

TRAUMA AND POSTTRAUMATIC STRESS DISORDER IN CHILDREN AND ADOLESCENTS

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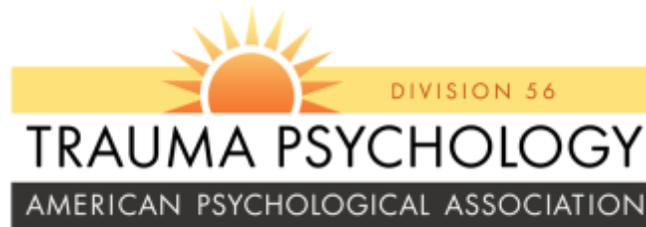
Common Types and Prevalence Estimates of Exposure to Traumatic Stressors

One in six young children (ages 2-5 years old) in the U.S. has been exposed to potentially traumatic family or community violence or abuse, and one in ten has been exposed to a potentially traumatic accident or dog bite (Briggs-Gowan et al., 2010; Copeland, Keeler, Angold, & Costello, 2007; Finkelhor, Ormrod, Turner, & Hamby, 2005).

- Between 50% (Finkelhor et al., 2005; Copeland et al., 2007) and 75% (Bell & Jenkins, 1993; in high crime neighborhoods) of school-age children (ages 6-12 years old) in the U.S. have been exposed to potentially traumatic stressors, and one in 20 has been exposed to sexual abuse or assault.
- Nearly two-thirds to more than 80% of adolescents in the U.S. (McLaughlin, Koenen, Hill, & Kessler, 2013) and internationally (Aho, Gren-Landell, & Svedin, 2016; Atwoli, Stein, Williams, & Koenen, 2013; Feng, Chang, Chang, Fetzer, & Wang, 2015; Pereda, Guilera, & Abad, 2014) have been exposed to potentially traumatic violence or abuse, and one in three have experienced potentially traumatic accidents or illnesses (Atwoli et al., 2013; Copeland et al., 2007; McLaughlin et al., 2013).
- Underserved populations of children and adolescents from low-income communities or nations that have high levels of conflict, ethnocultural disparities, and community or family breakdown are at highest risk of exposure to traumatic stressors (Atwoli, Stein, Koenen, & McLaughlin, 2013; Turner, Shattuck, Hamby, & Finkelhor, 2013).

Behavioral and Physical Health Impact of Trauma on Children and Adolescents

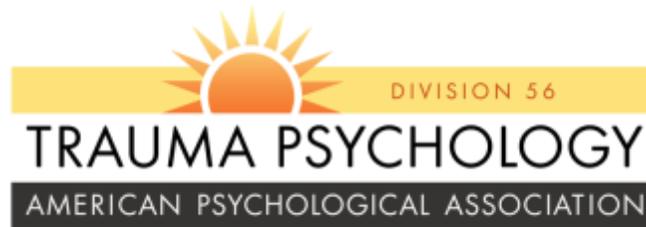
- Exposure to traumatic stressors, particularly if this occurs on an ongoing or repeated basis and compromises the child's security in primary caregiving relationships, has a wide range of adverse effects on children's and adolescent's:
 - Biopsychosocial development
 - Physical and emotional health
 - Learning and school performance
 - Peer and family relationships
 - Personal identity and self-concept: both internalizing (e.g., fears, anxiety, depression, grief, shame, dissociation, withdrawal) and externalizing (e.g., anger, impulsivity, aggression, inattentiveness, rule-breaking)
 - Medical health (gastrointestinal, pain, and sleep problems)
- Traumatized adolescents are at risk for developing:
 - Substance use disorders
 - Self-harm and suicidality



- Eating disorders
- Bipolar and psychotic disorders
- Involvement in delinquency with delinquent peers
- Traumatized children and adolescents are most likely to experience these adverse impacts if they have been exposed to:
 - Severe neglect, emotional abuse, social isolation, poverty, racism, stigma due to ethnicity, sexual identity or physical or learning disabilities, or betrayal of their trust by caregivers (including those who are abusive, psychiatrically impaired, or substance abusing) or key adults (religious leaders, teachers, coaches, other adult mentors)—or if they have been exposed to sexual violation or to multiple types of traumatic victimization (poly-victimization; D’Andrea, Ford, Stolbach, Spinazzola, & van der Kolk, 2012; Finkelhor, Ormrod, Turner, & Holt, 2009; Turner, Finkelhor, Ormrod, 2010).
- Protective factors that reduce the risk and severity of adverse reactions by traumatized children and adolescents include:
 - Self-control and problem-solving skills, good schools, safe neighborhoods, positive relationships with supportive caregivers and prosocial peers, non-involvement in risky or undermining relationships, socioeconomic resources, religious faith, success at school and with peer friendships, older age at time of traumatic exposure, and an absence of prior psychiatric disorders or substance abuse (both by the child and their family; Copeland et al., 2007; McLaughlin et al., 2013; Milan, Zona, Acker, & Turcios-Cotto, 2013; Wittchen et al., 2012)

New Developments in Research on the Impact of Trauma on Children and Adolescents

- PTSD symptoms may not occur simultaneously with the onset of the trauma and will vary over time. One set of symptoms may be manifested with high frequency in one period, followed by other periods that are characterized by a different set of symptoms.
 - Children often do not make a connection between symptoms (e.g., nightmares, temper flare-ups, depression) and past events, or may minimize symptoms in order to convince adults or peers that they are not affected by traumatic experiences.
 - Compared to traumatized adults, traumatized children and adolescents exhibit more impulsive and aggressive behaviors and more often engage in traumatic reenactments (i.e., incorporating aspects of traumatic events into their daily lives) that can be mistaken for symptoms of severe emotional disturbance (e.g., psychotic hallucinations, bipolar dysregulation; Dvir, Ford, Hill, & Frazier, 2014; Ford & Courtois, 2014).
- Two developmental periods, early childhood and adolescence, are times of particular vulnerability to adverse post-traumatic impacts.
 - Exposure to traumatic stressors in early childhood when brain areas involved in stress and resilience are rapidly developing (Teicher & Samson, 2016), may result



in psychobiological alterations or exacerbation of pre-existing vulnerabilities that may sensitize a child or adolescent and thereby increase susceptibility to adverse reactions to subsequent exposures to traumatic stressors or adversity (Grasso, Dierkhising, Branson, Ford, & Lee, 2016; Grasso, Ford, & Briggs-Gowan, 2013).

- Behavioral and emotional dyscontrol is more common in adolescents than adults normatively—consistent with evidence that inhibitory areas of the brain (e.g., prefrontal cortex) mature later than areas related to stress reactivity (e.g., amygdala) and reward seeking (e.g., midbrain)—putting traumatized teens at risk for severe dysregulation such as self-harm, suicidality, impulsivity, aggression, and substance abuse (Ford, Chapman, Connor, & Cruise, 2012; Ford & Gomez, 2015; Ford & Hawke, 2015).

Clinical Considerations for Practitioners Treating Traumatized Children and Adolescents

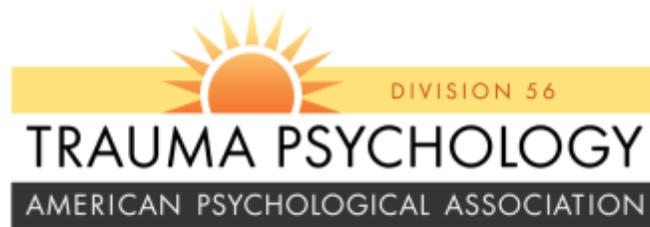
- Parents or adult caregivers are typically the respondents in screening young and school-age children, but screening with adolescents may involve both the youth's self-report and parent/caregiver reports.
- Brief education about the impact of stress and evidence-based practical coping strategies and treatment resources are important forms of anticipatory guidance to assist parents or adult caregivers whose children have been exposed to traumatic stressors and who are (or are at risk of) experiencing post-traumatic stress impairment (Ford, 2015).
- Empirically-supported treatments for traumatized children and adolescents to assist them and their families in recovering from the adverse impact of post-traumatic stress are specialized forms of psychotherapy that give treatment providers and clients with a number of options based on each unique child/family's preferences and needs (Ford & Courtois, 2013; Landolt, Cloitre, & Schnyder, 2016).
- No pharmacotherapy has been demonstrated to be effective in treating children or adolescents with post-traumatic stress impairments, although medication may help with depression or anxiety symptoms when these occur in traumatized children (Connor, Ford, Arnsten, & Greene, 2015).

Information for Families and Friends of Traumatized Children and Adolescent

- Resources to support parents or adult caregivers of traumatized children or adolescents in dealing with the impact of secondary or vicarious traumatic stress are available from the National Child Traumatic Stress Network (<http://www.nctsn.org/resources/topics/secondary-traumatic-stress>).

Resources for Professionals Seeking More Information about Traumatized Children

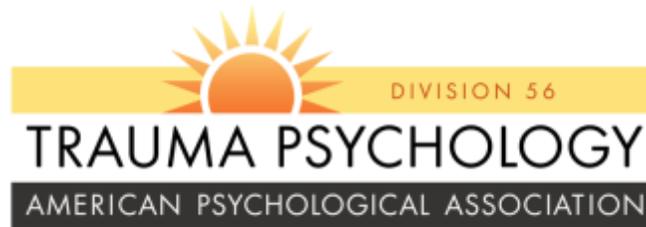
- Professionals can go to several organizations to access more information about working with traumatized children and adolescents and their families:
 - American Psychological Association (<http://www.apa.org/pi/families/resources/children-trauma-update.aspx>)



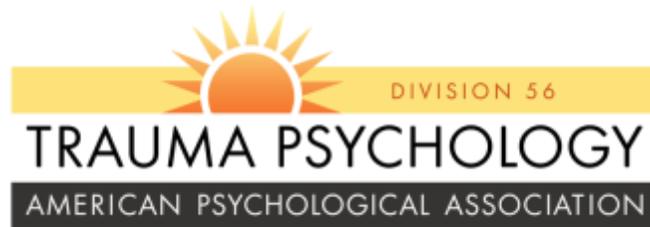
- National Child Traumatic Stress Network (www.nctsn.org)
- International Society for Traumatic Stress Studies (www.istss.org)
- International Society for the Study of Trauma and Dissociation (www.isst-d.org)
- Academy on Violence and Abuse (www.avahealth.org)
- Substance Abuse and Mental Health Services Administration (<http://www.samhsa.gov/nctic/trauma-interventions>)
- American Academy of Child and Adolescent Psychiatry (www.aacap.org)
- Dart Foundation (www.ptsdinfo.org)

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