The Medical Home Approach to Identifying and Responding to Exposure to Trauma

Pediatricians have a role to play in the identification of trauma and providing an appropriate response to help children and families heal. Trauma can be acute or a series of past events that culminate in symptoms in the present. The following information will provide an introduction to specific things pediatricians can do to recognize evidence that a traumatic event has occurred and how to respond. This document assumes the pediatrician is aware of state laws regulating the report of child abuse and neglect and the first priority if exposure to trauma is identified is ensuring the child is currently safe.

SOMATIC COMPLAINTS AND PHYSICAL EXAMINATIONS: Recognizing When Something Is Trauma Related

Pediatricians are well suited to identify and address a child's exposure to single or ongoing traumatic events and to prevent negative effects on physical and mental health. History of trauma may or may not be disclosed by the family or child. The pediatrician may need to ask about possible current or past exposure to traumatic events and assess safety. Questions may be targeted when there are unexplained somatic complaints or other indicators that may be associated with exposures to trauma or adversity. Symptoms are physiologic responses to fear and trauma, resultant from the expected function of the HPA axis and immune system.

History and Review of Systems

Trauma's influence on the brain results in changes in bodily functions, which can be assessed by including the symptoms listed in Table 1 in a standardized review of systems.

Table 1. Child's Response to Trauma: Bodily Functions

SYMPTOM(S)	FUNCTION	CENTRAL CAUSE
• Difficulty falling asleep • Difficulty staying asleep • Nightmares	Sleeping	Stimulation of reticular activating system
• Rapid eating • Lack of satiety • Food hoarding • Loss of appetite • Other eating disorders	Eating	Inhibition of satiety center, anxiety
• Constipation • Encopresis • Enuresis	Toileting	Increased sympathetic tone, increased catecholamines

Behavioral Response

Trauma's influence on the brain can result in behaviors that may be misleading for the pediatrician. It is best to keep an open mind-set when exploring causation for symptomology. Some of the most common misunderstood responses are listed in Table 2.

Table 2. Child's Response to Trauma: Misunderstood Causes

RESPONSE	MORE COMMON IN	MISUNDERSTOOD CAUSE
• Detachment • Numbing • Compliance • Fantasy	• Females • Young children • Children with ongoing trauma/pain • Children unable to defend themselves	• Depression • ADHD inattentive type • Developmental delay
• Hypervigilance • Aggression • Anxiety • Exaggerated response	• Males • Older children • Witnesses to violence • People able to fight or flee	• ADHD • ODD • Conduct disorder • Bipolar disorder • Anger management difficulties

Abbreviations: ADHD, attention-deficit/hyperactivity disorder; ODD, oppositional defiant disorder.

Exposure to Trauma Affects School Functioning and Development

Trauma inhibits development of specific areas of the brain that are responsible for executive functions, such as working memory, inhibitory control, and cognitive flexibility. These are skills required to learn new material, function in social settings, and stay focused. They allow the child to display self-control, stay on task despite distractions, and hold one idea in her mind as she learns the next step in a process. These skills develop through practice and are strengthened by experiences. For children who have experienced a traumatic event, the skills may not develop appropriately, resulting in missed milestones. Some examples are included in Table 3.

When developmental delays are identified by regular screening or concerns raised by parents, exposure to trauma should be something the pediatrician considers. This will help the pediatrician make the most appropriate referral for the child to another professional for evaluation or services. If there has been exposure to trauma, the pediatrician should ensure that the referral source has experience with assessment and treatment of children exposed to trauma.

Table 3. Child's Response to Trauma: Development and Learning			
AGE	**EFFECT ON WORKING MEMORY**	**EFFECT ON INHIBITORY CONTROL**	**EFFECT ON COGNITIVE FLEXIBILITY**
Infant / toddler / pre-schooler	Difficulty acquiring developmental milestones	• Frequent severe tantrums • Aggressive with other children	• Easily frustrated • Difficulty with transitions
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: eg, driving, functioning in workforce

CASE SCENARIO

Emma, a previously healthy 15-year-old girl accompanied by her mother, presents to the acute care clinic with abdominal pain and nausea of 3 months' duration. She occasionally vomits with the nausea and has lost about 10 pounds in 2 months. There is no history of fever, rash, constipation, menstrual irregularity, or other symptoms. She has not traveled out of the country or had any ill contacts. She takes no routine medications and has no allergies. Emma lives with her mother, stepfather, and 10-year-old sister. She has missed several days of school because of the abdominal pain but reports her grades are "good."

Her examination, including abdominal examination, is completely normal. A previous workup, including urinalysis, complete blood cell count, basic metabolic profile, abdominal and pelvic ultrasound, and a computed tomography scan, is negative.

Her parents want to know what the problem is and are requesting a referral to a gastroenterologist.

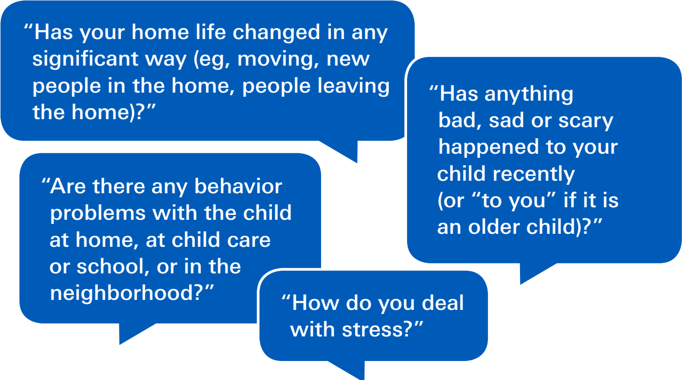
Before making the referral, you talk with Emma alone, without her parents in the room. She discloses that she has a history of long-term sexual abuse from 6 to 12 years of age by her biological father, whom she does not have contact with anymore. One year ago she took an overdose of over-the-counter medications and was hospitalized for suicidal ideation. Emma tells you that talking about these things really upsets her mother. Additionally, she discloses that she is being bullied at school.

Assessment for Exposure to Trauma

As pediatricians become more aware of the significant effect that exposure to trauma may have on a child's health, well-being, and safety, they may consider asking explicitly about exposure to trauma. Given data on the frequency of child exposure to traumatic events, it is not unreasonable to consider trauma during every health visit. Such universal assessment can help remove any sense of stigma or judgment and can reassure the family. The diagnosis cannot be made if it is never considered. Maintaining a high level of suspicion that trauma may be a cause of or contributing factor to the behavior or concern being raised is an important first step.

Validated, brief screening tools for a busy primary care setting have yet to be developed, but general questions can be used.

OPEN-ENDED QUESTIONS



Information about toxic stressors can be solicited in a nonthreatening but trauma-informed manner. Questions provide a prompt for what family members may have forgotten or not yet shared.

CLOSE-ENDED QUESTIONS

"You have told me that your child is having difficulty with aggression, attention, and sleep. Just as fever is an indication the body is dealing with an infection, when these behaviors are present, they can indicate the brain and body are responding to a stress or threat. Do you have any concerns that your child is being exposed to stress or something that would be scary to him?"

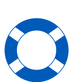
"The behaviors you describe and the trouble she is having with school and learning are very common. However, they are also sometimes warning signs that the brain is trying to manage a stress or threat. For example, sometimes children respond this way if they are being harmed or if they are witnessing others they care about being harmed. Do you know of violence exposure at school, with friends, at home, or in the neighborhood?"

"So what you are describing to me may be related to stress. Do you feel safe at home? Does your child feel safe at home? On the school bus? Walking to school? At school? Coming home from school?"

When trying to identify domestic violence, substance abuse, bullying, or child abuse, it may be necessary to be more direct. This includes framing around a concern.

It is important for pediatricians to say that they are screening all families for exposure to trauma. This helps reduce stigma and establishes it as a normal part of practice.

AFTER EXPOSURE TO TRAUMA IS IDENTIFIED: The Initial Response



Be Empathetic

Disclosure of exposure to a traumatic event can be difficult for children and families and may make them feel vulnerable. The pediatrician's response to disclosure influences children's and parents' perceptions of and response to the traumatic event, including whether they seek evaluation and treatment. Demonstrating empathy should be the first reaction. A pediatrician can respond with a statement like, "I am so sorry to hear that you __________. Thank you for sharing that information with me. I know we can work together to help your child."

Elicit Further Symptoms and Provide Education

Next, it is important to check in with the parent and, when appropriate, child (based on age and developmental level) with regard to the child's current symptoms, use of coping strategies, supports, and any other concerns the family might express. Start with an open-ended question that does not easily allow a one-word answer, eg, "What differences have you noticed in your child since the event?" Or ask the child, "What differences have you noticed in yourself since the event?" Most children cope very well after a traumatic event, especially when they have a supportive caregiver in the home. If the child is doing well, praise the child's ability to cope with the event and the caregiver for supporting the child through this difficult time.

One of the best things a pediatrician can do, even for those who do not appear symptomatic at the time, is provide education and **resources** about traumatic events and the typical responses to trauma. In non-complex forms of trauma (eg, single events), normalizing the event

can help reduce the child's and caregiver's distress. The pediatrician can use statements like…

"A lot of kids have something happen that is really scary for them at least one time in their life."

"It can be really scary for kids at first, but most of those kids do really well and after a short time get back to feeling the way they did before."

Parents and other adults in the child's life need to be aware of the variety of symptoms children may experience after a traumatic event, from emotional and behavioral changes to somatic complaints. Children suffering from traumatic stress may be clingy and fearful of new situations, easily frightened, difficult to console, irritable, impulsive, and inattentive. They may also have difficulty sleeping, struggle with their appetite, and show regression in functioning and behavior. It is important for parents to know that these symptoms are indicative of when the body's normal fight, flight, or freeze response to stress or a threat is "turned on too much" or "turned on too long." It will be important for pediatricians to remind families that children are doing the best they can with the knowledge, skills, and strategies they have obtained given their developmental stage. Caring for a child who has been traumatized can be challenging, especially for caregivers who have other stressors. However, if a child's daily functioning at home, in school, etc, becomes impaired, it will be important to assess that child immediately for additional, trauma-informed services (see **"After Exposure to Trauma Is Identified: Responding to Active, Trauma-Related Symptoms"**).

Help the Family Cope With a Child Exposed to Trauma

Pediatricians can help by providing caregivers with practical strategies to address the challenging symptoms of the child who has been traumatized. Over time, with practice, patience, and calm and consistent parenting, the child's brain and body can learn to respond in a healthier, more adaptive way.

Some general strategies to help children and families cope with trauma symptoms are listed in Table 4. The approach can be individualized based on the child's history and the type of trauma that was experienced. This will be particularly true if the trauma experienced is directly related to the activity in question. Pediatricians may need to seek guidance from a therapist with expertise in trauma treatment.

Table 4. Trauma-Informed Anticipatory Guidance

SYMPTOMS CHILD MIGHT EXPERIENCE	HOW FAMILY CAN RESPOND
Sleep disturbance	• Consistent bedtime schedule. • Soothing bedtime routine (bath, reading books, dim light, brief cuddling/snuggling). • No screen time 1 hour before bed. • Night-light. • Accept and empathize with child's fears, and help reassure the child. – Transitional item: stuffed animal, blanket, pillow, or other desired item (may tell the child story of stuffed animal being scared and needing to sleep with child to feel safe and secure).
Eating disturbance – All	• Consistent schedule of eating. • Calm, pleasant meals. • Three meals and 3 snacks (offer something every 2 hours). • Sit down to eat all meals and snacks. • Expect experimentation and messiness. • Give a chewable multivitamin with iron and zinc.

CONTINUES >

Table 4. Trauma-Informed Anticipatory Guidance (continued)	
SYMPTOMS CHILD MIGHT EXPERIENCE	**HOW FAMILY CAN RESPOND**
Eating disturbance – Food refusal	• No force-feeding, cajoling, or reprimands. • Set up rewards for taking each step toward eating item (eg, having item on plate, smelling item, putting item to lips, tasting item, taking a bite, swallowing item). • Offer 2 desired foods and 1 non-preferred food at each sitting. • Repeat offering food. • High-calorie/high-protein diet if underweight. • Follow growth weekly or monthly with primary care.
Eating disturbance – Overeating and hording	• Set up reward system for "asking for food items" and "eating item when given" (instead of sneaking and hiding food item). • Offer plenty of water throughout the day. • Frequent checks for hidden foods and reward system for "bedroom free of food." • Reducing hording: Keep a bowl of high fiber snacks (eg, carrots, apples). Refill bowl every 30 minutes and gradually increase time between fillings. Praise child for saving some and progress.
Toileting issues – Encopresis/constipation	• Bowel clean out as necessary (taking steps to minimize additional trauma). • Eliminate any negative associations around toileting. • Reward system for sitting on the toilet (may need a graduated reward system for small steps toward sitting on the toilet, eg, pooping in training diaper while in bathroom, pooping in training diaper while standing next to toilet, pooping in training diaper while sitting on closed toilet seat, pooping in training diaper while sitting on open toilet seat, pooping in toilet). • Game or activity that can only be used in the bathroom.
Toileting issues – Daytime urinary incontinence	• Treat constipation if present. • Timed voiding (every 2 hours). • Reward incentive for remaining dry during set intervals and adhering to voiding schedule.
Functional abdominal pain	• Consider increasing fiber in diet and decreasing lactose. • Clarify whether each bout is "same" or "different"; otherwise limit conversation about the pain. • Reinforce well behavior. • Distraction. • Cognitive coping skills (positive self-talk). • Relaxation techniques (deep breathing).
Tension headaches	• Ask, "What do you think might be causing this headache?" • Visual images of anatomic structures like blood vessel contracting and dilating and accompanying pain sensors may help some gain control of symptoms. • Visual imagery with progressive relaxation exercises. • Drink lots of water. • Headache diary may help establish triggers.

CONTINUES >

Table 4. Trauma-Informed Anticipatory Guidance (continued)		
SYMPTOMS CHILD MIGHT EXPERIENCE	**HOW FAMILY CAN RESPOND**	
Anxiety/fears/avoidance	• Acknowledge and respect the fear. • Do not belittle, exaggerate, or cater to the fear. • Provide information about the fear. – Read a book about the feared concern. – Watch reassuring television programs, movies, or videos. • Graduated exposure to the fear with rewards for each step taken. • Practice active listening.	
Trouble with self-regulation • Strong, inappropriate emotions • Low tolerance for stress • Easily frustrated	Techniques for the parent • Remind caregiver to not take this behavior personally. • Lower the tone and intensity in voice. • Remain calm and gentle. • Get down to child's eye level to speak. • Give directions that are positively stated, simple, and direct, without use of strong emotions. • Anticipate a reactive response and use redirection before child's emotions are out of control.	Techniques for the child • Teach child calming skills (eg, breathing techniques, relaxation skills or exercises) when child is not upset. • Have child practice skills when child is not upset. • Have caregiver model skills to child when caregiver is upset. • Gently remind child to use skills when upset; caregiver may suggest they use a skill together. • Use of strategic ignoring for behaviors that can be ignored can help children learn to self-calm.
Difficulty with verbally expressing feelings	• Have caregiver label her own emotions and response throughout the day, eg, "Mommy is really frustrated sitting in traffic right now." • Have caregiver help child label child's emotions, eg, "It looks like you are upset that you have to wait your turn." • Encourage child to label his own emotions throughout the day to practice, eg, "How are you feeling right now?"	
Irritable/aggressive behavior	• Have caregiver help child understand caregiver's facial expression and tone of voice. • Remind caregiver to be aware of her emotional response to child's behavior. • Do not take the behavior personally. • Be consistent and calm when disciplining; avoid yelling and aggression. • Give messages that say child is safe, capable, and worthwhile. • Praise desired and neutral behavior. • Spend extra-special time playing with child.	

Help Parents Cope and Self-care

Caring for a child who has been traumatized can be extremely challenging, resulting in parents becoming frustrated, angry, and exhausted as they try to manage the child's behaviors. It is very helpful when speaking with the parents, in the absence of the child, to find out how they are coping. Parents may have also experienced the trauma and be suffering from symptoms of their own, which may affect their ability to effectively care for their child. If parents disclose experiencing their own symptoms of distress, it is important they are encouraged to seek the support of an adult practitioner for treatment. Many parents can still support their child despite their distress, but they need their own support system to be successful. Help parents identify their strengths and coping resources. Encourage parents to use their support systems.

When eliciting history from the family, the pediatrician may become aware of multiple adverse childhood events within the child or parents' life. The accumulation of multiple trauma exposures in the family further weakens the child's ability to cope with additional trauma in a healthy way and may limit parents' ability to be an effective support system. These families may need assistance connecting to social service supports for economic resources, like job training or a food pantry, or crisis services for intimate partner violence counseling or substance abuse treatment, as well as financial services or child care. Additionally, they often require more frequent visits with the primary care physician or another professional to check in and provide support and encouragement.

Parents who have their own trauma history may have difficulty controlling their own emotions, making decisions that keep themselves and their children safe, developing healthy relationships, and setting clear boundaries for themselves and their children. Additionally, they may fail to respond appropriately to their children, especially when either of them is under stress. It is important to approach these parents in a trauma-informed manner. This includes recognizing that parents' anger, resistance, or avoidance may be a reaction to their own trauma. It is also important to remember that parents are doing the best they can with the examples they have been shown in their own lives. Pediatricians can model direct, honest communication and set clear boundaries with these parents and provide concrete recommendations using easily understood language to explain rationale. Make every effort to compliment parents' healthy choices, compliance with requests, and good decisions. Pediatricians can also be prepared with referral resources for parents who may require support for their own untreated trauma experiences.

Ongoing Monitoring and Encouragement

After an exposure to trauma has been identified, the pediatrician will assess the level of trauma exposure, the extent of trauma symptoms, and the capabilities and coping skills of the parents, as well as provide education, anticipatory guidance, and possibly a referral for additional services for evaluation, treatment, or support. The next important step will be establishing a reasonable time frame for follow-up with the child and family. Obtain input from the child and parents to find out how frequently they can and are willing to follow up. Follow-up is helpful to check in with parents and the child about resolution of symptoms, effectiveness of coping strategies, continued access to support systems, and previous referrals and assess the need for any additional referrals. It will also be very important for the pediatrician to work in close coordination with any other clinicians or therapists involved to develop and monitor a care plan that will most benefit the child and family.

AFTER EXPOSURE TO TRAUMA IS IDENTIFIED: Responding to the Symptomatic Child

There is no hard-and-fast rule on when to refer a child to trauma-informed therapeutic services. After hearing the child's and family's experience following the traumatic event(s), the pediatrician can consider the severity of the incident as well as the length of time the child has experienced negative symptoms. If symptoms have lasted for days to weeks and parents or the pediatrician is concerned, a referral might be the most appropriate action to take. A pediatrician with an established relationship with local trauma-informed service professionals has a potential resource for consultation and can provide easier access to care for the family when needed.

Medications

Medications are often the answer families seek. They provide the potential for a quick fix with very little effort. Unfortunately, there are few data that medications provide the cure in trauma. Usually, the value of medications is to provide a support, like a cast on a broken bone. While the cast does not cause healing, it provides an external support so that the work of healing can happen inside. Similarly, for children who have symptoms of trauma that prevent them from participating in therapies that will allow them to heal, medications provided for a short time can be a significant support to the healing process.

Referrals to Therapy

Children and families trying to manage trauma in their lives may need the help of mental health professionals trained to provide trauma-focused treatment. A Visit

Discharge and Referral Summary for Family is available through the American Academy of Pediatrics **(www.aap.org/traumaguide)** to help pediatricians organize and make that referral. 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 Recommendations area and incorporating local resources in the Resources area. This form can be completed electronically, printed, and provided to the family so they feel confident in providing the correct information to the referred professional. It is helpful when referrals are made to trauma-focused therapies, if they are available; see Table 5 for examples.

Table 5. Therapies for the Traumatized Child

AGE	THERAPY	GOALS[a]
Younger child	• Parent-Child Interaction Therapy (PCIT) (appropriate for children 2–12 y) • Child-Parent Psychotherapy (CPP) (appropriate for newborns, infants, and children 0–6 y)	• PCIT works with caregivers and children to align appropriate parental response to child behaviors. • CPP is a dyadic intervention that targets the effect of trauma on the child-parent relationship and how the parent can provide emotional safety for the child.
Older children	• PCIT (appropriate for children 2–12 y) • Trauma-Focused Cognitive-Behavioral Therapy (TF-CBT) (for children ≥5 y)	• PCIT works with caregivers and children to align appropriate parental response to child behaviors. • TF-CBT trains children and families in – Relaxation techniques – Skills and language to access emotion – Creating a trauma narrative • Then child is guided to create a trauma narrative. Child develops/writes a story about what happened to him/her. • When child is able to tell or read this story to caregiver, it indicates trauma no longer defines child but is instead a story of what happened to child, having lost its power to continue to harm.
Complex trauma or poly-victimization	• Attachment, Self-Regulation, and Competency (ARC) (appropriate for children and adolescents 2–21 y) • Integrative Treatment of Complex Trauma for Children and Adolescents (ITCT-C, ITCT-A) (appropriate for children and adolescents 2–21 y) • Trauma Systems Therapy (TST) (appropriate for children and adolescents 6–19 y) • Trauma Affect Regulation: Guide for Education and Therapy (TARGET) (appropriate for children and adolescents ≥10 y)	• ARC can include individual, group, and family treatment; parent workshops; milieu/systems intervention; and home-based prevention programs. Specifically targets the child's surrounding system (eg, family, services, communities). • ITCT-C is particularly adapted for families who are economically disadvantaged and culturally diverse. Can include multiple modalities (eg, individual, family, play). • TST is focused on children and adolescents who are having difficulty regulating their emotions. Can be used for children who have a wide range of traumatic experiences and for a variety of cultures. • TARGET is focused on children and caregivers who are experiencing traumatic stress, particularly those involved with justice or child welfare systems.

[a]Adapted from the National Child Traumatic Stress Network materials found at www.nctsn.org/resources/topics/treatments-that-work/promising-practices

CONCLUSION

Regardless of the intervention chosen, the family and child can be reassured that the pediatric medical home can be an ongoing source of support for them as they heal from the traumatic event(s) or begin therapy outside the medical home. The pediatrician can continue to support the family through scheduled future visits as well as proactively inquiring about these events in subsequent well-child visits. Science is clearly demonstrating the link between exposure to traumatic events that leads to toxic stress and long-term physical, mental, and behavioral health issues. This makes the medical home an ideal location to address these issues early on to mitigate the effects of toxic stress and support a long, healthy life for the child.

Please see the AAP Web site for the online version of this document as well as additional information at www.aap.org/traumaguide

The recommendations in this toolkit 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.

© 2014 American Academy of Pediatrics