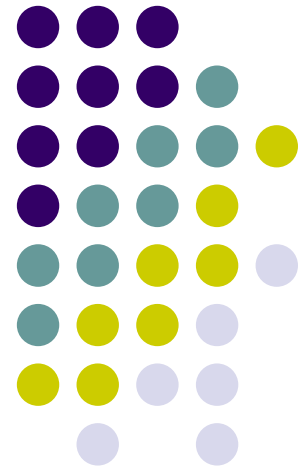


Assessing the Early Mental Health Effects of the Deepwater Horizon Oil Spill

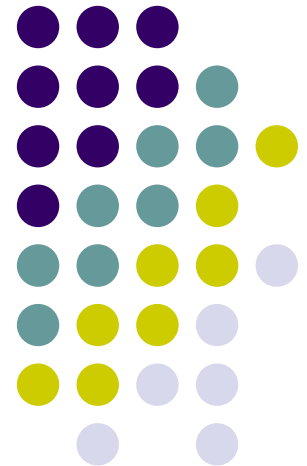
Howard J. Osofsky, M.D., Ph.D.
LSU Health Sciences Center
Institute of Medicine Meeting
New Orleans, June 22, 2010



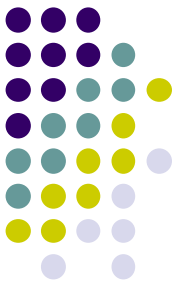
Hurricane Katrina Mental Health Data Affecting Early Response Deepwater Horizon Event

Howard J. Osofsky, M.D., Ph.D., Joy D. Osofsky, Ph.D. and Tonya C. Hansel, Ph.D.,
LSU Health Sciences Center, New Orleans

(Funded by Baptist Community Ministries, Louisiana Spirit, National Child Traumatic Stress Network, Robert Wood Johnson Foundation, United Way/Red Cross)



Child & Adolescent Screenings



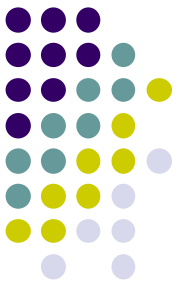
- Over 23,000 students screened regarding traumatic risk and exposure due to Hurricanes Katrina and Rita (in collaboration with schools)
 - The National Child Traumatic Stress Network (NCTSN) Hurricane Assessment and Referral Tool
 - Screenings began immediately following Hurricanes Katrina and Rita and are conducted annually at the beginning of each academic year.
 - Students in 4th-12th grades complete the screener themselves and parents complete the screener for children in 3rd grade and under.

Hurricane Traumatic Exposure & Risk



- Of the students screened:
 - 20% experienced a prior trauma
 - 21% experienced a trauma since the storm
 - 25% reported that a family member or friend was injured or died due to the storm
 - 72% lost toys or personal items
 - 22% were separated from a parent or caregiver
 - 81% were displaced
 - 79% reported that their house was damaged or destroyed

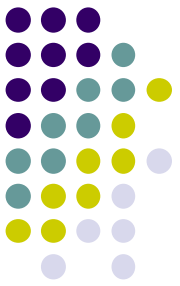
Traumatic Symptoms



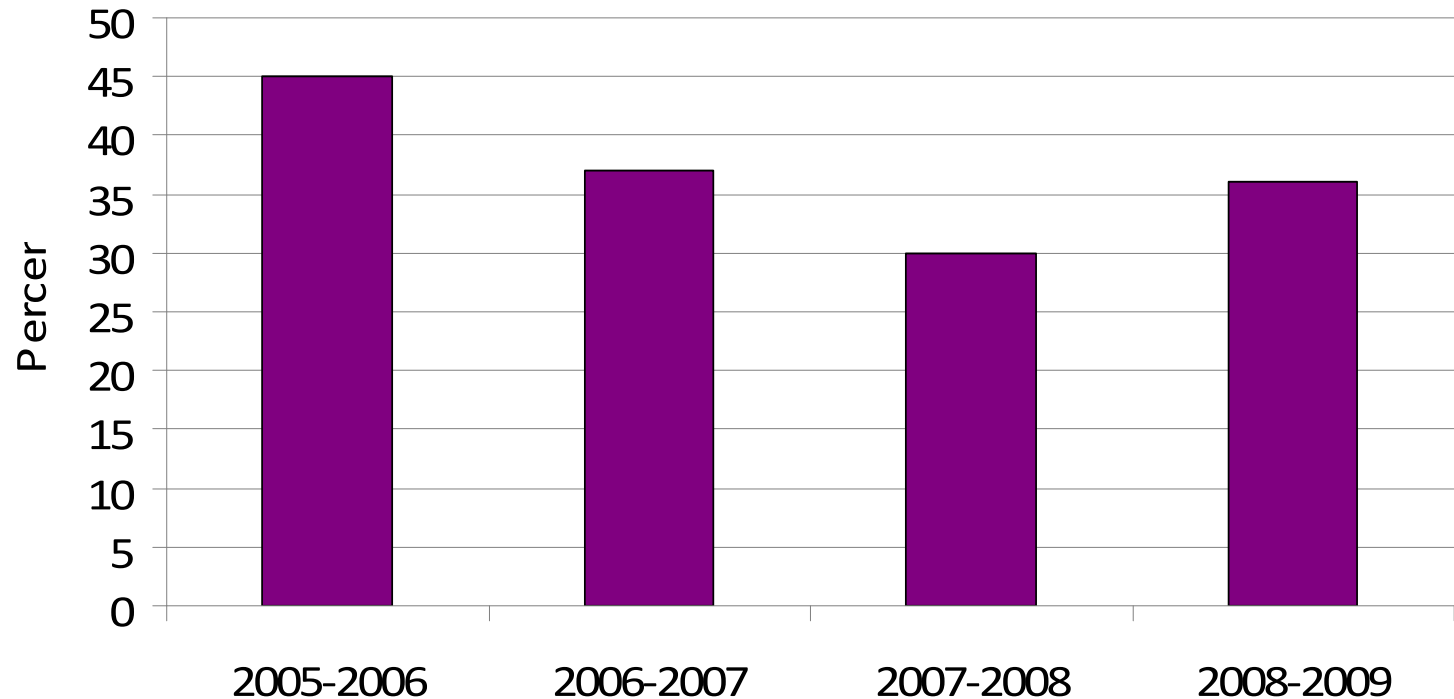
- The screening contains a questionnaire regarding trauma symptoms including negative affect, intrusive thoughts, avoidance, anxiety, somatic symptoms, and sleep difficulty.
- Based on this NCTSN measure, a student should be considered for mental health referral if they responded *quite a bit* or *very much* to at least 4 items.
- Children meeting the cut-off were given a list of referrals or brief evaluations from LSUHSC mental health professional

Traumatic Symptoms Overtime

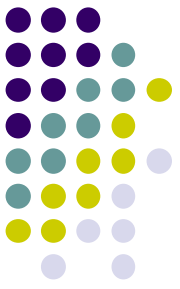
NCTSN Hurricane Assessment and Referral Tool



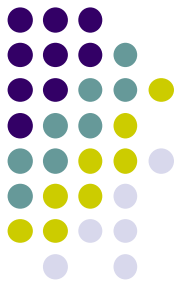
Percent of Children & Adolescents Meeting Cut-off



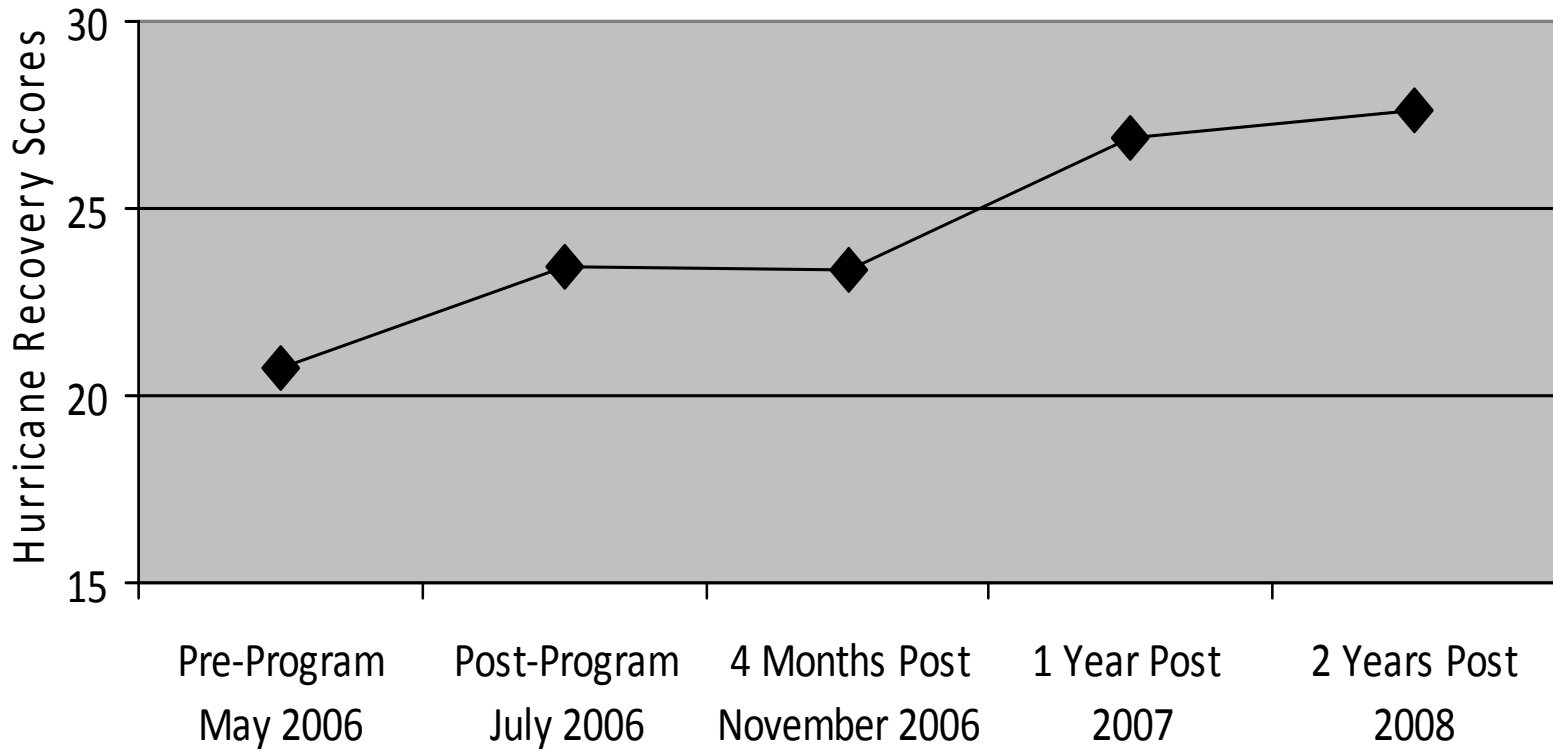
Youth Leadership Program



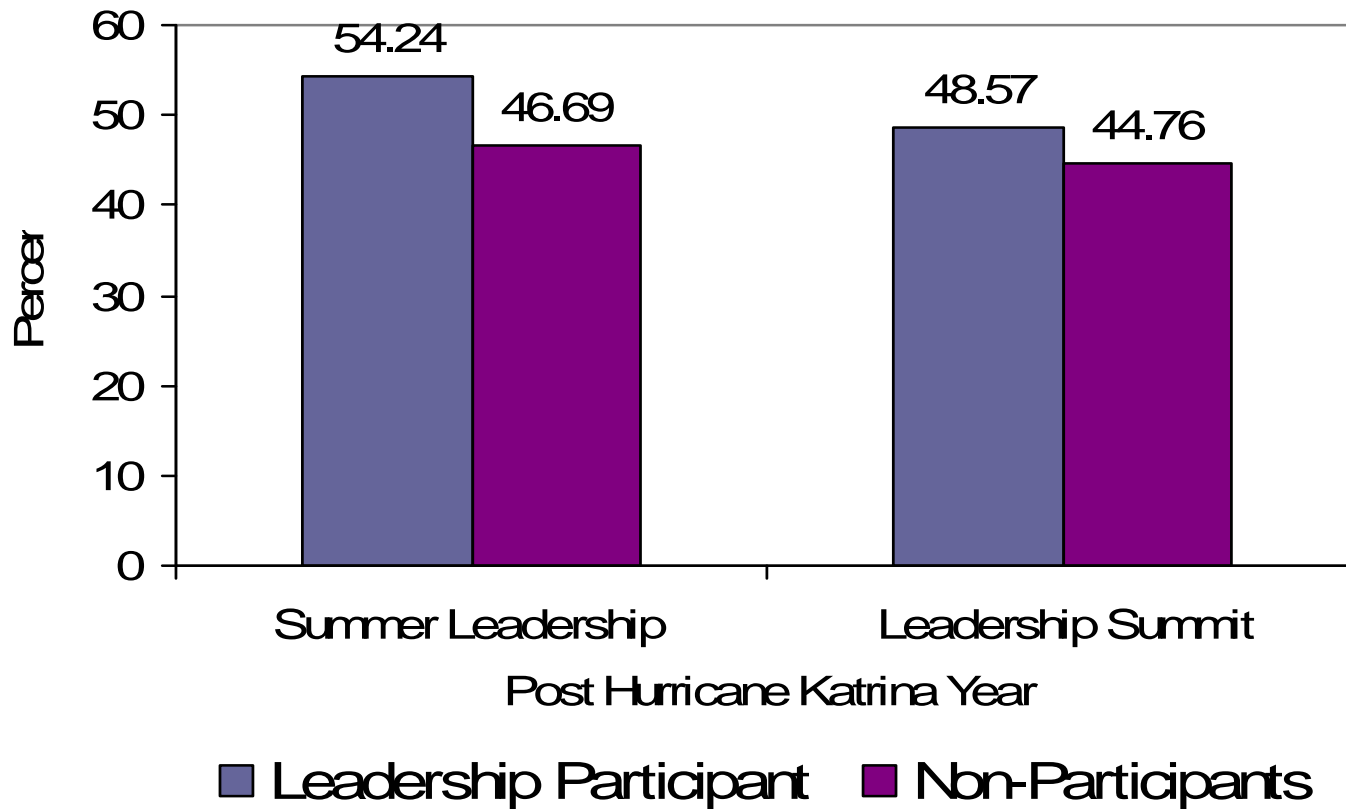
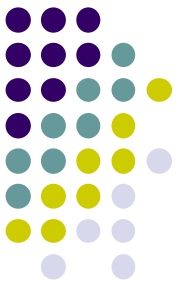
- The Youth Leadership Program, aims to enhance resilience and self-efficacy among students' and to further support their active contributions to the school and community.
- Two Youth Leadership Programs (Summer Leadership and Leadership Summit) were made available to 133 students through a collaborative effort with the LSUHSC trauma team and St. Bernard Parish School System.



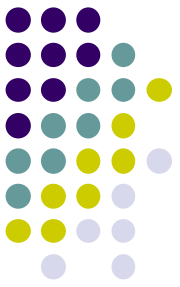
Youth Leadership participants continued to benefit, related to hurricane recovery, when assessed immediately following the program, and again 4 months, 1 year, and 2 years later.



Youth Leadership participants compared to peers, who did not participate, scored significantly higher on a measure of self-efficacy.



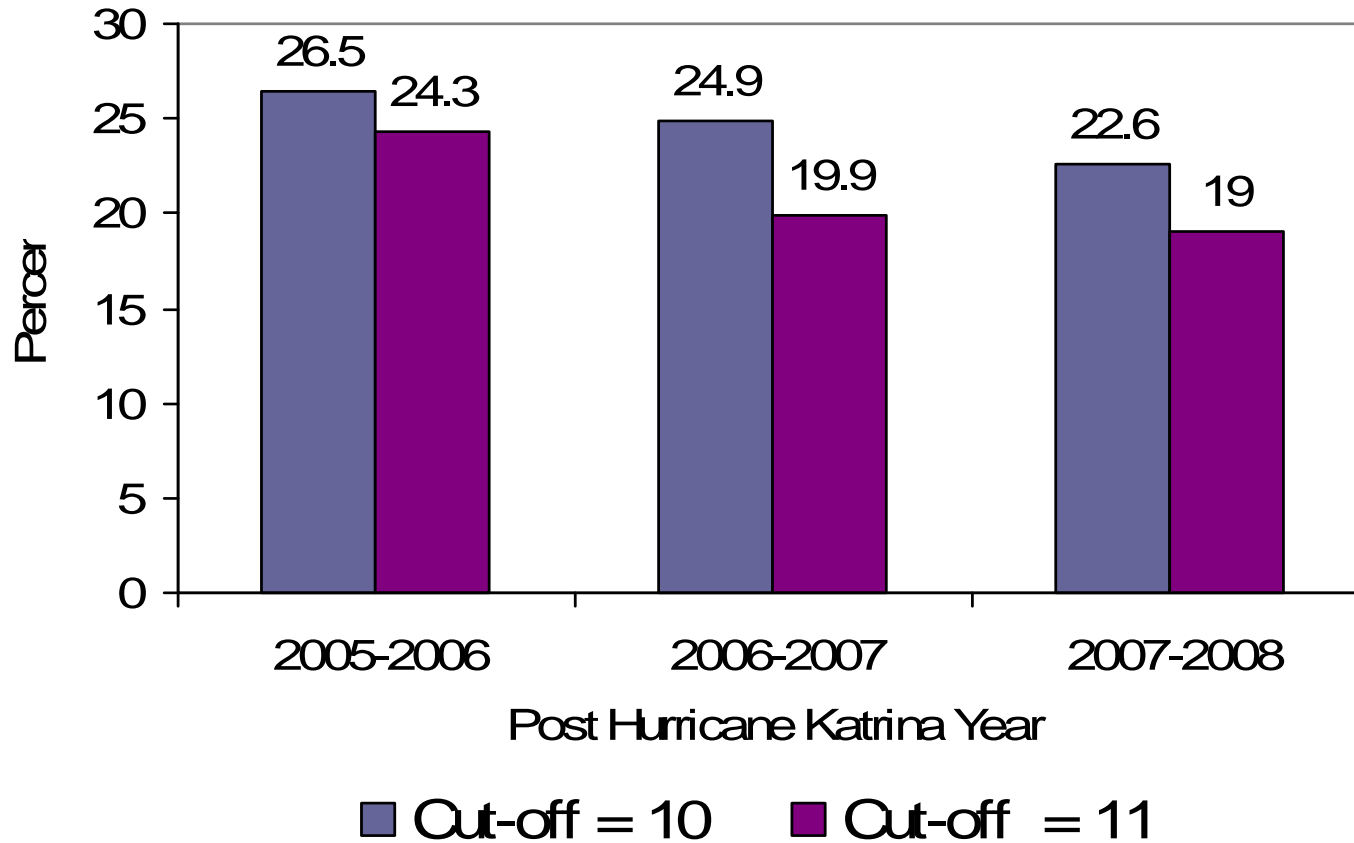
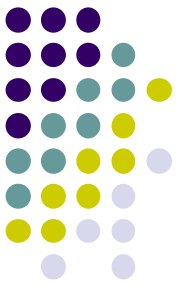
First Responder Data Summary



- First responders from Orleans and St. Bernard Parishes were surveyed over three post Hurricane Katrina years (2005-2008).
 - Time 1 = 2005-2006 ($N = 765$)
 - Time 2 = 2006-2007 ($N = 642$)
 - Time 3 = 2007-2008 ($N = 681$)

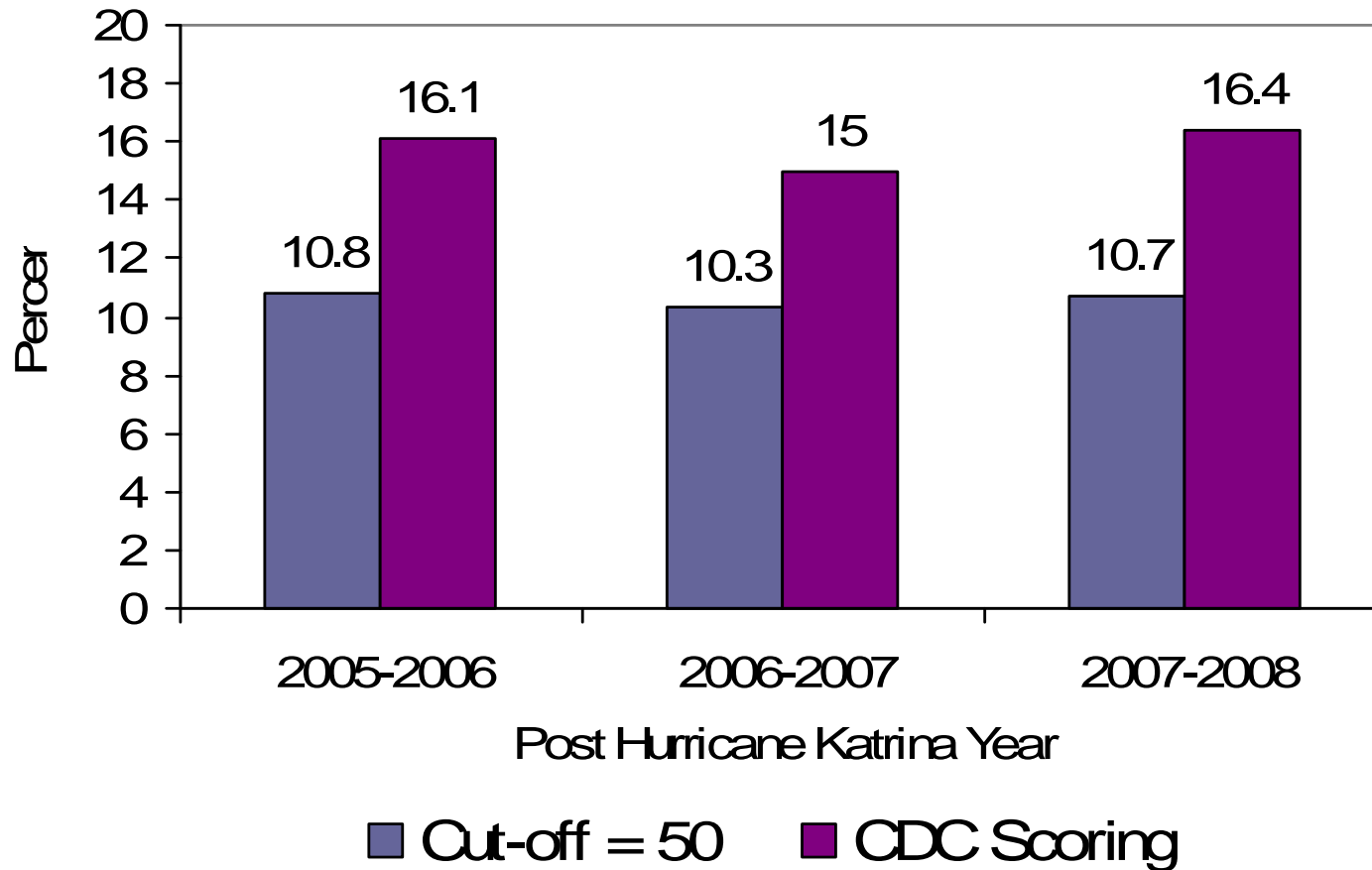
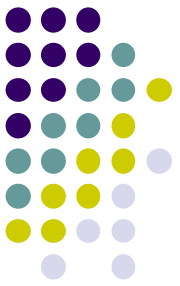
Depression

Measured by the CES-D (10 item form)



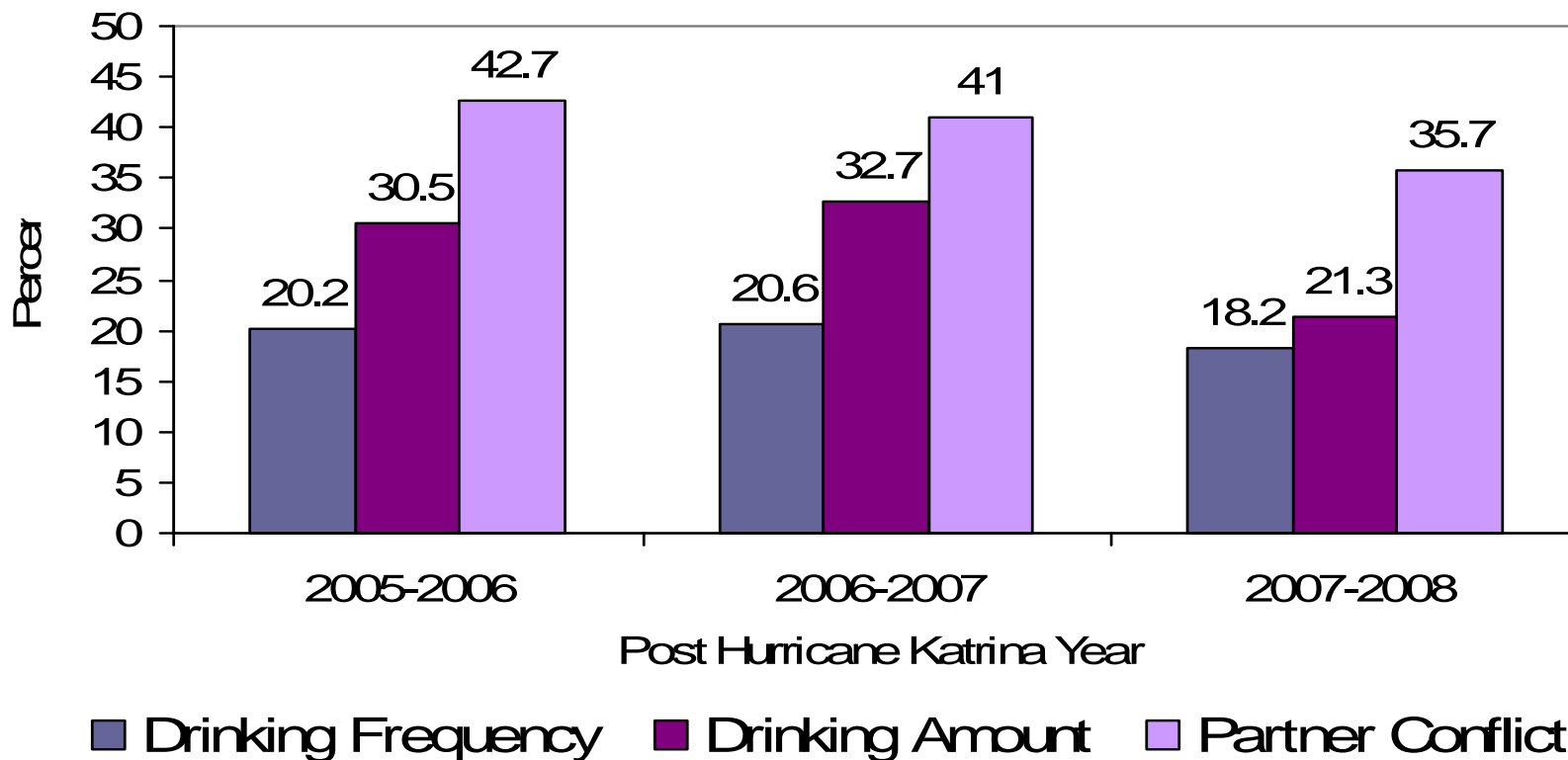
Post Traumatic Stress

Measured by the PCL-C

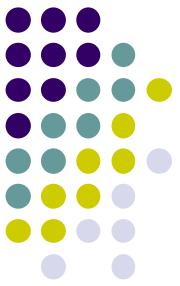


Substance Use & Partner Conflict

Self-report measures of increase in drinking frequency, drinking amount and partner conflict.



Serious Mental Illness 1 Year Post Hurricane Katrina (Kessler, 2006)



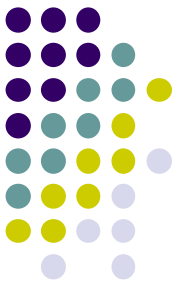
Before Katrina

6.1% prevalence of
serious mental illness

Since Katrina

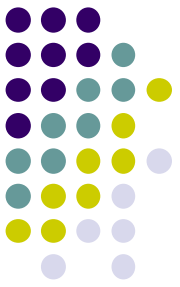
11.3% prevalence of
serious mental illness

Expectable Symptoms/Behaviors Based on Prior Research



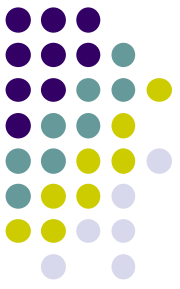
- The beginnings of a corrosive community
 - Anger, anxiety
 - Suspiciousness of national response, local response, BP response
 - Acute stress reactions – posttraumatic stress disorder, especially avoidance, anxiety, and hyperarousal
 - Symptoms of depression

Expectable Symptoms/Behaviors Based on Prior Research



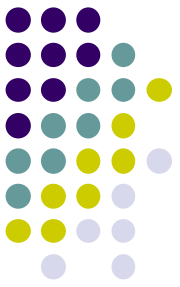
- Arguing and fighting
- Increased use of alcohol and drugs
- Domestic violence
- Child abuse/neglect

Results from Focus Groups



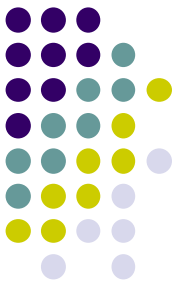
- I am having symptoms like after Katrina – not flashbacks but anxiety and anger
- Questions about whether I can make it again and rebuild my life
- I don't want handouts – I would like “hand-ups”
- Will people ever be able to fish again - it was our life – will things ever re-open
- Charities gave us food cards for groceries, but we needed help for clothes, bills, other expenses

Results from Focus Groups



- My husband has only had 7 days of work, but in a way, I'm relieved. I worry about his health and exposure to toxins
- My son gets so angry; then he threatens suicide
- I am afraid there will be more water than Katrina if I start crying; I can't be optimistic
- My husband is drinking now and he didn't used to drink

Directions for the Future



- More evidence based needs assessments
- Culturally sensitive involvement with local stakeholders
- Attention to and support for needs of children and families, especially potential for risk taking behaviors in adolescents
- Linking medical and behavioral health interventions
- Interventions to strengthen resilience
- Longitudinal assessments of public health, medical and mental health components