

IN HARM'S WAY:

Aiding Children Exposed to Trauma

ISSUE BRIEF NO.23

NOVEMBER 2005

PREPARED FOR A

GRANTMAKERS

IN HEALTH

ISSUE DIALOGUE

DENVER, CO



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Foreword

The ongoing toll of family, school, and community violence; the continuing threat of terror attacks; and the widespread destruction and dislocation caused by Hurricane Katrina have heightened concerns about the well-being of children exposed to trauma. Every year, thousands of children nationwide experience trauma as a result of exposure to violence, abuse, natural disasters, severe illness or injury, loss of loved ones due to violence or accident, or forced relocation. This exposure can have both immediate and long-term effects on children's health and their ability to function fully in their families, schools, and communities.

As part of its ongoing mission to serve trustees, executives, and staff of health foundations and corporate giving programs, Grantmakers In Health (GIH) convened a group of grantmakers, researchers, and policymakers on May 4, 2005 to discuss the role of philanthropy in meeting the needs of children exposed to trauma. During this day-long Issue Dialogue, participants examined the extent of childhood exposure to trauma, the effects of this exposure, and proven and promising approaches for identifying and serving traumatized children.

This Issue Brief synthesizes key points from the day's discussion with a background paper prepared for Issue Dialogue participants. It is intended to highlight the work of grantmakers and others interested in expanding their efforts to address children's mental health and ameliorate the effects of childhood trauma. This Issue

Brief focuses on the needs of children exposed to trauma, strategies for early identification and intervention, and ensuring the provision of timely and appropriate services to them and their caregivers. It provides:

- an overview of childhood trauma, including the prevalence and causes;
- an explanation of the effects of childhood exposure to trauma on brain development, as well as the physical and mental health of children and youth;
- a description of current challenges and efforts to address childhood trauma;
- identification of different approaches for addressing the mental health needs of children exposed to trauma; and
- examples of the role of health philanthropy in addressing childhood trauma and improving children's mental health.

Many of the approaches discussed in this report can benefit other children with or at risk for mental disorders. A full discussion of children's mental health needs and services is, however, beyond the scope of this paper.

Special thanks are due to those who participated in the Issue Dialogue, especially the presenters: Carol Breslau, vice president of initiatives, The Colorado Trust; Raymond Crowel, vice president, National Mental Health Association; John Fairbank, codirector, UCLA-Duke University National Center for Child

Traumatic Stress; Gwen Foster, senior program officer, The California Endowment; Phyllis Glink, executive director, The Irving Harris Foundation; Astrid Heppenstall Heger, associate professor of clinical pediatrics, University of Southern California Medical Center; Noreen Johnson Smith, vice president for programs, The Health Foundation of Central Massachusetts, Inc.; Lydia Prado, director of cultural competency, Mental Health Center of Denver; and Martin Teicher, associate professor of psychiatry, Harvard Medical School.

Donna Langill, program associate at GIH, planned the program, wrote the background paper, and finalized the Issue Brief. Pilar Ingargiola synthesized key points

from the Issue Dialogue into this report. Lauren LeRoy, president of GIH, moderated the Issue Dialogue. Anne Schwartz and Todd Kutyla, GIH's vice president and communications manager respectively, also contributed to the final report.

The Issue Dialogue and this publication were made possible by grants from The California Endowment, Caring for Colorado Foundation, The Colorado Trust, Health Resources and Services Administration, HealthONE Alliance, The John D. and Catherine T. MacArthur Foundation, and Rose Community Foundation.

About GIH

The mission of Grantmakers In Health (GIH) is to help grantmakers improve the nation's health. GIH seeks to build the knowledge and skills of health funders, strengthen organizational effectiveness, and connect grantmakers with peers and potential partners. We help funders learn about contemporary health issues, the implications of changes in the health sector and health policy, and how grantmakers can make a difference. We generate and disseminate information through meetings, publications, and an on-line presence; provide training and technical assistance; offer strategic advice on programmatic and operational issues; and conduct studies of the field.

As the professional home for health grantmakers, GIH looks at health issues through a philanthropic lens, sorting out what works for health funders of different missions, sizes, and approaches to grantmaking. We take on the operational issues with which many funders struggle (such as governance, communications, evaluation, and relationships with grantees) in ways that are meaningful to those in the health field.

Expertise on Health Issues

GIH's Resource Center on Health Philanthropy maintains descriptive data about foundations and corporate giving programs funding in health and their grants and initiatives, and synthesizes lessons learned from their work.

The Resource Center's database is available online on a password-protected basis to GIH Funding Partners (health grantmaking organizations that provide annual financial support to the organization). The database contains information on thousands of grants and initiatives made by more than 300 foundations and corporate giving programs. It can be searched by organizational characteristics (such as tax-exempt status, geographic focus, or assets); health programming areas (such as access, health promotion, mental health, and quality); targeted populations; and type of funding (such as direct service delivery, research, capacity building, or advocacy).

Advice on Foundation Operations

GIH also focuses on operational issues confronting health grantmakers through the work of its Support Center for Health Foundations. We advise foundations just getting started (including dozens of foundations formed as a result of the conversion of nonprofit hospitals and health systems) as well as more established organizations. The Support Center's activities include:

- The Art & Science of Health Grantmaking, an annual two-day meeting offering introductory and advanced courses on board development, grantmaking, evaluation, communications, and finance and investments;

- sessions focusing on operational issues at the GIH Annual Meeting on Health Philanthropy;
- individualized technical assistance for health funders; and
- a frequently asked questions feature on the GIH Web site.

Connecting Health Funders

GIH creates opportunities to connect colleagues to one another and with those in other fields whose work has important implications for health. GIH meetings, including the Annual Meeting on Health Philanthropy, the Fall Forum (when we focus on policy issues), and Issue Dialogues (intensive one-day meetings on a single health topic) are designed for health funders to learn more about their colleagues' work; talk openly about shared issues; and tap into the knowledge of experts from research, policy, and practice. Our audioconference series allows smaller groups of grantmakers working on issues of mutual interest, such as access to care, overweight and obesity, racial and ethnic disparities, patient safety, or public policy, to meet with colleagues regularly without having to leave their offices.

Fostering Partnerships

The many determinants of health status and the complexity of communities and health care delivery systems temper health grantmakers' expectations about going it alone. Collaboration with others is essential to lasting health improvements.

Although successful collaborations cannot be forced, GIH works to facilitate those relationships where we see mutual interest. We bring together national funders with those working at the state and local levels, link with other affinity groups within philanthropy, and help connect grantmakers to organizations that can help further their goals.

GIH places a high priority on bridging the worlds of health philanthropy and health policy. Our policy portfolio includes efforts to help grantmakers understand the importance of public policy to their work and the roles they can play in informing and shaping policy. We also work to help policymakers become more aware of the contributions made by health philanthropy. When there is synergy, we seek to strengthen collaborative relationships between philanthropy and government. GIH has established cooperative relationships, for example, with a number of federal agencies, including the Agency for Healthcare Research and Quality and the Centers for Disease Control and Prevention.

Educating and Informing the Field

An aggressive publications effort helps GIH reach many grantmakers and provide resources that are available when funders need them. Our products include both indepth reports and quick reads. Issue Briefs delve into a single health topic, providing the most recent data, sketching out opportunities for funders, and offering

examples of how grantmakers are putting ideas into action. The GIH Bulletin, a newsletter published 22 times each year, keeps funders up to date on new grants, studies, and people. GIH's Web site, www.gih.org, is a one-stop information resource for health grantmakers and those interested in the field. The site includes all of GIH's publications, the Resource Center database (available only to GIH Funding Partners), and the Support Center's frequently asked questions. Key health issue pages on access, aging, children/youth, disparities, health promotion, mental health, public health, and quality provide grantmakers with quick access to new studies, GIH publications, information on audioconferences, and the work of their peers.

Diversity Statement

GIH is committed to promoting diversity and cultural competency in its programming, personnel and employment practices, and governance. It views diversity as a fundamental element of social justice and integral to its mission of helping grantmakers improve the nation's health. Diverse voices and viewpoints deepen our understanding of differences in health outcomes and health care delivery,

and strengthen our ability to fashion just solutions. GIH uses the term, diversity, broadly to encompass differences in the attributes of both individuals (such as race, ethnicity, age, gender, sexual orientation, physical ability, religion, and socioeconomic status) and organizations (foundations and giving programs of differing sizes, missions, geographic locations, and approaches to grantmaking).

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Executive Summary

The ongoing toll of family, school, and community violence, the continuing threat of terror attacks, and the widespread destruction and dislocation caused by Hurricane Katrina have heightened concerns about the thousands of children who are exposed to trauma. In addition to the immediate stress associated with exposure to violence, abuse, natural disasters, severe illness or injury, loss of loved ones due to violence or accident, or forced relocation, new research is documenting the profound and lasting effects of trauma on brain development and both physical and emotional health. Working with public officials, service providers, schools, and families, health grantmakers can play important roles in both preventing the causes and addressing the consequences of exposure to trauma. To make a difference, funders must understand the effects of trauma on children's well-being, know about current efforts to address childhood trauma and the barriers to change, and be able to seize opportunities as they arise.

Effects of Exposure to Trauma in Childhood

Trauma has both immediate and long-term effects, producing a cascade of physiological and neurological responses that can lead to enduring alterations in brain development and function. Without appropriate interventions, the effects of trauma exposure can follow children throughout their lives, impeding their healthy development and their transition to adulthood. For example, trauma in childhood affects brain development. In some children, areas of the brain associated with anxiety and fear may be overdeveloped, while areas necessary for learning may be underdeveloped (National Clearinghouse on Child Abuse and Neglect Information 2001). Moreover, trauma often precipitates mental health problems, including fear, anxiety, flashbacks, nightmares and other sleep disturbances, poor concentration, regressive behavior, and suicidal thoughts. Finally, trauma relates to greater risk for physical health problems and poorer health outcomes. For example, traumatized children are more likely to suffer from allergies, asthma, and gastrointestinal problems (Graham-Bermann and Seng 2005; Perry 2000).

Challenges to Addressing Childhood Trauma

While knowledge and awareness about the impact of childhood trauma is increasing, comprehensive and coordinated efforts to prevent childhood trauma and address its consequences are lacking in most communities. There are many challenges to rallying families, schools, and communities to address childhood trauma, including:

- stigma and lack of awareness regarding mental health;
- gaps in knowledge about childhood exposure to trauma and effective interventions;
- fragmentation of existing services among various systems that serve children with mental illness (including mental health, juvenile justice, human services, child welfare, and public health) creating gaps in service, duplication of efforts, and overly complex systems to navigate;
- lack of capacity in schools;
- an inadequate supply of trained providers; and
- inadequate attention to issues of cultural competency.

Current Efforts to Address Childhood Trauma

Public officials, grantmakers, service providers, and others are turning their attention and their support to programs that provide early identification, intervention, and treatment services to children exposed to trauma, as well as other children with mental health needs.

Increasing Awareness. The federal government and national non-profit organizations are working to increase awareness of child trauma through campaigns such as *Caring for Every Child's Mental Health* and the *Campaign for America's Mental Health*.

Preventing Childhood Trauma. Current efforts include are *Stop Bullying Now!*, a federal initiative to educate school personnel, students, and families about the impact of bullying and ways to prevent it; *Safe Start*, a program of the U.S. Department of Justice to reduce the impact of family and community violence on young children, between the ages of zero and six.; *Safe Schools, Healthy Students*, an initiative of the Substance Abuse and Mental Health Services Administration (SAMHSA) to foster collaborations among child-serving agencies

and schools to create safer school environments, provide prevention and early intervention services, and promote healthy development.

Identifying Children Exposed to Trauma. The first step in helping to treat children with a history of trauma or mental illnesses is to identify troubled children early. The state of Ohio is leading the nation with creative efforts to identify children in middle school, high school, and even early childhood settings.

Increasing Access to Early Intervention and Treatment. Several models for promoting early childhood mental health are currently being tested. The mental health consultant model is one approach that is being used to bolster the ability of child care workers to meet mental health needs. The National Center for Child Traumatic Stress and the National Child Traumatic Stress Network are working to test new interventions and disseminate evidence-based models of care.

Developing Integrated Systems of Care. The federal government, in partnership with states and communities, is working to reduce the fragmentation of systems serving children with mental health needs and their families. SAMHSA's *State Infrastructure* and *System of Care* grants programs are supporting model interventions, policies, and procedures.

Enhancing School-Based Assessment, Services, and Supports. Although federal law requires schools to identify children with mental health needs and provide services necessary to maximize their learning, many schools lack the resources and trained personnel to do so. Public and private sector organizations are working to develop guidelines and tools for this purpose.

Opportunities for Health Philanthropy

Health grantmakers across the country are addressing the mental health needs of children exposed to trauma. Among the strategies available to help address childhood trauma and its lasting effects grantmakers can:

- support early childhood mental health interventions;
- support school-based or school-lined programs;
- support services for populations at high risk for mental disorders (such as those living in violent households);

- prevent further traumatization by addressing the environment in which trauma occurs;
- address workforce shortages;
- support needs assessments;
- fund research and analysis to expand the knowledge base about child mental health, the causes and consequences of child traumatic stress, and promising approaches for addressing mental health needs;
- promote the development of culturally competent services; and
- help support development of strong community leaders who are passionate about their issues and who can bring clinical, policy, and other expertise together.

Conclusion

Health grantmakers have a wide range of strategies available to them to aid children exposed to trauma. In states and localities where public agencies and nonprofit organizations are already working to educate people about child trauma and its consequences, grantmakers can use their resources to complement these initiatives by strengthening leadership, increasing awareness, and promoting collaboration. In areas where child trauma has yet to be addressed effectively, health grantmakers can be the catalysts that prompt families, schools, and communities to work together to develop an integrated system of care with a comprehensive array of services and supports that can meet the individualized needs of children and their families. Grantmakers may support small portions of projects including research and evaluation or may develop comprehensive initiatives that fund projects from planning through development, implementation, and evaluation, to create sustainable systems change. By supporting the range of efforts needed to prevent childhood trauma and address its consequences, grantmakers will play a critical role in helping traumatized children move toward a brighter future.

Sources

- Graham-Bermann, Sandra and Julia Seng, "Violence Exposure and Traumatic Stress Symptoms as Additional Predictors of Health Problems in High-Risk Children," *The Journal of Pediatrics* 146(3):349-354, March 2005.
- National Clearinghouse on Child Abuse and Neglect Information, *In Focus: Understanding the Effects of Maltreatment on Early Brain Development* (Washington, DC: Administration for Children and Families, U.S. Department of Health and Human Services, 2001).
- Perry, Bruce, "Trauma and Terror in Childhood: The Neuropsychiatric Impact of Childhood Trauma" in I. Schulz, S. Carella, and D. O. Brady, eds., *Handbook of Psychological Injuries: Evaluation, Treatment, and Compensable Damages* (Washington, DC: American Bar Association Publishing, 2000).

Overview of Childhood Trauma

The prevalence of childhood trauma is sobering. Every year, thousands of children experience trauma as a result of exposure to violence, abuse, natural disasters, severe illness or injury, loss of loved ones due to violence or accident, or forced relocation. Although precise numbers are not available, a national survey of children ages 12 to 17 found that 8 percent reported being the victims of sexual abuse, 17 percent had been physically assaulted, and 30 percent reported witnessing violence (National Child Traumatic Stress Network 2005). The problem may be even worse in urban areas than these numbers suggest. A survey of New York City school children conducted before the September 11, 2001 terror attacks found that 64 percent had experienced at least one significant traumatic event and other studies in urban areas suggest that trauma exposure is high in cities (National Child Traumatic Stress Network 2004a).

These traumatic events can create intense stress that threatens children's well-being. Emerging research is documenting that exposure to trauma has profound and sometimes lasting effects on brain development, psychological and emotional health, behavior, learning, and risk for future mental and physical disorders.

Recent events have raised public awareness about the mental health needs of children exposed to trauma. The continuing toll of school and community violence, the 2001 terror attacks and their aftermath, the large numbers of abused and neglected children,

and the widespread destruction and dislocation in the Gulf Coast region following Hurricane Katrina are only some of the reasons why public officials, service providers, researchers, and others have begun to address the causes and consequences of childhood exposure to traumatic events.

The Diagnostic and Statistical Manual of Mental Disorders (DSM), a widely used compendium of standard definitions of psychological disorders, defines a traumatic event as one where both of the following are present:

- the person experiences, witnesses, or is confronted with an event or events that involves actual or threatened death or serious injury, or a threat to the physical integrity of self or others; and
- the person's response involves intense fear, helplessness, or horror (American Psychiatric Association 2000).

Childhood trauma can result from a variety of causes, and it may be the product of either a single event or repeated events. Among the numerous causes are the following:

Exposure to violence or threat of violence—

The U.S. General Accounting Office (GAO) estimates that almost 9 million children have been exposed to serious violence as either witnesses or victims (GAO 2002). In addition, children may be traumatized by ongoing exposure to environments where there is a pervasive threat of violence (such as in schools where bullying is prevalent or in the home where domestic violence is

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"Some people have talked about (trauma) as an epidemic. It's actually an epidemic of tenfold greater prevalence than childhood cancer."

MARTIN TEICHER,
HARVARD MEDICAL
SCHOOL

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*“There are more children
who are exposed to trauma
than we like to admit.”*

JOHN FAIRBANK,
UCLA-DUKE UNIVERSITY
NATIONAL CENTER FOR
CHILD TRAUMATIC
STRESS

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continual) or by inappropriate exposure to violent images (HRSA 2004; The Henry J. Kaiser Family Foundation 2003).

Child abuse and neglect—Child abuse and neglect takes many forms, including physical, emotional or sexual abuse, and parental neglect. Children living in abusive households may experience trauma even if abuse is directed at others in the household. Children may also experience the trauma of being removed from their homes and families and placed in foster care. An estimated 1.7 million children are reported for abuse and neglect annually, with nearly 900,000 confirmed cases of children that have been direct victims of child abuse and neglect, and nearly 1,400 fatalities directly related to the abuse (Child Welfare League of America 2002).

Natural or manmade disasters—Each year, an average of 63,000 natural and manmade disasters in the U.S. are serious enough to require the services of the American Red Cross (American Red Cross 2004). Living through such disasters can be a traumatic event for children, as well as for the adults around them.¹ Factors influencing the effect of a disaster on children include the severity and duration of the disruption it causes, whether the child is injured or witnesses injuries to others, the degree of destruction caused by the disaster, and the availability of timely support from the adults around them (AAP 1999). The precise number of children exposed to disaster is not known. In 2005, hun-

dreds of thousands of children were displaced by Hurricane Katrina; thousands were separated from family members and all witnessed frightening scenes of devastation.

Severe illness or injury—Children who experience severe illness or injury may experience traumatic stress as a result. While the physical consequences of childhood illness or injury are often dealt with swiftly, the psychological and emotional effects of severe illness or injury often go unaddressed. Comprehensive data on the number of children with life-threatening illnesses are not available, but cancer, respiratory conditions, cardiovascular conditions, congenital abnormalities, and HIV/AIDS are among the leading causes of death among children and youth ages 0-24 (Field and Behrman 2003). According to the Centers for Disease Control and Prevention (CDC), 9.7 million children ages 0-19 suffered a nonfatal injury in 2003, including more than 12,000 firearm-related injuries and more than 687,000 motor vehicle-related injuries.

Traumatic loss—Children who experience the loss of family members or friends due to violence or accidents may experience traumatic stress as a result. The circumstances of the loss, as well as the support available, may affect whether a death or other loss of a family member or friend is traumatic.

Relocation—Children who experience relocation, either with their families or without them, may find the experience

¹ Natural disasters that can cause trauma include earthquakes, hurricanes, tornados, or floods that cause severe or widespread damage, while manmade disasters include major transportation accidents, residential fires, hazardous material spills or exposures, and disruption or destruction resulting from terrorism or civil unrest.

to be traumatic. Children affected by disasters, such as the thousands of children affected by 2005's Hurricane Katrina, often experience temporary or long-term displacement, as do children fleeing domestic violence and those placed in foster care. Immigrant and refugee children in the U.S. have also experienced the loss of their homes and have left behind family members, friends, and a familiar way of life. Some have experienced violent conflict and war firsthand. While not all immigrant and refugee children will find the experience of coming to the U.S. to be a traumatic one, some will have difficulty adjusting to profound changes in their lives. In 2002, 2.8 million immigrant and refugee children were living in the United States (Parker and Teitelbaum 2003).

Effects of Exposure to Trauma in Childhood

Emerging research is demonstrating that exposure to chronic fear and stress as a result of trauma, abuse, or neglect during childhood has adverse effects on brain development, as well as physical and mental health. From early childhood through adolescence, trauma produces a cascade of physiological and neurological responses that can lead to enduring alterations in brain development and function. These, in turn, can set the stage for future physical and psychiatric disorders. Without appropriate interventions, the effects of trauma

exposure can follow children throughout their lives, impeding their healthy development and their transition to a productive adulthood.

Effects on Brain Development

Trauma in childhood affects brain development. In some children, areas of the brain associated with anxiety and fear may be overdeveloped, while areas necessary for learning may be underdeveloped (National Clearinghouse on Child Abuse and Neglect Information 2001). These neurological changes, in turn, can lead to cognitive and emotional impairments. Additionally, because trauma delays children's ability to manage automatic reactions to perceived danger (such as the startle reflex), children may find it harder to concentrate in the classroom and control their behavior (National Child Traumatic Stress Network 2004b).

Current advances in brain imaging technology and other techniques are enabling researchers to document the impact of childhood trauma on brain development. An important finding is that there are particular stages in development when a traumatic experience may exert a critical or maximal effect on brain development. These sensitive periods may determine the type and consequences of exposure to trauma. For example, one study of 18 to 22 year olds with a history of three or more sexual abuse traumas or severe emotional maltreatment in childhood found that when the abuse occurred when children were between 3 and 5 years old, the area of the brain most affected was the hippocampus, a region that plays an important role in memory, as well as

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*"Our brains are sculpted by
 early experience.*

*Maltreatment is a chisel
 that shapes the brain to
 contend with anticipated
 strife, but at the cost of
 deep, enduring wounds.
 Early childhood stress or
 trauma isn't something you
 get over. It's an evil that we
 must acknowledge and
 confront, if we aim to do
 anything about the
 unchecked cycle of violence."*

MARTIN TEICHER,
 HARVARD MEDICAL
 SCHOOL

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EFFECT OF CHILDHOOD TRAUMA ON SPECIFIC REGIONS OF THE BRAIN

Different regions of the brain are uniquely susceptible to the early effects of stress and trauma:

- The hippocampus is associated with memory and stress. The hippocampus is studded with receptors for stress hormones. Stress during all periods of life can dramatically affect aspects of the hippocampus, which can have its nerve cells shrunken by exposure to stress hormones.
- The corpus colosum serves as a connector between the left and right hemispheres of the brain for information exchange. A reduction in the corpus colosum may disable the two hemispheres from functioning collectively, and therefore to have less integration, which is important for healthy, normal function.
- The prefrontal cortex is associated with visual recognition. The prefrontal cortex is the last region of the brain to mature and may be vulnerable to stress later in life.
- The superior temporal gyrus is key in speech, language and communication and is also involved in detecting intonation and emotional content of speech.

regulation of the autonomic nervous system and the neuroendocrine system. If the abuse occurred when children were 9 or 10 years old, the corpus colosum, a structure responsible for communication between the left and right hemispheres of the brain, was most affected. In 15 year olds, the brain region most affected was the prefrontal cortex, which is responsible for visual processing and higher cognitive functioning, among other things (Teicher 2005).

There are also gender differences in the impact of childhood trauma on the brain. One study examining the impact of different types of trauma on the corpus colosum found that for boys, a history of childhood neglect had the most effect on this brain structure, while for girls, sexual abuse had the most impact (Teicher 2005).

Effects on Behavioral Health

Children exposed to trauma often experience mental health problems, both at the time of traumatization and later in life. Traumatized children may exhibit fear, anxiety, flashbacks, nightmares and other sleep disturbances, poor concentration, regressive behavior, and suicidal thoughts (Figure 1). The mental and behavioral consequences of trauma exposure can impede the ability of children to function in their families, schools, and communities. They can also lead to problems in adolescence and adulthood, including learning difficulties and involvement in violence (Nageer et al. 2002).

A significant proportion of children exposed to traumatic events will go on to develop psychiatric disorders, and many

Figure 1. *Common reactions to trauma exposure among children in different age groups.*

Young Children (1-5 years of age)	School-aged Children (6-11 years of age)	Preadolescents and Adolescents (12-18 years of age)
<ul style="list-style-type: none"> • Helplessness and passivity; lack of usual responsiveness • Generalized fear • Heightened arousal and confusion • Difficulty talking about event; lack of verbalization • Difficulty identifying feelings • Nightmares and other sleep disturbances • Separation fears and clinging to caregivers • Regressive symptoms (for example, bedwetting, loss of acquired speech and motor skills) • Somatic symptoms (for example, stomach aches, headaches) • Startle response to loud or unusual noises • Fussiness, uncharacteristic crying, and neediness • Avoidance of or alarm response to specific trauma-related reminders involving sights and physical sensations 	<ul style="list-style-type: none"> • Feelings of responsibility and guilt • Repetitious traumatic play and retelling • Feeling disturbed by reminders of the event • Nightmares and other sleep disturbances • Concerns about safety and preoccupation with danger • Aggressive behavior and angry outbursts • Close attention to caregivers' anxieties • Withdrawal, school avoidance • Worry and concern for others • Somatic symptoms (complaints about body aches and pains) • Obvious anxiety and fearfulness • Specific trauma-related fears; general fearfulness • Regression (behaving like a younger child) • Separation anxiety • Loss of interest in activities • Loss of ability to concentrate in school, with lowering of performance • Distractibility 	<ul style="list-style-type: none"> • Self-consciousness • Life-threatening reenactment • Rebellion at home or school • Abrupt shift in relationships • Depression and social withdrawal • Decline in school performance • Trauma-driven acting out, such as risky sexual activity and other risk-taking • Prone to accidents • Efforts to distance oneself from feelings of shame, guilt, and humiliation • Excessive activity and involvement with others (or, alternatively, retreat from others) to manage inner turmoil • Wish for revenge or other action-oriented responses to trauma • Increased self-focusing and withdrawal • Sleep and eating disturbances, including nightmares

Source: Curie, Charles, "The Effects of Trauma on Children and the Role of Mental Health Services," testimony before the U.S. Senate Committee on Health, Education, Labor and Pensions, June 10, 2002.

more will experience other types of behavioral difficulties (National Child Traumatic Stress Network 2005).² Psychiatric diagnoses associated with exposure to traumatic events include acute stress disorder, posttraumatic stress disorder (PTSD), depression, phobia, and conduct disorder. For example, among a group of 384 adolescents participating in a longitudinal

study, 14.5 percent of those who experienced a traumatic event developed PTSD. Of these, just over 40 percent went on to develop major depression and nearly 30 percent developed a phobia. Adolescents who experienced a traumatic event—including those who exhibited posttraumatic stress and those who did not—were at higher risk for behavioral

² Not all mental disorders in childhood are caused by exposure to traumatic events or hostile environments. There is general consensus that the development of mental disorders in children may be influenced by biological factors, such as genetic susceptibility, injury, or exposure to toxins; environmental factors, such as having a depressed parent, living in a dysfunctional family, or exposure to abuse; or a combination of biological and environmental factors (HHS 1999).

and emotional problems, interpersonal problems, academic failure, and substance dependence (Gianconia et al. 1995).

Childhood exposure to trauma increases the risk for adult mental disorders (Harris et al. 2004). Adults exposed to trauma as children are at higher risk for depression, substance abuse, poorer medical health, and lower occupational attainment. Abuse that occurs at different ages can also result in different psychiatric symptoms later in life. For example, youth who are physically abused between the ages of 10 and 14 have an increased rate of substance abuse in early adulthood. Physical abuse earlier in life, by contrast, does not appear to result in an increased likelihood for substance abuse. Studies also suggest that youth who are abused at 6 and 16 have the greatest risk of showing signs of depression in early adulthood (Teicher 2005).

Effects on Physical Health

Children exposed to trauma may also be at greater risk for physical health problems and poorer health outcomes in adults. For example, traumatized children are more likely to suffer from allergies, asthma, and gastrointestinal problems (Graham-Bermann and Seng 2005, Perry 2000).

Children who have experienced repeated traumatic experiences are also more likely to engage in health risk behaviors in adolescence and young adulthood, leading to increased morbidity and mortality later in life (Teicher 2005). There is a correlation between the number of adverse events in childhood and disease outcomes, including conditions such as heart disease, cancer, and chronic lung disease (Felliti et al. 1998).

Challenges to Addressing Childhood Trauma

While knowledge and awareness about the impact of childhood trauma is increasing, comprehensive and coordinated efforts to prevent childhood trauma and address its consequences are lacking in most communities. There are many challenges to rallying families, schools, and communities to address childhood trauma, including the following:

Stigma and awareness—Stigma and lack of awareness regarding mental health continue to be barriers to addressing mental issues. Approximately 2 out of 3 people who do not seek treatment for mental illness cite stigma as a reason (Crowel 2005). Although progress is being made to reduce stigma, particularly for depression and anxiety disorders, many individuals and families continue to be reluctant to seek help. Stigma is particularly an issue in situations involving victimization, especially when it occurs within families. Further, many people do not have a clear understanding of what trauma is, what its effects are, or what they need to do to get help.

Gaps in knowledge—There are gaps in knowledge about childhood exposure to trauma and effective interventions. However, ongoing research on sensitive periods may help determine which of the various effects of trauma on brain development are reversible and what approaches are most effective. More research is needed to document the effectiveness of emerging practices and

demonstration projects. Research may also help reduce stigma: as science identifies physical causes for some mental illness, these findings may help improve public and professional understanding of trauma and mental illness.

Fragmentation of existing services—

Currently, the systems that serve children with mental illness, including mental health, juvenile justice, human services, child welfare, and public health, operate in isolation from each other. While they may be serving the same children and families, they typically do not share resources or information, often because of concerns about confidentiality. The result is significant duplication of assessment and information gathering, as well as overly complex systems that are difficult for families to navigate.

*Lack of capacity in schools—*Many children experiencing difficulties resulting from exposure to trauma or other causes remain unidentified, and therefore unserved, by schools. Yet schools have an important stake in these matters. Children who have mental or emotional problems typically experience difficulties at school, such as lack of concentration, shorter attention span, withdrawal, and fearfulness. Such unresolved problems lead to decreased academic performance, higher rates of absenteeism and school dropout, a greater likelihood of engaging in risky behaviors, and increased referrals to special education (HHS 2001; Powney et al. 2000). Although the U.S. Surgeon General estimates that 11 percent of all youth have mental disorders that create significant impairment, nationally, schools identify less than 1 percent of their students as having an

emotional disturbance (Koyanagi 2003). Schools also often lack the resources and supports to help these youth in need.

Insufficient numbers of trained providers—

By the year 2020, population needs are expected to require an additional 12,000 child psychiatrists, though the current pipeline will supply only 8,000 (Crowel 2005). The situation for psychologists, social workers, and psychiatric nursing is similar. Moreover, as we learn more about brain development, trauma, and effective interventions, there will be a growing need to expand in-service training and continuing education for current health providers, school staff, early childhood providers, police, and others.

Ensuring cultural competency of services and improving workforce diversity—

By 2030, racial and ethnic minorities are estimated to make up over 40 percent of the population of the U.S. (Census Bureau 2005). Often, cultural, social, economic, and religious factors are barriers to receiving appropriate mental health care (National Mental Health Association 2005). Developing a culturally competent and more diverse workforce is necessary to address the needs of the country's increasingly diverse population.

Over the last ten years, several organizations representing specific racial and ethnic communities and cultures have come together to form an alliance to promote the development of culturally competent mental health services. This alliance, the *National Alliance of Multi-ethnic Behavioral Health Associations* (NAMBHA),

.....
*“The child disappears down
 a crack and ends up
 recycling back through one
 of those systems.”*

RAYMOND CROWEL,
 NATIONAL MENTAL
 HEALTH ASSOCIATION

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“Most of the barriers were silos around money. . . [Our] partnership became health services, mental health, Department of Child and Family Services, probation, the court system, community providers, and schools. All came to the table and said ‘Oh, you’ve got \$1 million for kids going into foster care? We would like to play on that team.’”

ASTRID HEPPENSTALL
HEGER, UNIVERSITY OF
SOUTHERN CALIFORNIA
MEDICAL CENTER

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ENSURING CULTURAL COMPETENCY

The U.S. Substance Abuse and Mental Health Services Administration has developed a set of nine principles for the delivery of culturally competent children's mental health services.

- The family, however defined, is the consumer and usually the focus of treatment and services.
- Americans with diverse racial and ethnic backgrounds are often bicultural or multicultural. As a result, they may have a unique set of mental health issues that must be recognized and addressed.
- Families make choices based on their cultural backgrounds. Service providers must respect and build upon their own cultural knowledge as well as the strengths of families.
- Crosscultural relationships between providers and consumers may include major differences in world views. These differences must be acknowledged and addressed.
- Cultural knowledge and sensitivity must be incorporated into program policymaking, administration, and services.
- Natural helping networks such as neighborhood organizations, community leaders, and natural healers can be a vital source of support to consumers. These support systems should be respected and, when appropriate, included in the treatment plan.
- In culturally competent systems of care, the community, as well as the family, determine direction and goals.
- Programs must do more than offer equal, nondiscriminatory services; they must tailor services to their consumer populations.
- When boards and programs include staff who share the cultural background of their consumers, the programs tend to be more effective (SAMHSA 2005c).

includes the National Leadership Conference on African-American Behavioral Health, the National Asian-American Pacific Islander Mental Health Association, the National Latino Behavioral Association, and First Nations (representing Native Americans). Together,

these organizations are providing input on the development of culturally competent, evidence based mental health and trauma programs that specifically address the needs of minority populations (Crowel 2005).

Public Sector and Nonprofit Efforts to Address Childhood Trauma

Awareness is increasing about the short- and long-term effects of child traumatic stress, and the need to address the mental health needs of all children. As a result, public officials, grantmakers, service providers, and others are turning their attention and their support to programs that provide early identification, intervention, and treatment services to children exposed to trauma, as well as other children with mental health needs.

Increasing Awareness

Parents, service providers, and health care professionals may not be aware of the immediate and long-term impact of childhood trauma and may therefore not take the steps necessary to ameliorate its consequences. The federal government and many national organizations are working to increase awareness of child trauma and ensure access to timely and appropriate services.

The U.S. Substance Abuse and Mental Health Services Administration (SAMHSA) is sponsoring a communications campaign, *Caring for Every Child's Mental Health*, to increase public and policymakers' awareness of children's mental health issues. Using social marketing techniques and principles, the campaign disseminates five key messages:

- every child's mental health is important;
- many children have mental health problems;
- these problems are real, painful, and can be severe;
- mental health problems can be recognized and successfully treated; and
- by working together, caring families and communities can help.

A communications coalition is using a variety of communications vehicles to disseminate the campaign's messages to various audiences. The campaign also provides communications training, onsite media support, and access to campaign materials to SAMHSA grantees and others.

The National Mental Health Association (NMHA) is also spearheading a national grassroots initiative, the *Campaign for America's Mental Health*, to increase the understanding of educators, primary care providers, and families about children's mental health disorders. The objectives are to increase public awareness, combat stigma, and improve the detection and treatment of children's mental disorders. NMHA has 36 national partners, as well as state and local mental health associations, working on this campaign. NMHA has also developed a music campaign to empower youth, called *MPower*. The campaign uses a variety of musicians around the country to do concerts and advertisements to get the word out about mental health issues of anxiety, depression, and trauma.

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"I think (multiculturalism) is something we as a field need to be thinking about strategically and long term... It's how we relate in our own country to an increasing mix of cultures and perspectives."

PHYLLIS GLINK,
 IRVING HARRIS
 FOUNDATION, 2005

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Preventing Childhood Trauma

The best way to avert the damage from childhood trauma is to prevent exposure to that trauma, in families, schools, and communities. Prominent current efforts include:

Stop Bullying Now!—Administered by the U.S. Health Resources and Services Administration (HRSA), *Stop Bullying Now!* educates school personnel, students, and families about the impact and prevention of bullying. HRSA is working with a coalition of 70 nonprofit and public sector partners to communicate the message that stopping bullying requires changing school and other environments. The campaign includes a Web site, www.stopbullyingnow.hrsa.gov, that provides access to educational materials and public service announcements.

Safe Start—The Office of Juvenile Justice and Delinquency Prevention has developed a five-year effort, *Safe Start*, to reduce the impact of family and community violence on children under six. The program works with families to build protective factors in children, understand their strengths and resources, and identify what supports the community and system can provide to address any gaps. The ultimate goal is to educate parents to minimize exposure to additional risk and trauma and to identify the services and supports available to promote wellness and healthy development in children.

Safe Schools, Healthy Students—SAMHSA created *Safe Schools, Healthy Students* to develop real-world knowledge around best practices to reduce school violence and substance abuse. Its goal is to create collaborations among child-serving agencies and schools that lead to safer school environments, provide prevention and early intervention services, and promote healthy development. The program, which has made three-year grants to over 150 communities, has been successful in achieving its goals. Participating communities report decreases in school violence, disciplinary referrals, and substance abuse, as well as improvements in academic achievement. For example, the grant site in Redding, California reported that disciplinary referrals for crime and violence dropped by 27 percent in one year, while the site in Bremerton, Washington experienced substantial decreases in reports of fights, harassment, and threats (SAMHSA 2005a; SAMHSA 2005b).

Identifying Children Exposed to Trauma

The first step in helping to treat children with a history of trauma or mental illnesses is to identify troubled children early. Ohio is a leader in early identification, screening and assessment. Under the leadership of Ohio Department of Mental Health director Michael Hogan—who also chaired President Bush's New Freedom Commission on Mental Health—Ohio has taken significant strides toward developing early identification programs for ensuring that children exposed to

trauma and those with mental health needs receive timely and appropriate services.³ Among Ohio's achievements are three initiatives:

Red Flags is a middle school-based screening and education program aimed at identifying students suffering from depression. It was developed in response to problems with school violence and suicide among younger student populations. The program has three components: an in-service training for school personnel on recognizing the symptoms of depression, responding appropriately according to a preestablished protocol, and altering the classroom environment to accommodate the needs of students with mental disorders; a video-based curriculum for students; and education for parents and community members. The program was first implemented in 1999. The department has made implementation kits available to all Ohio middle schools and more than 600 have implemented the program. The program has been replicated in Idaho and there are plans to implement *Red Flags* in 13 western states.

TeenScreen is a national initiative to ensure that all students are offered a free mental health screening before they leave high school. The Ohio *TeenScreen* program uses computer technology to screen middle and high school students for mental ill-

ness. Students with identified needs receive counseling and referrals to community services. As a result of state outreach to county mental health boards, approximately 1,200 students were screened in 14 schools in six counties during the 2003-04 school year. The program is currently operating in 12 schools and the state plans to increase that number.

Ohio is using state funds to support training for early childhood program staff to meet the mental health needs of young children and identify children who may need early intervention services. The Ohio Department of Mental Health is also making \$1.2 million available to county mental health boards to support the expansion of community-based services that promote emotional and behavioral well-being of young children and address the needs of children at risk for mental disorders. Funds can be used to support training and consultant services for early childhood staff and other professionals that work with families of young children, family services to promote nurturing environments and relationships, parent-to-parent support groups, and mental health services to help troubled young children. Guidelines for the initiative require projects to incorporate evidence-based practices.

³ On April 29, 2002, President George W. Bush announced the formation of the New Freedom Commission on Mental Health and charged it with conducting a comprehensive study of the United States' mental health service delivery system and making recommendations on improvement. The commission issued its final report in July 2003. More information on the commission is available at www.mental-healthcommission.gov.

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“We have to figure out how we bring service to science...to find the best in promising practices and help communities figure out how to evaluate and analyze their programs to determine what is effective.”

RAYMOND CROWEL,
NATIONAL MENTAL
HEALTH ASSOCIATION

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Increasing Access to Early Intervention and Treatment

New research is increasing the urgency of addressing childhood trauma early, before problems become severe. In the late 1980s and the 1990s, new information emerged on the importance of early stimulation and nurturing on the brain development of infants and toddlers, culminating with the publication of the Institute of Medicine’s landmark report, *From Neurons to Neighborhoods: The Science of Early Childhood Development* in 2000. This report sparked a dramatic increase in investment in parenting education, family support, and early childhood programs designed to promote healthy brain development among young children. The emerging research on the effects of trauma on the young brain has similar potential to catalyze new efforts to prevent and address childhood trauma.

Models for promoting early childhood mental health are currently being tested in many communities. The mental health consultant model is one approach that is being used to bolster the ability of children’s programs and their staffs to meet the mental health needs of the children in their care. Mental health consultants are health professionals who help early childhood programs, schools, and other programs serving children promote healthy mental and emotional development. They also advise program staff about appropriate ways to address the needs of children exhibiting signs of a mental disorder and those with problematic behaviors.

A study of the use of mental health consultants in *Head Start* programs found that the services of the consultant increased positive behaviors and improved specific classroom behaviors. Among the improvements were decreases in aggressive behavior and temper tantrums, increases in positive social interactions among children, and age-appropriate emotional regulation by children. Parents also reported that the mental health consultant services helped them access services for their child and deal more effectively with behavior challenges at home (Green et al. 2003).

In Baltimore, a different model, *Child Development Community Policing*, is pairing mental health professionals, families, and others in the community with police officers to serve as early responders when children are exposed to violence. Together, these professionals are trained to understand what happens in domestic violence and abusive situations and how to address the needs of the entire family. Community and family members are partnered to provide outreach, and act as a community-based resources for developing strategies to prevent subsequent acts of violence and identifying connections to necessary services (Crowel 2005; Fairbank 2005).

Another way to increase access to effective interventions is to accelerate the translation of research into practice. Although there are gaps in the research on childhood trauma, some practices have been proven effective. To help test approaches and hasten the translation of the science into practice, SAMHSA provided funding in 2001 to establish the *National Center for*

The New Freedom Commission on Mental Health's Subcommittee on Evidence-Based Practices developed a background paper on evidence-based approaches. The paper discusses the importance of evidence-based practices and identifies opportunities and limitations in implementing the practices. The paper further outlines the necessity of developing an infrastructure and outlines eight recommendations for implementing evidence-based practices. The paper is available on-line at: www.mentalhealthcommission.gov/reports/EBP_Final_040605.pdf

Child Traumatic Stress and the National Child Traumatic Stress Network (the Network). Funded as part of the *Donald J. Cohen National Traumatic Stress Initiative*, the center and the network are working to raise the standard of care, improve services, educate professionals and providers serving children, and increase public awareness.

The center is coordinated by Duke University and the University of California, Los Angeles and provides leadership and support to the national network. The network consists of 38 community treatment and service centers that work with intervention developers and community systems and providers to enable the interventions to take hold as well as 15 academic and medical center based intervention development and education centers that develop and test evidence-based interventions. These centers support the development of promising practices, the transfer of science-based treatments to clinical care, and the transformation and integration of systems through evidence-based practices.

Developing Integrated Systems of Care

The federal government, in partnership with states and communities, is taking steps to reduce the fragmentation of systems serving children with mental health needs and their families. SAMHSA has developed several grants programs to support the transformation and integration of systems of care. One of these, the *State Infrastructure Grants Program* was created to provide support to develop policy and procedure changes at the state level to promote stronger collaborations, as well as resource and information sharing. SAMHSA's *System of Care Grants Program* is designed to create integrated systems of care across children's developmental span and across multiple agencies. An integrated system of care:

- encourages youth, families, agencies, schools, and community resources to build and finance a customized, local, comprehensive, and integrated system of services and supports;
- is family-centered, individualized to the needs of the child and family;
- focuses on and strengthens of children, youth, their families, and communities to provide culturally competent services;

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*"It takes from 15-20 years
 for an evidence-based
 intervention to be adopted
 in the service systems."*

JOHN FAIRBANK,
 NATIONAL CENTER FOR
 CHILD TRAUMATIC STRESS

- reduces the inappropriate use of high-cost, restrictive care while investing in prevention and early intervention;
- requires accountability and cost responsibility; and
- emphasizes high quality, outcome-based home and community services and supports.

Through the program's ten year history, there have been over 92 different programs in 48 states and territories. Currently, there are over 40 active sites throughout the U.S.

One of the effective models developed through the System of Care program is the wraparound approach, which utilizes a strengths-based, individualized care plan to provide youth and their families with the supports they need to maximize health and development. The *Milwaukee Wraparound* program is one example of this approach. This model system of care program was initially created to work with 25 children involved in the juvenile justice system who had needs that were considered too difficult for that system to meet. The program utilized a combination of flexible funding sources and wraparound community support systems to transition youth into the community and had a 95 percent success rate in keeping them in the community for two years. As a result of the initial successes of the program, the juvenile justice system, courts, child welfare, and Medicaid programs transferred money into a common pool to develop a whole service array for a variety of children with complex

needs in multiple systems. The program identified mechanisms to refocus state dollars and to develop waivers to eliminate barriers and enable changes in policies and procedures to allow for innovative treatment planning and resource sharing across systems.

Other initiatives addressing the issue of fragmentation include the *Federal National Partnership*, which convenes federal agencies to address coordination among federal programs around children's services, and the *Finance Project*, which is working with states to identify strategies for weaving together the various funding streams within state systems.

Enhancing School-Based Assessment, Services, and Supports

Although the Individuals with Disabilities Education Act (IDEA) requires schools to identify children with mental health needs or other disabilities and provide services necessary to maximize their learning, many schools lack the resources and trained personnel to do so.⁴ In an effort to aid school personnel in meeting the needs of students, the American Academy of Pediatrics and the National Association of School Nurses collaborated to develop comprehensive guidelines for schools on health, mental health, and safety issues. Sponsored by HRSA, the guideline development process included parents and more than 300 professionals from national organizations. The guidelines address areas with implications for student mental health, such as the development of a respectful and inclusive school environment, the

⁴ The Individuals with Disabilities Education Act (IDEA) mandates the provision of a free and appropriate education for all children with disabilities, including those with emotional and behavioral problems.

STRATEGIC GRANTMAKING PRINCIPLES

- Provide flexible funding and take a long-term view.
- Invest in building necessary infrastructure, particularly in underserved communities.
- Be willing to put money on the table first so others will want to play.
- Work with colleagues in the philanthropic community to raise their awareness about childhood trauma and increase the grantmaking community's willingness to fund this issue.
- Bring together different audiences to share what is being learned.
- Use foundation funds to leverage funding from public and private sources.
- Provide mentoring to staff of grantee organizations, while acknowledging the experience, skills, and expertise they bring to their jobs.

need to use evidence-based practices in school programs, and the desirability of involving parents in school programs. They also include guidance on issues specific to mental health, including maintaining the capacity to identify students with mental health needs, the use of a multidisciplinary team to assess the needs of students exhibiting problem behaviors, developing a crisis response protocol to deal with crises and their aftermath, and the availability of social and mental health services to all students. The guidelines are available online at www.nationalguidelines.org.

The 1997 reauthorization of IDEA required schools to take a proactive approach to children exhibiting emotional difficulties and problem behaviors that interfere with learning, and use positive

strategies, rather than disciplinary actions, to address them. Among the tools mentioned in the law and implementing regulations are Functional Behavioral Assessments (FBAs) and Positive Behavioral Interventions and Supports (PBIS). FBAs typically include analysis of the problem behaviors, an assessment of possible conditions or situations that may be contributing to problem behaviors, and recommendations for environmental modifications that may help the student learn alternative behaviors. The PBIS includes the development of a behavioral intervention plan that lays out the positive strategies that will be used to help the student reduce behaviors that interfere with learning and teach alternative behaviors through individual or schoolwide interventions (Bazelon Center 2003).

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“Foundations really need to be very strategic and creative about their philanthropy in order to address these complex issues. That means thinking outside the box and thinking about long-term strategies and really looking at what we already know and how great programs can be replicated, systems can be built, information can be communicated, and infrastructure needs to be supported.”

PHYLLIS GLINK,
THE IRVING HARRIS
FOUNDATION

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“I think another really critical message for foundations is that change doesn’t happen overnight. Building the infrastructure for the field is a long-term process. You have to give sites confidence and security to know that they have a few years, at least, to do their work without having to worry about coming back to you for new funding.”

PHYLLIS GLINK, THE
IRVING HARRIS
FOUNDATION

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Opportunities for Health Philanthropy

Health grantmakers across the country are addressing the mental health needs of children exposed to trauma. Many of the strategies and approaches available are highlighted below.

Grantmakers Can Support Early Childhood Mental Health

Addressing problems as early as possible gives children the best chance of overcoming the effects of traumatic stress. To ensure that young children receive timely services, The Health Foundation of Central Massachusetts funded *Together for Kids*, a program that improves the ability of child care staff and families to address the needs of children exhibiting problem behaviors. The program supports mental health consultants (referred to as child development advisors) for child care agencies, teacher training, parenting education, substitute teachers that permit staff to meet with parents (at school and at home), and improved systems of communication between child care staff and parents.

To create the program, the foundation utilized a comprehensive grantmaking strategy that included more than a year of planning, an 18-month pilot testing phase, two years of full implementation, and rigorous process and outcome evaluations at each phase of the program. In the planning stage, child care providers and representatives from the mental health community worked with the foundation to assess the problem and identify best-practice solutions from across the country that promised real systems change. In the

pilot stage, the partners took the baseline information and developed a comprehensive model to test the identified solutions. In the implementation stage, the model was revised and fine-tuned to better address the needs of the parties involved—mental health consultants, child care staff, parents, and children. Throughout the process, evaluation was used to enhance and improve the model to ensure successful outcomes.

The evaluation showed that *Together for Kids* had a statistically significant impact on the classroom environment, individual behavior, and school readiness. Not only did child care staff feel better equipped to deal with behavioral issues in the classroom, the program also resulted in significant improvements in child development scores. Children with developmental delays who received support and mental health consultation through the program gained an average of six to eight additional months developmentally during the three to four month intervention whereas in control sites, children who did not have access to the program lost ground developmentally. The foundation is working with its grantees and others to use evaluation data to further strengthen the program, and is also using the outcome data to advocate for state policy and regulatory changes. (Full copies of the evaluation reports can be downloaded from the foundation’s Web site, www.hfcm.org.)

The Peninsula Community Foundation and The California Endowment also funded a mental health consultant program in San Francisco. Mental health consultants work with child care staff to implement prevention and early intervention strategies

as well as with staff and families of at-risk children to provide guidance and develop appropriate interventions.

Grantmakers Can Support School-Based or School-Linked Programs

Because child traumatic stress can affect academic performance, addressing the mental health needs of school-aged children can help schools meet state and federal academic standards. For example, the John Muir/Mt. Diablo Community Health Fund in California supported a partnership among a counseling center, a school district, and a municipal arts agency that implemented an early intervention program for students ages 5 to 12 with mental health and adjustment problems. The children participated in group and family counseling, as well as afterschool and summer arts programs. The Lucile Packard Foundation for Children's Health launched an initiative in 2002 that provides support for school- and community-based afterschool programs promoting behavioral, mental, and emotional health among preteens. An evaluation of the initiative identified seven benchmarks of quality, based on a review of the literature on the characteristics of effective youth programs. The benchmarks are:

- seven to twelve months of exposure to a program's services;
- the availability of supportive relationships with adults and peers;
- two or more opportunities annually for staff to develop knowledge and skills;
- retention of at least 50 percent of staff for one year or more;

- provision of at least four types of services and activities;
- presence of mechanisms for internal evaluation, tracking, and assessment; and
- presence of a culturally competent staff (defined as a racially and ethnically diverse staff that includes people with language skills that match program participants' language needs).

Using these benchmarks to assess grantees, the evaluation found that over 90 percent of the foundation's grantees met at least four of the benchmarks. Of these, 31 percent met six or seven of the benchmarks and were rated as high-quality programs (Goldsmith et al. 2004).

With many schools adopting zero-tolerance policies toward some types of behaviors, it is even more important to identify children with emotional and behavioral problems early to avert inappropriate suspensions and expulsions. In Palm Beach County, Florida, the Quantum Foundation has been a driving force behind the development of a proven approach to address emotional and behavioral problems in elementary school students and promoting positive behaviors. The Children's Behavioral Health Initiative seeks to coordinate and integrate behavioral health services and focus on the prevention of social, emotional, and behavioral problems through early identification and assessment. To accomplish this, the program includes:

- placement of a behavioral health professional in each school;

- early identification and assessment of children's potential behavioral health problems with enhanced teacher involvement;
- better intervention and treatment, including school-based services and referrals to community providers;
- resources that create a healthy environment in schools and the community; and
- improved parent and community involvement in the lives of children.

The program has been implemented in 30 schools and an early outcome study found that children who received services showed improvements in behaviors such as worrying about things; appearing lonely, sad, or depressed; and exhibiting low self-esteem. Moreover, participating schools had a lower rate of discipline-related referrals than nonparticipating schools. Teachers and principals at the participating schools reported high satisfaction with the program, and parents of children who received services reported that the program helped parents and teacher understand their child's behavior. They also reported that the services improved their child's ability to learn in the classroom (Lee et al. 2003).

The Boston Foundation used a different approach to improve the provision of mental health services to students. The foundation supported *Advocating Success for Kids (ASK)*, a collaboration among Children's Hospital in Boston, the Boston public schools, and six community-based primary care sites to improve mental health services for children ages 3 to 9. *ASK* provides diagnostic consultations and follow-up care for children exhibiting

behavioral, developmental, or learning difficulties that impair their ability to learn effectively in their classrooms. Through the program, a multidisciplinary team (consisting of a psychologist, educator, developmental pediatrician, and case manager) meets with families to link them to educational, medical, and psychosocial support services that can improve the school readiness, performance, and emotional well-being of their children.

Also in Massachusetts, the MetroWest Community Health Care Foundation provided funds to support student assistance coordinators at local middle and high schools. The coordinators are providing mental health intervention services to students at high risk for unsafe or unhealthy behaviors. In the Pacific Northwest, the Northwest Health Foundation provided funding to a local school district to hire a psychiatric nurse practitioner to expand and improve school-based mental health services in the district.

Grantmakers Can Support Services for Child Populations at High Risk for Mental Disorders

Some populations of children, such as those living in violent households, are more likely to have been exposed to trauma and, therefore, are at increased risk for mental disorders. To address the mental health needs of children who witness domestic violence, The Robert Wood Johnson Foundation's *Local Initiative Funding Partners Program* collaborated with the Children's Hospital Medical Center of Akron and local funders to support crisis intervention teams for children exposed to family violence and put a stop to generational cycles of abuse. Teams based at a

local battered women's shelter and a victim assistance program are available 24 hours a day to provide home-based services to children, responding to the scene of domestic violence calls within 30 minutes after notification from a police officer. Among the many state and local cosponsors of the program are the Saint Ann Foundation, Akron Community Foundation, Barberton Community Foundation, Harry K. Fox and Emma R. Fox Charitable Foundation, and the Tuscora Park Health & Wellness Foundation.

As the philanthropic community's response to Hurricane Katrina shows, health grantmakers have the ability to move quickly to ameliorate the deleterious effects of disasters on children and their families. For example, just days after that catastrophic storm, The Blue Shield of California Foundation provided \$25,000 to Operation USA, a Los Angeles-based disaster relief agency, to help small nonprofit community health centers in the Gulf Coast region respond to the health needs of low-income children and adults affected by the hurricane. Many other health grantmakers, both in the affected areas and elsewhere, quickly moved to set up special funds to support immediate relief efforts, as well as to rebuild health, mental health, and human services infrastructure decimated by the storm.

Grantmakers Can Prevent Further Traumatization

Support for family-centered programs can help prevent further traumatization for those children endangered by violent home environments. For these children, approaches that treat the whole family are the best way of addressing current needs

and preventing further violence and abuse. The California Endowment, through its *Special Opportunities in Mental Health* initiative, has supported several family-centered projects that are addressing the mental health needs of children who have witnessed domestic violence or been victims of child abuse and neglect.

Among the foundation-funded projects is *Healing the Circle*, a program for American Indian and Alaska Native families in San Diego that are at risk for or experiencing child abuse and neglect. The program provides culturally competent counseling services for children, facilitated support groups for adolescents, and therapy and anger management services for parents.

Grantmakers Can Address Workforce Issues

Many areas of the country are experiencing shortages of mental health providers, including particularly severe shortages of pediatric mental health providers. The Irving Harris Foundation, through its Harris Professional Development Training Network, supports communitywide training on early childhood mental health issues with an emphasis on the impact of exposure to early trauma. The foundation believes that a well-trained workforce capable of intervening with and advocating for the children and families they serve is critical to the success of program, policy, and systems change. Therefore, the foundation invests in high quality, multidisciplinary efforts that build training expertise within communities.

The foundation has funded 16 programs in the U.S. and 3 in Israel that train graduate and postdoctoral fellows, academics, professionals, paraprofessionals, front-line

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*“Investing in high-quality
 people and training starts
 to reach out and have a
 broader impact.”*

PHYLLIS GLINK,
 THE IRVING HARRIS
 FOUNDATION

providers, judges, lawyers, social workers, and others in child development and infant mental health. The result is a network of colleagues and grantees who have developed new and innovative approaches to working with young children and families. These models have been replicated in other communities, further multiplying the foundation's initial investment and spreading expertise, knowledge, and success to other communities. For example, the six sites selected by the National Childhood Traumatic Stress Network to focus on replicating model infant mental health training and intervention programs are all part of the Harris Network.

Other grantmakers are also building the capacity of the workforce through education and training. The Duke Endowment is supporting a project to provide school nurses and other school staff with enhanced mental health training. The *School Mental Health Project*, coordinated by North Carolina's Eastern Area Health Education Center, started by conducting focus groups with school nurses and other school personnel to ascertain their levels of knowledge. The project is using a variety of modalities to educate school nurses and others about children's mental health, including the development of a curriculum on school mental health, regional training sessions, Web-based instruction, development of a resource directory of experts, and a Web site that provides access to a wide range of resources.

The John Rex Endowment is funding a project in Raleigh, North Carolina to train primary care and mental health providers to recognize social, emotional, and behavioral problems in children and to provide appropriate services. The Commonwealth

Fund is also working nationally to educate professionals, including health care providers, about children's mental health issues. The fund has sponsored *dbpeds.org*, a Web site aimed at professionals interested in child development and behavior, especially those in the medical setting. The Web site offers professionals information about early identification and screening of children with emotional and behavioral disorders, tools for integrating mental health screening into both primary and specialty medical practices, and materials for parents.

Grantmakers Can Support Needs Assessments

Although many states and communities are working to improve mental health services for children, there is sometimes little information about existing services, gaps in those services, and the best ways to fill them. To better understand the local context, the Jewish Healthcare Foundation in Pittsburgh sponsored a study to determine if early care and education staff were equipped to address the needs of young children with serious behavioral problems. The study, conducted by the policy analysis unit of a local university, found that in the Pittsburgh area, services for these children were underfunded and uncoordinated, and neither the staff of the early childhood programs serving the children nor their families knew how to access existing programs. The researchers recommended several solutions including enhancing training for early childhood staff and mental health staff serving young children, expanding the number of providers with appropriate expertise, and improving early identification mechanisms (Certo 2002).

The Health Foundation of Greater Cincinnati sponsored a similar analysis of the mental health needs of school-age children in a three-county area of southwestern Ohio. The analysis surveyed almost 22,000 students in grades 5 through 12, using questions from previously developed instruments to collect information about socioeconomic status, school achievement, behavioral problems, school and family attachment, and help-seeking behaviors, among other things. The analysis yielded three recommendations: increasing collaboration to promote comprehensive service systems, building capacity, and seeking innovative ways to meet the mental health needs of children and youth (Perez et al. 2003).

Grantmakers Can Fund Research and Analysis

Grantmakers can play a role in expanding the knowledge base about child mental health, the causes and consequences of child traumatic stress, and promising approaches for addressing mental health needs. The Hogg Foundation for Mental Health, for example, supported some of the clinical research cited above that is leading to a new understanding of the effects of trauma on brain development in children. In another example, the William T. Grant Foundation provided funding for a study of young adult survivors of community violence to help identify the personal and social consequences of violent victimization and understand the coping mechanisms and strategies that influence recovery from direct exposure to traumatic violence.

The Robert Wood Johnson Foundation funded the American Academy of Pediatrics (AAP) to develop a new chil-

dren's mental health classification system for use by primary care clinicians. The intent was to facilitate the understanding, coding, treatment, and referral of child and adolescent mental health conditions. The grant culminated with the 1996 publication of *The Classification of Child and Adolescent Mental Diagnoses in Primary Care. Diagnostic and Statistical Manual for Primary Care (DSM-PC) Child and Adolescent Version*. This manual is still used by health care providers serving children and adolescents.

In addition to funding the provider training described above, The Commonwealth Fund has supported policy analysis and model development as part of its *Program on Child Development and Preventive Care*. The fund has also funded several reports on children's healthy mental development, including:

- *Building a Bridge from Birth to School: Improving Developmental and Behavioral Health Services for Young Children*, which examines ways that health care providers can promote healthy child development, including healthy mental development (available online at http://www.cmwf.org/publications/publications_show.htm?doc_id=237483); and
- *Using Medicaid to Support Young Children's Healthy Mental Development*, which provides guidance to state Medicaid officials and others interested in children's mental health on developing the policies and procedures needed to make early childhood mental health services reimbursable by Medicaid (available online at http://www.nashp.org/Files/CW8_Health_Mental_development.pdf).

“Providing services in nonmental health settings helps reduce stigma as a barrier. It also serves refugees from cultures around the world that don’t necessarily view mental health disorders as separate from physical and spiritual well-being.”

GWEN FOSTER,
THE CALIFORNIA
ENDOWMENT

In addition, the foundation is working with the National Academy for State Health Policy and state Medicaid agencies to test models of service delivery and financing that promote children’s healthy mental development.

Grantmakers Can Promote Culturally Competent Services

Foundations are using their grantmaking to promote the development of culturally competent services for children, to respond to the increasing diversity of the country’s population. The California Endowment’s *Special Opportunities in Mental Health* initiative focuses on improving mental health services for low-income groups, minorities, and children and adolescents involved in the child welfare or criminal justice systems, relying on organizations run by and for the communities they serve. Among the lessons learned under this initiative is that culturally competent mental health services are often best provided in nontraditional settings. Thus, the initiative funds the provision of services by professionals and paraprofessionals working in settings such as schools, community organizations, faith-based organizations, funeral homes, domestic violence shelters, health facilities, and other settings.

The *Violence Intervention Program* in Los Angeles County, a *Special Opportunities in Mental Health* grantee, is an example of an innovative, culturally competent approach to addressing the trauma-related needs of children entering foster care. The program began with a small planning grant to identify barriers to providing needed mental health and related services to these children, and to determine how the problems could be solved. As a result of a

collaborative partnership involving health services, mental health, the state division of child and family services, probation, the court system, community providers, schools and others, a community-based assessment and treatment center was created that provides mental health services to children in and entering foster care, plus physical health care, legal services, social services, family support, and other services that address trauma and maximize the chance that families can be reunited or children can be successfully placed in out-of-home care. To address the needs of its culturally diverse population, staff are bilingual and services are designed to respect the culture and beliefs of clients. The program also engenders trust by addressing the range of needs presented by families, including housing and transportation services. Because of its success, this model program is being replicated in five additional communities throughout California.

The Colorado Trust’s *Preventing Suicide in Colorado* initiative found that building culturally competent programs requires input from the community a program is intended to serve. Through this initiative, the foundation partnered with the Mental Health Center of Denver to create a culturally competent strategy to address adolescent exposure to trauma. The project followed a community-based participatory approach that included the target population—Latina girls age 11 to 17—in the planning process and throughout the implementation of the project.

Over 90 percent of the girls participating in the program have experienced trauma—as a result of rape, physical assault, separation or loss, or out-of-home placement.

Over a third of them have a history of a previous suicide attempt. The program took an approach that was built on the culture of these young women, building on their community- and family-centered values. With the assistance of the program participants, the project developed mentoring programs, paired the young women with adults to make community presentations, started a newsletter to keep participants continually involved and invested, provided gatekeeper trainings on suicide prevention, and initiated a media campaign through the culturally relevant medium of art and creative expression.

Because the program was built on the values of the community and its participants, the program has been successful at empowering the girls to help each other, to reach out to other girls, and to help their community. The program has seen such success that the youth are working closely with the Denver public schools to determine how to continue and expand it within city schools—an idea that was initially resisted by the schools when they were approached by center staff, rather than the girls themselves. While many programs are based on research, this project demonstrates the value of using a bottom-up approach to develop a culturally appropriate and successful model.

Grantmakers Can Fund Leadership and Advocacy

To translate investments in model development, research, and program evaluation into long-term and widespread change, grantmakers are working to develop strong community leaders who are passionate about their issues and who can bring clinical, policy, and other expertise together.

Such leadership is key in bringing policy-makers, providers, and others to the table to address issues related to childhood trauma and mental health issues. The Irving Harris Foundation invests in leadership and policy development in early childhood as a strategy for breaking the cycle of poverty. To develop committed, informed policymakers and advocates, the foundation has made a major investment in the Irving B. Harris School of Public Policy Studies at the University of Chicago.

Through its *Special Opportunities in Mental Health* initiative, The California Endowment is also supporting the development of leaders at all levels, including leadership among funders, policymakers, grantee organizations, and communities. Through one of its grants, the foundation is working with a Latina community women's health leadership program through the Latina Center in Richmond, California. The center provides health leadership training for immigrant Latinas to help them become skilled lay mental health promotoras and peer leaders. The women are then able to support other Latinas in recovering from trauma and mental illness associated with depression, as well as alienation related to immigration and domestic violence. They also help women heal from trauma by helping them find other needed services. The peer-to-peer model of leadership development not only helps individuals in gaining access to services and supports, but also empowers women to become more active in other ways, such as involvement in education, employment, and other community issues.

Foundations and their grantees know that if problems with existing systems could be easily addressed, they would already be

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“Sometimes people feel that if you're going with a community-based approach, somehow it's going to be less than what our research-trained minds or our academic arena tell us is going to work best. But we've got it all covered. . . I think that speaks well to the wisdom of community members.”

LYDIA PRADO, MENTAL HEALTH CENTER OF DENVER

.....
*“We see it as our job to help
 advocate, and to use the
 data gathered in the course
 of the evaluation of the
 project to move that
 political agenda forward.”*

NOREEN JOHNSON
 SMITH, HEALTH
 FOUNDATION OF
 CENTRAL
 MASSACHUSETTS, INC.

solved. Foundations therefore provide support to partnerships and collaboratives that are working toward positive change. One example of this model of funding can be found in the *Health Care and Health Promotion Synergy Initiative* of the Health Foundation of Central Massachusetts. The foundation distributes approximately 80 percent of its grant funding for children’s health, child abuse prevention, and oral health through this initiative, which requires applicants to establish partnerships and collaborative approaches to address the broader systems issues affecting access to health services. The foundation recognizes that by funding change efforts through collaborations, the efforts will be more successful and sustainable. The foundation itself is a partner in many advocacy efforts in Massachusetts not only supports its grantees’ advocacy agendas, but also becomes active in influencing public policy, administrative policies and regulations, and state budget priorities.

Conclusion

In states and communities across the country, there is growing understanding—and growing concern—about the impact of trauma on the mental health and development of children. There is a base of knowledge about the scope of the problem and effective approaches for addressing both short- and long-term consequences and the research on childhood trauma and the impact on brain development continues to grow, which may increase the

possibility of effectively addressing the physical, mental and behavioral needs of youth exposed to trauma. There are gaps in the research and knowledge, relatively few coordinated systems of services and supports for children and families, and shortages of culturally competent professionals. As a result, grantmakers have many opportunities to play leadership roles in addressing issues of childhood trauma and mental illness.

Health grantmakers have a wide range of strategies available to them to aid children exposed to trauma. In states and localities where public agencies and nonprofit organizations are already working to educate people about child trauma and its consequences, grantmakers can use their resources to complement these initiatives by strengthening leadership, increasing awareness, and promoting collaboration. In areas where child trauma has yet to be addressed effectively, health grantmakers can be the catalysts that prompt families, schools, and communities to work together to develop an integrated system of care with a comprehensive array of services and supports that can meet the individualized needs of children and their families.

Grantmakers may support small portions of projects including research and evaluation or may develop comprehensive initiatives that fund projects from planning through development, implementation, and evaluation, to create sustainable systems change. By supporting the range of efforts needed to prevent childhood trauma and address its consequences, grantmakers will play a critical role in helping traumatized children move toward a brighter future.

References

- American Academy of Pediatrics, "How Pediatricians Can Respond to the Psychosocial Implications of Disaster," *Pediatrics* 103(2):321-3423, February 1999.
- American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders DSM-IV-TR*, Fourth Edition Text Revision (Washington, DC: 2000).
- American Red Cross, "History Timeline—2000—Present," <<http://www.redcross.org/museum/history/2000-present.asp>>, March 20, 2005.
- Certo, T. (Ed.), *Special report: Are we leaving them behind? The case for helping childcare providers and parents address behavioral problems in very young children—Summary*. (Pittsburgh, PA: Office of Child Development, University of Pittsburgh, 2002).
- Child Welfare League of America, "National Fact Sheet 2005," <<http://www.cwla.org/advocacy/national-factsheet05.htm>>, September 11, 2005.
- Crowel, Raymond, National Mental Health Association, presentation at a Grantmakers In Health Issue Dialogue, *In Harm's Way: Aiding Children Exposed to Trauma*, May 4, 2005.
- Curie, Charles, "The Effects of Trauma on Children and the Role of Mental Health Services," testimony before the U.S. Senate Committee on Health, Education, Labor and Pensions, June 10, 2002.
- Fairbank, John, UCLA-Duke University National Center for Child Traumatic Stress, presentation at a Grantmakers *In Health Issue Dialogue, In Harm's Way: Aiding Children Exposed to Trauma*, May 4, 2005.
- Felliti, Vincent, Robert Anda, Dale Nordenberg et al., "Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults. The Adverse Childhood Experiences (ACE) Study," *American Journal of Preventive Medicine* 14(4):245-258, May 1998.
- Field, Marilyn J., and Richard E. Behrman (eds.), *When Children Die: Improving Palliative and End-of-Life Care for Children and Their Families* (Washington, DC: National Academy Press, 2003).
- Foster, Gwen, The California Endowment, presentation at a Grantmakers In Health Issue Dialogue, *In Harm's Way: Aiding Children Exposed to Trauma*, May 4, 2005.
- Gianconia, Rose, Helen Reinherz, Amy Silverman, et al., "Traumas and Posttraumatic Stress Disorder in a Community Population of Older Adolescents," *Journal of the American Academy of Child & Adolescent Psychiatry* 34(10):1369-1380, October 1995.
- Glink, Phyllis, The Irving Harris Foundation, presentation at a Grantmakers In Health Issue Dialogue, *In Harm's Way: Aiding Children Exposed to Trauma*, May 4, 2005.

Goldsmith, Julie, Amy Arbreton, and Molly Bradshaw, *Promoting Emotional and Behavioral Health in Preteens: Benchmarks of Success and Challenges Among Programs in Santa Clara and San Mateo Counties. Final Report to the Lucile Packard Foundation for Children's Health on The Foundation's Area 2 Grantmaking Strategy* (Palo Alto, CA: The Lucile Packard Foundation for Children's Health, 2004).

Graham-Bermann, Sandra and Julia Seng, "Violence Exposure and Traumatic Stress Symptoms as Additional Predictors of Health Problems in High-Risk Children," *The Journal of Pediatrics* 146(3):349-354, March 2005.

Green, Beth, Maria Everhart, Maria Garcia Gettman, et al., *Mental Health Consultation in Head Start: Selected National Findings* (Portland, OR: Portland State University Regional Research Institute, 2003).

Harris, William, Frank Putnam, and John Fairbank, "Mobilizing Trauma Resources for Children," <<http://stone.he.net/~fsasf/Harris.pdf>>, April 14, 2005.

Heger, Astrid Heppenstall, University of Southern California Medical Center, presentation at a Grantmakers In Health Issue Dialogue, *In Harm's Way: Aiding Children Exposed to Trauma*, May 4, 2005.

The Henry Kaiser Family Foundation, *Children and the News: Coping with Terrorism, War, and Everyday Violence* (Menlo Park, CA: 2003).

Koyanagi, Chris, *Failing to Qualify: The First Step to Failure in School?* (Washington, DC: Judge David L. Bazelon Center for Mental Health Law, 2003).

Lee, Bong Joo, Julie Spielberger, Thomas Haywood, and Harold Richman, *Second-Year Implementation and Early Outcome Study of the Children's Behavioral Health Initiative, Palm Beach County, Florida* (Chicago, IL: Chapin Hall Center for Children at the University of Chicago, 2003).

Nageer, Davis R., Larry Cohen, Jean Tepperman, et al., *1st Steps. Taking Action Early to Prevent Violence* (Oakland, CA: Prevention Institute, 2002).

National Child Traumatic Stress Network, "Facts and Figures," <http://www.nctsn.org/nctsn/nav.do?pid=ctr_gnrl_facts>, April 13, 2005.

National Child Traumatic Stress Network, *Children and Trauma in America. A Progress Report of the National Child Traumatic Stress Network* (Durham, NC: 2004a).

National Child Traumatic Stress Network, *Understanding Child Traumatic Stress* (Durham, NC: 2004b).

National Clearinghouse on Child Abuse and Neglect Information, *In Focus: Understanding the Effects of Maltreatment on Early Brain Development* (Washington, DC: Administration for Children and Families, U.S. Department of Health and Human Services, 2001).

National Mental Health Association, "Did You Know?," <<http://www.nmha.org/infoctr/didyou.cfm>>, September 11, 2005.

Parker, Emil and Martha Teitelbaum, *Percentage of Immigrant Children Without Health Insurance is on the Rise* (Washington, DC: Children's Defense Fund, 2003).

Perez, Barbara, Valerie Robinson, and Susan Smith, *The Need for Behavioral Health Services for School-Age Children: A Survey of Students in Southwestern Ohio* (Cincinnati, OH: The Health Foundation of Greater Cincinnati, 2003).

Perry, Bruce, "Trauma and Terror in Childhood: The Neuropsychiatric Impact of Childhood Trauma" in I. Schulz, S. Carella, & D. O. Brady (Eds.), *Handbook of Psychological Injuries: Evaluation, Treatment, and Compensable Damages* (Washington, DC: American Bar Association Publishing, 2000).

Prado, Lydia, Mental Health Center of Denver, presentation at a Grantmakers In Health Issue Dialogue, *In Harm's Way: Aiding Children Exposed to Trauma*, May 4, 2005.

Search Institute, Asset Categories, <<http://www.search-institute.org/assets/assetcategories.html>>, April 12, 2005.

Seltzer, Tammy, *Suspending Disbelief: Moving Beyond Punishment to Promote Effective Interventions for Children with Mental or Emotional Disorders* (Washington, DC: Judge David L. Bazelon Center for Mental Health Law, 2003).

Smith, Noreen Johnson, The Health Foundation of Central Massachusetts, Inc., presentation at a Grantmakers In Health Issue Dialogue, *In Harm's Way: Aiding Children Exposed to Trauma*, May 4, 2005.

Teicher, Martin, Harvard Medical School, presentation at a Grantmakers In Health Issue Dialogue, *In Harm's Way: Aiding Children Exposed to Trauma*, May 4, 2005.

U.S. Census Bureau, "Projected Population of the United States, by Race and Hispanic Origin: 2000 to 2050," <<http://www.census.gov/ipc/www/usinterimproj/natprojtab01a.pdf>>, September 11, 2005.

U.S. Centers for Disease Control and Prevention, "Unintentional All Injury Causes Nonfatal Injuries and Rates per 100,000 2003, United States, All Races, Both Sexes, Ages 0 to 19" <<http://webappa.cdc.gov/sasweb/ncipc/nfirates2001.html>>, April 14, 2005.

U.S. Department of Health and Human Services, *Mental Health: A Report of the Surgeon General* (Rockville, MD: 1999).

U.S. General Accounting Office, *Mental Health Services. Effectiveness of Insurance Coverage and Federal Programs for Children Who Have Experienced Trauma Largely Unknown*, GAO-020813 (Washington, DC: 2002).

U.S. Health Resources and Services Administration, *The Scope and Impact of Bullying* (Rockville, MD: 2004).

U.S. Substance Abuse and Mental Health Services Administration, "The Faces of Safe Schools/Healthy Students Fact Sheet. SS/HS Is Reducing Violence and Substance Abuse Among Our Youth," <http://sshs.samhsa.gov/media/sshs_media/faces/FactSheet1-ReducingViolence-Published-edit.pdf>, September 11, 2005a.

U.S. Substance Abuse and Mental Health Services Administration, "The Faces of Safe Schools/Healthy Students Fact Sheet. SS/HS Is Improving Academic Achievement," <http://sshs.samhsa.gov/media/sshs_media/faces/FactSheet2-AcademicAchieve3-Published-edit.pdf>, September 11, 2005b.

U.S. Substance Abuse and Mental Health Services Administration, "Cultural Competence in Serving Children and Adolescents With Mental Health Problems," <<http://www.mentalhealth.samhsa.gov/publications/allpubs/Ca-0015/default.asp>>, April 14, 2005c.

Weitz, Judith H., *Coming Up Taller: Arts and Humanities Programs for Children and Youth At Risk* (Washington, DC: The President's Committee on the Arts and the Humanities, 1996).



1100 CONNECTICUT AVENUE, NW
SUITE 1200
WASHINGTON, DC 20036
TEL: 202.452.8331 FAX: 202.452.8340
www.gih.org