

PREVENTION WORKS!

CHILDREN LIVING IN STRESSFUL ENVIRONMENTS: A RESOURCE KIT

VI.i. Children Who Have Experienced Disasters

Discussion

Disasters, whether natural or human-caused, can be especially traumatic for children. Families may lose homes, possessions, and jobs. They may have to find new places to live and attend school. They may face economic hardship and family dysfunction in the wake of these losses. They may also suffer the death or injury of family members. A disaster threatens children's sense of safety and security in the world—a condition that is essential to healthy development.¹ The stress of experiencing a disaster can lead to mental health problems in children that, if untreated, can lead to future substance abuse.²

Children are inevitably affected by natural disasters such as hurricanes, floods, wildfires, tornadoes, and earthquakes; accidents such as transportation crashes; and more recently, acts of violence such as school shootings and international terrorism. From 2000 to 2007 alone, there were 377 federally designated disasters in the United States³—and children are still recovering from these traumas. For example, according to a study reported in January 2008 by the Mailman School's National Center for Disaster Preparedness (NDCP) and the Children's Health Fund, at least 46,600 children along the gulf coast still experience mental health and other problems resulting from 2005's Hurricane Katrina.⁴

Children's reactions to disasters vary according to the individual. Often, they may not understand what happened or how they feel about it and may not react immediately. Some children have

¹ Agency for Toxic Substances and Disease Registry. (November 2005). *Helping families deal with the stress of relocation after a disaster*. Retrieved March 20, 2008, from www.atsdr.cdc.gov/publications/100233-RelocationStress.pdf.

² Work Group on Disasters, American Academy of Pediatrics. (1994). *Psychosocial issues for children and families in disasters: A guide for the primary care physician*. Rockville, MD: Substance Abuse and Mental Health Services Administration (SAMHSA). Publication No. SMA95-3022. Retrieved March 25, 2008, from <http://mentalhealth.samhsa.gov/publications/allpubs/SMA95-3022/default.asp>.

³ Federal Emergency Management Agency (FEMA). *Presidential disaster declarations: January 3, 2000 to March 3, 2007*. Washington, DC: FEMA. Retrieved March 25, 2008, from www.fema.gov/pdf/hazard/map/declarationsmap2000_07.pdf.

⁴ Columbia University, Mailman School of Public Health. (December 2007). *The legacy of Katrina's children: Estimating the numbers of hurricane-related at-risk children in the gulf coast states of Louisiana and Mississippi*. NDCP research brief 2007–12. Retrieved March 24, 2008, from www.ncdp.mailman.columbia.edu/files/legacy_katrina_children.pdf.

delayed reactions that show up days, weeks, or even months later, or they may never even have a reaction.⁵

A child is likely to have more psychological distress if he or she experiences a disaster at close range, was in danger of injury or death, or witnessed the death or injury of others. Other factors that increase risk include low socioeconomic status, intense community disruption, previous trauma, and poor parental coping.^{6,7} Exposure to media coverage of the disaster also increases children's stress.⁸

A disaster will probably worsen any existing mental health problems or family problems a child may have. A child's reactions to a disaster are strongly affected by the emotional reactions of his or her parents and other adults. A child's ability to recover also directly corresponds to the parents' ability to adjust and provide emotional support. When parents are overprotective or overly reliant on a child, the child may have trouble overcoming disaster-related stress. Existing parental substance abuse and domestic violence—already risk factors for substance abuse in children—may increase after a disaster, making it even harder for children to adjust to postdisaster conditions.⁹

In the first month after a disaster, it is normal for children to show a greater dependence on their parents or caregivers, experience nightmares and disturbed sleep, lose interest in school, regress behaviorally, fear future disasters or reminders of the past disaster, and reenact the event in play activities. While girls tend to experience greater disaster-related stress, boys often take longer to recover and may exhibit aggressive, antisocial, and violent behaviors. Girls tend to talk more about their feelings, think more about the disaster, and ask more questions.¹⁰

Children's reactions to disasters also vary according to age. Preschool children are especially affected by the disruption to the security of their lives. They rely on family members for comfort and especially fear abandonment. Thumbsucking, clinging to parents, speech problems such as stammering, fear of the dark or of animals, nightmares, excretory problems, and changes in appetite are all common reactions to disaster in this age group. Children ages 5 to 11 may exhibit

⁵ Agency for Toxic Substances and Disease Registry. (November 2005). *Helping families deal with the stress of relocation after a disaster*. Retrieved March 20, 2008, from www.atsdr.cdc.gov/publications/100233-RelocationStress.pdf.

⁶ Norris, F. H., Byrne, C.M., Diaz, E., and Kaniasty, K. (May 22, 2008). *Risk factors for adverse outcomes in natural and human-caused disasters: A review of empirical literature*. River Junction, VT: U.S. Department of Veterans Affairs, National Center for Posttraumatic Stress Disorder. Retrieved March 25, 2008, from www.ncptsd.va.gov/ncmain/ncdocs/fact_shts/fs_riskfactors.html.

⁷ Hamblen, J. (May 22, 2007) *Terrorist attacks and children*. River Junction, VT: U.S. Department of Veterans Affairs, National Center for Posttraumatic Stress Disorder. Retrieved March 25, 2008, from www.ncptsd.va.gov/ncmain/ncdocs/fact_shts/fs_children_disaster.html.

⁸ SAMHSA, National Mental Health Information Center. (September 2005). *Tips for talking to children after a disaster: A guide for parents and teachers*. Rockville: MD: SAMHSA. Retrieved March 25, 2008, from http://mentalhealth.samhsa.gov/cmhs/katrina/parent_teach.asp.

⁹ Work Group on Disasters, American Academy of Pediatrics. (1994). *Psychosocial issues for children and families in disasters: A guide for the primary care physician*. Rockville, MD: SAMHSA. Publication No. SMA95-3022. Retrieved March 25, 2008, from <http://mentalhealth.samhsa.gov/publications/allpubs/SMA95-3022/default.asp>.

¹⁰ Work Group on Disasters, American Academy of Pediatrics. (1994). *Psychosocial issues for children and families in disasters: A guide for the primary care physician*. Rockville, MD: SAMHSA. Publication No. SMA95-3022. Retrieved March 25, 2008, from <http://mentalhealth.samhsa.gov/publications/allpubs/SMA95-3022/default.asp>.

irritability; whining; clinging; aggressive behavior; competition for parental attention; poor concentration at, loss of interest in, or avoidance of school; and withdrawal from peers. Youths aged 11 to 14 may experience disturbed sleep and appetite; rebelliousness; fighting, acting out, or withdrawal at school; physical problems; and loss of interest in social activities. Adolescents aged 14 to 18 may also experience disturbed sleep and appetite and physical problems, as well as hypochondria. They may exhibit abnormally high or low energy levels, poor concentration, apathy, and irresponsible or delinquent behavior. They may also lose the typical teen desire for freedom from parental control.¹¹

When children continue to experience disaster-related reactions for a prolonged period of time, they may develop posttraumatic stress disorder (PTSD). Symptoms can include emotionally re-experiencing the disaster; emotional numbness; avoidance of people, places, and thoughts related to the disaster; sleeping difficulties; exaggerated startle response; and chronic, unremitting tension. While these symptoms are normal responses directly after a disaster, they may indicate PTSD if they persist for more than 1 month and affect a child's ability to function.¹²

Three factors increase the likelihood that children will develop PTSD following a disaster: the severity of the disaster, the parental reaction, and the physical proximity to the disaster. Studies show that children with the most intense disaster experiences generally exhibit more symptoms, more severely. Children with greater family support and less parental distress show fewer PTSD symptoms, and children who are farther away from the disaster site also experience less distress.¹³

Children who experience a disaster and are clinically diagnosed with PTSD are at greater risk for developing substance abuse later.¹⁴ In a study of 1,007 young adults, those with PTSD were four times as likely as their peers to develop a substance use disorder within 3 to 5 years after the initial assessment. These youth were most likely to abuse psychoactive drugs, suggesting that they may have been trying to self-medicate.¹⁵

¹¹ SAMHSA, National Mental Health Information Center. (April 2003). *Reaction of children to a disaster*. Rockville, MD: SAMHSA. Retrieved March 25, 2008, from <http://mentalhealth.samhsa.gov/publications/allpubs/KEN01-0101/default.asp>.

¹² National Institutes of Health (NIH), National Institute on Drug Abuse (NIDA). (February 2006). *NIDA community drug alert bulletin: Stress & substance abuse*. Bethesda, MD: NIH. Retrieved March 25, 2008, from www.drugabuse.gov/StressAlert/StressAlert.html.

¹³ Hamblen, J. (May 22, 2007). *PTSD in children and adolescents*. River Junction, VT: U.S. Department of Veterans Affairs, National Center for Posttraumatic Stress Disorder. Retrieved March 25, 2008, from www.ncptsd.va.gov/ncmain/ncdocs/fact_shts/fs_children.html.

¹⁴ NIH, NIDA. (February 2006). *NIDA community drug alert bulletin: Stress & substance abuse*. Bethesda, MD: NIH. Retrieved March 25, 2008, from www.drugabuse.gov/StressAlert/StressAlert.html.

¹⁵ NIH, NIDA. (September 12, 2005). *Stress and substance abuse: A special report*. Bethesda, MD: NIH. Retrieved March 25, 2008, from www.drugabuse.gov/stressanddrugabuse.html.

Facts

- There is little research about the effect of disasters on children of specific cultural or ethnic groups. Since religion and cultural tradition may provide comfort to disaster survivors, outreach by leaders of different cultural groups in the community is essential in all phases of disaster recovery.¹⁶
- Sixteen percent of children living 100 miles away from Oklahoma City had significant PTSD symptoms 2 years after the 1995 bombing. These children had no direct connection to people who had been killed or injured and were not directly exposed to the event.¹⁷
- Classmates and close friends are significant sources of support that can help children adjust in the wake of disasters.¹⁸
- A study of 560 Americans found that, directly after the terrorist attacks of September 11, 2001, 85 percent of parents or other adults in the home talked with their children about it for at least an hour, and most also participated in group activities related to the attacks.¹⁹
- Among adults surveyed 3 to 5 days after the September 11 attacks, 35 percent of parents reported that their children had at least one symptom of stress. Almost half of parents reported that their children were worried about their own safety or the safety of a loved one.²⁰
- Lifetime rates of PTSD in adolescents have been found to range from 6.3 percent in a community sample of older adolescents to 29.6 percent in substance-dependent adolescents aged 15 to 19 who were receiving treatment. Among the substance-dependent adolescents, 19.2 percent currently had PTSD.²¹

¹⁶ Work Group on Disasters, American Academy of Pediatrics. (1994). *Psychosocial issues for children and families in disasters: A guide for the primary care physician*. Rockville, MD: SAMHSA. Publication No. SMA95-3022. Retrieved March 25, 2008, from <http://mentalhealth.samhsa.gov/publications/allpubs/SMA95-3022/default.asp>.

¹⁷ Hamblen, J. (May 22, 2007) *Terrorist attacks and children*. River Junction, VT: U.S. Department of Veterans Affairs, National Center for Posttraumatic Stress Disorder. Retrieved March 25, 2008, from www.ncptsd.va.gov/ncmain/ncdocs/fact_shts/fs_children_disaster.html.

¹⁸ American Psychological Association. (n.d.). *Fostering resilience in response to terrorism: For psychologists working with children*. Retrieved March 25, 2008, from www.apa.org/psychologists/pdfs/children.pdf.

¹⁹ American Psychological Association. (n.d.). *Fostering resilience in response to terrorism: For psychologists working with children*. Retrieved March 25, 2008, from www.apa.org/psychologists/pdfs/children.pdf.

²⁰ Hamblen, J. (May 22, 2007) *Terrorist attacks and children*. River Junction, VT: U.S. Department of Veterans Affairs, National Center for Posttraumatic Stress Disorder. Retrieved March 25, 2008, from www.ncptsd.va.gov/ncmain/ncdocs/fact_shts/fs_children_disaster.html.

²¹ NIH, NIDA. (September 12, 2005). *Stress and substance abuse: A special report*. Bethesda, MD: NIH. Retrieved March 25, 2008, from www.drugabuse.gov/stressanddrugabuse.html.

Federal Resources

The National Center for Posttraumatic Stress Disorder (NCPTSD)

www.ncptsd.va.gov/ncmain/index.jsp

The NCPTSD, within the Department of Veterans Affairs, conducts research, trains medical professionals, and disseminates evidence-based information on traumatic stress.

National Institute of Mental Health (NIMH): Coping with Traumatic Events

www.nimh.nih.gov/health/topics/coping-with-traumatic-events/index.shtml

National Institutes of Health's (NIH's) NIMH researches and provides evidence-based information about reactions to national crises and traumatic events such as the September 11, 2001, terrorist attacks; the Oklahoma City bombing; wars and violence in the Middle East; and disasters such as earthquakes, tornados, fires, floods, and hurricanes, including the 2005 gulf coast storms.

The Substance Abuse and Mental Health Services Administration's (SAMHSA's) Disaster Relief Information

<http://mentalhealth.samhsa.gov/cmhs/katrina/default.asp>

Immediately following such disasters and for the long term, SAMHSA focuses on its mission of "Building Resilience and Facilitating Recovery" for those affected, the most vulnerable of whom are often individuals with substance abuse and mental illness disorders.

Private Organizations

National Child Traumatic Stress Network (NCTSN)

www.nctsn.org

Funded by SAMHSA's Center for Mental Health Services, NCTSN was established to improve access to care, treatment, and services for traumatized children and adolescents exposed to traumatic events.

Strategies/Programs

Developing Cultural Competence in Disaster Mental Health Programs

<http://mentalhealth.samhsa.gov/publications/allpubs/SMA03-3828/default.asp>

Mental health service providers have become increasingly aware that race, ethnicity, and culture may have a profound effect on the way in which an individual responds to and copes with disaster. This guide provides background information, guiding principles, recommendations, and resources for developing culturally competent disaster mental health services. Mental health workers can adapt these resources to serve the unique characteristics of individuals and communities affected by disasters.

Feelings Need Checkups Too

www.aap.org/profed/childrencheckup.htm

The American Academy of Pediatrics produced this CD-ROM and toolkit for pediatricians who are helping children experiencing emotional distress related to the September 11 terrorist attacks and other catastrophic events.

Fostering Resilience in Response to Terrorism

www.apa.org/psychologists/resilience.html

The American Psychological Association Task Force on Promoting Resilience in Response to Terrorism has produced fact sheets to help psychologists foster resilience in a variety of populations, including children.

Helping Children Cope with Crisis: A Guide for African American Parents

www.nichd.nih.gov/publications/pubs/cope_with_crisis_brochure.cfm

NIH's National Institute of Child Health and Human Development and the National Black Child Development Institute collaborated with parents, professionals, and leaders of national African American organizations to provide parents with information and resources to inspire hope and provide a sense of safety for their children during crises.

Tips for Talking About Traumatic Events

<http://mentalhealth.samhsa.gov/cmhs/TraumaticEvents/tips.asp>

SAMHSA provides these tips to guide parents, caregivers, teachers, and others on supporting and listening to youth who have experienced disasters.