Helping Foster and Adoptive Families Cope With Trauma

American Academy of Pediatrics

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Adoptive and foster families may struggle to understand and support their new children. Because these children may have experienced significant trauma prior to their placement, they may view and react to people and events in ways that may seem unusual, exaggerated, or irrational. Recent advances in developmental science are revealing how significant adversity in childhood alters both the way the genome is read and the developing brain is wired. In this way, early childhood trauma is biologically embedded, influencing learning, behavior and health for decades to come.

The purpose of this guide is to support adoptive and foster families by strengthening the abilities of pediatricians to:

1) identify traumatized children, 2) educate families about toxic stress and the possible biological, behavioral, and social manifestations of early childhood trauma, and 3) empower families to respond to their child's behavior in a manner that acknowledges past trauma but promotes the learning of new, more adaptive reactions to stress.

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POCKET MATERIALS:

Diagnosis/Coding Tips and Screening Tools Visit Discharge and Referral Family Handout

BACKGROUND

How can pediatricians assist a fostering or adoptive family to better understand and respond to the special needs of their child?

Virtually all children in foster care have been abused and/ or neglected. While they may have suffered physical injury, this is often the tip of the iceberg. Children who have experienced maltreatment often have developed different ways of perceiving and reacting to their world, ways that often prove maladaptive in a more normal environment. Foster and adoptive parents who do not understand these differences risk frustration and may feel resentment as they struggle to understand and raise their children. The resulting stress can disrupt placement and eventually lead to unfavorable outcomes for the children.

Even a casual inspection of the statistics related to foster care shows that this population has special needs. Intrauterine alcohol and drug exposures combine to leave many in the foster care system with cognitive, sensory, and emotional impairments.¹ Children in foster care suffer a high incidence of developmental delays, as high as 25% in some age groups.² Rates of clinical Post Traumatic Stress Disorder as high as 25% have been reported. Over 80% of children aging out of foster care have received a psychiatric diagnosis.³,⁴ Even the systems in place to protect children may prove traumatic, necessitating separation from home and siblings, sometimes in multiple foster placements.

The lifetime consequences of early trauma are often severe. Researchers have found many of the most common life-threatening health conditions, including obesity, heart disease, alcoholism, and drug use, to be directly related to childhood adversity. The financial cost to society is enormous and the personal costs cannot be reckoned.⁵

Efforts to assist adoptive and foster families require an understanding of the long-term effects of maltreatment on neurodevelopment. Social/behavioral, neuroendocrine, and even genetic systems are all influenced by early abuse and neglect, and interact with each other as the individual grows and develops. Whether the interaction helps the individual overcome trauma's effects or not depends on many factors.

The past few years have brought a dramatic improvement in our ability to understand how the healthy brain develops, and a better perception of what happens when the environment is not conducive to good growth. Several key observations have emerged:

THE BRAIN IS NOT STRUCTURALLY COMPLETE AT BIRTH

 Myelination, proliferation of synaptic connections, and development of glial and circulatory support systems all continue long after the child has entered her world. Nature gives children a chance to adapt to the specific needs presented by the environment into which they have been born.

TEACHING POINT

Among other things, optimal development of the neuroendocrine system is dependent on adequate nutrition and absence of toxins like lead, mercury, alcohol, and other drugs.

STRUCTURAL DEVELOPMENT IS GUIDED BY ENVIRONMENTAL CUES

 The infant's brain adapts to what it sees, hears, and feels. Researchers have demonstrated "critical periods" for effective development of many brain systems.

TEACHING POINT

Proper structural growth depends on a stimulating environment, one that prepares the child for future circumstances.

EFFECTIVE STIMULATION REQUIRES INTERACTION WITH OTHER PEOPLE

 Children can't be expected to provide their own high-quality stimulation. Every person a child encounters is in some sense a teacher.

TEACHING POINT

Other people must be present, attentive enough, and consistent/predictable enough to teach the lessons the developing brain needs.

GENE EXPRESSION DETERMINES NEUROENDOCRINE STRUCTURE, AND IS STRONGLY INFLUENCED BY EXPERIENCE

• Genetic research has identified a variety of gene alleles that appear to protect against, or predispose to, long-term sequelae of traumatic stress, by varying the sensitivity of stress hormone receptors in the limbic system. An increasing body of evidence points to the ability of early life experience to trigger epigenetic modifications, effectively altering brain structure by changing gene transcription.

TEACHING POINT

One way that early adversity can effect long-term change is by altering the way an individual's genetic blueprint is read, thus influencing the stress response.

THE BODY'S SYSTEMS ARE MUTUALLY INTERACTIVE

Social interactions (or the lack thereof) may thus affect neuroendocrine development, which can alter observed behaviors (see Figure 1). Behavior in turn produces social feedback, which stimulates a neuroendocrine response (a physiologic response) and, if severe, may cause modifications in brain structures (an anatomic response). Another word for this complex system of interactions is: Learning. Learning under conditions of extreme stress has been shown to produce epigenetic modifications in gene transcription and cause structural changes

in the developing brain.^{8,10} Like the others, this path leads both ways; the genes and epigenetic modifications to their transcription ultimately determine the brain's structure, which governs behavior. This interactive cascade of responses among social/behavioral, neuroendocrine, and genetic/epigenetic systems has recently been dubbed the eco-bio-developmental model.¹¹

TEACHING POINT

The more emotionally charged a learning situation is, the more likely it is to result in long-term modifications.

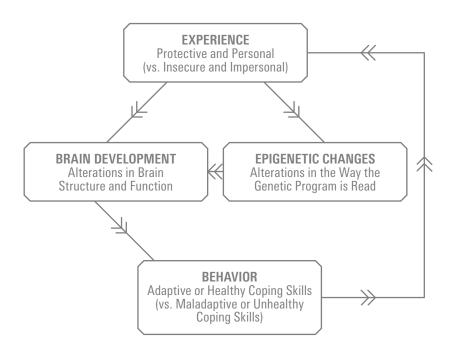


Figure 1

Development results from ongoing and cumulative interactions between experience, biology, and behavior. If early childhood experiences are protective and personal, adaptive or healthy coping skills are more likely. If early experiences are insecure or impersonal, maladaptive or unhealthy coping skills are more likely.

The Role of Stress

Stress in itself need not result in injury. Just as the stress of ambulation helps guide bone and muscle growth, a child needs to experience emotional stress in order to develop healthy coping mechanisms and problem-solving skills. Shonkoff¹¹ categorizes stress as *positive*, helping to guide growth; *tolerable*, which while not helpful will cause no permanent damage; or *toxic* (see Figure 2). Toxic stress is sufficient to overcome the child's undeveloped coping mechanisms and lead to long-term impairment.

The National Children's Traumatic Stress Network (NCTSN) definition of traumatic stress encompasses the physical and emotional responses of a child to events that threaten the life or physical integrity of the child or of someone critically important to the child (such as a parent or sibling). It is this out-of-control physiological arousal that is the hallmark of stress that becomes traumatic, and can incite maladaptation. While a single event like a natural disaster or an assault by a stranger may constitute toxic stress, the effects multiply when the trauma continues, whether by repetition of similar stresses (as in an environment of domestic violence or parental drug abuse) or accumulation of disparate ones. The effect may be particularly severe when trauma involves the child's primary care giving system. Termed complex trauma by the NCTSN, this reaction develops over time, as subsequent events reinforce the lessons learned previously.

It is important to note that this stress is necessarily subjective, varying from child to child. Serious threats may not disturb one child, while minor ones may prove traumatic to another. It is the physiologic arousal that makes the difference, and this is determined by the child's perceptions. This variability is multifactorial; it may depend on the child's previous trauma history, social support, and even on genetic predisposition.

Trauma need not leave visible injuries. Psychological maltreatment can be traumatic and stressful. Neglect can also be traumatic. It is almost always chronic, as basic needs such as food, shelter, or emotional security are not met, day after day. Neglect is by far the most

common reason for entry to the foster care system. It is often seen in conjunction with abuse, and may be exceptionally severe: 71% of child maltreatment fatalities are due to neglect exclusively or in combination with another maltreatment type.¹³

Though early toxic stress and trauma are nearly universal in children who have been adopted or placed into foster care, the events may be remote, and the history is often buried among old records or not documented. Prenatal exposures that influenced brain development may not be detectable in obstetric records. Significant facts and details may be lost in the caretaker transfers and handoffs common in the bureaucracy that attends foster care and adoption. Pediatricians should understand that presentations of attention deficits, emotional dysregulation, and oppositional behaviors may have their roots in early abuse or neglect, recognizing the power of early adversity to affect the child's perceptions of, and responses to new stimuli.

Early maltreatment can result in long-term behavioral changes. These in turn draw responses from those around the trauma-adapted child, responses which can either help or hinder the child's attempts at re-adaptation to the non-traumatic world (see teaching points on p 2-3). Responses that are consistent and which respect the child's prior adaptation facilitate learning, and may eventually permit re-adaptation. Responses that are not may serve to remind the child of the traumatic environment, triggering the hyperarousal characteristic of PTSD and inadvertently reinforcing the maladaptive behaviors.

It is best to consider the whole family as the patient, not just the traumatized child. Fortunately, pediatricians are perfectly situated to help families survive this challenging process. The sections which follow discuss the role of the pediatrician in identifying traumatized children, screening for the consequences of toxic stress, and bringing about effective interventions by educating and empowering parents.

Children are doing the best they can.

CHILD / INDIVIDUAL STRESSORS

- Abuse, neglect, chronic fear state
- Other traumas
 - natural disasters
 - accidents and illness
 - exposure to violence
- Disabilities / chronic disease

PARENTAL / FAMILY STRESSORS

- Parental dysfunction
 - substance abuse
 - domestic violence
 - mental illness
- Divorce / single parenting
- Poverty

SOURCES OF RESILIENCE*

Temperament, social-emotional supports, and learned social-emotional skills

OTHER VULNERABILITIES*

Temperament, delays in development, and limited social-emotional supports

	Physiologic STRESS in Childhood		
STRESS RESPONSE	Positive	Tolerable	Toxic
DURATION	Brief	Sustained	Sustained
SEVERITY	Mild/moderate	Moderate/severe	Severe
SOCIAL-EMOTIONAL BUFFERING	Sufficient	Sufficient	Insufficient
LONG-TERM EFFECT ON STRESS RESPONSE SYSTEM	Return to baseline	Return to baseline	Changes to baseline

^{*} Sources of resilience and other vulnerabilities are able to mitigate or exacerbate the physiologic stress response

Figure 2. Precipitants and Consequences of Childhood Physiologic Stress

Significant sources of adversity in childhood, from both individual and family stressors, precipitate a physiologic stress response. Sources of resilience and other vulnerabilities are able to mitigate or exacerbate the physiologic stress response. With sufficient levels of social-emotional buffering, the stress response can be either positive (and actually build resilience), or tolerable (and result in no sustained changes). With insufficient levels of social-emotional buffering, the physiologic stress response is sustained or severe and becomes toxic, resulting in potentially permanent alterations to the epigenome, brain structure, and behavior. These traumatic alterations may actually be adaptive in threatening or hostile environments, but they are often maladaptive in other, less threatening contexts.

TRAUMATIC ALTERATIONS

- Epigenetic modifications
- Changes in brain structure and function
- Behavioral attempts to cope
 May be maladaptive in other contexts







ADDRESSING TOXIC STRESS

It's part of being a pediatrician

Toxic stress and the early roots of disease, death, and lifelong disparities

The Adverse Childhood Experiences (ACE) Study is one of the largest investigations ever conducted to assess associations between childhood maltreatment and laterlife health and well-being. The study examined mainly white, well-educated members of the Kaiser Health Plan in San Diego. The study found a strong dose-response relationship between the extent of exposure to abuse, neglect, or family dysfunction during childhood and several leading causes of death in adults, including depression, ischemic heart disease, liver disease, and stroke.¹⁴ Beyond the strong association with risk-taking behavior and adoption of unhealthy lifestyles, ACEs are also a direct source of biologic injury leading to alterations in immune function and elevated inflammatory markers. Almost two thirds of study participants reported at least one ACE. Persistent health disparities associated with poverty and child maltreatment could be reduced by the treatment and alleviation of ACEs in childhood.

Promote health and prevent disease by identifying and addressing toxic stress

When toxic stress and ACEs are identified, there are successful interventions and resources that reduce the child's excessive responses to environmental stress and allow them to resume a normal developmental trajectory. Identifying toxic stress and referring families for treatment have the potential to positively impact the child's life-long health and prosperity.

Pediatricians are the frontline guardians of healthy child development, and caregivers rely on them to diagnose and treat developmental and behavioral problems. Furthermore, pediatricians must address complex concerns that are not strictly medical in nature: the boundaries of their professional responsibility include not only physical health, but also the child's success in emotional, educational, and social domains.

Pediatricians are uniquely positioned to intervene through their:

- · Regular interactions with children.
- Appreciation for the important role that families and communities play in determining child wellness.
- Developmental approach to health.
- Understanding of the advantages of prevention over remediation.
- Awareness of the critical importance of effective advocacy to promote changes in well-established systems that influence health and development.

Asking families about exposure to stress and potential associated symptoms:

- Communicates to families that toxic stress is a common problem.
- Begins to reduce the isolation associated with troublesome behaviors that victims of toxic stress develop.
- Communicates that there are solutions such as trauma-informed treatments that can help children resume a healthy developmental trajectory and help families recover.
- Conveys that trauma threatens the healthy growth and development of children and has detrimental consequences across the lifespan.

Children with a history of toxic stress may present to the pediatrician with sleep problems, toileting problems, anger, aggressive behaviors, depression, or difficulties sustaining attention. Knowledge of the relationship between these behavior problems and earlier stressful life experiences is important in guiding effective treatment; failure to understand this relationship may result in treatment approaches that are inefficient, ineffective, or even counterproductive. Identifying the role of toxic stress in these symptoms early will allow the pediatrician to mobilize available community resources and mitigate deleterious effects on the child's subsequent socialization and development. This will ultimately save the pediatrician time and futile effort spent in treating problems without addressing their root cause.

Assume that all children who have been adopted or fostered have experienced trauma

Pediatricians care for children before, during, and after traumatic experiences and must be skilled in identifying the many presentations of toxic stress. Assume that all children who have been adopted or fostered have experienced trauma. Just as not every child exposed to tuberculosis develops hemoptysis, fevers, and weight loss, not every child exposed to stress will develop trauma symptoms. However, practice standards demand that all children exposed to either tuberculosis or trauma should be screened and tested. With tuberculosis, some exposed will show no clinical disease, some will have latent disease, and some will be ill. The same 3 outcomes apply to trauma exposure. The pediatrician must assume that such exposure could have profoundly impacted the child, and must use history taking, surveillance questions, and screening tools to accurately assess trauma's impact.

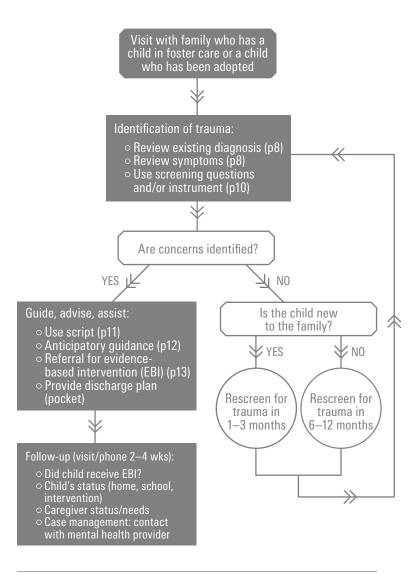


Figure 3. Algorithm for Identifying and Screening for Trauma

HOW TO IDENTIFY TRAUMA

History and Review of Systems

Trauma's influence on the brain results in changes in bodily functions, which can be assessed quickly by including the following in a standardized review of systems:

Response to Trauma: Bodily Functions			
FUNCTION	CENTRAL CAUSE	SYMPTOM(S)	
Sleep	Stimulation of reticular activating system	Difficulty falling asleep Difficulty staying asleep Nightmares	
Eating	Inhibition of satiety center, anxiety	 Rapid eating Lack of satiety Food hoarding Loss of appetite 	
Toileting	Increased sympathetic tone, increased catecholamines	Constipation Encopresis Enuresis Regression of toileting skills	

Trauma's influence on the brain may result in behaviors which can be misidentified as and/or comorbid with common behavioral diagnoses. A high index of suspicion for trauma should be maintained to avoid diagnostic errors:

Response to Trauma: Behaviors ^{15,16}			
CATEGORY	MORE COMMON WITH	RESPONSE	MISIDENTIFIED AS AND/OR COMORBID WITH
Dissociation (Dopaminergic)	 Females Young children Ongoing trauma/Pain Inability to defend self 	DetachmentNumbingComplianceFantasy	 Depression ADHD Inattentive Type Developmental delay
Arousal (Adrenergic)	 Males Older children Witness to violence Inability to fight or flee 	HypervigilanceAggressionAnxietyExaggerated response	 ADHD ODD Conduct disorder Bipolar disorder Anger management difficulties

NOTE: Trauma induced changes in bodily functions and behaviors may be adaptive and protective when children are in a threatening situation. However, these same bodily functions and behaviors may be maladaptive when children are removed from the stressor. When not examined within the context of past traumas, behaviors can be misinterpreted as pathologic.







Exposure to trauma impacts development and school functioning:

- Trauma inhibits development of the hippocampus and prefrontal cortex in the brain – areas responsible for executive function which is composed of...
 - Working memory
 - Inhibitory control
 - Cognitive flexibility

 These are the skills required to learn, function in social settings, and stay focused. They allow us to display self-control, stay on task despite distractions, and hold one idea in our minds as we learn the next step in a process. These skills develop through practice and are strengthened by experiences.

Response to Trauma: Development and Learning ^{15,16}				
AGE	IMPACT ON WORKING MEMORY	IMPACT ON INHIBITORY CONTROL	IMPACT ON COGNITIVE FLEXIBILITY	
Infant / toddler / pre-schooler	Difficulty acquiring developmental milestones	Frequent severe tantrums Aggressive with other children Attachment may be impacted	Easily frustrated	
School-aged child	Difficulty with school skill acquisition Losing details can lead to confabulation, viewed by others as lying	Frequently in trouble at school and with peers for fighting and disrupting	Organizational difficulties Can look like learning problems or ADHD	
Adolescent	Difficulty keeping up with material as academics advance Trouble keeping school work and home life organized Confabulation increasingly interpreted by others as integrity issue	Impulsive actions which can threaten health and well-being Actions can lead to involvement with law enforcement and increasingly serious consequences	Difficulty assuming tasks of young adulthood which require rapid interpretation of information: ie, driving, functioning in workforce	

Assume that all children who have been adopted or fostered have experienced trauma.

Screening Options

Open-ended questions: The pediatrician can probe for information about toxic stressors in a non-threatening, but trauma-informed manner. Questions provide a prompt for what family members may have forgotten or are unsure the pediatrician would want to know:

"Do you know of any really scary or upsetting things that happened to you (your child) either before or after he/she came to live with you?"

"Since the last time I saw you (your child) has anything really scary or upsetting happened to you (your child) or anyone in your family?" **Directed questions:** When trying to identify domestic violence, substance abuse, bullying, systems-induced trauma, or child abuse, one may have to be more direct. Keep in mind that the parent, caretaker, or child must feel safe to answer the question without fear of retribution by an abuser. Using what we know about trauma responses of the body and behavior, the pediatrician can lay out her concerns.

"You have told me that your child is having some problems with aggression, acting out, attention, and sleep. Just as fever means the body is dealing with an infection, when these behaviors happen, they may mean that the brain and body are responding to a stress or threat. Do you have any concerns that your child is being exposed to a threat or feeling stressed?"

"The behaviors you describe and the trouble she is having with school and learning are often warning signs that the brain is trying to manage stress or threat. Sometimes children respond this way if they are being harmed, or if they saw others they care about being harmed. Do you know if your child saw or witnessed violence at school, with friends, or at home?"

Formal surveillance/screening tools: The use of a formal screening tool is helpful if trauma exposure is suspected, reported by caretaker or patient during history taking, or if symptoms are identified by history or review of systems. The tool can provide the pediatrician with more objective data to share with the mental health consultant.

Trauma Surveillance/Screening Tools (See pocket materials for additional tools in the public domain.)						
TOOL	DESCRIPTION	NUMBER OF ITEMS AND FORMAT	AGE GROUP	ADMIN AND SCORING TIME	CULTURAL CONSIDERATIONS	COST AND DEVELOPER
UCLA PTSD- RI: Post Traumatic Stress Disorder Reaction Index*	Assesses exposure to trauma and impact of events	20-22 items depending on child, parent or youth version	Child and Parent: 7-12 years; Youth 13+	20-30 min to administer 5-10 min to score	English, Spanish	Available to International Society for Traumatic Stress Studies members
Abbreviated UCLA PTSD RI	Elicits trauma related symptoms	9 items for child 6 items for adult	8-16 years 3-12 years	2-5 minutes	English, Spanish	Available to International Society for Traumatic Stress Studies members
TSC-C Trauma Symptom Checklist for Children	Elicits trauma related symptoms	TSC-C: 54 items TSC-YC: 90 items, caregiver report for young children	8-16 years 3-12 years	15-20 min	English, Spanish	Proprietary (\$172-\$230 per kit)

Adapted with permission from American Academy of Pediatrics Task Force on Mental Health. Mental health screening and assessment tools for primary care. In: Addressing Mental Health Concerns in Primary Care: A Clinician's Toolkit [CD-ROM]. Elk Grove Village, IL: American Academy of Pediatrics; 2010. www.aap.org/mentalhealth/screeningchart. Revised January 2012. Accessed November 7, 2012.

^{*}A short version of the UCLA PTSD-RI can be found in the following article:
Cohen JA, Kelleher KJ, Mannanrino, AP. Identifying, treating and referring traumatized children: the role of pediatric providers. Arch Pediatr Adol Med.
2008;162(5):447–452. Available at http://archpedi.jamanetwork.com/article.aspx?articleid=379539

HOW TO RESPOND

It can be extremely challenging to parent a traumatized child. Understandably, caregivers can become frustrated, angry, and exhausted as they try to manage their child's reactive behaviors. Yet, a caregiver's calm and consistent responses to the child are what offer the child the chance to stabilize and heal. It is important to explain to families that as concerning as their child's behavior is, it represents a normal reaction to unhealthy threats that have resulted in healthy and unhealthy coping strategies. While sleep problems and aggression may be problematic

in the current home setting, these behaviors may have been protective in a home where a parent would drink at night and become violent. The pediatrician and family should affirm to the child that these responses and behaviors are normal and to be expected. The brain and body are doing just what they are supposed to do—to keep the traumatized child safe. The child's responses indicate that they are doing the best they can with the only tools they have. With time, patience, and practice, the child's brain and body will learn new, more adaptive ways to respond to a new, safer environment.

Scripts for Helping Families Understand Trauma and Impact			
AFFIRMATION THAT TRAUMA RESPONSE IS A HEALTHY RESPONSE TO UNHEALTHY THREAT	Symptoms (sleep difficulty, aggression, acting out, etc) are the body's way of protecting itself from threat.		
DESCRIBE PATHOPHYSIOLOGY OF TRAUMA RESPONSE	Our bodies are made to help us live in the wild where being able to deal with danger, like a hungry tiger, is how we protect our bodies. Our bodies and brains are wired to fight, run or hide at times of threat, NOT to learn or to remember facts about the event. These responses are meant to be strong, but in short bursts. After the threat the body is supposed to be able to relax.		
HELP CARETAKER RECOGNIZE FEELING OF TRAUMA	Parents and older children should be told to remember a time when they felt threatened or anxious (car accident, fight), and remember how their bodies felt. The heart raced, muscles were ready to go. While they may remember very well the minutes before the accident or threat, they may have little memory of the actual scary time.		
HELP CARETAKER EXTRAPOLATE OWN EXPERIENCE TO SITUATION OF TOXIC STRESS	Parents should think about what it is like if "the tiger" is in the house. This causes the fight, run, or hide response, but instead of lasting for just a short time, it keeps going.		
BRAIN RESPONSE	When a baby is learning to walk, they practice over and over and then one day they can walk without thinking about it because the brain links are so strong. Response to trauma is the same. Once the brain links are made and strengthened, something little causes a strong response. Parts of the brain that respond to trauma grow larger and grow connections. Parts of the brain used in learning and logic get smaller.		

A NOTE ABOUT MEDICATIONS:

Medications used to treat behavioral health concerns may have a place in the care of children who are dealing with trauma. While a full discussion of medication management is beyond the scope of this pamphlet, families often have questions about the use of medications to help their child. It is important to help the child and family understand that these medications can alleviate symptoms while the real work of healing is done through therapy. One can think of these medications as serving the same function as a cast does for children with a fracture. They help to stabilize the child so healing can take place. For more information about medication, visit the AAP Mental Health Initiatives Web site at www.aap.org/mentalhealth.

Anticipatory Guidance

Children are doing the best they can. Pediatricians can help by providing practical strategies for caregivers to address the behaviors and challenges of the traumatized child.

Trauma-Specific Anticipatory Guidance				
WHAT YOU WILL SEE	WHY IT OCCURS	HOW FAMILY CAN RESPOND		
Traumatized children will respond to anything they think is a threat more quickly and more forcefully than other children. Traumatized children are more likely to misread facial and nonverbal cues and think there is a threat where none is intended.	Areas of the brain responsible for recognizing and responding to threat are turned on. This is called hypertrophied. Brain does not recognize that this new situation does not contain the same threats.	Do not take these behaviors personally. Helping the child understand your facial expression or the tone of your voice will help lessen the chance of the child's behavior escalating in situations that otherwise do not seem threatening.		
Traumatized children need to be redirected or behavior may start to escalate.	Responding with aggression will trigger the child's brain back into threat mode. Logic centers shut down, fight, flight, or hide response takes over.	Avoid yelling and aggression. Lower the tone and intensity of your voice. Come down to the child's eye level, gently take hold the child's hand, and use simple, direct words. Give directions without using strong emotions.		
Children don't always know how to say what they are feeling. It can be hard for them to find words. Often they are not told that how they feel is okay.	Emotion and language centers are not well connected. Memory centers to hold words are blocked.	Tell the child it is okay to feel the way she feels and to show emotion. Give the child words to label her emotions.		
Traumatized children do not have the skills for self-regulation or for calming down once upset.	Children have had to constantly be watchful for danger. Parts of the brain that keep us alert stay turned on, but the parts of their brains used for self-regulation and calming have not grown with the child.	Develop breathing techniques, relaxation skills, or exercises that the child can do when getting upset. Praise the child for expressing feelings or calming down. Guide the child at first, then just remind the child to use his skills when you start to see the child getting upset.		
Traumatized children will challenge the caretaker, often in ways that threaten placement.	Children come with negative beliefs and expectations about themselves (worthless, powerless) and about the caregiver (unreliable, rejecting). Children often reenact or recreate old relationships with new people. They do this to get the same reactions in caretakers that they experienced with other adults because these lead to familiar reactions. These patterns helped the child survive in the past, prove negative beliefs, help the child vent frustration, and give the child some sense of mastery.	Give messages that say the child is safe, wanted, capable, and worthwhile and that you as the caretaker are available, reliable, and responsive. Praise even neutral behavior. Be aware of your own emotional responses to the child's behavior. Correct when necessary in a calm unemotional tone. Repeat, repeat. Do not take these behaviors personally.		

Do not take the child's behavior personally.

Where to Refer

Children and families trying to manage trauma in their lives need the help of mental health providers trained to provide trauma treatment. A discharge form is available in this guide. This form can be used as a referral tool to communicate with mental health specialists, as a summary for family members, and as a summary for the pediatrician's chart. The pediatrician can complete the form by checking off the assessment findings, explaining any developmental or medical issues, selecting specific recommendations, and identifying a date for a follow-up appointment. The pediatrician can customize the form by adding specific names and phone numbers in the recommendation area, and incorporating local resources in the resources box. This form can be completed electronically (www.aap.org/traumaguide), printed, and provided to the family so they feel confident in providing the correct information to the referred professional. When available in your geographic area, children should be referred to a trauma therapist that uses trauma-specific therapies that are cognitive behavioral (such as TF-CBT) or dyadic (best for young children, such as CPP or PCIT). Children who have experienced more complex trauma may benefit from treatments such as ARC which may augment CBT models.

	Therapies for the Traumatized Child			
AGE	THERAPY	GOALS		
Young child 0-5y	 PCIT – Parent Child Interactive Therapy CPP – Child Parent Psychotherapy 	Works with caregivers and children to address child behaviors observed during play. A dyadic intervention that targets the impact of trauma on the child-parent relationship and how the parent can provide emotional safety for the child.		
Older children	 TF-CBT — Trauma Focused Cognitive Behavioral Therapy (for children 5 and older) CBITS — Cognitive Behavioral Intervention for Trauma In Schools (for high school-aged youth) 	Trains children and families in • relaxation techniques • skills and language to access emotion • psychoeducation Then, child is guided to create a trauma narrative. Child develops/writes a story about what happened to them. When the child is able to tell or read this story to their caregiver it indicates the trauma no longer defines the child, but is instead a story of what happened to them, having lost its power to continue to harm.		
Both older and younger children with complex trauma/ attachment concerns	ARC – Attachment, self-regulation and competency	 To support healthy relationships between children and their caregiving systems to support resources and safety for adult members of the family build all family members' ability to manage feelings, body sensations, and behaviors improve problem solving skills support healthy development of identity support the child in processing/integrating stressful life experiences 		

In addition to the above interventions, the AAP tool *Evidence-Based Child and Adolescent Psychosocial Interventions* is a matrix that outlines evidence-based child and adolescent psychosocial interventions and includes traumatic stress as one of the presenting problems. This chart is updated 2 times a year as new research emerges, and is available at www.aap.org/mentalhealth/psychosocialinterventions

For more information about therapies in your area:

- http://nctsn.org/resources/audiences/parents-caregivers/finding-help
- http://store.samhsa.gov/mhlocator
- www.samhsa.gov/nctic/trauma.asp







THE MEDICAL HOME

A hub for safety, support, and resources

The medical home serves as the focal point for the reduction of toxic stress and for the support of child and family resiliency. Although many patients with a significant history of trauma will need to be followed by mental health professionals, the pediatrician still plays an important role in management. Pediatricians can provide emotional support and validation to foster and adoptive parents in their challenging role as caregivers. Pediatricians can work longitudinally with caregivers and continue to treat symptoms that are obstructing therapy. They can also facilitate access to community resources, work closely with the child's school to address behavioral challenges to learning, and help coordinate care among specialists in other disciplines. The medical home represents safety, access to resources, and continuous care for a child who has experienced trauma.







RESOURCES

AAP Healthy Foster Care America www.aap.org/fostercare

AAP Mental Health Initiatives www.aap.org/mentalhealth

AAP Early Brain and Child Development www.aap.org/ebcd

AAP Medical Home for Children and Adolescents Exposed to Violence www.aap.org/medhomecev

AAP National Center for Medical Home Implementation www.medicalhomeinfo.org

AAP Web Site for Parents www.healthychildren.org

National Child Traumatic Stress Network www.nctsn.org

Center on the Developing Child at Harvard University www.developingchild.harvard.edu

Child Trauma Academy www.childtrauma.org

SAMHSA National Center for Trauma-Informed Care www.samhsa.gov/nctic

The Adolescent Brain: New Research and its Implications for Young People Transiting From Foster Care (Jim Casey Youth Opportunities Initiative) www.jimcaseyyouth.org/filedownload/639

Responding to Childhood Trauma: The Promise and Practice of Trauma Informed Care (Gordon R. Hodas, MD, Pennsylvania Office of Mental Health and Substance Abuse Services)

www.dpw.state.pa.us/ucmprd/groups/public/documents/
manual/s_001585.pdf

A Message From A Child Formerly in Foster Care www.aap.org/fostercare/MIA

REFERENCES

- ¹ Salisbury AL, Ponder KL, Padbury JF, Lester BM. Fetal effects of psychoactive drugs. *Clin Perinatol.* 2009;36(3):595–619. www.ncbi.nlm.nih.gov/pmc/articles/PMC2767264/pdf/nihms149863.pdf Accessed November 16, 2012.
- ² Jee SH, Szilagyi M, Ovenshire C, et al. Improved detection of developmental delays among young children in foster care. *Pediatrics*. 2010;125(2):282–289.
- ³ Greeson JK, Briggs EC, Kisiel CL, et al. Complex trauma and mental health in children and adolescents placed in foster care: findings from the National Child Traumatic Stress Network. *Child Welfare*. 2011;90(6):91–108.
- ⁴ Salazar AM, Keller TE, Gowen LK, Courtney ME. Trauma exposure and PTSD among older adolescents in foster care [published online ahead of print August 17, 2012]. Soc Psychiatry *Psychiatr Epidemiol.* doi:10.1007/s00127-012-0563-0.
- ⁵ Franey K, Geffner R, Falconer R, eds. *The Cost of Child Maltreatment: Who Pays? We All Do.* San Diego, CA: Family Violence & Sexual Assault Institute; 2001.
- ⁶ Binder EB. The role of FKBP5, a co-chaperone of the glucocorticoid receptor in the pathogenesis and therapy of affective and anxiety disorders. *Psychoneuroendocrinology.* 2009;34(suppl 1):S186–S195.
- ⁷ Amstadter AB, Koenen KC, Ruggiero KJ, et al. Variation in RGS2 is associated with suicidal ideation in an epidemiological study of adults exposed to the 2004 Florida hurricanes. *Arch Suicide Res.* 2009;13(4):349– 357. www.ncbi.nlm.nih.gov/pmc/articles/PMC2760049/ pdf/nihms127420.pdf Accessed November 16, 2012.
- McGowan PO, Sasaki A, D'Alessio AC, et al. Epigenetic regulation of the glucocorticoid receptor in human brain associates with childhood abuse. *Nat Neurosci*. 2009;12(3):342–348. www.ncbi.nlm.nih.gov/pmc/ articles/PMC2944040/pdf/nihms233892.pdf Accessed November 16, 2012.
- ⁹ Weinstock M. Sex-dependent changes induced by prenatal stress in cortical and hippocampal morphology and behaviour in rats: an update. *Stress.* 2011;14(6): 604–613.

- Mehta MA, Golembo NI, Nosarti C, et al. Amygdala, hippocampal and corpus callosum size following severe early institutional deprivation: the English and Romanian Adoptees study pilot. *J Child Psychol Psychiatry*. 2009;50(8):943–951.
- of Pediatrics Committee on Psychosocial Aspects of Child and Family Health; Committee on Early Childhood, Adoption, and Dependent Care; Section on Developmental and Behavioral Pediatrics. The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*. 2012;129(1):e232–e246. http://pediatrics. aappublications.org/content/129/1/e232.full Accessed November 16, 2012.
- Hibbard R, Barlow J, Macmillan H; and American Academy of Pediatrics Committee on Child Abuse and Neglect; American Academy of Child and Adolescent Psychiatry, Child Maltreatment and Violence Committee. Psychological maltreatment. Pediatrics. 2012;130(2):372–378. http://pediatrics. aappublications.org/content/130/2/372.full Accessed November 16, 2012.
- ¹³ US Department of Health and Human Services, Administration for Children and Families. Child Maltreatment 2011. Children's Bureau Web site. www.acf.hhs.gov/programs/cb/resource/child-maltreatment-2011 Published December 2012. Accessed January 29, 2013.
- Felitti V, Anda RF, Nordenberg D, 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. Am J Prev Med. 1998;14(4):245–258.
- ¹⁵ Perry BD. Examining child maltreatment through a neurodevelopmental lens: clinical applications of the Neurosequential Model of Therapeutics. *J Loss Trauma*. 2009;14(4):240–255. www.childtrauma.org/images/stories/Articles/traumaloss_bdp_final_7_09.pdf Accessed November 16, 2012.
- Perry BD, Pollard RA, Blakely TL, Baker WL, Vigilante D. Childhood trauma, the neurobiology of adaptation, and "use-dependent" development of the brain: how "states" become "traits". *Infant Mental Health J.* 1995;16(4):271–291. www.childtrauma.org/images/stories/Articles/state_trait_95.pdf Accessed November 16, 2012.

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An online version of this guide can be found at www.aap.org/traumaguide

The recommendations in this publication do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.



Source: Foster Care Alumni of America's national community art project, Exploring the Culture of Foster Care (www.fostercarealumni.org)

POCKET MATERIALS:

Diagnosis/Coding Tips and Screening Tools:

On one side of the handout is a list of diagnoses to consider when evaluating a child exposed to trauma. There is also a link to the Coding Fact Sheet for Treating Trauma. On the other side of the handout is a list of trauma surveillance and screening tools that are in the public domain.

Family Handout:

The handout titled *Parenting After Trauma: Understanding Your Child's Needs* may be reproduced and provided to foster and adoptive parents. To access an electronic version of this handout, visit www.aap.org/traumaguide

Visit Discharge and Referral Summary for Family:

This discharge form is to be completed by the pediatrician and given to the family to guide them in following up on referrals and having the correct information to provide to the receiving/referred professional. It may also be useful to the pediatrician when communicating directly with a mental health professional. This form is not intended to provide a complete history nor is it for the referred professional to complete. The form can be completed electronically (www.aap.org/traumaguide), printed, and provided to the family at the end of the visit. You may also save the form to your files.

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The Dave Thomas Foundation for Adoption is a national nonprofit public charity dedicated exclusively to finding permanent homes for the more than 130,000 children waiting in North America's foster care systems. Created by Wendy's® founder Dave Thomas who was adopted, the Foundation implements evidence-based, results-driven national service programs, foster care adoption awareness campaigns and innovative grant making. To learn more, visit davethomasfoundation.org or call 1-800-ASK-DTFA.



Jockey Being Family is Jockey International's corporate citizenship initiative dedicated to strengthening adoptive families for successful futures. Since 2005, Jockey has donated more than \$3.5 million in financial and in-kind support to local and national non-profit organizations to help increase the availability of resources to adoptive families. Adoption is a lifelong journey and Jockey is committed to ensuring that each family has the support they need to remain "forever families."