PSYCHOSOCIAL ISSUES FOR CHILDREN AND FAMILIES IN DISASTERS:
A Guide For The Primary Care Physician

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AMERICAN ACADEMY OF PEDIATRICS

The American Academy of Pediatrics was founded in June 1930 by 35 pediatricians who met in Detroit in response to the need for an independent pediatric forum. At that time, the idea that children have special developmental and health care needs was a new one. Preventive health practices now associated with child care C such as immunization and regular health examinations C were only just beginning to change the custom of treating children as "miniature adults."

Today, the Academy unites 47,000 pediatricians throughout the Americas to ensure for all young people the attainment of their full potential for physical, emotional, and social health. To this end, the Academy dedicates its resources to professional education, advocacy for children, representation of pediatricians, public education, access to health care, and service to children.

More than 50 councils, committees, and task forces C addressing interests as diverse as infectious and communicable diseases, injury and poison prevention, emergency medicine, substance abuse, and school health C develop many of the Academy's policies, programs, and publications. For more information on how to obtain these materials, phone the Academy at 708/228-5005.

FOREWORD

The publication of this booklet marks not only a new and important collaboration between the Federal Center For Mental Health Services and the American Academy of Pediatrics, but a landmark initiative to enhance services to children and families following disasters. The funding of the booklet's development by the Federal Emergency Management Agency is dramatic evidence of not only the importance of the topic but their commitment to comprehensive assistance to those impacted by disasters.

In the organization of services in response to the psychological sequelae of major disasters, the focus of interventions for children has been primarily the school system. The practicing physician frequently has been an unrecognized, and largely unsolicited, part of the psychological recovery mosaic.

This booklet represents an attempt to provide physicians with information to explore a variety of roles in disaster response and recovery as well as tools to better assess and treat the needs of their patients.

The aftermath of large scale disasters places strain on the entire fabric of a community and its residents. The health care provider may often be both the victim/survivor and the source of assistance. It is our hope that this booklet will provide a resource to help physicians, their patients, and their communities cope more effectively in very difficult times.

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Introduction

In recent years, the news media has brought the realities of disasters in the United States and the world to the attention of the public. Since the 1974 Disaster Relief Act became law, there have been more than 800 major federally designated disasters in the United States and more than 8000 deaths annually due to natural and human-caused disasters.[17]

The legacy of a disaster is serious and has widespread physical and emotional sequelae. The emotional impact of a disaster often persists well after the physical impact. Children may evidence symptoms related to the disaster either at home or at school. These are usually normal reactions to an abnormal situation; therefore, it is important for the physician to know how to recognize the psychologic sequelae in order to assist the child and family.

The focus of this manual is on how the child health care provider may better prepare, assess, and treat youngsters and their families in the event of a disaster. As a recognized leader in a community, the physician also may be called upon to address community needs in case of such events. This manual also will aid the physician in assuming this role.

CHARACTERISTICS OF DISASTERS

NATURAL VS HUMAN-CAUSED

A disaster is usually defined as an event that

1. involves destruction of property
2. includes injury and/or loss of life
3. affects a large population and is shared by many families.

Disasters are events that are out of the realm of the normal human experience and, from a psychologic standpoint, are traumatic enough to induce stress in anyone, regardless of

previous experience or function.19 "Catastrophic disasters" are disasters that may have an impact on tens of thousands of people and disrupt entire communities.

Disasters are usually classified as natural or human-caused, and the differences between them are outlined in **Table 1.**

TABLE 1. *NATURAL VS HUMAN-CAUSED DISASTERS*

	Natural	**Human-Caused**
Causes	Forces of nature	Human error, malfunctioning technology
Examples	Earthquakes, hurricanes, floods	Airplane crashes, major chemical leaks, nuclear reactor accidents
Blame	No one	Person, government, business
Scope	Various locations	Locations may be inaccessible to rescuers, unfamiliar to survivors, little advance warning
Postdisaster distress	High	Higher, often felt by family members not involved in actual disaster

Examples of human-caused disasters include mass transportation (air, rail, ship, or car) accidents, fire, dissemination of environmental toxins, civil unrest, crime, and terrorism. Natural disasters include such events as hurricanes, earthquakes, tornadoes, and lightning strikes, and may be the source of community-wide destruction that is "catastrophic" in scope. Sometimes disasters occur due to a combination of nature and technology, such as an airplane crash secondary to poor weather conditions.

Since there is no one to blame in a natural disaster, the victims may direct their anger inwardly and feel guilty for not taking the necessary precautions, or they may believe that it was "God's will" or a punishment. In the absence of someone to blame, victims may project their anger onto caretakers, including health care professionals.

Human-caused disasters are associated with higher levels of posttraumatic distress than natural disasters.[30] For example, in mass transport disasters, fatalities are sometimes universal, and mutilation and serious injuries often occur. Some survivors develop a phobia for that type of transportation. In human-caused disasters, victims may feel anger toward and blame an individual or group of people whom they hold responsible for the event.

War is another traumatic stressor for children and families which may lead a child to experience the death of a loved one, loss of home and possessions, and relocation. During war, children often witness violence. Many war-related problems and feelings that

children and adolescents must overcome during a war are similar to those faced in the aftermath of natural and human-caused disasters.[28]

This manual is meant to assist primary care physicians in responding to the most common types of natural and human-caused disasters. Other types of trauma may also have a similar impact on children and families, but are beyond the scope of this manual. For example, victims of child abuse and children who experience a vehicular accident may present similar challenges.

NATURAL HISTORY OF DISASTERS

The phases of a disaster, whether human-caused or natural, have been studied by the National Institute of Mental Health,15 which lists them as follows:

1. ***Predisaster*** conditions of the community, family, and individual.
2. ***Warning*** of impending disaster given by the media or weather changes.
3. ***Threat*** of disaster, immediately preceding the actual impact.
4. Immediately ***postdisaster***, when survivors take inventory of events.
5. ***Rescue phase***, in which survivors and emergency workers join to save those affected by the disaster.
6. ***Remediation*** performed by the Red Cross, insurance adjusters, federal government, and local relief efforts.
7. ***Recovery period***, in which physical structures are rebuilt and families and individuals begin to cope.

IMPACT OF DISASTERS

EFFECTS OF A DISASTER ON A COMMUNITY

Since children do not live in a vacuum, it is important to consider the effects of a disaster on their surroundings and helpers C the community, the family, and the primary care physician C and how those may reflect on the children. Each disaster differs in its effects based on its scope, intensity, and the characteristics of the predisaster community, family, and individual personalities.

The effects of a disaster on a community are often widespread, and include the following:

- destruction of infrastructure
- absence of electricity, sanitation, and potable water
- destruction of physical contact with the outside world (eg, roadways, phones, and bridges)
- dissipation of community cohesion due to death and injury
- vulnerability and exploitation due to disaster and media sensationalism[23]
- potential for recurrence

EFFECTS OF A DISASTER ON CHILDREN AND THEIR FAMILIES

The possible effects of a disaster on the family are varied and extremely important to the child. These include the following events:

- death or physical injury to a family member;
- loss of family dwelling or possessions;
- relocation (school changes);
- job loss; and
- parental disorganization or dysfunction

The primary care physician must consider the physical trauma to the child and family prior to the emotional effects. However, it is important that the physician, as a trusted person, gives the parent permission to take care of his/her own needs so that he/she might better help the child to cope (analogous to the parent putting on the oxygen mask first in an airplane emergency, and then putting on the child's mask). This may include referring the parent for counseling.

The important caveat to remember is that, in most cases, the children and families are having a normal reaction to an abnormal situation. It is often easier for parents to seek treatment for their child before seeking treatment for themselves, but sometimes a parent will present a symptomatic child as a way of presenting his or her own symptoms.

Parental adjustment to the disaster is an important factor in the child's adjustment. If there are any preexisting family conflicts or psychopathology, these may impede adaptation to the life changes caused by a disaster. Domestic violence or parental alcohol or substance abuse also may increase after a disaster and seriously impede the family's recovery. If a parent relies too heavily on the child for support, or alternatively, is overprotective, a child's personal resolution of the effects of a disaster may be delayed.

A parent's reaction to the child's behavior is also important. Parental response to a disaster correlates well with that of the child.[7,24] Parents may be so upset that they may not be aware of their child's troubles.[4,24]

PREEXISTING RISK FACTORS

The preexisting life situation of the child or adolescent needs to be understood for a better assessment of disaster effects. For example, there may be preexisting physical handicaps or psychopathology in the child or family members. In dysfunctional families, there may be an increased tendency to abuse alcohol or other drugs. Children with developmental disabilities or physical handicaps may need added care due to interruption of their care, loss of facilities (such as handicap access buildings), or worsening of their condition secondary to the disaster. These children and families should be targeted for outreach after the disaster, as well as predisaster planning, to assure that facilities and equipment will be available. If any mental or physical health problem exists, the disaster will most likely exacerbate it, and children with these problems should be referred back to the previous practitioner for specific assistance.

Families in which a child is born at the time of a disaster or who are in the early stages of nursing, bonding, and attachment may be another group needing special attention. New mothers may need additional teaching and support to appreciate and minimize the impact of the added stressors, as well as practical assistance to access proper food, water, formula, and supplies.

EFFECTS ON THE PRIMARY CARE PHYSICIAN

The primary care physician can be one of the major sources of information and support for the child, family, and community before, during, and after a disaster. **Table 2** describes these roles.

TABLE 2. *ROLES OF PRIMARY CARE PHYSICIANS IN DISASTERS*

Before	Teach pediatric emergency techniques to nurses, emergency medical technicians, and other health professionals
	Order pediatric supplies (eg, diapers, baby wipes, intravenous fluids, and oral electrolyte solutions) for emergency departments, ambulances, and evacuation shelters
	Help families to formulate disaster plans
During	Assist medical personnel in triage
	Treat those with minor wounds and decide who needs to be hospitalized
After	Be available to parents
	Teach parents about common behaviors children or adolescents display
	Provide referrals for families with children requiring mental health services
	Consult with schools
	Identify psychiatric or physical signs of stress in children, adolescents, and families

With all these responsibilities, the primary care physician in the community may also be coping with personal losses and problems. This role conflict poses a double burden and should not be ignored.[22,24,25] The need to treat more patients with fewer supplies and in a less-than- optimal treatment setting may take its toll on caregivers. Additionally, if

the physician's office is damaged or destroyed in the disaster, rebuilding the structure and practice is a necessity.

Coping with the death of a patient may also be extremely difficult. Speaking with other physicians about their common experiences may be helpful. Support groups for physicians, health care providers, and their families are also a venue to help with coping in the aftermath of the disaster.

From a practical standpoint, with the closing of schools after a disaster, caregivers may need additional child care. Temporary housing may also be necessary for those health care professionals who remain and help rebuild the community. Yet the physician should continually evaluate the balance between personal and professional demands.

CULTURAL, RELIGIOUS, AND ETHNIC CONSIDERATIONS

There is little research about the unique impact of disasters on specific cultural or ethnic groups of children, but there are some observations showing differences.[10,26] Outreach by leaders of different cultural groups in the community is essential in all phases of a disaster. Information regarding available services should be provided in all languages appropriate to the community.[14] This information may be distributed through church and community groups.

Since religion may be a source of comfort to many in the face of loss of life, property, and sometimes lifestyle, it is important that churches, synagogues, and their clergy become active in the recovery of the community during and after a disaster. Mutual referral between the primary care physician and the clergy should be established to aid families in coping.

REACTIONS OF CHILDREN AND ADOLESCENTS TO A DISASTER

EARLY VS LATE EFFECTS OF DISASTER

The time course for reactions to a disaster is variable and phases of disaster-related behaviors are described in **Table 3.**[16]

TABLE 3. *EARLY VS LATE EFFECTS OF A DISASTER* [25]

	First Stage	Second Stage	Third Stage
Time	During and immediately after a disaster	A few days to several weeks after disaster	Months later
Reaction	Disbelief, denial, anxiety,	Clinginess, appetite changes, regressive	Reconstruction

relief, grief, altruism	symptoms, somatic complaints,sleep disturbances, apathy, depression, anger, and hostile, delinquent acts

The first stage occurs during the disaster and immediately after it with the attendant emotions of fear, "state of shock," acute anxiety, grief after loss, or relief if the family is intact. There is a great deal of altruism that may even be seen in the willingness of a schoolchild to help a younger sibling.

The second stage occurs for several weeks after the disaster. Common behaviors during this time include regression to previous developmental levels and manifestations of emotional upset, eg, clinginess, change in appetite, enuresis, constipation, headaches, sleep disturbances, and irritability. Anger over loss, survivor guilt and suspicion of outsiders, apathy, depression, and withdrawal may occur. Hostility and violence towards others, pessimism about the future, and posttraumatic play are not uncommon. Any of these symptoms are within normal expectations, provided they last only a few weeks, but the child needs a referral to a mental psychiatric health professional if significant problems persist beyond that. After a disaster, the child or adolescent may have strong feelings of disappointment or resentment if a delay occurs in the rebuilding of the home or school. Children may show signs of posttraumatic stress but few will go on to develop a full- blown psychiatric disorder.

The reconstructive phase is the last phase and may take several years or decades. This is the time when the family members are actively rebuilding their lives, and the physician should monitor and be available to these families. It is important to note that these phases do not always occur in a sequential fashion and children and families may regress.

RESPONSES OF CHILDREN AND ADOLESCENTS BY AGE [17]

Generally, a child's reaction is dependent on the following factors:

- proximity to the impact zone
- awareness of the disaster
- physical injury sustained
- amount of disability
- witnessing injury or death of family member or friend
- perceived or actual life threat
- duration of life disruption
- familial and personal property loss
- parental reactions and extent of familial disruption
- child's predisaster state
- probability of recurrence

The child's response to disaster depends upon his/her own perception of the trauma which, in turn, is influenced by his/her cognitive and physical development.[29] The following five primary responses seen in children result from loss, exposure to trauma, and disruption of routine:

- increased dependency on parents or guardians
- nightmares
- regression in developmental achievements
- specific fears about reminders of the disaster, eg, a toy airplane if the child was in an airplane crash
- demonstration of the disaster via posttraumatic play and reenactments

These symptoms usually last for a month or so after the disaster. If these behaviors persist, referral to counseling may be appropriate.

Postdisaster symptoms change with age.[25] Table 4 describes age- specific symptoms.

DIFFERENCES BY GENDER [24,25]

Responses to a disaster may also vary by gender.

Boys

- take longer to recover
- display more aggressive, antisocial, and violent behaviors

Girls

- are more distressed
- are more verbal about emotions
- ask more questions
- have more frequent thoughts about the disaster

GRIEF AND BEREAVEMENT

After a disaster, the child and adolescent must cope with loss, the greatest of which is the death of a family member or friend. Destruction of home, school, and possessions will also cause the child to grieve. Grieving, a search for meaning, and anger are normal reactions to loss and proceed differently for each child.[8,12]

Table 5 describes the developmental basis for grief reactions in infants, children, and adolescents. Toddlers, school-age children, and adolescents are able to verbalize sadness and should be strongly encouraged to do so. The intensity of the grief reaction will usually be at its peak immediately after the disaster and wane during the next few weeks. However, the anniversary of the event or the birthday of a deceased loved one or friend may trigger bereavement and recurrent symptoms, but to a lesser extent. If a verbal child

does not express sadness or denies a sense of loss, or if bereavement is prolonged, then referral to a mental health professional is advisable.

The presence or absence of emotional support provided by the family and community for children's grief reactions is significant. The family's reaction may be helpful or hurtful. Parents also have experienced trauma and loss in disasters, and may initially display disbelief, denial, and depressive symptoms such as weight loss, insomnia, poor appetite, alcoholism, and irresponsible behavior.

Bereavement may last from 6 to 12 months. If symptoms persist beyond that, or if they are excessive with an inability to return to predisaster functioning, referral to a mental health professional is necessary.

TABLE 5. *DEVELOPMENTAL CONSIDERATIONS IN THE COMPREHENSION OF DEATH IN CHILDREN AND ADOLESCENTS*

	Infants	**Preschool Children**	**School-Age Children**	**Adolescents**
Developmental considerations	Object permanence, establishing trust	Magical thinking, egocentric, no concept of time	Logical thinking, conception of time, differentiation of self from others	Establishing independence, abstract thinking, feelings of omnipotence
Effect of disaster	Destroys routine, loss of loved ones	Destroys routine, loss of loved ones	Destroys routine, loss of loved ones	Loss of lifestyle, loved ones
Result of disaster	Regression, detachment	Posttraumatic play, withdrawal, apathy	School problems, anxiety, somatic complaints, anger, posttraumatic play	Risk-taking, somatization, depression, anger, hostility to others
View of disaster	No comprehension	Reversible	Understand loss as a consequence of	Full understanding

injury and
illness

SPECIFIC PROBLEMS AND RECOMMENDATIONS

DISRUPTION OF NORMAL PATTERNS

The cardinal effect of a disaster on children and adolescents is the disruption of their lives, whether through injury, death, or destruction (of home, school, or community). This leads to a loss of reliability, cohesion, and predictability, which affects children of all ages. Toddlers usually respond with increased dependency. School-age children, including preteens, show evidence of the trauma with talk and play about the trauma, hostility to peers and family members, and avoidance of previously enjoyable activities. Adolescents also may withdraw, have decreased interests, fatigue, hypertension, and hostility.[26] Sleep disturbances, such as insomnia, resistance to bedtime, refusal to sleep alone, early rising, or excessive sleep, are extremely common. Increased substance abuse, amenorrhea, and teen pregnancy also occur.

It is important for parents and teachers to create and maintain a schedule that is predictable for the children. Sometimes, especially with sleep disturbances, the parents need flexibility but also need to establish a routine. Night lights, stuffed animals, reassurance, and soothing are helpful. Compassion is helpful, but punishment is not. Discipline can be reinstituted as usual. Consultation with a child psychiatrist may be considered for children who may benefit from mild tranquilizers for daytime distress; a hypnotic or sedative at bedtime for continued insomnia also may be advisable. Parents may need similar consultation.

SOMATIC SYMPTOMS

Somatic problems such as headaches, abdominal pain, and chest pain are commonly observed in children through adolescence in the weeks following a disaster and are usually self-limited. If these complaints begin to interfere with the child's life, then the child and family should be referred for mental health counseling. The primary care physician can help by reassuring the child and family that these somatic complaints are not signs of serious physical illness but that they will be addressed and will resolve with time and proper counseling.

AGGRESSIVE/DEFIANT BEHAVIOR

Hostile behaviors may take the form of hitting, biting, or pinching by toddlers or preschoolers, or fighting and not getting along with peers among school-age children, or delinquency and excessive rebellion by adolescents.[26] For the younger child, simply setting limits on unacceptable behaviors may result in the desired change. With adolescents, depression and anger about loss of family, routine, or disruption of

community (eg, school or social life) may be expressed in misconduct. Involving them in rebuilding the community or helping younger children or the elderly may provide positive outlets for their feelings. Groups, such as the Scouts or school clubs, can be sites of informal, guided discussions in which preteens and adolescents may feel comfortable in expressing their fears, feelings of loss, and anxiety. The physician can help by advising these clubs and by leading discussions.

REPETITIOUS BEHAVIOR

The most common type of repetitious behavior is seen in the play of toddlers and preschoolers after a disaster.[27] Children will reenact crucial details of a disaster as a coping mechanism. For example, the end result of a child's "game" about the disaster may be different from the actual disaster or the child may portray himself or a family member as a hero.

Other repetitive behaviors are recurrent nightmares, frequent trauma-specific flashbacks, and distress with reminders of the event. These intrusions can affect concentration and may be very frightening. Posttraumatic play and reenactments show that the child is still very much involved with the disaster. The play and/or reenactments are a necessity for the child although there is no evident joy or diminution of distress. It is not play in the usual sense of giving pleasure or immediately relieving distress. The primary care provider should reassure parents that this play may be therapeutic and can help recovery.[24,27]

REGRESSIVE BEHAVIOR

Separation anxiety symptoms, enuresis, encopresis, thumb-sucking, loss of acquired speech, increased clinging and whining, and fear of darkness are more commonly seen in the school-age child and younger child or toddler. These regressive symptoms are usual and short-lived immediately following a disaster. Parents should be reassured of this so that punishment and shame are avoided. In the older child and adolescent, regression may take the form of competing for parental attention with other siblings, decline in previously responsible behaviors, and extreme dependency. Often a child may experience transient confusion. If this happens, the child should be reoriented, and the physician should provide reassurance to parents. If these symptoms last for more than a few weeks, then counseling for the family and the child is advised. However, the return of stability and routine to the home, as well as the passage of time, usually rectify the problem.

ANXIETY

Anxiety occurs in all age groups. One must not minimize or dismiss the expression of anxiety and should encourage the verbal child and teenager to discuss their fears and anxieties. Many times the child is the mirror for parental and/or siblings' anxieties. Thus, family counseling usually is recommended to allow parents and children to know and try to understand each other's feelings.[23] Children, and especially adolescents, if accurately informed by the physician, also may feel less anxious.

DEPRESSION

A sense of sadness is common after a disaster. However, if a child or teenager has persistent symptoms of depression, then psychiatric intervention is warranted. If there is preexisting depression or other psychopathology in the child or the family, the disaster may exacerbate it and strongly hinder adequate recovery. Some preteens and teens may have suicidal thoughts or gestures, especially if a close relative has died. If a teenager expresses helplessness, hopelessness, suicidal ideation, isolation, or other depressive symptoms, then psychiatric evaluation is mandatory. Depression is not the equivalent of sadness, which is usual after a disaster. The physician should alert parents to the common signs of depression, such as decreased appetite, sleep disturbances, constant sadness, and irritability.

GUILT

After a natural disaster, there is no one to blame, but children and teenagers may feel guilty for surviving or having their families and homes intact. They also may feel guilt for being unable to help, or may blame parents or authority figures for being unprepared or not taking necessary precautions to protect them.[27] Young children may experience "magical thinking," resulting in feeling that they are responsible for the disaster because of something "bad" they did.

In technologic disasters, the same issues apply. However, there may be a person, company, or government to blame. If litigation is involved, the protracted process may mitigate against children and their families putting the trauma behind them. This may result in disillusionment, especially in school-age children and adolescents. Loss of faith in religion also may occur.

The physician can alleviate guilt by reassuring the child or adolescent that the disaster was not his or her fault and that all has been done to return life to normal. Also, instruct the child that assigning blame is counterproductive and that rebuilding lives, families, and communities is what is important. The physician must comfort and support the child and family but should not expect an immediate positive response.

POSTTRAUMATIC STRESS DISORDER

Posttraumatic stress disorder (PTSD) has been observed in children and adults following exposure to a traumatic event such as a disaster, but not all children show all the symptoms of PTSD.[3] Few develop the full disorder. Some may have a delayed onset while others may have anxiety, depressive, or conduct disorders. Some children display the symptoms only during the immediate postdisaster period.

The diagnosis of PTSD is made when a child has symptoms with specific additional criteria in three major categories persisting for more than 1 month:[3]

1. Intrusive, repeated reexperiencing of the event through play or in trauma-specific nightmares or flashbacks, or distress with events that resemble or symbolize the trauma.
2. Routine avoidance of reminders of the event or a general lack of responsiveness, eg, diminished interests or sense of foreshortened future.
3. Increased general arousal, such as sleep disturbances, irritability, poor concentration, increased startle reaction, and regression.

GENERAL RECOMMENDATIONS

The most important point to keep in mind for any child in a disaster is that the child and the family can be helped to recover through working together, with the help of the practitioner, as they deal with the psychosocial aftermath. These are usually normal children who have experienced stress from trauma and loss. Secondly, the practitioner should talk privately to the verbal child. The child's view of what has happened is often very different from the parents', guardians', or teachers' perceptions.[24]

The practitioner should actively seek out all children and families involved, to let them know of the available services and to listen to the children, thus legitimizing and normalizing their fears and grief with support. This also helps parents realize that what they and their child are experiencing is not abnormal. Some parents are so upset that they may not be aware of their child's troubles.

LISTENING AND EMPHASIZING STRENGTHS

For the child experiencing the symptoms described above, which are usually self-limited and cease a few weeks after the disaster, it is important to listen and to emphasize the child's strengths and abilities to cope with loss and adversity as they did in the past. It is also helpful to note the child's bravery and courage. The goal is to decrease the stress for the child and facilitate working through grief by listening and empathizing with the child and family. Sometimes a child's drawings may be helpful in expressing fears.[13] Observing a child's play may be helpful in identifying a child's feelings. Play may be therapeutic for the child.[20] Children are generally resilient; nevertheless, they need order when their routines have been disrupted. Parents should be instructed to try to resume as much of their usual routine as soon as possible; to spend more time with their children in positive activities even of the simplest kind; and not to interfere in the child's repetitious posttrauma talk and play (unless dangerous), since the child experiences the intrusion as a rejection.

If symptoms last for more than a month, or if posttraumatic stress disorder, anxiety, or depression are noted, then referral to a mental health professional should be considered. Other situations that may require such a referral are children or families with psychopathology prior to the trauma, those with suicidal ideation, or those with risky behaviors.

SCREENING TECHNIQUES

The best rapid method for assessing the extent to which a child or adolescent has been affected by a disaster is a directed history inquiring specifically about the following:

- changes in sleep patterns
- apathetic behavior and lack of motivation
- any regressive behavior (enuresis, encopresis, biting)
- changes in relationships with family members or peers (more clingy and dependent or withdrawn and isolated)
- grades in school
- fears and worries

In addition to the clinical evaluation, the practitioner can use formal screening scales in order to assess whether a child is experiencing postdisaster behavior problems.[5] These scales are usually administered by teachers, social workers, and clinicians. Two examples are

- The Child Behavior Checklist for 4- to 18-year-olds[1]
- The Pediatric Emotional Distress Scale (PEDS)[21]

A copy of the PEDS is appended for inspection and use. Normative and scoring information is available from the author.

There are also numerous self-report scales that are being examined in terms of their ability to screen for posttraumatic stress disorder (PTSD) in children, such as the following:

- Impact of Events Scale[9]
- Reaction Index[6]
- Children's PTSD Inventory[18]

DETERMINING NEED AND TYPE OF INTERVENTION

The role of the primary care physician is to assess the child and family, and to provide emotional support and reassurance to them. The physician should make general recommendations to the family that will ultimately help the child. The main goals are to keep the family together, to provide support, and to encourage family communication. Strengthening a child's friendships and peer support also are important.[11] The physician should emphasize the importance of establishing a routine and getting life back to normal as much as possible. The practitioner can help the parents to assign tasks to family members, such as chores for the preteens and teens, helping children with homework, and setting aside regular times for meals, play, talking, and bedtime. Several visits may be necessary to assess the coping abilities and liabilities of the child and family.

KNOW LIMITATIONS

When symptoms are prolonged, then referral for individual and group psychotherapy is in order. The goal of therapy is to remove or decrease disruptions in the child's personality development and to get development back on course. Parents and other family members must be involved and early intervention is important.

OUTSIDE THE OFFICE: ISSUES FOR COMMUNITY INVOLVEMENT

DISASTER PREPAREDNESS

One important task for the primary care physician is to help the community implement a disaster preparedness program prior to the disaster.[2] Such programs are even more critical in localities that are more susceptible to natural disasters, such as California (earthquakes) or the Gulf and southeastern coasts (hurricanes). Assisting a community in preparing for a disaster may include providing anticipatory guidance to school teachers with presentations in the school, and to parents during regular health visits. These would include the location of local shelters, reviewing first-aid tips, and discussing symptoms that may occur in a child or adolescent after a disaster. As a member of the medical community, the practitioner should help determine and arrange for the availability of necessary pediatric medical equipment in shelters, ambulances, and hospital emergency rooms.

SCHOOLS

After a disaster, the schools are a natural site for monitoring behavior of children and adolescents even early in the aftermath when schools are often used as temporary shelters for families. Collaboration between the physician and school staff is extremely important. The physician may wish to work with school staff in developing information about what to expect from their students after a disaster, offer screening for high-risk problems, and assist in developing a list of referral sources. A set of postdisaster activities for elementary schoolchildren has been developed to help children adapt.[11] Additionally, counseling programs for students and/or families can be set up at school in a mutual partnership with the primary care physician. The school also can be a base for dissemination of written information to parents and students. The physician may be helpful in writing or providing guidance to organize this information. He or she may be asked to be a consultant, eg, to discuss death and grieving with students and school staff.

MEDIA

Mass media can be effective in informing the public of the status of a disaster, eg, where and how to get emergency services. The physician may wish to assist those designing such public service announcements. Additionally, the primary care physician may be asked to write or talk about the psychosocial sequelae of disasters for children on radio or television. The physician may also assist in setting up disaster hotlines, another avenue by which the physician may participate and provide guidance. The primary care

physician also can be an advocate for children and families to discourage inappropriate or distressing media attention on the disaster community.[23]

COMMUNITY AGENCIES AND RELIGIOUS ORGANIZATIONS

The primary care physician may be asked to speak to various community organizations and relief groups, or at churches and synagogues about the health and psychosocial effects of a disaster on children and adolescents. As a source of information, the practitioner may wish to work closely with local clergy to share information to help children and families cope with grief and loss.

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Appendix A

POTENTIAL RESOURCES IN A DISASTER ENVIRONMENT

STATE AND LOCAL

Mental Health

All areas should have mental health services for children and their families. At times of widespread disaster, local or state-wide mental health agencies may be the recipients of rapid-review federal "Outreach" grants to provide trauma-related intervention. **Contact local mental health center or, if not satisfied, state agency responsible for mental health services for children.**

Schools and Out-of-Home Child Care Centers

School guidance programs frequently offer group support activities for children and parents when a large number are affected. **Parents should be encouraged to take advantage of free groups and information sessions when they are ready and able.**

American Red Cross

The American Red Cross has chapters in most larger cities, and a state chapter in each capital city. They should be able to help families with immediate basic needs (food, clothing, shelter) as well as supportive services and longer term interventions. **Call the local chapter for assistance, or if not satisfied, the state chapter in your capital city.**

Professional Organizations

Many disciplines have assembled resources and networks at national and state levels. This may include information and/or professionals qualified to serve as volunteers or consultants. For example, the American Psychological Association and the American Red Cross have established a formal agreement and network so that each state will have psychologists trained and available for emergency crisis intervention and/or longer term triage and referral. **Contact your state association offices (usually in the capital city) for the disaster coordinator, or call national contacts listed below.**

Churches

Churches are often the most productive and rapid responders for immediate basic needs. Most organized denominations have some kind of disaster relief program now. **Contact the district office of the major denominations in your area.**

Universities and Medical Universities

In many of the large-scale disasters of the last few years, academic practitioners with general training in stress, coping, counseling, and posttraumatic stress disorder have stepped forth to be of assistance. Some caution is advised so that your patients are treated appropriately and not enlisted into a hastily designed research study or given treatments designed for traditional psychiatric disorders. Be sure that those to whom you refer patients have specific training in child and family issues and, ideally, in the specific effects of trauma. **Contact your local university's departments of psychiatry, psychology, or pediatrics (many major pediatrics departments have their own psychologists, psychiatrists, and/or social workers).**

Media

TV, radio, and newspapers should provide listings of available resources and supports in major disasters.

NATIONAL LEVEL

Federal Emergency Management Agency (FEMA)

This federal agency is charged with intervening to provide logistical and financial assistance to individuals, businesses (via the Small Business Administration), and communities after an officially declared disaster **(800/621-3362).**

Emergency Services and Disaster Relief Branch Center for Mental Health Services

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This center provides publications and videotapes regarding human responses to disasters. During disasters, it provides funding through an interagency agreement with FEMA for crisis counseling and training to disaster survivors. It can provide consultation regarding disaster preparedness and natural and human-caused emergencies and disasters **(301/443-4735).**

Office of Public Affairs, Centers for Disease Control and Prevention

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This office provides epidemiologic intelligence, health surveys, and broad-based consultation in times of disasters. Contact through state health officer or **(404/639-3286).**

Professional Organizations

Many professional organizations have gathered research, generated handouts, and developed networks of qualified consultants. Potentially helpful organizations include but are not limited to:

- American Psychological Association
  202/336-5898
- American Academy of Child and Adolescent Psychiatry
  202/966-7300
- National Academy of School Psychologists
  301/608-0500
- American Nurses Association
  202/554-4444
-)American Academy of Pediatrics
  708/228-5005

With all potential resources, it is important to note that the agencies and relief groups themselves, at a local level, may be as disrupted as the community at large (eg, no electric power, employees involved in catastrophes at home, or medical personnel engaged in emergency activities at regional medical centers).

Appendix B

PEDIATRIC EMOTIONAL DISTRESS SCALE (PEDS)*

If you have a child between the ages of 2 and 10: Please circle one number for each item to describe how often your child has shown each behavior IN THE LAST MONTH.

Gender of child to be rated (M/F)____

Child's birth date:(M/D/Y)_____

	Almost Never	**Sometimes**	**Often**	**Very Often**
1. Acts whiny	1	2	3	4
2. Wants things right away	1	2	3	4
3. Refuses to sleep alone	1	2	3	4
4. Has trouble going to bed/falling asleep	1	2	3	4
5. Has bad dreams	1	2	3	4
6. Seems fearful without good reason	1	2	3	4
7. Seems worried	1	2	3	4

8. Cries without good reason	1	2	3	4
9. Seems sad and withdrawn	1	2	3	4
10. Clings to adults/doesn't want to be alone	1	2	3	4
11. Seems "hyperactive"	1	2	3	4
12. Has temper tantrums	1	2	3	4
13. Gets frustrated too easily	1	2	3	4
14. Complains about aches and pains	1	2	3	4
15. Acts younger than used to for age (ie, bedwetting, baby talk, thumbsucking)	1	2	3	4
16. Seems to be easily startled	1	2	3	4
17. Acts aggressively	1	2	3	4
18. Creates games, stories, or pictures about_____	1	2	3	4
19. Brings up_____in conversation.	1	2	3	4
20. Avoids talking about_____even when asked.	1	2	3	4
21. Seems fearful of things that are reminders of_____	1	2	3	4

If your child has had a major trauma or stress in the last year, please describe it on the line provided (eg, loved one in the war, illness, death or loss, accident, natural disaster). Then rate their behavior with regard to the trauma/stress. (Describe trauma/stress.)

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