropriate and accessible mental health services. One parent, whose 6-year old was on an 18-month waiting list for psychiatric care, was told that she still needed a referral from her primary care physician even though he had relocated to Puerto Rico after the hurricane. Several respondents noted it was increasingly difficult or impossible for them to maintain their own prescribed psychotropic medications, either because they could not find appropriate psychiatric help or their medical records had been lost.

# The safety nets designed to protect children's and family's welfare have major gaps

- Over one-fifth of the school-age children who were displaced were either not in school, or had missed 10 or more days of school in the past month.
- 44% of the caregivers surveyed reported that they did not have health insurance, although nearly half had at least one chronic medical condition. A number indicated that they had lost their insurance when they lost their jobs subsequent to the storm. 10% of children were uninsured.
- Several caregivers noted the inter-state differences they experienced in service availability after the hurricane. One grandparent caring for her seven grandchildren noted that when she was evacuated to Texas she was eligible for and received both Medicaid coverage and food stamps, both of which were denied when she returned to Louisiana, suggesting a difference in program requirements and eligibility criteria. A parent of a child with muscular dystrophy reported that when she was evacuated to Virginia, her child had access to both medications and medical services, both of which have proved to be bigger problems upon her return to Louisiana.

#### The displaced have lost stability, income, and security

- On average, households have moved 3.5 times since the hurricane, some as many as nine times, often across state lines. Each move involved various issues of resettlement, and a number of parents described lags in re-enrolling children at a new school with each move.
- Nearly two-thirds of the households had at least one adult with a full-time or parttime job prior to Katrina, whereas only 45% had a salaried wage-earner after the hurricane. This drop in income of twenty percentage points was not offset by an increase in public benefits.
- Nearly half of parents and other caregivers believe that their children are either never or only sometimes safe in their community, compared to 21% of caregivers answering the same question in urban Louisiana pre-Katrina. 69% of caregivers believed there were people in their current nieghborhood who would be a bad influence on their children, compared to 52% of caregivers pre-Katrina.
- There was an ongoing need reported for specific services, particularly regarding financial matters (72% of households had a need in the past 3 months), household items or clothing (60%), and food, groceries, or meals (52%). A number of respondents noted that since FEMA had discontinued paying for the propane tanks for their trailers (a policy implemented during the study's fieldwork)

they had elected to turn off the heat in their trailers and sharply curtail the use of hot water.

Virtually all the respondents in the study came from one of five Louisiana parishes – Orleans (65%), Saint Bernard (11%), Saint Tammany (10%), Jefferson (7%), and Plaquemines (4%) – which were among the hardest hit by Katrina, and many of which are years from being redeveloped. 58% of the respondents would like to return to their former neighborhood, 30% would like to relocate elsewhere (including a number of respondents interested in purchasing their FEMA-subsidized travel trailers and then moving them elsewhere), and 11% were still unsure as to their future plans.

### Summary

Failing to stabilize the systems of care in people's lives will likely have long-term consequences. Parents' mental health issues, such as untreated depression, have been shown to increase the risk of mental health disability among children, many of whom are traumatized and already psychologically vulnerable; the lack of sufficient school-based services and capacity, as well as students own lack of attendance, will likely lead to diminished academic performance and advancement, further limiting their economic opportunities; and social isolation may lead to increased risk behaviors such as drug use, which in turn increases the hazards of communicable disease, crime, and incarceration. Although these outcomes are far from assured, the absence of systems of care to address them now makes them far more likely to occur in the future.

Furthermore, the needs and system-wide gaps evidenced by the massive dislocation of an urban population suggest a review of disaster preparedness planning for both mid-term and long-term recovery efforts by government and private sector providers, in particular the need to develop plans for reconstituting medical care and mental health systems and providing for continuity of care. Much as Hurricane Katrina served as a sobering test of the protocols of the newly-drafted National Response Plan and of state and local emergency response plans, it has also tested – and severely strained – the capacity of local health systems and public health departments to manage major population shifts and provider losses and still deliver preventive, chronic, and acute care services.

As lessons are drawn to ensure future preparedness, four systems deserve particular attention. The problems experienced by Louisiana's displaced children and families can be related to breakdowns in systems related to (1) access to care, (2) availability of ongoing primary, mental health, and dental care, (3) assurance of continuity of care, and (4) the ability of schools to reach out and engage students and their families. Making these system-wide issues even more challenging is the scope of these safety nets, which often have to be stretched to cover displaced populations across county and sometimes state lines. As noted above, respondents in this study reported problems related to loss of medical insurance subsequent to losing their jobs in the wake of the hurricane, their inability to qualify for or receive specific social welfare benefits (despite having qualified in a neighboring state), and maintaining medications and continuous medical care in the face of lost medical records. These problems suggest the need for post-disaster systems that can sustain long-term preventive and primary care, and assure access to medical records (perhaps through the use of such strategies as a standardized patient-held medical record, electronic medical records, or statewide registries of disaster victims). Equally important for children who find themselves displaced for long periods of time are stable school environments. In the aftermath of such major dislocations, school systems may need to institute outreach

programs to expedite enrollment in schools and case-manage cases of disengagement or missed school days, as well as serving as a referral point for local service providers for both students and their families.

Finally, the data fail to capture what is immediately evident to even the most casual observer of the trailer communities. As emergency and transitional housing settings, the FEMA-developed trailer parks are more than adequate, providing residents with the essentials of private shelter, water, and sanitation. However, once the "emergent" phase is over the trailer parks evolve in to semi-permanent communities, and in this light they are often dismal and desolate. Hastily erected on available parcels of land, often in undesirable locations such as on the edge of a commercial airport, the parks feel more like military encampments than family neighborhoods. In contrast, the private trailer communities, most of which were well-established years before the hurricane and which often reflect an aesthetic of design and planning, feel more like established neighborhoods. There may be a lesson for preparedness planners from housing experiments such as Chicago's Gatreaux Program, in which public housing residents were resettled in scatter-site fashion in higher-income suburban settings, and who subsequently experienced better health, educational, and economic outcomes. If a relocation might last longer than six months, it may be worthwhile to consider a secondary resettlement of small clusters of residents from FEMA-style trailer parks to well-established "healthy" neighborhoods, taking in to account the incentives necessary for both the relocating residents and the recipient communities.