

# Effects and Prevention of Toxic Stress

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## Description

Stress is the body's physiological and cognitive response to situations/events that we perceive as threats or challenges. This is a normal and natural reaction. The National Council of Science on Developing Children has proposed three different types of stress responses in young children are positive, acceptable, and toxic. Prolonged exposure to stressful and unfavorable experiences can be toxic. Repeated exposure to stress without the benefit of buffer protection in supporting adult relationships is called toxic stress. Neglect and abuse, divorce/separation, death of loved ones, exposure to domestic violence, imprisonment by parents or family, neighborhood violence, extreme poverty, parent or family, and several other harmful life events are toxic stress reactions. Abuse, drugs/alcohol, parents or caregivers with mental disorders, neglect that may contribute to. Exposure to toxic stress can have short-term and long-term adverse physical and mental health effects on both children and adults.

## Types of toxic stress

- Positive stress response
- Tolerable stress response and
- Toxic stress response

**Positive stress response:** A normal and essential part of healthy development, characterized by a short-term increase in heart rate and a mild increase in hormone levels. Some situations that can cause a positive stress response are the first day of a new caregiver or the day of receiving injected immunity.

**Acceptable stress response:** More activates the body's warning system as a result of more serious and long-term difficulties such as loss of loved ones, natural disasters, and horrific injuries. When activation is temporary and mitigated by relationships with adults that help the child adapt, the brain and other organs recover from what would otherwise be harmful effects.

**Toxic stress response:** Can occur if the child experiences mild, severe, frequent, and/or persistent adversity. For example, psychological abuse, chronic neglect, substance abuse or mental illness exposure to violence, and/or accumulation of family financial burden. Difficulty is there will be no proper support from adults. Long-term activation of this type of stress response system can disrupt the development of brain structure and other organ systems, increasing the risk of stress-related illness and cognitive impairment in adulthood

## Consequences of toxic stress

It's easier to raise a strong child than to fix a broken man. As a result of this long-term stress response, the child's nervous system, immune system, and even DNA are altered. Toxic stress significantly increases the size of the center of fear of the brain (limbic system, amygdala), and children can develop symptoms very similar to post-traumatic stress disorder (PTSD). Toxic stress reduces size and impairs the function of brain regions involved in learning, memory, and executive function (prefrontal cortex, hippocampus). As a result, children are at risk of having learning and behavioral problems. Your child's immune system is suppressed and you are at risk of developing a variety of chronic lifelong health conditions, including asthma, heart disease, stroke, autoimmune diseases, and cancer. DNA has been modified so that gene expression in children affects physical function and is probably passed on to the next generation.

## Prevention of toxic stress

To maximize our capabilities, we need to eliminate or significantly reduce the trauma that our children experience. Children depend on adults to survive and for that reason. An important preventive strategy is the development of a healthy relationship between adults and children. In fact, studies show that the most important environmental factor during early childhood development is the relationship with the caregiver. You can help improve the resilience of your child and family by making connections, building strong relationships, learning about stress, embracing change, fostering a positive self-image and maintaining a hopeful attitude. Many children and families want strong relationships, but do not know how to effectively develop those relationships without help. You can also identify children at risk of being exposed to stressful situations that can lead to toxic stress. Investigate community resources as it may be helpful to recommend self-help and self-help groups, books, other publications, and online resources. In some cases, children and their families may need the help of a qualified psychologist. Keep in mind that diet affects brain development. Malnutrition increases vulnerabilities in stress response systems, emotional function, and cognitive development. It provides basic nutritional education to the family and emphasizes the importance of a healthy diet. If necessary, you can refer to a dietician.

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