

What Is Toxic Stress?



Everyone feels stress!

And not all stress is bad. Stress can help bring attention to what's important and be a motivator for problem-solving. But too much of the wrong kind of stress can be unhealthy. For children, this kind of stress can become toxic over time, affecting the way their brains and bodies grow. Adverse Childhood Experiences (ACEs) like abuse or neglect can cause this kind of stress and can harm a child's long-term health. Because of this possible impact, it's important to know a little more about stress and the different ways people's bodies can respond.



Positive stress response:

This is the body's response to temporary stress. Stress hormones help the body do what's needed in the moment. Once the event passes, the stress response turns off and the body goes back to its normal state. For example, starting a new child care arrangement or getting shots might lead to a positive stress response. Children can gain confidence and learn coping skills when supported through this type of stress.



Tolerable stress response:

This is the body's response to more lasting and serious stress. With tolerable stress, a child needs the help of a supportive caregiver to help her stay calm and turn down the stress response. With this support in place, the body can more easily return to its normal state. Tolerable stress can occur during events like an injury or natural disaster.



Toxic stress response:

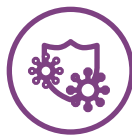
This is the body's response to lasting and serious stress, without enough support from a caregiver. When a child doesn't get the help he needs, his body can't turn off the stress response normally. This lasting stress can harm a child's body and brain and can cause lifelong health problems. This type of stress results from exposure to things like abuse and neglect.

How does toxic stress affect children's bodies?



The brain:

Toxic stress can make it harder for children to sit still, pay attention, and learn. It can affect other behavior, too, causing children to have trouble remembering rules and to forget to think before acting. It can also affect a child's moods and feelings.



Immunity:

Toxic stress can make it harder for bodies to fight off infection and illness. For example, children may have more frequent colds and ear infections, or health conditions like eczema or asthma.



The heart:

Toxic stress can increase a person's risk of developing high blood pressure, elevating levels of inflammation that can damage the arteries. These conditions can lead to heart disease, stroke, and other serious health issues later in life.



Hormones and development:

Toxic stress can impact growth and development. It can also lead to obesity and changes in the timing of puberty, as well as other issues.

How can adults protect children from toxic stress?

When caregivers consistently care for children and offer support, they feel safe. This feeling of safety is good for their brains and bodies. Other protective factors for your child include eating healthy food, getting regular exercise, getting a good night's sleep, practicing mindfulness, and getting mental health support when needed. Together, these factors help lower the stress response and can help reduce the potential negative effects of ACEs.



SOURCES

- American Academy of Pediatrics. (2018). Sleep. Retrieved from <https://www.healthychildren.org/English/healthy-living/sleep/Pages/default.aspx>
- Bucci, M., Marques, S. S., Oh, D., & Harris, N. B. (2016). Toxic Stress in Children and Adolescents. *Adv Pediatr*, 63(1), 403-428. doi:10.1016/j.yapd.2016.04.002
- Center on the Developing Child at Harvard University. (2014). A decade of science informing policy: The story of the National Scientific Council on the Developing Child. Retrieved from <https://developingchild.harvard.edu/resources/decade-science-informing-policy-story-national-scientific-council-developing-child>
- Khoury, B., Sharma, M., Rush, S. E., & Fournier, C. (2015). Mindfulness-based stress reduction for healthy individuals: A meta-analysis. *J Psychosom Res*, 78(6), 519-528. doi:10.1016/j.jpsychores.2015.03.009
- Office of Disease Prevention and Health Promotion. (2018). Chapter 3: Active children and adolescents.
- Purewal Boparai, S. K., Au, V., Koita, K., Oh, D. L., Briner, S., Burke Harris, N., & Bucci, M. (2018). Ameliorating the biological impacts of childhood adversity: A review of intervention programs. *Child Abuse Negl*, 81, 82-105. doi:10.1016/j.chiabu.2018.04.014
- Shonkoff, J. P., & Garner, A. S. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, 129(1), e232-246. doi:10.1542/peds.2011-2663
- Yousafzai, A. K., Rasheed, M. A., & Bhutta, Z. A. (2013). Annual Research Review: Improved nutrition--pathway to resilience. *J Child Psychol Psychiatry*, 54(4), 367-377. doi:10.1111/jcpp.12019

 CENTER for
YOUTH
WELLNESS

 HealthySteps
PEDIATRIC CARE • SUPPORTING • PARENTING