

Responding to Natural Disasters: Helping Children and Families

Information for School Crisis Teams

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Natural disasters can be especially traumatic for children and youth. Experiencing a dangerous or violent flood, storm, or earthquake is frightening even for adults, and the devastation to the familiar environment (i.e., home and community) can be long lasting and distressing. Often an entire community is impacted, further undermining a child's sense of security and normalcy. These factors present a variety of unique issues and coping challenges, including issues associated with specific types of natural disasters, the need to relocate when home and/or community have been destroyed, the role of the family in lessening or exacerbating the trauma, emotional reactions, and coping techniques.

Children look to the significant adults in their lives for guidance on how to manage their reactions after the immediate threat is over. Schools can help play an important role in this process by providing a stable, familiar environment. Through the support of caring adults school personnel can help children return to normal activities and routines (to the extent possible), and provide an opportunity to transform a frightening event into a learning experience.

Immediate response efforts should emphasize teaching effective coping strategies, fostering supportive relationships, and helping children understand the disaster event. Collaboration between the school crisis response team and an assortment of community, state, and federal organizations and agencies is necessary to respond to the many needs of children, families, and communities following a natural disaster. Healing in the aftermath of a natural disaster takes time; however, advanced preparation and immediate response will facilitate subsequent coping and healing.

Issues Associated with Specific Disasters

Hurricanes. Usually hurricanes are predicted days to weeks in advance, giving communities time to prepare. These predictions give families time to gather supplies and prepare. At the same time, however, these activities may generate fear and anxiety. Although communities can be made aware of potential danger, there is always uncertainty about the exact location of where the hurricane will impact. When a hurricane strikes, victims experience intense thunder, rain, lightning, and wind. Consequently, startle reactions to sounds may be acute in the months that follow. Among a few children subsequent storms may trigger panic reactions. Immediate reactions to hurricanes can include emotional and physical exhaustion. In some instances children may experience survivor guilt (e.g., that they were not harmed, while others were killed or injured). Research indicates that greater

symptomatology in children is associated with more frightening experiences during the storm and with greater levels of damage to their homes.

Earthquakes. Aftershocks differentiate earthquakes from other natural disasters. Since there is no clearly defined endpoint, the disruptions caused by continued tremors may increase psychological distress. Unlike other natural disasters (e.g., hurricanes and certain types of floods), earthquakes occur with virtually no warning. This fact limits the ability of disaster victims to make the psychological adjustments that can facilitate coping. This relative lack of predictability also significantly lessens feelings of controllability. While one can climb to higher ground during a flood, or install storm shutters before a hurricane, there is usually no advance warning or immediate preparation with earthquakes. Survivors may have to cope with reminders of the destruction (e.g., sounds of explosions, and the rumbling of aftershocks; smells of toxic fumes and smoke; and tastes of soot, rubber, and smoke).

Tornadoes. Like earthquakes, tornadoes can bring mass destruction in a matter of minutes, and individuals typically have little time to prepare. Confusion and frustration often follow. Similar to a hurricane, people experience sensations during tornadoes that may generate coping challenges. It can be difficult to cope with the sights and smells of destruction. Given the capricious nature of tornadoes, survivor guilt has been observed to be an especially common coping challenge. For instance, some children may express guilt that they still have a house to live in while their friend next door does not. In addition, a study following a tornado that caused considerable damage and loss of life, revealed significant associations between children's disturbances and having been in the impact zone, been injured, and having experienced the death of relatives.

Floods. These events are one of the most common natural disasters. Flash floods are the most dangerous as they occur without warning; move at intense speeds; and can tear out trees, destroy roads and bridges, and wreck buildings. In cases of dam failure the water can be especially destructive. Research has reported that many children who survive a destructive flood experience psychological distress. The two most significant predictors of impairment are the degree of disaster exposure and perceptions of family reactions. Sensations that may generate coping challenges include desolation of the landscape, the smell of sludge and sodden property, coldness and wetness, and vast amounts of mud. Most floods do not recede overnight, and many residents have to wait days or weeks before they can begin the cleanup.

Finally, it is important to acknowledge that although a given natural disasters may last for only a short period, survivors can be involved with the disaster aftermath for months or even years. In attempts to reconstruct their lives following such a natural disaster, families are often required to deal with multiple people and agencies (e.g., insurance adjustors, contractors, electricians, roofers, the Red Cross, the Federal Emergency Management Agency (FEMA), and the Salvation Army).

Possible Reactions of Children and Youth to Natural Disasters

Most children will be able to cope over time with the help of parents and other caring adults. However, some children may be at risk of more extreme reactions. The severity of children's reactions will depend on their specific risk factors. These include exposure to the actual event, personal injury or loss of a loved one, dislocation from their home or community, level of parental support, the level of physical destruction, and pre-existing risks, such as a previous traumatic experience or mental illness. Symptoms may differ depending on age but can include:

- **Preschoolers**—thumb sucking, bedwetting, clinging to parents, sleep disturbances, loss of appetite, fear of the dark, regression in behavior, and withdrawal from friends and routines.
- **Elementary School Children**—irritability, aggressiveness, clinginess, nightmares, school avoidance, poor concentration, and withdrawal from activities and friends.
- **Adolescents**—sleeping and eating disturbances, agitation, increase in conflicts, physical complaints, delinquent behavior, and poor concentration.

A minority of children may be at risk of post-traumatic stress disorder (PTSD). Symptoms can include those listed above, exhibited over an extended period of time. Other symptoms may include reexperiencing the disaster during play and/or dreams; anticipating or feeling that the disaster is happening again; avoiding reminders of the disaster; general numbness to emotional topics; and increased arousal symptoms such as inability to concentrate and startle reactions. Although rare, some adolescents may also be at increased risk of suicide if they suffer from serious mental health problems like PTSD or depression. Students who exhibit these symptoms should be referred for appropriate mental health evaluation and intervention.

Immediately Following a Natural Disaster: Information for School Crisis Teams

Identify children and youth who are high risk and plan interventions. Risk factors are outlined in the above section on children's reactions. Interventions may include individual counseling, small group counseling, or family therapy. From group crisis interventions, and by maintaining close contact with teachers and parents, the school crisis response team can determine which students need supportive crisis intervention and counseling services. A mechanism also needs to be in place for self-referral and parental-referral of students.

Support teachers and other school staff. Provide staff members with information on the symptoms of children's stress reactions and guidance on how to handle class discussions and answer children's question. As indicated, offer to help conduct a group discussion. Reinforce that teachers should pay attention to their own needs and not feel compelled to do anything they are not comfortable doing. Suggest that administrators provide time for staff to share their feelings and reactions on a voluntary basis as well as help staff develop support groups. In addition, teachers who had property damage or personal injury to themselves or family members will need leave time to attend to their needs.

Engage in post-disaster activities that facilitate healing. La Greca and colleagues have developed a manual for professionals working with elementary school children following a natural disaster. Activities in this manual emphasize three key components supported by the empirical literature: (a) exposure to discussion of disaster-related events, (b) promotion of positive coping and problem-solving skills, and (c) strengthening of children's friendship and peer support. Specifically:

• Encourage children to talk about disaster-related events. Children need an opportunity to discuss their experiences in a safe, accepting environment. Provide activities that enable children to discuss their experiences. These may include a range of methods (both verbal and nonverbal) and incorporate varying projects (e.g., drawing, stories, audio and video recording). Again provide teachers specific suggestions or offer to help with an activity.

- **Promote positive coping and problem-solving skills.** Activities should teach children how to apply problem-solving skills to disaster-related stressors. Children should be encouraged to develop realistic and positive methods of coping that increase their ability to manage their anxiety and to identify which strategies fit with each situation.
- Strengthen children's friendship and peer support. Children with strong emotional support from others are better able to cope with adversity. Children's relationships with peers can provide suggestions for how to cope with difficulties and can help decrease isolation. In many disaster situations, friendships may be disrupted because of family relocations. In some cases parents may be less available to provide support to their children because of their own distress and their feelings of being overwhelmed. It is important for children to develop supportive relationships with their teachers and classmates. Activities may include asking children to work cooperatively in small groups in order to enhance peer support.

Emphasize children's resiliency. Focus on their competencies in terms of their daily life and in other difficult times. Help children identify what they have done in the past that helped them cope when they were frightened or upset. Tell students about other communities that have experienced natural disasters and recovered (e.g., Miami, FL and Charleston, SC).

Support all members of the crisis response team. All crisis response team members need an opportunity to process the crisis response. Providing crisis intervention is emotionally draining. This is likely to include teachers and other school staff if they have been serving as crisis caregivers for students.

Secure additional mental health support. Although more than enough caregivers are often willing to provide support during the immediate aftermath of a natural disaster, long-term services may be lacking. School psychologists and other school mental health professionals can help provide and coordinate mental health services, but it is important to connect with community resources in order to provide such long-term assistance. Ideally these relationships would be established in advance.

Important Influences on Coping Following a Natural Disaster

Relocation. The frequent need for disaster survivors to relocate creates unique crisis problems. For example, it may contribute to the social, environmental, and psychological stress experienced by disaster survivors. Research suggests that relocation is associated with higher levels of ecological stress, crowding, isolation, and social disruption.

Parent's Reactions and Family Support. Parents' adjustment is an important factor in children's adjustment, and the adjustment of the child in turn contributes to the overall adjustment of the family. Altered family functions, separation from parents after natural disaster, and ongoing maternal preoccupation with the trauma are more predictive of trauma symptomatology in children than is the level of exposure. Thus, parents' reactions and family support following a natural disaster are important considerations in helping children's cope.

Emotional Reactivity. Preliminary findings suggest that children who tend to be anxious are those most likely to develop post-trauma symptomatology following a natural disaster. Research suggest

that children who had a preexisting anxiety disorder prior to a natural disaster are at greater risk of developing PTSD symptoms.

Coping Style. It is important to examine children's coping following a natural disaster because coping responses appear to influence the process of adapting to traumatic events. Research suggests that the use of blame and anger as a way of coping may create more distress for children following disasters.

Long-Term Effects

Research suggests that long term difficulties following a natural disaster (e.g., PTSD), are most likely to be seem among children who experienced any of the following:

- Had threats to their physical safety.
- Thought they might die during the disaster.
- Report that they were very upset during the disaster.
- Lost their belongings or house as a result of the disaster.
- Had to relocate in the aftermath.
- Attended schools following the disaster that had multiple schedule changes, double sessions or a lot of disruptions.

Consequently, crisis response team members need to identify students who experience these risk factors and closely monitor their status. These students may require long-term coping assistance.

References

Asarnow, J., Glynn, S., Pynoos, R. S., Nahum, J., Gunthrie, D., Cantwell, D. P., & Franklin, B. (1999). When the earth stops shaking: Earthquake sequelae among children diagnosed for pre-earthquake psychopathology. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 1016-1023.

Bolton, D., O'Ryan, D., Udwin, O., Boyle, S., & Yule, W. (2000). The long-term psychological effects of a disaster experienced in adolescence: II: General psychopathology. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 41, 513-523.

Brock, S. E., Lazarus, P. J., & Jimerson, S. R. (Eds.), *Best practices in school crisis prevention and intervention*. Bethesda, MD: National Association of School Psychologists.

Feinberg, T. (1999). The midwest floods of 1993: Observations of a natural disaster. In A.S. Canter & S.A. Carroll (Eds.), *Crisis prevention & response: A collection of NASP_resources* (pp. 223-239). Bethesda, MD: National Association of School Psychologists.

Green, B. L., Korol, M., Grace, M. C., & Vary, M. G. (1991). Children and disaster: Age, gender and parental effects on PTSD symptoms. *Journal of the American Academy of Child and Adolescent Psychiatry*, *30*, 945-951.

Goenjian, A.K., Molina, L., Steinberg, A. M., & Fairbanks, L. A. (2001). Post traumatic stress and depressive reactions among adolescents after Hurricane Mitch. *American Journal of Psychiatry*, 158, 788-794.

Jones, R. T., Fray, R., Cunningham, J. D., & Kaiser, L. (2001). The psychological effects of hurricane Andrew on ethnic minority and Caucasian children and adolescents: A case study. *Cultural Diversity and Ethnic Minority Psychology*, *7*, 103-108.

La Greca, A.M., Vernberg, E. M. Silverman, W. K., Vogel, A. L.,& Prinstein, M. J. (1994). *Helping children prepare for and cope with natural disasters: A manual for professionals working with elementary age children.* Department of Psychology, University of Miami.

Lazarus, P. J., & Jimerson, S. R., Brock, S. E. (2002). Natural disasters. In S. E. Brock, P. J. Lazarus, & S. R. Jimerson (Eds.), *Best practices in school crisis prevention and intervention* (pp. 435-450). Bethesda, MD: National Association of School Psychologists.

Lazarus, P. J., & Gillespie, B. (1996). Critical actions in the aftermath of natural disasters. *The School Administrator*, 53(2), 35-36.

Lonigan, C. J., Shannon, M. P., Finch, A. J. Jr., & Daugherty, T. K. (1991). Children's reaction to a natural disaster: Symptoms severity and degree of exposure. *Advances in Behavioral Research and Therapy*, 13, 135-154.

National Institute of Mental Health. (2000). *Helping children and adolescents cope_with disasters:* Fact sheet [On-line]. Available: http://www.nimh.nih.gov.

Prinstein, M. J., La Greca, A. M., Vernberg, E. M., & Silverman, W. K. (1996). Children's coping assistance: How parents, teachers, and friends help children cope after a natural disaster. *Journal of Clinical Child Psychology*, 25, 463-475.

Young, M. A. (1997). *The community crisis response team training manual* (2nd ed.). Washington, DC: National Organization for Victim Assistance.

Zenere, F. J., & Lazarus, P.J. (1999). Winds of terror. Children's responses to hurricane and tornado disasters. In A. S. Canter & S. A. Carroll (Eds.), *Crisis prevention and response:* A_collection of NASP resources (pp. 223-229). Bethesda, MD: National Association of School Psychologists.

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