



## WHY THIS MATTERS

When a child repeatedly experiences threatening or harmful situations, their body remains on high alert, flooded with adrenaline or the stress hormone, cortisol. This is toxic stress, which can damage developing brains and bodies and can cause numerous physical and behavioral problems. Toxic stress can be present at home, at school, or in the community.

## WHAT THE RESEARCH SAYS

Toxic stress, such as poverty or emotional abuse, is linked to a host of chronic health conditions. It can change our biology, in which generations pass chronic conditions down the genetic line. Emotionally, children who live with toxic stress can demonstrate oppositional behaviors and struggle with self-regulation, which leads to trouble maintaining healthy relationships. People with toxic stress may have difficulty focusing. This makes mental concentration and completion of tasks problematic in school and work. Memory problems caused by toxic stress further impact the brain's ability to learn new content.



Recent research found the pandemic prematurely aged teenage brains years in a matter of months. The effects of this prematurity were similar to that of toxic stress: impacting teens' emotional regulation, decision-making, and impulse control.

These brain changes are linked with anxiety, depression, and learning problems.<sup>1</sup> In addition, teens report that stress, anxiety, and depression are their biggest barriers to learning.<sup>2</sup>

Divorce, discrimination, housing insecurity, or death of a family member are sources of toxic stress and can be traumatic to children. Some of these experiences and environments are considered Adverse Childhood Experiences (ACEs). ACEs have been studied for years by researchers as they can increase levels of toxic stress.

4+ ACEs

32X more likely to have a learning/behavioral issue

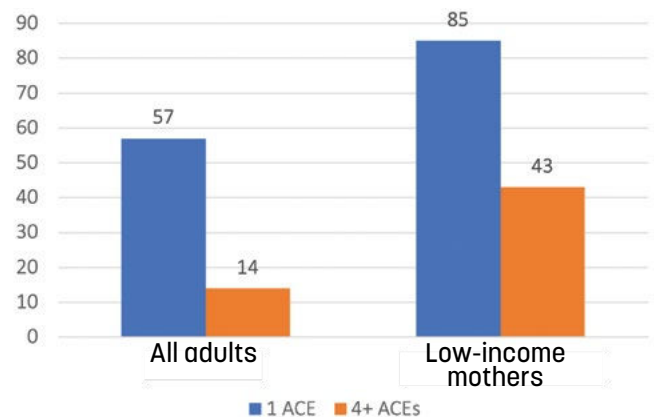


Most people have at least one ACE. Those with four or more ACEs are at substantial risk of chronic physical and mental health problems. Children with four or more ACEs are also 32 times more likely to have a learning/behavioral issue when compared to children with no ACEs.<sup>3</sup>

## WHAT'S HAPPENING IN WISCONSIN?

In Wisconsin, 60% of adults had at least one ACE, and 16% had four or more. Among low-income mothers, 85% had at least one ACE, and 43% experienced four or more ACEs.<sup>4</sup>

Percent of Wisconsin Adults with ACEs



- continued -

## REDUCING AND ADDRESSING TOXIC STRESS<sup>5</sup>

Brain plasticity – the ability of the brain to continually adapt in response to the environment – means that kids can recover from stress. Kids' brains and bodies are able to cope with stress through mindfulness practices, exercise, good nutrition, adequate sleep, and healthy social interactions. If toxic stress stops and is replaced by practices that build resilience in a caring environment, the brain can slowly undo many of the stress-induced changes. Resilience is the ability to cope and recover from difficulties and is a proven strategy that increases mental well-being. Resilience is a skill that kids can learn.

Protective factors also help to lessen the consequences of toxic stress. A trusted relationship with a caring adult is the key protective factor. Caring adults can help kids recover from adversity by establishing a positive connection and developing healthy coping strategies to deal with stress.

Adults can create environments that make resilience building possible, and that help prevent toxic stress from occurring in childhood. Refundable tax credits like the Child Tax Credit help to reduce child neglect, youth violence, and child poverty.<sup>6</sup>

## ADVERSE CHILDHOOD EXPERIENCES (ACEs)

Adverse Childhood Experiences (ACEs) are potentially traumatic experiences that cause toxic stress. Adversities can be experienced within the family, or outside the home in the community.

- Emotional or physical neglect
- Emotional, physical, or sexual abuse
- Experiencing discrimination, racism, homophobia
- Incarcerated loved one
- Household members with mental illness or substance abuse
- Parental separation, divorce, or death
- Witnessing violence in the home or community

## WHAT WE CAN DO

### ➤ PARENTS/CAREGIVERS:

- Seek help if you or your children feel unsafe in your home.
- Ensure children have at least one trusted adult in their lives.
- Strengthen skills and relationships that help families cope with stress.
- Instill healthy household habits: connect over meals, get sufficient sleep, exercise, and spend time in nature.
- Develop healthy coping skills and teach your child how to build their own resilience. [Resilient Wisconsin](#) offers numerous resources.

### ➤ POLICYMAKERS:

- Invest in high-quality early care and education for children living in high-poverty communities.
- Expand refundable tax credits, such as the Earned Income Tax Credit, to ease financial burden on working parents.

### ➤ SCHOOLS

- Cultivate a trauma-informed school with trauma-sensitive strategies, whole school wellness practices, and social emotional skill-building in all grades.
- Provide extra support to children known to have been exposed to traumatic events or to be experiencing ACEs.
- Include resources such as crisis lines for parents and students to access if feeling unsafe in their home.

### ➤ PROVIDERS

- Provide trauma-informed care.
- Consider screening patients for ACEs.
- Complete the [CDC ACEs Provider Training Modules](#), offered by professional role.
- Leverage the resources of the [National Child Traumatic Stress Network](#).

#### REFERENCES:

<sup>1</sup> Gotlib et al. *Biological Psychiatry*. (2022, December 1). Effects of the COVID-19 Pandemic on Mental Health and Brain Maturation in Adolescents: Implications for Analyzing Longitudinal Data. <https://doi.org/10.1016/j.bpsgos.2022.11.002>.

<sup>2</sup> YouthTruth, *Insights from the Student Experience: Emotional and Mental Health*. Fall 2022. <https://youthtruthsurvey.org/emh/>.

<sup>3</sup> Wisconsin Family Impact Seminars, University of Wisconsin-Madison. (2019, January 30). *Building Strong Wisconsin Families: Evidence-Based Approaches to Address Toxic Stress in Children*. <https://wisfamilyimpact.org/wp-content/uploads/2019/01/FIS37.pdf>.

<sup>4</sup> Mersky, Joshua. *Scaling Up Home Visiting in Wisconsin: A Strategy to Address Trauma*. <https://wisfamilyimpact.org/wp-content/uploads/2020/04/FIS37-Josh-Mersky-brief.pdf>.

<sup>5</sup> Learn more in this Guide to Toxic Stress by the Center on the Developing Child: <https://developingchild.harvard.edu/guide/a-guide-to-toxic-stress/>

<sup>6</sup> Scammegna, P. (2022, December 8). *Anti-Poverty Tax Credits Linked to Declines in Reports of Child Neglect, Youth Violence, and Juvenile Convictions*. Population Reference Bureau.