APPENDIX J. Helping Children and Adolescents Cope With Violence and Disasters

The U.S. Department of Health and Human Services' (HHS) National Institute of Mental Health (NIMH) and other federal agencies are working to address the issue of assisting children and adolescents who have been victims of or witnesses to violent and/or catastrophic events. The purpose of this fact sheet is to tell what is known about the impact of violence and disasters on children and adolescents and suggest steps to minimize long-term emotional harm.

In the aftermath of the September 11 terrorist attacks on New York City and Washington, DC, both adults and children struggled with the emotional impact of such large-scale damage and losses of life. Other major acts of violence that have been felt across the country include the 1995 bombing of the Alfred P. Murrah Federal Building in Oklahoma City and the 1999 shootings at Columbine High School in Littleton, Colorado. While these disastrous events have caught the nation's attention, they are only a fraction of the many tragic episodes that affect children's lives. Each year, many children and adolescents sustain injuries from violence, lose friends or family members, or are adversely affected by witnessing a violent or catastrophic event. Each situation is unique, whether it centers upon a plane crash where many people are killed, automobile accidents involving friends or family members, or natural disasters, such as the Northridge, California earthquake (1994) or Hurricane Floyd (1999), where deaths occur and homes are lost—but these events have similarities as well and cause similar reactions in children. Even in the course of everyday life, exposure to violence in the home or on the streets can lead to emotional harm.

Research has shown that both adults and children who experience catastrophic events show a wide range of reactions (Smith & North 1993; Yehuda et al. 1998). Some suffer only worries and bad memories that fade with emotional support and the passage of time. Others are more deeply affected and experience long-term problems. Research on posttraumatic stress disorder (PTSD) shows that some soldiers; survivors of criminal victimization, torture and other violence; and survivors of natural and man-made catastrophes suffer long-term effects from their experiences. Children who have witnessed violence in their families, schools, or communities are also vulnerable to serious long-term problems. Their emotional

reactions, including fear, depression, withdrawal, or anger, can occur immediately or sometime after the tragic event. Youngsters who have experienced a catastrophic event often need support from parents and teachers to avoid long-term emotional harm. Most will recover in a short time, but the few who develop PTSD or other persistent problems need treatment.

TRAUMA—WHAT IS IT?

"Trauma" has both a medical and a psychiatric definition. Medically, "trauma" refers to a serious or critical bodily injury, wound, or shock. This definition is often associated with trauma medicine practiced in emergency rooms and represents a popular view of the term. Psychiatrically, "trauma" has assumed a different meaning and refers to an experience that is emotionally painful, distressful, or shocking, which often results in lasting mental and physical effects.

Psychiatric trauma, or emotional harm, is essentially a normal response to an extreme event. It involves the creation of emotional memories about the distressful event that are stored in structures deep within the brain. In general, it is believed that the more direct the exposure to the traumatic event, the higher the risk for emotional harm (March et al. 1997). Thus, in a school shooting, for example, the student who is injured probably will be most severely affected emotionally; and the student who sees a classmate shot, even killed, is likely to be more emotionally affected than the student who was in another part of the school when the violence occurred. But even second-hand exposure to violence can be traumatic. For this reason, all children and adolescents exposed to violence or a disaster, even if only through graphic media reports, should be watched for signs of emotional distress.

HOW CHILDREN AND ADOLESCENTS REACT TO TRAUMA

Reactions to trauma may appear immediately after the traumatic event or days and even weeks later. Loss of trust in adults and fear of the event occurring again are responses seen in many children and adolescents who have been exposed to traumatic events. Other reactions vary according to age (Marans & Adelman 1997; Osofsky 1995; Pynoos et al. 1996; Vogel & Vernberg 1993):



For children 5 years of age and younger, typical reactions can include a fear of being separated from the parent, crying, whimpering, screaming, immobility and/or aimless motion, trembling, frightened facial expressions, and excessive clinging. Parents may also notice children returning to behaviors exhibited at earlier ages (these are called regressive behaviors), such as thumb-sucking, bedwetting, and fear of darkness. Children in this age bracket tend to be strongly affected by the parents' reactions to the traumatic event.

Children 6–11 years old may show extreme withdrawal, disruptive behavior, and/or inability to pay attention. Regressive behaviors, nightmares, sleep problems, irrational fears, irritability, refusal to attend school, outbursts of anger, and fighting are also common in traumatized children of this age. Also, the child may complain of stomachaches or other bodily symptoms that have no medical basis. Schoolwork often suffers. Depression, anxiety, feelings of guilt, and emotional numbing or "flatness" are often present as well.

Adolescents 12–17 years old may exhibit responses similar to those of adults, including flashbacks, nightmares, emotional numbing, avoidance of any reminders of the traumatic event, depression, substance abuse, problems with peers, and antisocial behavior. Also common are withdrawal and isolation, physical complaints, suicidal thoughts, school avoidance, academic decline, sleep disturbances, and confusion. The adolescent may feel extreme guilt over his or her failure to prevent injury or loss of life and may harbor revenge fantasies that interfere with recovery from the trauma.

Some youngsters are more vulnerable to trauma than others, for reasons scientists do not fully understand. It has been shown that the impact of a traumatic event is likely to be greatest in the child or adolescent who previously has been the victim of child abuse or some other form of trauma or who already had a mental health problem (Boney-McCoy & Finkelhor 1995; Duncan et al. 1996; Garbarino et al. 1991; Roth et al. 1997). And the youngster who lacks family support is more at risk for a poor recovery (Morrison 2000).

HELPING THE CHILD OR ADOLESCENT TRAUMA SURVIVOR

Early intervention to help children and adolescents who have suffered trauma from violence or a disaster is critical. Parents, teachers, and mental health professionals can do a great deal to help these youngsters recover.

After violence or a disaster occurs, the family is the first-line resource for helping. Among the things that parents and other caring adults can do are:

- Explain the episode of violence or disaster as well as you are able.
- Encourage the children to express their feelings and listen without passing judgment. Help younger children learn to use words that express their feelings. However, do not force discussion of the traumatic event.
- Let children and adolescents know that it is normal to feel upset after something bad happens.
- Allow time for the youngsters to experience and talk about their feelings. At home, however, a gradual return to routine can be reassuring to the child.
- If your children are fearful, reassure them that you love them and will take care of them. Stay together as a family as much as possible.
- If behavior at bedtime is a problem, give the child extra time and reassurance. Let him or her sleep with a light on or in your room for a limited time if necessary.
- > Reassure children and adolescents that the traumatic event was not their fault.
- Do not criticize regressive behavior or shame the child with words like "babyish."
- Allow children to cry or be sad. Do not expect them to be brave or tough.
- > Encourage children and adolescents to feel in control. Let them make some decisions about meals, what to wear, etc.
- > Take care of yourself so you can take care of the children.

Most children and adolescents, if given support such as that described above, will recover almost completely from the fear and anxiety caused by a traumatic experience within a few weeks. However, some children and adolescents will need



more help perhaps over a longer period of time to heal. Grief over the loss of a loved one, teacher, friend, or pet may take months to resolve and may be reawakened by reminders such as media reports or the anniversary of the death.

In the immediate aftermath of a traumatic event and the weeks following, it is important to identify the youngsters who are in need of more intensive support and therapy because of profound grief or some other extreme emotion. Children and adolescents who may require the help of a mental health professional include those who show avoidance behavior, such as resisting or refusing to go places that remind them of the place where the traumatic event occurred, and emotional numbing, a diminished emotional response or lack of feeling toward the event. Youngsters who have more common reactions, including re-experiencing the trauma, or reliving it in the form of nightmares and disturbing recollections during the day, and hyperarousal, including sleep disturbances and a tendency to be easily startled, may respond well to supportive reassurance from parents and teachers.

WHAT ARE SCIENTISTS LEARNING ABOUT TRAUMA IN CHILDREN AND ADOLESCENTS?

NIMH, a part of the National Institutes of Health, supports research on the brain and a wide range of mental disorders, including PTSD and related conditions. The Department of Veterans Affairs also conducts research in this area with adults and their family members.

Recent research findings include:

- > Some studies show that counseling children very soon after a catastrophic event may reduce some of the symptoms of PTSD. A study of trauma/grief-focused psychotherapy among early adolescents exposed to an earthquake found that brief psychotherapy was effective in alleviating PTSD symptoms and preventing the worsening of co-occurring depression (Goenjian et al. 1997).
- Parents' responses to a violent event or disaster strongly influence their children's ability to recover. This is particularly true for mothers of young children. If the mother is depressed or highly anxious, she may need to get emotional support or counseling to be able to help her child (Bromet et al. 2000; Deblinger et al. 1999; McFarlane 1987).

- > Either being exposed to violence within the home for an extended period of time or exposure to a one-time event, like an attack by a dog, can cause PTSD in a child.
- Research has demonstrated that PTSD after exposure to a variety of traumatic events (family violence, child abuse, disasters, and community violence) is often accompanied by depression (Ackerman et al. 1998; Lipschitz et al. 1999; March et al. 1997; McCloskey & Walker 2000; Pfefferbaum et al. 1999). Depression must be treated along with PTSD, and early treatment is best.

NIMH-supported scientists are continuing to conduct research into the impact of violence and disaster on children and adolescents. Through research, NIMH hopes to gain knowledge to lessen the suffering that violence and disasters impose on children and adolescents and their families.

The General Public can obtain publications about PTSD and other anxiety disorders by calling NIMH's toll-free information service, 1-888-ANXIETY, or calling the Institute's public inquiries office at 301-443-4513. Information is also available online from NIMH's Web site (http://www.nimh.nih.gov/healthinformation/anxietymenu.cfm). The accompanying resource list indicates agencies or organizations that may have additional information about helping children and adolescents cope with violence and disasters.

Reporters interested in PTSD and other anxiety disorders may contact the NIMH press office at 301-443-4536.

Based on the NIMH booklet "Helping Children and Adolescents Cope With Violence and Disasters"—http://www.nimh.nih.gov/publicat/violence.cfm.



REFERENCES

Ackerman, P.T., Newton, J.E., McPherson, W.B., Jones, J.G., & Dykman, R.A. (1998). Prevalence of post traumatic stress disorder and other psychiatric diagnoses in three groups of abused children (sexual, physical, and both). *Child Abuse and Neglect*, *22*(8), 759–774.

Bell, C.C., & Jenkins, E.J. (1991). Traumatic stress and children. *Journal of Health Care for the Poor and Underserved, 2(1),* 175–185.

Boney-McCoy, S., & Finkelhor, D. (1995). Prior victimization: A risk factor for child sexual abuse and for PTSD-related symptomatology among sexually abused youth. *Child Abuse and Neglect*, 19(12), 1401–1421.

Bremner, J.D., Randall, P., Scott, T.M., Bronen, R.A., Seibyl, J.P., Southwick, S.M., et al. (1995). MRI-based measurement of hippocampal volume in patients with combat-related posttraumatic stress disorder. *American Journal of Psychiatry*, 152, 973–981.

Breslau, N., Kessler, R.C., Chilcoat, H.D., Schultz, L.R., Davis, G.C., & Andreski, P. (1998). Trauma and posttraumatic stress disorder in the community: The 1996 Detroit Area Survey of Trauma. *Archives of General Psychiatry*, *55*(7), 626–632.

Bromet, E.J., Goldgaber, D., Carlson, G., Panina, N., Golovakha, E., Gluzman, S.F., et al. (2000). Children's well-being 11 years after the Chornobyl catastrophe. *Archives of General Psychiatry*, 57(6), 563–571.

Cahill, L. (1997). The neurobiology of emotionally influenced memory: Implications for understanding traumatic memory. In R. Yehuda & A.C. McFarlane (Eds.), *Psychobiology of posttraumatic stress disorder. Annals of the New York Academy of Sciences* (Vol. 821, pp. 238–246). New York, NY: The New York Academy of Sciences.

De Bellis, M.D., Baum, A.S., Birmaher, B., Keshavan, M.S., Eccard, C.H., Boring, A.M., et al. (1999). A.E. Bennett Research Award. Developmental traumatology. Part I: Biological stress systems. *Biological Psychiatry*, *45*(10), 1259–1270.

De Bellis, M.D., Keshavan, M.S., Clark, D.B., Casey, B.J., Giedd, J.N., Boring, A.M., et al. (1999). A.E. Bennett Research Award. Developmental traumatology. Part II: Brain development. *Biological Psychiatry*, *45*(10), 1271–1284.

Deblinger, E., Steer, R.A., & Lippmann, J. (1999). Maternal factors associated with sexually abused children's psychosocial adjustment. *Child Maltreatment*, *4*(1), 13–20.

Duncan, R.D., Saunders, B.E., Kilpatrick, D.G., Hanson, R.F., & Resnick, H.S. (1996). Childhood physical assault as a risk factor for PTSD, depression, and substance abuse: Findings from a national survey. *American Journal of Orthopsychiatry*, 66(3), 437–448.

Earls, F.J. Child exposure to violence and PTSD across urban settings. NIMH Grant No. 5R01MH56241-05. In progress.

Garbarino, J., Kostelny, K., & Dubrow, N. (1991). What children can tell us about living in danger. *American Psychologist*, 46(4), 376–383.

Goenjian, A.K., Karayan, I., Pynoos, R.S., Minassian, D., Najarian, L.M., Steinberg, A.M., et al. (1997). Outcome of psychotherapy among early adolescents after trauma. *American Journal of Psychiatry*, *154*(4), 536–542.

Gold, P.E., & McCarty, R.C. (1995). Stress regulation of memory processes: Role of peripheral catecholamines and glucose. In M.J. Friedman, D.S. Charney, & A.Y. Deutch (Eds.), *Neurobiological and clinical consequences of stress: From normal adaptation to post-traumatic stress disorder* (pp. 151–162). Philadelphia, PA: Lippincott-Raven.

Golier, J., & Yehuda, R. (1998). Neuroendocrine activity and memory-related impairments in posttraumatic stress disorder. *Developmental Psychopathology*, *10(4)*, 857–869.

Lipschitz, D.S., Winegar, R.K., Hartnick, E., Foote, B., & Southwick, S.M. (1999). Posttraumatic stress disorder in hospitalized adolescents: Psychiatric comorbidity and clinical correlates. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38(4), 385–392.

Marans, S., & Adelman, A. (1997). Experiencing violence in a developmental context. In J.D. Osofsky (Ed.), *Children in a violent society* (pp. 202–222). New York, NY: Guilford Press.

March, J.S., Amaya-Jackson, L., & Pynoos, R.S. (1997). Pediatric posttraumatic stress disorder. In J.M. Weiner (Ed.), *Textbook of child and adolescent psychiatry* (2nd ed., pp. 507–524). Washington, DC: American Psychiatric Press.



REFERENCES (cont.)

March, J.S., Amaya-Jackson, L., Terry, R., & Costanzo, P. (1997). Posttraumatic symptomatology in children and adolescents after an industrial fire. *Journal of the American Academy of Child and Adolescent Psychiatry*, *36*(8), 1080–1088.

McCloskey, L.A., & Walker, M. (2000). Posttraumatic stress in children exposed to family violence and single-event trauma. *Journal of the American Academy of Child and Adolescent Psychiatry*, 39(1), 108–115.

McFarlane, A.C. (1987). Family functioning and overprotection following a natural disaster: The longitudinal effects of post-traumatic morbidity. *Austraoam and New Zealand Journal of Psychiatry*, *21*(2), 210–218.

Morrison, J.A. (2000). Protective factors associated with children's emotional responses to chronic community violence exposure. *Trauma, Violence, and Abuse: A Review Journal, 1(4),* 299–320.

Murphy, L., Pynoos, R.S., & James, C.B. (1997). The trauma/grief-focused group psychotherapy module of an elementary school-based violence prevention/intervention program. In J.D. Osofsky (Ed.), *Children in a violent society* (pp. 223–255). New York, NY: Guilford Press.

National Institute of Mental Health. (2001). Helping children and adolescents cope with violence and disasters. http://www.nimh.nih.gov/publicat/violence.cfm.

Osofsky, J.D. (1995). The effects of exposure to violence on young children. *American Psychologist*, 50(9), 782–788.

Pfefferbaum, B., Nawaz, S., & Kearns, L.J. (1999). Posttraumatic stress disorder in children: Implications for assessment, prevention, and referral in primary care. *Journal of the Oklahoma State Medical Association*, *92*(7), 309–315.

Pynoos, R.S., Steinberg, A.M., & Goenjian, A.K. (1996). Traumatic stress in childhood and adolescence: Recent developments and current controversies. In B.A. Van der Kolk, A.C. McFarlane, & L. Weisaeth (Eds.), *Traumatic stress: The effects of overwhelming experience on mind, body, and society* (pp. 331–358). New York, NY: Guilford Press.

Rauch, S.L., & Shin, L.M. (1997). Functional neuroimaging studies in posttraumatic stress disorder. In R. Yehuda & A.C. McFarlane (Eds.), *Psychobiology of posttraumatic stress disorder. Annals of the New York Academy of Sciences* (Vol. 821, pp. 83–98). New York, NY: The New York Academy of Sciences.

Richards, M.H. Risky context and exposure to violence in urban youth. NIMH Grant No. 5R01MH57938-02. In progress.

Roth, S., Newman, E., Pelcovitz, D., van der Kolk, B., & Mandel, F.S. (1997). Complex PTSD in victims exposed to sexual and physical abuse: Results from the DSM-IV Field Trial for Posttraumatic Stress Disorder. *Journal of Traumatic Stress*, 10(4), 539–555.

Smith, E.M., & North, C.S. (1993). Posttraumatic stress disorder in natural disasters and technological accidents. In J.P. Wilson & B. Raphael (Eds.), *International handbook of traumatic stress syndromes* (pp. 405–419). New York, NY: Plenum Press.

Smith, E.M., North, C.S., & Spitznagel, E.L. (1993). Post-traumatic stress in survivors of three disasters. *Journal of Social Behavior and Personality*, 8(5), 353–368.

Stein, M.B., Hanna, C., Koverola, C., Torchia, M., & McClarty, B. (1997). Structural brain changes in PTSD. Does trauma alter neuroanatomy? In R. Yehuda & A.C. McFarlane (Eds.), *Psychobiology of posttraumatic stress disorder. Annals of the New York Academy of Sciences* (Vol. 821, pp. 76–82). New York, NY: The New York Academy of Sciences.

Vogel, J.M., & Vernberg, E.M. (1993). Psychological responses of children to natural and human-made disasters: I. Children's psychological responses to disasters. *Journal of Clinical Child Psychology*, 22(4), 464–484.

Yehuda, R., McFarlane, A.C., & Shalev, A.Y. (1998). Predicting the development of posttraumatic stress disorder from the acute response to a traumatic event. *Biological Psychiatry*, *44*(12), 1305–1313.

Yule, W., & Canterbury, R. (1994). The treatment of post traumatic stress disorder in children and adolescents. *International Review of Psychiatry*, *6*(2), 151.