Testimony
Before the Ad Hoc Subcommittee on Disaster Recovery, Committee on Homeland Security and Governmental Affairs
United States Senate

Post-Catastrophe Crisis: Addressing the Need and Availability of Mental Health Care in the Gulf Coast

Statement of

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For Release on Delivery
Expected at 10:00 a.m.
Wednesday, October 31, 2007

Madam Chairwoman and Members of the Subcommittee, I am A. Kathryn Power, Director of the Center for Mental Health Services at the Substance Abuse and Mental Health Services Administration, an agency of the U.S. Department of Health and Human Services (HHS). Thank you for the opportunity to be here today to explore SAMHSA's ongoing efforts to address the behavioral health concerns among the broad population of all ages whose lives, hearts and minds have been affected by Hurricane Katrina.

SAMHSA collaborates with other Federal efforts, States, and the private sector to prevent and treat mental and substance use disorders. We do so by directing our programs, policies, and resources toward supporting state and local efforts to build resilience and facilitate recovery. The Center for Mental Health Services is the focal point for SAMHSA's efforts to promote mental health, prevent the development or worsening of mental illness, and support the mental health services delivery system.
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The work is challenging, sometimes even daunting. Unlike an obvious broken bone, burn, laceration, or other physical wound, mental illnesses often do not have outward physical signs. Adding another layer to the complexity of seeking timely and appropriate treatment is the barrier of not knowing when or where to seek help and the lack of awareness that mental and substance use disorders often co-occur. Beyond these barriers, the issues of stigma, access, and availability of services also present roadblocks to early intervention, treatment, and recovery.

Yet SAMHSA – knowing the barriers, accepting the challenges, and fully understanding the importance of our role in advancing pubic health – continues to move forward working to improve and save lives that otherwise might be lost to devastating symptoms, isolation and even suicide. SAMHSA moves forward with the understanding that recovery is the expected outcome. Research tells us that with appropriate help, individuals with mental illnesses, substance use disorders, and co-occurring disorders can and do recover. These conditions are chronic illnesses; relapses are possible; and the recovery process can be protracted.

Today, recovery is no longer the exception; it is the expectation. To advance the recovery paradigm the public health approach is required, working with people in the context of their environments. The public health model uses systems that provide a continuum of services that focus on an entire population rather than on individuals with individual illnesses. The continuum begins with an assessment of need and ends with a population-based, evaluated approach that extends into practice, research, policy, and the engagement of the public itself.

Effective disaster preparedness and response are an essential part of SAMHSA's public health approach to building resilience and facilitating recovery. That is why we were on the ground in Louisiana and elsewhere in the Gulf region within days of Hurricane Katrina. That is why we are still responding to the behavioral health outcomes for those still struggling to heal more than two years after the waters receded. And, when I speak of

Hurricane Katrina, I'm also speaking of Hurricanes Rita and Wilma that followed quickly after Katrina, further ravaging the Gulf Coast mercilessly.

While I cannot comment about either the successes or breakdowns that may have occurred in other areas of disaster response and recovery in the wake of Katrina, I can tell you about the work undertaken by SAMHSA, the programs we supported, and the range and scope of what we did and can do in disaster mental health.

SAMHSA AND DISASTER PREPAREDNESS/RESPONSE

SAMHSA is not a newcomer to disaster mental health work. We have a long and successful track record and history. And our knowledge about the emotional toll of disaster is grounded in both research and experience that are both broad and deep.

Individual Reaction to Trauma

What we know about trauma and disaster tell us that typical individual and family reactions to a disaster, whether natural or manmade, include physical, emotional, cognitive, and behavioral responses. People may experience anxiety, loss of sleep or appetite, stress, grief, irritability, hopelessness, and family conflict. Whether the reactions are adaptive or become distressing, people affected by a disaster may experience more than one type of reaction, and these reactions may change over time. For example, one may experience hyper-vigilance immediately following a disaster and, then, over time, lapse into a state of chronic fatigue.

However, it is critical to understand that not all individuals who are exposed to trauma—even repeated trauma—may develop a social, emotional, or behavioral disorder. In mental health disaster response, we cannot and do not assume that every child, adolescent, and adult who experiences a trauma will develop symptoms. To do so would result in inappropriate labeling, undermining, and focusing on the negative aspects of a traumatic event. We know from past experience that a disaster may result in a range of expected reactions, depending on an individual's previous exposure to trauma. In disaster mental health response, our job is to help individuals understand the depth of their emotional reactions to foster effective coping strategies and to understand when additional mental health and substance abuse treatment may be needed.

The research on risk factors for behavioral disorders following a disaster provided us with insights regarding who would be most at risk in the aftermath of Hurricane Katrina. By far, severity of exposure is the single most important factor. This summary concept of "severe exposure" encompasses numerous stressors, including bereavement, injuries, terror and threat to life, witnessing horrible things, and, of course, property damage and financial loss. All of these stressors were experienced widely by survivors of Hurricane Katrina. Displacement, social disruption, and community destruction are powerful stressors with implications for the long-term psychological well-being of Katrina survivors. Personal, social, and socioeconomic factors interact with exposure.

At the same level of exposure, research has told us that people with pre-existing psychiatric problems, lower social support, or lower income generally will fare more poorly than their counterparts. Research has shown that at the same level of trauma, individuals with pre-existing mental illnesses – both those receiving treatment and those whose behavioral illnesses remain untreated – are at increased risk in the wake of a disaster. Their resilience is not as great as healthy individuals; those receiving care may deteriorate if treatment, whether behavioral or somatic, is interrupted. Table 1 at the back of this testimony provides a partial listing of research studies conducted following other disasters that examine the relationship between exposure and extent of mental distress or illness.

Clearly, our work in disaster mental health works to strike a balance between over-pathologizing traumatic experiences and ensuring that individuals who need treatment get it as early as possible, is a fine line to walk, but an important one to be aware of. Most children have supportive environments and good mental health. In addition, many children get through traumatic experiences with their mental health intact because they have so many other strengths.

Understanding the Magnitude of Disaster-related Mental Health Problems

While individual reactions to disasters vary widely, nonetheless, past research on the mental health consequences of major floods and hurricanes told us that the psychological impacts of Hurricane Katrina could be both pervasive and severe.

Estimating the extent of the problem was challenging; historically, data on mental health are not collected routinely and systematically after major disasters. Further, past studies do not have comparable findings as a result of the severity of the disaster, the way samples were drawn, how long after the disaster the studies were conducted, and whether the investigators assessed psychological disorders or emotional distress.

With those caveats, I can tell you that studies of general populations or school populations that include a mixture of severely exposed individuals and more modestly or even minimally exposed individuals have often found rates of serious disaster-related psychological problems to be in the range of 5-10 percent, with an additional 5-10 percent showing less serious emotional problems. In contrast, studies of localized populations with a higher proportion of severely exposed individuals frequently have yielded much higher rates of behavioral problems. Several studies conducted in the aftermath of Hurricane Andrew, for example, found rates of posttraumatic stress disorder (PTSD) in the range of 25-56 percent.

These and other data suggested to us that it would be useful in the wake of Katrina for our disaster mental health work to distinguish between the most severely exposed counties or parishes and other disaster-declared counties or parishes. We thought then that in the most severely exposed counties or parishes, 25-30 percent of the population might experience clinically significant mental health needs and an additional 10-20 percent might show sub-

clinical but not trivial mental health needs. That translates to an estimate of upward of approximately 160,000 individuals with significant emotional problems and over 105,000 with sub-clinical problems in Orleans and St. Bernard parishes alone. In other disaster-stricken counties or parishes, we anticipated that approximately 5-10 percent of the population might experience clinically significant mental health needs, with an additional 5-10 percent of the population showing sub-clinical but not trivial mental health needs. When extrapolated to population estimates, these prevalence rates pointed to tremendous need, a need to which we began to respond even before the rains subsided.

Early on, SAMHSA estimated that up to 500,000 women, men and children might be in need of crisis assistance and would be vulnerable to depression and other forms of psychological distress. Others experienced problems with their physical health and/or behavioral problems such as substance use in adults or conduct problems among youth. Early estimates from clinicians on the ground suggested that survivors were experiencing significant symptoms of traumatic stress. Calls to local suicide hotlines were up 60 percent and continued at a higher than average level for more than a year.

This accumulation of knowledge of both the factors affecting emotional status following disaster and expected rates of behavioral distress and the need for assistance helped guide our work in the days, weeks, months and years following Katrina along two parallel courses:

(1) Lowering psychological distress and building resilience for those otherwise healthy individuals for whom the disaster might have increased their risk for behavioral health problems; and
(2) Ensuring continuity of care for those with mental and substance use disorders.

That work – and much of the funding – continues today. I now would like to describe those funding and service paths for disaster mental health services and support that SAMHSA began providing in the hours following Katrina that continue to this day.

REBUILDING MENTAL HEALTH IN THE WAKE OF KATRINA

When Katrina struck, SAMHSA focused its resources to help the affected communities along the Gulf Coast deliver an effective behavioral health response. SAMHSA was on the ground in the Gulf Coast from the very beginning providing funds to purchase medication, mental health support for first responders, grants for crisis counseling, personnel and direct clinical services from SAMHSA staff. As Dr. Cline recently told New Orleans leaders: “Our dedication to the recovery effort remains steadfast as we are committed to restoring hope and health in the Gulf Coast region.”

Of course, dollars were a top priority to ensure that people got the services they needed. Table 2 provides a detailed description of the funding Louisiana has received to support mental health and substance abuse prevention and treatment services since Katrina struck.

To summarize, since Katrina struck:

- The US Department of Health and Human Services alone has provided more than $1.3 billion in Federal resources to support Louisiana's health care costs, including funds to serve its poor and uninsured residents, provide mental health services, support primary care clinics and private hospitals, and help New Orleans recruit and retain more doctors, nurses, and mental health professionals.

- Total Federal funds of at least $338 million were targeted to address critical post-Katrina mental health and substance abuse issues in Louisiana. These resources helped support a range of services, from crisis counseling and inpatient clinical services to school-based screenings and youth suicide prevention.

SAMHSA alone has provided more than $170 million in mental health and substance abuse funding to Louisiana, including $64 million in 2007 in both formula and discretionary grants.

However, SAMHSA's work has been far more about serving people in the spirit of the public health than it has been about dollars and cents. Simply put, SAMHSA mounted a response to the Katrina disaster that was as comprehensive as it was complex. Our response encompassed the principles of collaborating with State and local officials as well as disaster relief organizations—both public and private. Our strategies promoted wellness and resilience, prevention of substance abuse and other harmful coping strategies, and help-seeking behavior. SAMHSA's response efforts brought to the fore the importance of proactive and comprehensive mental health and substance abuse response as a vital and life-saving activity that significantly aids all aspects of disaster recovery.

Let me describe just a few of the key elements we brought to bear in Louisiana and elsewhere in the Katrina-affected areas.

- ***Crisis Counseling Training and Assistance Program (CCP):*** When it comes to disaster mental health services, our support comes primarily through an Interagency Agreement with Federal Emergency Management Agency (FEMA) which fund the SAMHSA-implemented and monitored Crisis Counseling Training and Assistance Program (CCP), a program authorized under Section 416 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1974.

  For over thirty years, the CCP has supported *short-range* solutions-focused interventions with individuals and groups experiencing psychological and behavioral sequelae to large scale disasters. These interventions help disaster survivors understand their situation and reactions, mitigate against additional stress, help survivors review their options, promote mental health using specific evidence-based coping strategies, provide emotional support, and encourage links with other individuals and agencies able to help survivors recover to their pre-disaster level of functioning. The Crisis Counseling Program uses an outreach model that includes, individual crisis

counseling, group crisis counseling, public education, community networking and assessment and referral to reach those affected in a federally declared disaster area. The program includes both short-term (60 day) and long-term (9 month) grant funding.

- ***SAMHSA Emergency Response Center (SERC):*** We established the SAMHSA Emergency Response Center, or SERC, through which we coordinated the overall Federal response for mental health and substance abuse issues around Katrina. It was uniquely established to address the immediate need that arose from Katrina. The SERC operated 12 hours a day, seven days a week at the height of the disaster and, in the days, weeks, and months immediately following Katrina.

  While it was in operation, the SERC became a one-stop source for the public. We responded to over 5,000 e-mails and so many phone calls that we lost count. We developed and disseminated hundreds of thousands of copies of publications, assessment tools, training guidelines, and other publications on disaster behavioral health needs to states, shelters, and others.

- ***Katrina Assistance Project (KAP):*** SAMHSA coordinate the mobilization of Federal and civilian staff to meet local requests for mental health and substance abuse services, as well as program and administrative staff in the impacted States. The Katrina Assistance Project (KAP), a collaborative project between SAMHSA and a number of national professional mental health and substance abuse provider organizations, was developed to respond as quickly and efficiently as possible. Between September 2005 and June 2006, SAMHSA's KAP filled over 1,000 approximate two-week deployment assignments. Team members included mental health and substance abuse services professionals serving in a variety of clinical and behavioral counseling roles to meet the unique requirements of each site. Collectively, the deployment assignments included: professional counselors; substance abuse counselors; social workers; psychologists; psychiatrists; physicians; nurses; and pastoral counselors.

  SAMHSA's teams reported conducting nearly 117,,000 counseling sessions helping thousands of vulnerable men and women reconnect or connect for the first time with the essential services and medicine they needed to get through this situation and to reconstruct their lives.

- ***National Suicide Prevention Lifeline:*** We mobilized the SAMHSA-sponsored National Suicide Prevention Lifeline, to assist evacuees around the country who were in crisis. This resource was sorely needed—two months after the storms hit, we recorded a 60% increase over average pre-Katrina call volume to approximately 1,400 calls per week.

- ***Public Service Announcements:*** Together with the Ad Council, SAMHSA launched an outreach campaign of television and radio public service announcements— in English and Spanish— to encourage survivors who might have been experiencing psychological distress following the hurricanes to consider seeking mental health services. The PSAs

were targeted to reach adult survivors and first responders directly as well as parents and caregivers who can assess their children's emotional well-being. Viewers and listeners were encouraged to take time to check in on how they and their families were doing, and call a confidential toll-free number (1-800-789-2647 for adults/parents and 1-800-273-TALK for first responders) to speak to a trained professional who could assist with information and referrals to local services. A second wave of PSA materials were released around the one-year anniversary of Katrina in both the Gulf region as well as States to which evacuees were relocated.

- ***National Summit:*** SAMHSA convened a national summit, *The Spirit of Recovery: All-Hazards Behavioral Health Preparedness and Response—Building on the Lessons of Hurricanes Katrina, Rita, and Wilma,* on May 22–24, 2006. Teams appointed by the respective governors of 46 States, 7 Territories, and the District of Columbia came together in New Orleans to assess the progress made on disaster health plans and to help address existing problems and continued needs, particularly around regional collaboration. Through plenary sessions, topical breakouts, and regional workgroups, participants reviewed lessons learned from the last hurricane season and identified opportunities to work more closely together to resolve unmet behavioral health needs. While looking back at past efforts, tasks completed, and remaining work to be done as a result of the 2005 hurricanes was a critical component of the summit, looking ahead and preparing for future disasters through coordinated all-hazards preparedness was also key.

OUTCOMES OF OUR WORK

While much physical and emotional rebuilding remains to be accomplished, the work that SAMHSA undertook in collaboration with Federal, State and local officials in Louisiana and elsewhere in the affected Gulf Coast regions stand as testimony to what can be done, and be done well, to help rebuild the emotional health and wellbeing of a proud population from a self-sufficient and proud state.

Our expectations regarding the nature and magnitude of the mental health issues confronting Katrina survivors were borne out both on the ground through our own experience and in a study recently completed by Ronald Kessler of Harvard University and his colleagues. Assessment of pre-and post-Katrina data found that the estimated prevalence of serious mental illness roles from 6.1 percent before Katrina to 11.3 percent thereafter; moderate to mild mental illness rose from 9.7 percent to 19.9 percent. Interestingly, the prevalence of suicidal ideation and plans for suicide dropped from 8.4 to 0.7 percent and from 3.6 to 0.4 percent, respectively. While we cannot specifically say that access to the suicide prevention lifeline was a contributing factor to the drop in suicidality we can be confident in knowing it was a resource we made available.

Our successes and failures in reaching out to people through the Crisis Counseling Program, whether to assure them that their feelings were normal and healthy or to urge them toward further evaluation and treatment, were the subject of an extensive cross-site evaluation. The evaluation examined the *reach, quality and pathways to excellence* across the crisis counseling programs multiple sites in disaster declared areas and in areas in which evacuees were relocated that were not declared disaster sites.

The effectiveness of the crisis counseling program was held to be "hugely successful". Participants and counselors were overwhelmingly positive about the quality of services they received or provided.

- Its reach was found to be
  - Large -- 1.3 million encounters;
  - Deep – good penetration in the stricken areas
  - Wide -- spanning the country from New Jersey to Utah
  - Timely
  - It provided competent and respectful services to large numbers of ethnic minorities and older adults in proportions sometimes even greater than their numbers in the overall population.
  - While the program did not reach youth in proportion to their representation in the population, local programs did make special effort to reach youth through classrooms. [It is unclear whether the underrepresentation was related to relocation of many youth outside the Katrina-affected region or the closure of schools and other locales at which youth congregate.]
  - Many people with severe exposure to the disasters were reached, though not all of those in need of more intensive services were referred to them.
- In terms of quality, the program performed best in terms of the respectful manner in which counselors interacted with participants. Participants were helped to feel more confident in their own abilities to help themselves and their families, and they were helped to know that their own feelings were ok. Participants also were positive about the help they had been given to stay healthy and active and the information they received on reactions to disaster. Counselors themselves were generally well-protected against stress by their programs.
- A "path analysis" helped assess the factors that predict participant outcomes at the county level. Four service delivery characteristics of counties were found to be strongly related to better participant outcomes. These specific factors will help guide future CCP work and included:
  - Offering more intensive services (longer sessions or more visits)
  - Seeing participants in their own homes
  - Making more referrals for psychological services
  - Having fewer providers experiencing stress themselves.

A number of recommendations were made that can further boost the effectiveness of both the national program as well as the local programs that provide the direct services. These recommendations are now being integrated into the ongoing feedback that has helped the CCP grow and succeed over its 30-year history. They are found at the back of this testimony at Table 3.

Thus, SAMHSA's disaster mental health programming continues to be informed and to be improved through the knowledge gained by research and by experience.

A NOTE ON WHAT MAY LIMIT MENTAL HEALTH SERVICE DELIVERY IN RESPONSE to TRAUMA

Before closing, I would like to point out that while we would like to say that our work is complete and that life in Louisiana today approximates what it was in the days before Katrina and her sister hurricanes, we cannot. However, it is not for want of effort by SAMHSA, by the HHS and by the Administration, however:

1. SAMHSA does not instruct State governments on how best to deploy its disaster mental health funding. Indeed, while SAMHSA administers these grants, States themselves know best what their immediate needs are and how best to deploy the resources we provide to meet those needs. We know that a top-down approach to identify priorities for rebuilding and recovery is not the way to go.

2. SAMHSA urges Louisiana to use the funding that has been provided for disaster mental health work to meet the mental health and other behavioral health needs of its people. For example:

    - Today, some $12.8 million in Crisis Counseling Program funding has been obligated but unexpended in Louisiana; another $20 million in approved funds remains unobligated and available for draw down.

    - Some $1.3 million in FY 2005 mental health block grant funding (around 22 percent) was never expended.

    - As of October 26, 2007, Louisiana has drawn down approximately 75 percent of the $221 million they received in supplemental Social Services Block Grant funds in 2005. The Louisiana state plan for supplemental SSBG funds allocates $80 million of the total $221 million to the State Department of Health and Hospitals for mental health and substance abuse services. Louisiana has until September 30, 2009, to expend all supplemental SSBG funds.

3. Similarly, we cannot command other states and communities to continue working with Katrina victims who have been displaced around the Nation.

SAMHSA believes that the work of rebuilding lives and communities, the work of building resilience and facilitating recovery begins in families, neighborhoods and communities themselves. A bureaucratic, top-down approach isn't in the best interests of the people we work to serve. What SAMHSA can do best is provide state of the science and state of the art tools and resources to our colleagues on the ground, and that is precisely what we have done over the months since Katrina.

Conclusion

Thank you for the opportunity to appear today. I will be pleased to answer any questions you may have.

TABLE 1

Postdisaster Functioning by Exposure and/or Severity of Exposure

Article	Outcomes Assessed and Observed
Bravo et al., 1990	2 years after floods/mudslides in Puerto Rico, 912 survivors (375 previously interviewed with DIS (ECA version). In retrospective sample, severity of exposure predicted presence of depressive, somatic, alcohol use, and PTSD symptoms, even with predisaster symptoms controlled, but effects small. Few effects in smaller prospective sample (but note also fewer symptoms in severe group).
Caldera et al., 2001	6 months after Hurricane Mitch, 496 adults at primary care center assessed with Harvard Trauma Questionnaire. Based on cutpoint of 50, rates of PTSD were 4.5% among the less exposed, 9% among those were highly exposed. 23 of 29 cases re-interviewed at 1 year; 12 met criteria for current PTSD. In regression, injury and house destroyed predicted symptom level.
David et al., 1996	6 - 12 months after Hurricane Andrew, 61 adult volunteers interviewed with Structured Clinical Interview for DSM-III-R. 51% met criteria for new onset disorder including 36% PTSD, 30% major depression, 11% generalized anxiety disorder, 10% panic.
Freedy et al., 1992	8-12 weeks after Hurricane Hugo, 418 MUSC employees assessed using measure of resource loss and SCL-90. Resource loss highly correlated with GSI for SCL-90. Clinically significant distress displayed by 34% of men and 44% of women with high losses (5% and 11% of men and women with few losses). High loss = upper quartile on measure.
Garrison et al., 1993	1 year after Hurricane Hugo 1,264 ninth and tenth graders ranging in age from 11 to 17 assessed with 16 item PTSD symptom scale (investigator derived to match DSM). Overall 5%. In ascending order of prevalence, rates of PTSD were 1.5% for black males, 3.8% for white males, 4.7% for black females, and 6.2% for white females. Odds for PTSD increased as severity of exposure increased.
Garrison et al., 1995	6 months after Hurricane Andrew, 400 adolescents and their parents surveyed by phone using modified short version of the DIS as measure of PTSD. PTSD criteria met for post Andrew by 7%. Odds increased with fear for safety during storm.
Gleser et al., 1981	2 years after Buffalo Creek dam collapse, 380 adults and 273 children assessed with PEF, early version of SCL-90, and measure of sleep disruption. Much attention to quantifying exposure. 66-70% of adults and 30% of children evaluated as moderately or severely impaired on PEF. Anxiety approximately 60% and 20%, depression approx. 70% and 25%. 92% sleep disturbance.
Goenjian et al., 2001	6 months after Hurricane Mitch in Nicaragua, 158 adolescents from 3 differentially exposed cities assessed with CPTSD-RI and Depression Self-Rating Scale. Rates of PTSD and depression were 90% and 81% in Posoltega (most affected), 55% and 51% in Chinandega (intermediate), and 14% and 29% in Leon (least affected). City accounted for 47% of the variance in PTSD scores.

Ironson et al., 1997	1 and 4 months after Hurricane Andrew, 180 adults assessed using measures of resource loss, IES, PTSD questions following DSM-III-R criteria, and multiple measures of immune functioning. 33% met PTSD criteria, 44% in high range on IES. Damage, life threat, injury, and especially perceived loss correlated highly with PTSD symptoms. Sample differed from laboratory controls in NKCC, CD56, CD4, and CD8 (but not WBC) in the direction of lower immunity.
LaGreca et al., 1996	3, 7, and 10 months after Hurricane Andrew, 442 children assessed with CPTSD-RI. At 3 months, 27% moderate PTSD, 29% severe or very severe; at 7 months, 23% moderate, 18% severe or very severe; at 10 months, 21% moderate, 13% severe or very severe. Means were 30, 24, and 21. Severity of exposure strong predictor of scores.
Lonigan et al., 1993	3 months after Hurricane Hugo, 5687 children surveyed using CPTSD-RI. Symptoms increased as severity of exposure, home damage, and length of displacement increased. PTSD positive in 16% of children whose homes were destroyed v. 4 % in those who experienced little or no damage.
Norris, 1992	1 year after Hurricane Hugo, 1000 adults from 2 stricken and 2 control cities assessed with Traumatic Stress Screener. Among those exposed to Hugo, 83% met Criterion B, 42% met D, only 6% met C, so only 5% met all symptom criteria. Criterion C drove diagnosis (also true for other traumatic events assessed).
Norris et al., 1999	6 and 30 months after Hurricane Andrew, 241 victims assessed using RCMS for PTSD and CES-D. PTSD 26% Wave 1, 29% Wave 2. Depression (score > 16) 39% Wave 1, 26% Wave 2. On continuous measures, intrusion and arousal declined over time but depression and avoidance did not. Symptoms increased with life threat, injury, property damage, and postdisaster ecological stress.
Sattler et al., 1995	4 weeks after Hurricane Andrew, 89 victims living in shelters completed questionnaire including 47-item Multiscore Depression Inventory and additional questions about PTSD symptoms (no scale given). 19% mildly depressed, 27% moderately depressed. Sizable percentages reported PTSD symptoms such as frequent thoughts about hurricane, loss of interest in activities, difficulty sleeping, arguing with family, irritability.
Shannon et al. ,1994.	Three months after Hurricane Hugo, 5000 youth aged 9-19 assessed using CPTSD-RI. 5% full PTSD
Shaw et al., 1995	8 and 32 weeks after Hurricane Andrew, 144 children from High Impact and Low Impact schools assessed with CPTSD-RI, Achenbach's Teacher's Report Form (TRF), and 21 measures of disruptive behavior from Dade County Schools. At 8 weeks, 56% of children in high impact school severe on RI, compared to 39% from low impact school. At 32 weeks, 55% and 38%. However, more TRF psychopathology in low impact schools. Decrease in disruptive behavior in the region of the high impact school, later followed by return to normal levels. But increase in the region of low impact school, followed by return to normal.
Smith, E. et al., 1986	11 months post St Louis flood or dioxin exposure, 547 persons interviewed retrospectively with DIS. Sample composed of 189 unexposed, 139 indirectly exposed, and 173 directly exposed to disaster. Exposed broken down into flood (75), dioxin (29), or flood and dioxin (69). Psychopathology minimal but victims showed

	elevations in symptoms of depression. somatization, anxiety, and PTSD compared to controls. No difference in drug abuse, panic disorder. Primarily exacerbated pre-existing symptoms. New symptoms more prevalent for depression and PTS only. Rates of new PTSD 3.6% among exposed (1.4% flood, 6.9% dioxin, 4.5% flood and dioxin).
Steinglass & Gerrity, 1990	4 and 16 months after tornado/ flood, 39 tornado victims (Albion, PA) and 76 flood victims (Parsons, WV) assessed using DIS and IES . At 4 months, 49% and 76% high stress symptoms on IES. At 16 months, 24% and 41%. In Parsons, PTSD rates 15% at 4 months, 5% in past 4 months at 16 months. In Albion, 21% anytime in 16 months after.

TABLE 2
FEDERAL SUPPORT FOR MENTAL HEALTH/SUBSTANCE ABUSE SERVICES IN LOUISIANA, FY 2005-2007

TOTAL FEDERAL MH/SA FUNDS MADE AVAILABLE TO LOUISIANA

AGENCY	**AMOUNT**
SAMHSA	$174 million
ACF	$ 80 million
FEMA	$ 84 million
TOTAL	**$338 MILLION**

SAMHSA MENTAL HEALTH AND SUBSTANCE ABUSE FUNDING TO LA

	2005	**2006**	**2007**
Discretionary	20 awards totaling $17,229,225	20 awards totaling $27,139,369	16 awards totaling $31,074,491
Formula Grants	4 awards totaling $33,097,366	4 awards totaling $32,717,192	4 awards totaling $33,129,399
Total	**24 awards totaling $50,326,591**	**24 awards totaling $59,856,561**	**20 awards totaling $64,203,890**

ACF SOCIAL SERVICES BLOCK GRANT FUNDING TO LOUISIANA

	FY 06 SSBG	Supplemental	Drawdown as of 10/26/07	Balance
Louisiana	$26 million	$221 million	$166 million	$55 million

- Louisiana's state plan for supplemental SSBG spending allocates $80 million to the Department of Health and Hospitals for mental health and substance abuse services. The state plan divides those funds as follows:

Immediate Intervention: Crisis Response System	$37 Million
Behavioral Health Services for Children and Adolescents	$18 Million
Behavioral Health Program Restoration and Resumption	$10 Million
Substance Abuse Treatment and Prevention	$ 8 Million
Preventing Inappropriate Institutional Care (Dev Dis)	$ 7 Million

FEMA: LOUISIANA CRISIS COUNSELING PROGRAM (CCP)

CCP FUNDING

- In 2006, the Louisiana Crisis Counseling Program was approved for $72 million including $20,048,610 for the Intermediate Service Program and 51 million for the Regular Services Program (RSP), managed by SAMHSA. As of September 2007, $31 million of the RSP funds have been federally obligated; however, the State has drawn down $19 million of these funds. So there are $12.8 million in obligated but unexpended funds and $20 million in approved funds remaining.

- Louisiana Crisis Counseling Program and Specialized Crisis Counseling Services (CCP and SCCS) school-based initiatives provide an array of interventions in schools throughout the State. These services are being delivered to 138 schools in the metropolitan New Orleans area. Services address issues directly affecting children through cognitive behavioral and stress reduction activities. These services also address the educational and stress reduction needs of parents and teachers in those schools. LSU-HSC provides supervision and consultation for LA-CCP/SCCS school-based services.

MISSION ASSIGNMENTS

- Mental Health and Substance Abuse clinicians were deployed by SAMHSA to Louisiana to provide supplemental, clinical services from September 2005 to June 30, 2006. These deployments were funded by FEMA through mission assignments to SAMHSA totaling $12 million. During this period, these clinicians provided nearly 90,000 counseling sessions.

TABLE 3
RECOMMENDATIONS FOR FURTHER DEVELOPMENT
Crisis Counseling Program Cross-Site Evaluation

Recommendations for the National Program

- Increase capacity for evaluation of services to children and youth
- Improve counselor skill in eliciting participant stories and experiences
- Increase counselor capacity to recognize and respond to more serious levels of participant distress
- Determine the boundaries of how much programs should vary in service mix and delivery
- Provide additional guidance pertaining to effective group counseling approaches
- Improve the overall quality of counselor training
- Advocate for better mental health care for disaster victims who need more than crisis counseling.

Recommendations for Local Programs

- Increase the overall intensity of services by spending more time with participants and/or following up with them more often
- Increase the overall intimacy of services by choosing settings, such as homes, that foster privacy and focus
- Increase the frequency of referrals to psychological services
- Reduce counselor job stress, especially in badly stricken areas.
- Employ an adequate number of professional counselors to provide expert supervision, advice and triage.