

Impact of the Oil Spill Disaster on Children:

Short and Long-Term Concerns

***IOM Workshop on Human Health Effects of
Gulf Oil Spill***

June 22-23, 2010

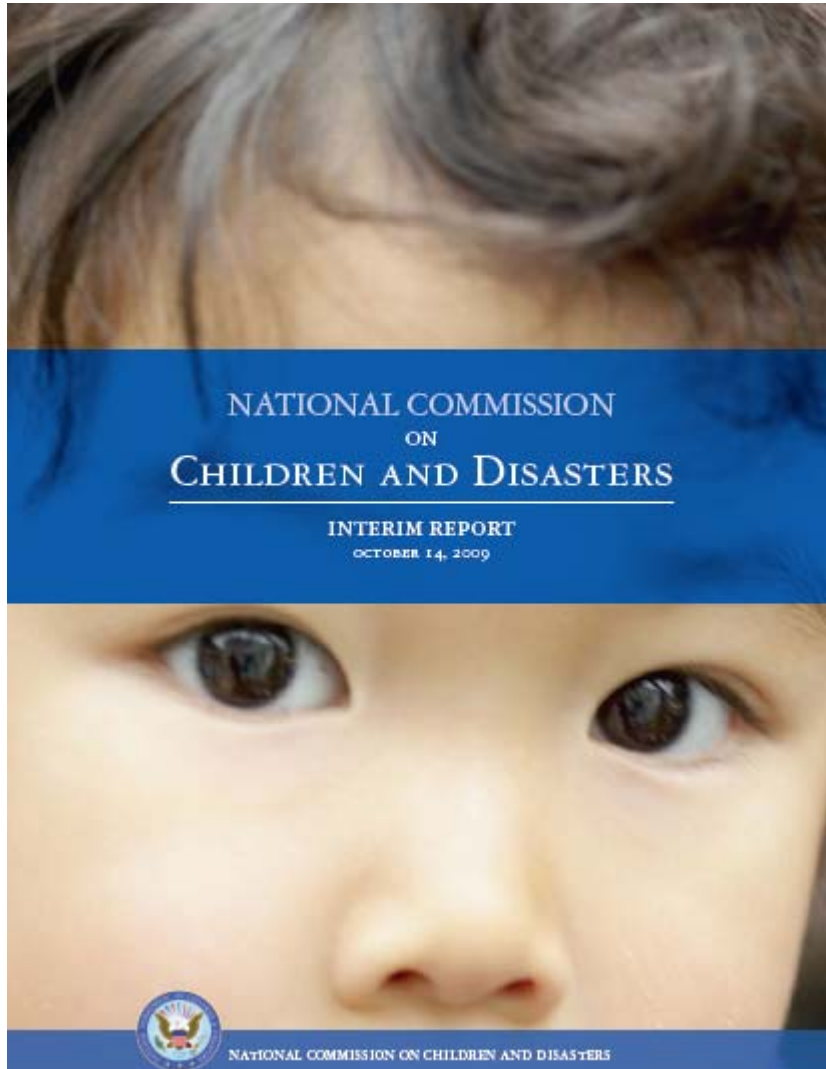
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National Commission on
Children and Disasters



Interim Report: Findings and Recommendations

<http://www.childrenanddisasters.acf.hhs.gov/>



Columbia University
MAILMAN SCHOOL
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Background

- **Children represent about 25% of U.S. pop**
- **Insufficient counter-measure research base**
- **Poorly understood intra-disaster vulnerabilities and needs**
- **Highly significant influence on adult disaster response behaviors**
- **Inadequate support and protection during disaster recovery**

Special Anatomical & Behavioral Considerations

- Children live and breath closer to the ground
- Large, permeable skin surface/ body mass
- They routinely place hands and objects in mouth
 - They take risks
 - They are dependent
- Highly vulnerable to short and long-term stress

...i.e, low-living, thin-skinned, risk-taking humans - not just “little adults”



Exposure Consequences

- **Potential exacerbation of asthma, especially for children already at risk**
- **Inhalation-related narcosis, tachypnea, pneumonitis, headaches, etc.**
- **Dermatologic conditions**
- **Lethal aspiration**
- **Crude oil products (e.g. benzene and hexane) associated with possible long-term CNS consequences or malignancies**

Psychosocial Consequences: The Big Challenges for Children and Families

“Toxic Stress”

Round 2?

“This is way worse than Katrina. That was just a hurricane; it destroyed a lot, but we could rebuild and eventually come back to our homes. With the oil spill, we live with uncertainty and most of us are afraid that this place we love will not come back. It will mean the end of our way of life. I don’t know what we’ll do – or how we’ll survive”
Austin, age 15

What we Know

- **Anxiety and PTS symptoms documented post 9/11**
- **Severe consequences for vulnerable children post Katrina related to persistent uncertainty, parental dysfunction, severe economic stress, etc.**
 - **¾ children reported to have psychological issues post-Katrina**
 - **4X more likely to have “serious emotional disorder” in Spring '10 (32% v. 8-9%)**
 - **2X more likely to be “too old” for grade v. non-Katrina affected children**
- **Well-being of children is directly related to resiliency and stability of parents**

What We Don't Know

- Will there be long term systemic pathology related to persistent, high-level toxin exposures?
- What will be the psychological consequences of persistent toxic stress (uncertainty, economic loss, physical threats, displacement, etc.)?
- What happens with exposure to multiple large-scale disaster related traumas ?
- Best practice interventions for prevention, mitigation of trauma across populations?
- Best practices for assuring stability, bolstering family resiliency, assuring access to health care and other essential services, academic continuity?

Monitoring Children

- **Baseline clinical and laboratory assessments**
- **Bio-specimen banking**
- **New onset of health care concerns (breathing issues, headaches, abdominal symptoms, etc.)**
- **New onset of emotional or behavioral symptoms**
- **Cognitive, developmental and academic status**
- **Family and child “well being” indices**



Protecting Children: 7 Guidelines

- 1. Reliable information from trusted sources**
- 2. Careful monitoring**
- 3. Appropriate family support**
- 4. Rapid and comprehensive displacement assistance, as needed**
- 5. Comprehensive, consistent case management service for all affected families**
- 6. Sufficiently funded, coordinated and timely intervention and assessment services (medical, mental health) for affected families**
- 7. Rapid return to stable, positive community settings (old or new)**

End