# SECTION II: UNDERSTANDING CHILDHOOD TRAUMA

## CHAPTER I. TRAUMA IN EARLY CHILDHOOD

#### IN THIS CHAPTER

- Childhood Trauma & Traumatic Stress Defined
- There are many types of traumatic experiences.
- Each child responds differently to traumatic events.
- Trauma can have lifelong effects.
- Early intervention and promoting resiliency can mitigate the effects of childhood traumatic stress.

## What Is Childhood Trauma?

Throughout childhood, many (if not most) children experience some type of traumatic experience, an event that threatens or harms their emotional or physical wellbeing. The NCTSN estimates that one in four children will experience a traumatic event before they are 16 years old. Traumatic experiences can be the result of a natural disaster such as an earthquake or tornado. Children can also experience trauma within their communities as a result of community violence and racial, cultural, or socio-economic discrimination. Sexual and physical abuse, loss of a family member, bullying, or medical procedures can also be traumatic.

#### Traumatic Experience

An event that threatens or harms emotional or physical well-being.

- Poverty
- Community violence
- Refugee/ war zone
- Racial and ethnic disparities
- Physical/sexual abuse
- School violence
- Neglect
- Medical trauma
- Traumatic grief
- Natural disasters

## What Is Child Traumatic Stress?

While many children experience one or more traumatic event, every child has different physiological and psychological responses. Though most of us would agree that certain stresses are serious – experiencing a life-threatening attack or losing a loved one – we always have to remember that stress and trauma can only

be judged by those experiencing them. Variations in experiences, expectations, resources, and to some extent the way our brains and bodies are hard wired determine to a great extent what each individual perceives as stressful or traumatic.

Stress comes in many forms. It can be positive, alerting us to dangers. Some stresses can focus our attention on challenges that, if we can face them, will lead us to better places in our lives. Some stresses are tolerable but others can lead to long lasting physical and emotional affects. Stress and trauma can change the way we look at the world – making us more attentive to risk than to possibility. Furthermore, it does not take a major disaster to create levels of stress that impact health: the "hassles" and worries that come from feeling economically vulnerable or scrutinized because of one's race, religion, gender, or sexuality, are potentially as or more dangerous than exposures to even serious one-time trauma.

Child traumatic stress is caused when a child is exposed to trauma or chronic

stress and develops persistent reactions that affect the way they function on a day-to-day basis. Traumatic stress can make it difficult for a child to succeed at school or interact with others. It can also plant the seeds of physical and mental health problems that children may have to face for decades. Child traumatic stress can have an impact on many areas of development:

#### **Child traumatic stress**

When a child is exposed to trauma or chronic stress and develops persistent reactions that affect their day-to-day functioning.

emotional and behavior regulation; relationship formation and trust; maintaining attention while trying to learn new skills and knowledge. Children who have experienced traumatic stress may come to providers' attention because of problems with their behavior, difficulties with sleeping or eating, or problems adapting to child care and school settings. In some cases, but certainly not all, childhood traumatic stress can lead to symptoms that are clinically diagnosed as post-traumatic stress disorder (PTSD). For example, the fifth edition of the Diagnostic and Statistical Manual (DSM-5) defined a developmental subtype of PTSD for children ages six years and younger. The preschool age-specific definition of PTSD is developmentally sensitive and focuses on recurrent psychological distress, avoidance behaviors, and increased arousal.

## Exposure and Experience of Trauma

Exposures to chronic stress are fundamentally different than our experiences of chronic stress and should be assessed and addressed separately. *Exposure* 

encompasses any population subjected to a traumatic event. *Experience* of trauma refers to how an individual responds to trauma exposure. Stress can be experienced as positive, tolerable, or chronically unsoothed ("toxic") depending on:

- The event
- Characteristics of the individual (e.g. resiliency and vulnerability)
- Factors in the family and community

Some of those who experience stress will continue to show *effects*. Effects can be targeted with simple interventions, specialty services for physical and/or psychological complications, or coordinated teamwork (see Figure 1)

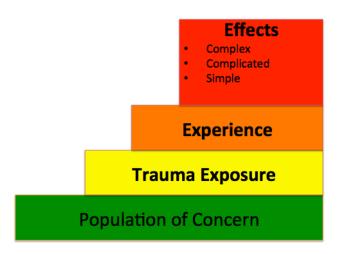


Figure 1: Trauma Exposure, Experience, and Effects

## Child Traumatic Stress and Gene Regulation

Though it has long been recognized that early childhood adversity can cause lifetime problems, it is only more recently that we have come to isolate and understand some of the mechanisms involved. For example, the field of

epigenetics has produced evidence that our experiences can alter the function of our genes. Though the links are not well understood, we now known that experiences can change the ways that genes regulate key processes within our bodies.

## Oxytocin

A hormone that plays a role in how we relate to other people (e.g., emotions we feel when we see our children and the desire we have to be close to and nurture others). Two systems that have been explored in relationship to stress and trauma are the genes that regulate oxytocin and glucocorticoid receptors.

Stress and trauma can alter both of these systems, leading an individual to being chronically "on-guard" around others. For example, children raised in stressful environments may be more likely to have elevated blood pressure or allergies as

### Glucocorticoid System

Part of the body's mechanism for responding to stress at a chemical level.

adolescents compared to children raised in less stressful environments. Epigenetics has also started to explain how parental exposure to stress and trauma, even before children are conceived, may be passed down to future generations.

## Promoting Resiliency Through Early Intervention

The fact that people react differently to stress and trauma suggests that there might be ways to help those who experience traumatic events to feel less impact or recover more quickly. Resilience refers to the ability to buffer the impact of

stress as it happens and recover from the impact more quickly and completely. Resiliency has two main components that are closely related: a person's own abilities – both innate and learned – to regulate their emotions and behaviors at a time of challenge, and the resources – social and material – that a person can mobilize for protection and response.

#### Resiliency

The ability to:

- Blunt the impact of trauma as it happens and,
- Recover from the impact more quickly and more completely.

There are many ways to define and measure recovery from a traumatic experience. For example, recovery can be measured by how quickly the body's stress responses return to a normal state. Alternately, we might consider what it takes for someone to return to a state of optimism and security or adapt to new realities peacefully (for strategies on promoting resilience see Section III, Element VI: Addressing Trauma-Related Health and Mental Health).

Research in a number of fields support promising interventions for trauma and stress-related concerns in early childhood, some of which might be able to alter physiologic responses with long-term somatic and cognitive effects. Table 1 lists some of those with the strongest evidence:

**Childhood Traumatic Stress** Table 1: Promising Interventions for Mental and Physical Health Professionals to Use for Young Children Experiencing the Symptoms of

Program (Target age)	Impact	Summary
Family Foundations (0-2)	Antisocial-aggressive Behavior, Anxiety, Conduct Problems, Depression, Externalizing, Internalizing, Prosocial with Peers	A universal prevention program to improve mother, child, and birth outcomes through promoting co-parenting quality among couples who are expecting their first child.
Nurse-Family Partnership (0-2)	Child Maltreatment, Delinquency and Criminal Behavior, Early Cognitive Development, Internalizing, Mental Health - Other, Physical Health and Well-Being, Preschool Communication/Language Development, Reciprocal Caregiver-Child Warmth	A nurse home visiting program for first-time pregnant mothers that sends nurses to work one-on-one with the pregnant women to improve prenatal and child rearing practices through the child's second birthday.
Family Check-up (Toddler Version; 0-2)	Conduct Problems, Externalizing, Internalizing, Reciprocal Caregiver-Child Warmth	The toddler version of the Family Check-Up (FCU) aims to prevent conduct problems among at-risk toddlers by improving the quality of parenting and has demonstrated success in increasing and maintaining caregivers' use of Positive Behavior Support.
Triple P System (0-11)	Child Maltreatment, Mental Health - Other	A public health approach to reach all caregivers s in a community to enhance parental competence and prevent or alter dysfunctional parenting practices, thereby reducing family risk factors both for child maltreatment and for children's behavioral and emotional problems.
Incredible Years –Caregiver (3- 11)	Antisocial-aggressive Behavior, Close Relationships with Caregivers, Conduct Problems, Depression, Externalizing, Internalizing, Positive Social/Prosocial Behavior	A group-based parenting program that strengthens parenting competencies to promote young children's social, emotional, and academic competence and prevent the development of conduct problems, delivered in weekly group sessions for 3-5 months.
Parent Management Training – Oregon Model (3-18)	Antisocial-aggressive Behavior, Conduct Problems, Delinquency and Criminal Behavior, Externalizing, Internalizing	A group- or individual-based parenting training program that teaches effective family management strategies and parenting skills, including skill encouragement, setting limits/positive discipline, monitoring, problem solving, and positive involvement, in order to reduce antisocial and behavior problems in children.
Parent-Child Interaction Therapy (3-11)	Antisocial-aggressive Behavior, Child Maltreatment, Conduct Problems	A 12-week treatment for young children with emotional and behavioral problems, with one-half hour caregiver-child sessions, that places emphasis on improving the caregiver-child relationship, teaching effective parenting skills, and encouraging effective discipline.
Adapted from Blueprints for Healthy Youth Development	Healthy Youth Development	

## Core Readings and Resources

- Johnson SB, Riley AW, Granger DA, Riis J. The science of early life toxic stress for pediatric practice and advocacy. *Pediatrics* 2013;131:319-327.
- Shonkoff JP, Garner AS; 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 Jan;129(1):e232-46.
- Stirling, Amaya-Jackson, 2008: Understanding the Behavioral and Emotional Consequences of Child Abuse. *Pediatrics*, 122(3):667-673.
- Materials on brain development and toxic stress at the Harvard University Center on the Developing Child: <a href="http://developingchild.harvard.edu">http://developingchild.harvard.edu</a>
- Blueprints for Healthy Youth Development provides a registry of evidence-based positive youth development programs designed to promote the health and wellbeing of children and teens. Online at: <a href="http://www.blueprintsprograms.com">http://www.blueprintsprograms.com</a>