



The New Orleans Metropolitan Area Family Resiliency Project Helps with Mental Health Problems After Katrina

Addressing the mental health needs of displaced children and families in the aftermath of Hurricane Katrina

SUMMARY

Through the New Orleans Metropolitan Area Family Resiliency Project, the Department of Psychiatry of the Louisiana State University Health Sciences Center (LSUHSC) provided an array of behavioral and mental health services for children, first responders (including police, firefighters and emergency medical technicians) and their families in three New Orleans parishes hard hit by Hurricane Katrina.

The project described here built on the department of psychiatry's earlier work providing crisis-related mental health services before and after Katrina.

Key Results

The New Orleans Metropolitan Area Family Resiliency Project:

- Used screening tools and surveys to assess the post-hurricane experiences and associated mental health issues of some 9,000 students, first responders and teachers.
- Delivered counseling services to some 1,500 people.
- Implemented a procedure for making mental health referrals.
- Developed evidence-based prevention and intervention strategies to prepare for future disasters and to inform policy decisions.
- Conducted two youth leadership programs to support youth resilience, build self-sufficiency and decrease risky behaviors.

Key Findings

- Counselors screened nearly 7,000 students in the parishes of Orleans, Plaquemines and St. Bernard in the 2007–08 school year and delivered mental health services to 1,388 of them. Some 182 students continued to receive treatment after the grant ended.

- Based on a small sample of 31 children, researchers found that overall symptoms of post-traumatic stress disorder (PTSD) and the four PTSD clusters—stressors, re-experiencing, avoidance and hyperarousal—decreased after treatment.
- Counselors screened 1,340 first responders and provided mental health services to 127 of them. From 2007 to 2008, results of the screening suggest a slight decrease in first responders meeting the cut-off score for depression symptoms and a slight increase in the cut-off score for PTSD symptoms.

Funding

The Robert Wood Johnson Foundation (RWJF) provided \$718,601 for the project from 2007 to 2009.

THE PROBLEM

More than a year after Hurricane Katrina, one of the worst disasters in U.S. history, much devastation remained in New Orleans and the Gulf Region, and recovery was moving slowly. Children and families who had returned to the New Orleans metropolitan area continued to suffer from the trauma, and in addition, they faced economic loss, unstable living arrangements and uncertainty about the future.

First responders, including police officers, firefighters and emergency workers, were experiencing many of the same stressors, while also dealing with staffing shortages and increased demand for their services.

The Department of Psychiatry at the Louisiana State University Health Sciences Center, which provides clinical direction to the state's crisis counseling program, played a key role in addressing the mental health needs of people in post-Katrina New Orleans. Howard J. Osofsky, MD, PhD, chair of the department, and Joy D. Osofsky, PhD, professor of pediatrics and psychiatry, were at the forefront of the initial response after the storm.

This project built on a program already in place at Louisiana State University Health Sciences Center (LSUHSC) to provide mental health services to schoolchildren, first responders and their families. The Orleans, St. Bernard and Plaquemines parishes, among the hardest hit by the storm, specifically requested additional help.

CONTEXT

In the wake of Hurricane Katrina, RWJF responded with funding for immediate relief and also committed funding for longer-term, capacity-building efforts. One of the main areas of funding needs that the RWJF Hurricane Katrina Response Team identified was mental health. This project fits directly into that funding strategy.

RWJF determined that the Department of Psychiatry at the Louisiana State University Health Sciences Center had the support of the local school systems and other interested agencies, had the mental health expertise necessary to complete the project, and had already established relationships with schools and first responders to provide the care.

For more information on RWJF's short- and long-term response to Hurricane Katrina, read *In the Eye of the Storm*, a special report.

THE PROJECT

The Louisiana State University Health Sciences Center (LSUHSC) Department of Psychiatry launched the New Orleans Metropolitan Area Family Resiliency Project to provide training to clinicians, teachers and parents, and an array of behavioral and mental health services to children, first responders and their families in three New Orleans parishes hard hit by Hurricane Katrina. Joy Osofsky, PhD, and Howard J. Osofsky, MD, PhD, co-directed this initiative. Some 20 mental health clinicians affiliated with the department of psychiatry provided services.

Training Clinicians

Through "learning communities," project staff educated clinicians about two evidence-based mental health intervention models that focus on trauma. Adapted from an approach created by the National Child Traumatic Stress Network, each collaborative includes an initial training, followed by conference calls and in person meetings to assess the models as they are implemented, and to share experiences and lessons learned.

- Some 114 mental health professionals attended the "Families Overcoming and Coping Under Stress (FOCUS)" learning collaborative. FOCUS was first developed for families of returning military and modified by Louisiana State University Health Sciences Center staff for use with first responders and their families in New Orleans.
- Some 245 mental health professionals attended the "Strength After Trauma (StArT)" learning collaborative. StArT is a flexible intervention that can be used with individuals, groups and families that include children and adolescents experiencing moderate to severe traumatic reactions.

See the [Appendix](#) for more information about both models.

Teacher Workshops

Project staff conducted some 19 workshops and trainings for teachers in Orleans, Plaquemines and St. Bernard parishes to prepare them to work effectively with children after the trauma of a hurricane and to maintain their own emotional health. The trainings were held during teacher curriculum development days in the 2006 and 2007 school years, and on the teacher days held prior to the beginning of school in 2007.

The project held additional trainings and individual consultations with faculty and staff, when requested, on specific topics such as the effects of trauma on children and parents, anger management and bullying.

Parent Workshops

Project staff conducted some 22 workshops and trainings for parents in the three parishes in 2007 and 2008. The workshops were designed to help parents understand how trauma affects children, to learn how to help their children and to care for themselves. The workshops were held as part of school open houses and orientation meetings and at parent breakfasts and lunches.

Collaboration With Other Agencies

Project staff developed partnerships in the three parishes with an array of community organizations, school boards, human service agencies, first responder organizations, the faith-based community and other local stakeholders and service providers.

The goal was to identify collaborative opportunities to re-establish needed infrastructure and enhance access to services.

Other Funding

Additional support came from the federally funded National Child Traumatic Stress Network, a collaboration of academic and community-based centers that work with traumatized children and their families, which gave a \$1.6 million, four-year grant to the LSUHSC-affiliated Rural Trauma Services Center in 2008. The Red Cross/Louisiana Association of United Way provided a one-year grant of \$570,000 in 2008.

RESULTS

Staff working on the New Orleans Metropolitan Area Family Resiliency Project:

- **Used screening tools and surveys to assess the post-hurricane experiences and associated mental health issues of some 9,000 students, first responders and teachers.** See the [Appendix](#) for a description of these tools. See Findings for information on the assessment's findings.
- **Delivered counseling services to some 1,500 people.** Staff provided evaluations and mental health services to 1,388 students and to 127 first responders. See [Findings](#).
- **Implemented a procedure for making mental health referrals.** The staff designed a procedure to avoid duplication of services by maintaining clear lines of communication between school counselors and mental health providers. Initially implemented in Plaquemines Parish, the procedure was later adapted in the St.

Bernard Parish and Orleans Parish public schools and in the Recovery School District (a special school district designed to improve underperforming schools).

- **Developed evidence-based prevention and intervention strategies to prepare for future disasters and to inform policy decisions.** In particular, project staff continued to modify the "Families Overcoming and Coping Under Stress (FOCUS)" model, working in collaboration with the Jane and Terry Semel Institute for Neuroscience and Human Behavior at the University of California, Los Angeles. That experience contributed to a better response to Hurricane Gustav in 2008, according to the project directors.
- **Conducted two youth leadership programs to support youth resilience, build self-sufficiency and decrease risky behaviors:**
 - Clinicians provided weekly resiliency training to children attending the Cops for Kids Summer Camp, using three evidence-based models: Real Life Heroes, Esteem Builders and Equip for Life. The camp, jointly funded by the New Orleans Police Department and the Police and Justice Foundation, is for children between 6 and 15 from low-income neighborhoods of New Orleans.
 - A trauma-focused leadership summit in 2008 drew some 115 students in St. Bernard Parish. The goal was to teach children and adolescents that leadership comes in different forms and that they can be leaders in many areas. Students were involved in outreach projects with younger children, the elderly and others in need.

Findings

As reported to RWJF, staff working on the New Orleans Metropolitan Area Family Resiliency Project:

- **Screened 6,929 students in Orleans, Plaquemines and St. Bernard parishes in the 2007–08 school year.** Parents completed the screen for children in the third grade or younger.
 - Some 21 percent of high school students reported riding with a driver (including themselves) who was using alcohol or drugs. Five percent of the students have used alcohol or drugs to relax or feel better. When using alcohol or drugs:
 - Five percent have done so by themselves.
 - Five percent have forgotten things they did.
 - Four percent have been told to cut down.
 - Four percent have gotten into trouble.
 - Since the hurricane, 21 percent of the students have experienced a major loss or trauma. The majority of students who experienced a major loss or trauma reported

the loss as the death of a close relative, family/personal illness and loss or death of a pet. Other loss or trauma experiences included personal injuries, loss of personal items and family separation.

- Some 20 percent of the students reported that they would like to speak to a counselor. 12 percent reported feeling depressed, 12 percent reported deep sadness, 10 percent reported loneliness and 15 percent reported anger.
- Some 30 percent of the screened students met the cut-off score that indicated a need for additional mental health services. Trauma symptoms included negative affect, intrusive thoughts, avoidance, anxiety, somatic symptoms and sleep difficulty/nightmares.
- **Conducted evaluations and delivered mental health services to 1,388 students in the three parishes who scored "at risk" or who requested or were referred for services and consented to treatment.** With additional funding from other sources, 182 students continued to receive treatment after the grant period.
- **Assessed improvement over time in a sample of 31 children, ages 7 to 17, who were receiving treatment during the grant period.**
 - Although not statistically significant, trends suggested a decrease in negative coping skills, such as distraction, social withdrawal and self-criticism, and an increase in positive coping skills, such as problem solving and cognitive restructuring.
 - Statistically significant results suggested that overall PTSD symptoms and the four PTSD clusters—stressors, re-experiencing, avoidance and hyperarousal—decreased after treatment.
 - Responses suggest that, on average, parents and guardians were satisfied with the services provided to their children.
- **Interviewed some 177 students and parents who participated in the Cops for Kids summer camp program about their experiences of the disaster.**
 - Some 23 percent of the students reported experiencing a major loss or trauma since the storm. The majority of students reported the loss of relationships with relatives and/or friends or changes in family structure.
 - Of the 48 high school students who answered questions about drug and alcohol use:
 - Eight percent reported riding with a driver (including themselves) who was using alcohol or drugs.
 - Four percent have used alcohol or drugs to relax or feel better.

- When using alcohol or drugs, 4 percent have done so by themselves; 6 percent have forgotten things they did; and 5 percent have been told to cut down.
- Some 35 percent of the students met the cut-off score indicating trauma symptoms that qualified them for referrals to additional mental health services. All were given a list of local referrals.
- Reported trauma symptoms were lessened in the last week of camp, compared to the first.
- **Screened 1,340 first responders in firehouses, during police roll call and at emergency medical technician facilities in Orleans and St. Bernard parishes.** Survey questions in 2007 were tailored primarily to evacuation and hurricane experiences; the 2008 questions focused more on the recovery process and work-related stressors. Both surveys asked about mental health, PTSD and depression.
 - The majority of first responders reported that the lack of appropriate work facilities was a stressor and that they had received financial assistance of some kind.
 - Some 20 percent of respondents reported an increase in their drinking.
 - Respondents reported a 41 percent increase in conflicts with partners in 2007 and a 36 percent increase in 2008.
 - From 2007 to 2008, the number of individuals meeting the cut-off score for referral to mental health services due to depression symptoms decreased slightly while increasing slightly for PTSD symptoms.
- **Counselors delivered evaluations and mental health services to 127 first responders in the two parishes.**
- **Some 539 teachers completed surveys between the spring 2007 and spring 2008 school years to document their evacuation and hurricane experiences, levels of partner conflict and symptoms of depression or PTSD.**
 - Some 20 percent had friends killed or injured in the storm.
 - Some 24 percent met the cut-off for depression.
 - Some 11 percent met the cut-off for PTSD symptoms.

LESSONS LEARNED

1. **Spend the necessary time developing trusting and collaborative relationships with school officials and community agencies in order to destigmatize the delivery of mental health services and support and make them accessible.** The time spent was essential to reaching families in need. (Project Directors)

2. **The upheavals that accompany a disaster make adaptation and programmatic flexibility essential.** The ongoing changes in the school districts in the aftermath of Katrina made it challenging to implement screenings and interventions and limited the amount of available follow-up. Likewise, teachers and agency staff had new demands placed on them that made it difficult to participate fully in training programs. The project team had to concentrate services in areas of greatest need and be flexible in how they provided training. (Project Directors)
3. **In a hurricane-prone area, service providers must be prepared to shift gears to meet new needs.** The landfall of Hurricane Gustav in the fall of 2008 again forced the evacuation of New Orleans. The project team had to set aside some of its grant-related projects for a time to support newly traumatized families as they returned to the city and to provide new training and support to the schools. (Project Directors)

AFTERWARD

The one-year grant funding from the Red Cross/Louisiana Association of United Way that began in 2008 will allow the Family Resiliency Project to:

- Continue providing direct services to youth and their families in the greater New Orleans area.
- Train school-based professionals in southwest Louisiana parishes in "Introduction to Psychological First Aid," an intervention model used to assist people in the acute aftermath of disaster.
- Make available continuing education training in trauma-focused individual and group therapies for mental health professionals in southwest Louisiana parishes.

The four-year grant from the National Child Traumatic Stress Network, which began in 2008, will allow the Louisiana Rural Trauma Services Center, which is affiliated with the Louisiana State University Health Sciences Center departments of psychiatry and pediatrics, to develop a continuum of care, including resilience building programs, to expand and improve trauma-focused services for children, adolescents and their families in the Orleans, St. Bernard and Plaquemines parishes.

Prepared by: Kelsey Menehan

Reviewed by: Karyn Feiden and Molly McKaughan

Program Officer: Andrew Hyman

Grant ID # 59474

Program area: Vulnerable Populations

APPENDIX

Screening Tools and Intervention Models

The team used these evidence-based screening tools, pretreatment and posttreatment:

- *National Center for Child Traumatic Stress coping measure (KidCope)*, a 23-item scale that assesses the following coping skills: distraction, social withdrawal, problem solving, social support, cognitive restructuring and self-criticism.
- Center for Epidemiological Studies Depression Scale for Children (CES-DC) a 20-item measure that assesses depressive symptoms.
- UCLA PTSD Index for DSM-IV, a 22-item measure that assesses overall PTSD symptoms and four symptom clusters—stressors, re-experiencing, avoidance and hyperarousal.

The team trained clinical professionals in these two intervention models:

- *Families Overcoming and Coping Under Stress (FOCUS)* is an eight- to 10-session family intervention that addresses the impact of traumatic experiences and adversity on family life. The core components of this intervention include:
 - Constructing a family narrative time line to promote understanding among family members.
 - Providing trauma-specific psychological education to normalize reactions, enhance understanding and promote resiliency.
 - Enhancing positive parent and child coping skills.
 - Increasing positive parent-child interactions and routines.
- *Strength After Trauma (StArT)* is a 10-12 session intervention for traumatized or bereaved youth that can be used in clinical or school settings. The core components of this intervention include:
 - Developing emotional awareness.
 - Psychological education.
 - Anxiety management.
 - Problem solving.
 - Cognitive restructuring.
 - Individual and family narrative construction.
 - Relapse prevention.

BIBLIOGRAPHY

(Current as of date of the report; as provided by the grantee organization; not verified by RWJF; items not available from RWJF.)

Book Chapters

Osofsky JD, Osofsky HJ, Kronenberg M and Cross T. "The Aftermath of Hurricane Katrina: Mental Health Considerations and Lessons Learned." In *Meeting the Needs of Children, Families, and Communities Post-Disaster: Lessons Learned From Hurricane Katrina and Its Aftermath*. Kilmer RP, Gil-Rivas V, Tedeschi RG and Calhoun LG (eds.). Washington: American Psychological Association, February 2009.

Articles

Calderon-Abbo J, Kronenberg M, Many M and Osofsky HJ. "Fostering Healthcare Providers' Post-traumatic Growth in Disaster Areas: Proposed Additional Core Competencies in Trauma-Impact Management." *American Journal of the Medical Sciences*, 336(2): 208–214, 2008. Abstract available [online](#).

Kronenberg ME, Hansel TC, Brennan AM, Lawrason B, Osofsky HJ and Osofsky JD. "Children of Katrina: Lessons Learned About Postdisaster Symptoms and Recovery Patterns." *Child Development*, 81(4): 1241–1259, July/August 2010. Abstract available [online](#).

Kronenberg ME, Osofsky HJ, Osofsky JD, Many M, Hardy M and Arey J. "First Responder Culture: Implications for Mental Health Professionals Providing Services Following a Natural Disaster." *Psychiatric Annals*, 38(2): 114–118, 2008. Abstract available [online](#).

Osofsky HJ and Osofsky JD. "Viewpoint: Two Years After Katrina, Mental Health Issues Abound." *Association of American Medical Colleges Reporter*, August 2007.

Osofsky JD. "In the aftermath of Hurricane Katrina: A personal story of a psychologist from New Orleans." *Professional Psychology: Research and Practice*, 39(1): 12–17, 2008. Abstract available [online](#).

Osofsky JD. "The Real Crisis Resulting From Hurricane Katrina: Children's Mental Health Needs." Unpublished.

Osofsky JD, Osofsky HJ and Harris W. "Katrina's Children: Social Policy Considerations for Children in Disasters." *Social Policy Report: Giving Child and Youth Development Knowledge Away*, 21(1): 3–20, 2007. Available [online](#).

Osofsky JD, Putnam FW and Lederman CS. "How to Maintain Emotional Health When Working with Trauma." *Juvenile and Family Court Journal*, 59(4): 91–102, 2008. Abstract available [online](#).

Reports

Brymer M, Allen A, Saltzman W and Osofsky J. *Revised StArT Manual*. New Orleans: LSUHSC Department of Psychiatry, 2007.

Saltzman W, Lester P and Morse P. *Revised FOCUS Manual*. New Orleans: LSUHSC Department of Psychiatry, 2007.

StArT Learning Collaborative Training #1 Evaluation Report. New Orleans: LSUHSC Department of Psychiatry, 2007.

StArT Learning Collaborative Training #2 Evaluation Report. New Orleans: LSUHSC Department of Psychiatry, 2007.

Cops for Kids Report. New Orleans: LSUHSC Department of Psychiatry, 2008.

LSUHSC 2007 Cops for Kids Program: Real Life Heroes. New Orleans: LSUHSC Department of Psychiatry, 2008.

The Real Crisis Resulting From Hurricane Katrina: Children's Mental Health Needs. New Orleans: LSUHSC Department of Psychiatry, July 2008.

StArT Learning Collaborative Training #3 Evaluation Report. New Orleans: LSUHSC Department of Psychiatry, 2008.

First Responder 2007 and 2008 Survey Report. New Orleans: LSUHSC Department of Psychiatry, January 2009.

Orleans, Plaquemines and St. Bernard School Screening Report. New Orleans LSUHSC Department of Psychiatry, January 2009.

RWJF Outcome Analyses. New Orleans: LSUHSC Department of Psychiatry, January 2009.

StArT and FOCUS Learning Collaboration Participant Questionnaire. New Orleans: LSUHSC Department of Psychiatry, January 2009.

StArT Course Evaluations: Sessions 1, 2 and 3. New Orleans: LSUHSC Department of Psychiatry, January 2009.

Teacher Survey Report: St Bernard, Plaquemines and Orleans Parishes, Spring 2007–Spring 2008. New Orleans: LSUHSC Department of Psychiatry, January 2009.

Survey Instruments

"National Child Traumatic Stress Network PTSD and Depression Screening Measures." Developed by Brymer M, Steinberg of NCTSN, September 2005, and modified by Osofsky J, Osofsky H and Kronenberg M in collaboration with Orleans and Plaquemines school boards and St. Bernard Parish Unified School District, fielded January 2007–January 2008.

Presentations and Testimony

Joy Osofsky. "Hurricane Katrina: First Responders and Children of the Storm," at a symposium at the annual meeting of the International Society of Traumatic Stress Studies, Los Angeles, November 4–7, 2006.

Joy Osofsky. "Disaster Mental Health in the Wake of Hurricane Katrina," invited presentation for the 22nd Annual Carter Center Conference, Atlanta, November 8–9, 2006.

Joy Osofsky. "Trauma Through the Eyes of a Child: How to Understand and Help Traumatized Children and Adolescents," invited plenary and workshop. Annual meeting of the National Association for School Psychologists, February 2008.