WHAT ARE ACES?

Adverse Childhood experiences (ACES) are potentially traumatic events in a child’s life that can have negative and lasting effects on health and well-being.

These experiences occur before the age of 18 and are remembered by that child as an adult.

Such traumatic events may include: psychological, emotional, physical, or sexual abuse; violence against mother; or living with household members who were substance abusers, mentally ill, suicidal, criminal or imprisoned.

Maltreatment (child abuse, sexual abuse, neglect, bullying, etc.) causes chronic stress that can disrupt early brain development, and the development of the nervous and immune systems.

EFFECTS OF ACES

- Early Death
- Risky Health Behaviors
- Low Life Potential
- Chronic Health Conditions
EFFECTS & LIFE OUTCOMES FROM ADVERSE CHILDHOOD EXPERIENCES

Adverse Childhood Experiences have a strong and cumulative impact on the health and functioning of adults. Children who are abused or neglected are at higher risk for health and social problems as adults.

The toxic levels of stress or trauma experienced by a child is linked to poor physical and mental health throughout life.

These problems include lower educational achievement, lower economic success, impaired social success in adulthood, alcoholism, depression, drug abuse, eating disorders, obesity, high-risk sexual behaviors, smoking, suicide, and certain chronic diseases.

WHAT CAN WE DO TO HELP MITIGATE THE EFFECTS OF ACES?

For those who have experienced ACEs, there are a range of possible responses that can help, including therapeutic sessions with mental health professionals, meditation, physical exercise, spending time in nature, and many others.

The ideal approach, however, is to prevent the need for these responses by reducing the sources of stress in people's lives. This can happen by helping to meet their basic needs or providing other services.

Likewise, fostering strong, responsive relationships between children and their caregivers, and helping children and adults build core life skills, can help to buffer a child from the effects of toxic stress.

HOW DO ACES RELATE TO TOXIC STRESS?

ACEs research shows the correlation between early adversity and poor outcomes later in life. Toxic stress explains how ACEs "get under the skin" and trigger biological reactions that lead to those outcomes. In the early 2000s, the National Scientific Council on the Developing Child coined the term “toxic stress" to describe extensive, scientific knowledge about the effects of excessive activation of stress response systems on a child’s developing brain, as well as the immune system, metabolic regulatory systems, and cardiovascular system.

Experiencing ACEs triggers all of these interacting stress response systems. When a child experiences multiple ACEs over time—especially without supportive relationships with adults to provide buffering protection—the experiences will trigger an excessive and long-lasting stress response, which can have a wear-and-tear effect on the body, like revving a car engine for days or weeks at a time.

Importantly, the Council also expanded its definition of adversity beyond the categories that were the focus of the initial ACE study to include community and systemic causes—such as violence in the child’s community and experiences with racism and chronic poverty—because the body's stress response does not distinguish between overt threats from inside or outside the home environment, it just recognizes when there is a threat, and goes on high alert.

WHAT CAN WE DO TO HELP MITIGATE THE EFFECTS OF ACES?
TAKE THE ACES QUIZ

THE ACES QUIZ

The Adverse Childhood Experiences, or “ACEs,” quiz asks a series of 10 questions (see below) about common traumatic experiences that occur in early life. Since higher numbers of ACEs often correlate to challenges later in life, including higher risk of certain health problems, the quiz is intended as an indicator of how likely a person might be to face these challenges.

THINGS TO CONSIDER BEFORE TAKING THE QUIZ

FIRST

The quiz is a helpful tool for raising awareness about the potential impact of ACEs. But it’s important to remember all the things this quiz doesn’t take into account. First, there are many experiences that could be traumatic for children that the quiz doesn’t ask about—community violence, racism, other forms of discrimination, natural disasters, housing insecurity. That means answering all the questions on the ACE quiz will not give a full picture of the adversity a child has faced—and thus would not be a true indicator of possible risk—nor a full picture of the possible solutions communities should consider.

WHAT ISN’T ACCOUNTED FOR:

- **Stressors outside the household** (e.g., violence, poverty, racism, other forms of discrimination, isolation, chaotic environment, lack of services)
- **Protective factors** (e.g., supportive relationships, community services, skill-building opportunities)
- **Individual differences** (i.e., not all children who experience multiple ACEs will have poor outcomes and not all children who experience no ACEs will avoid poor outcomes—a high ACEs score is simply an indicator of greater risk)

The ACEs quiz gives no insight into whether an individual child might be more or less sensitive to adversity and asks no questions about whether there may have been any protective relationships in place to help buffer the child from stress. So the ACEs quiz can only give insight into who might be at risk—not who is at risk—for certain later-life challenges. In this series of three short videos, you can learn more about what resilience is, the science behind it, and how it’s built.

SECOND

Second, everyone is different, and adverse experiences in childhood affect each child differently. Just because a person has experienced several ACEs does not mean that later social, emotional, or health problems are inevitable. Some children develop resilience—the ability to overcome serious hardship—while others do not. Genetic factors also play a role, in that some children are predisposed to be more sensitive to adversity than others. And the most common factor among children who show resilience is at least one stable and responsive relationship with a supportive adult.
TAKE THE QUIZ

For each “yes” answer, add 1. The total number at the end is your cumulative number of ACEs.

### BEFORE YOUR 18TH BIRTHDAY:

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>#1. Did a parent or other adult in the household often or very often... a) Swear at you, insult you, put you down, or humiliate you? or b) Act in a way that made you afraid that you might be physically hurt?</td>
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<td>#2. Did a parent or other adult in the household often or very often... a) Push, grab, slap, or throw something at you? or b) Ever hit you so hard that you had marks or were injured?</td>
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<td>#3. Did an adult or person at least 5 years older than you ever... a) Touch or fondle you or have you touch their body in a sexual way? or b) Attempt or actually have oral, anal, or vaginal intercourse with you?</td>
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<td>#4. Did you often or very often feel that... a) No one in your family loved you or thought you were important or special? or b) Your family didn’t look out for each other, feel close to each other, or support each other?</td>
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<td>#5. Did you often or very often feel that... a) You didn’t have enough to eat, had to wear dirty clothes, and had no one to protect you? or b) Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?</td>
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<td>#6. Were your parents ever separated or divorced?</td>
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<td>#7. Was your mother or stepmother: a) Often or very often pushed, grabbed, slapped or had something thrown at her? or b) Sometimes, often, or very often kicked, bit, hit with something hard? or c) Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?</td>
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<td>#8. Did you live with anyone who was a problem drinker or alcoholic, or who used street drugs?</td>
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<td>#9. Was a household member depressed or mentally ill, or did a household member attempt suicide?</td>
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<td>#10. Did a household member go to prison?</td>
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What Does Your Score Mean?

The Quiz Score Is Based on Ten Types of Childhood Trauma Measured in the ACE Study.

Five are personal — physical abuse, verbal abuse, sexual abuse, physical neglect, and emotional neglect.

Five are related to other family members: a parent who’s an alcoholic, a mother who’s a victim of domestic violence, a family member in jail, a family member diagnosed with a mental illness, and the disappearance of a parent through divorce, death or abandonment.

You get one point for each type of trauma. The higher your ACE score, the higher your risk of health and social problems.

As Your ACE Score Increases, So Does the Risk of Disease, Social and Emotional Problems.

With an ACE score of 4 or more, things start getting serious. The likelihood of chronic pulmonary lung disease increases 390 percent; hepatitis, 240 percent; depression 460 percent; suicide, 1,220 percent.

The most important thing to remember is that the ACE score is meant as a guideline: If you experienced other types of toxic stress over months or years, then those would likely increase your risk of health consequences.

Fortunately, our brains and lives are somewhat plastic, which means our mental and physical health can improve. The appropriate integration of resilience factors born out of ACE concepts — such as asking for help, developing trusting relationships, forming a positive attitude, listening to feelings — can help people improve their lives.

Resilience: Tipping the Balance Toward Good Health

To promote a good standard of health and help prevent mental health and addiction problems in our communities, we need to support all individuals in building the foundations of resilience—the skills and abilities that develop through experience and allow us to adapt and stay healthy even in circumstances of severe stress or hardship.

The resilience scale is a metaphor to explain why some people seem more resilient than others and to help visualize how to improve resilience: the ability to respond positively in the face of adversity.

Loading the Scale

Think of a scale where a person’s good and bad experiences get stacked over the course of development. The positive experiences that get stacked on one end are called protective factors and include things like attentive caregivers and available social supports that provide things like good prenatal health, nutrition, health care, and a childhood rich in Serve and Return interactions. The other end of the scale gets loaded up with bad experiences—what scientists call risk factors. These are experiences that cause Toxic Stress and tip the scale in a negative direction. Toxic stress occurs when no caring adults are present to buffer the effects of experiences such as abuse, neglect, or parental addiction.
SETTING THE FULCRUM

Most of us know of people who seem to thrive in spite of difficult childhoods, or those who struggle in life even though good caregivers and strong communities loaded their scales with predominantly positive experiences.

Experiences alone are only half of the story; genes also play a role. A person’s genetic inheritance is like the starting position of the fulcrum, or the balance point, of the scale: some of us are born highly sensitive to the effects of toxic stress, while others can withstand significant amounts of stress without experiencing lasting harm to brain architecture. On the scale, we see that the position of the fulcrum affects how much leverage positive or negative experiences have in shaping our life outcomes.

HOW DO WE BUILD RESILIENCE?

Research into epigenetics has revealed that, remarkably, the position of the fulcrum is not set in stone. Experiences at critical stages of development modify how our genes are expressed. Over time, supportive relationships and serve-and-return experiences can shift the fulcrum in a more resilient direction, strengthening brain architecture so that a person is better prepared to bounce back from significant life stresses.

Because life events aren’t always in our control, it’s important to help all children build the foundations of resilience so that they can better meet the challenges they may face during development and later in life. For older children, adolescents, and adults, it is never too late to build resilience; though the required effort increases with age, we can always improve skills that enable better outcomes.

Backed by cutting-edge research from top parenting experts in the field, The Happy Child is a new kind of parenting app to help families forge deeper bonds with their children.

Years of ground-breaking research and findings in Psychology, Neuroscience and Pediatrics have been curated into one easy-to-use app (no in-app purchases!)
REFERENCES & SOURCES

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Harvard Center on the Developing Child
https://developingchild.harvard.edu/resources/aces-and-toxic-stress-frequently-asked-questions/
American SPCC is the voice for children in America. We are determined to harness the power of education to end child abuse and give all children the chance to flourish as adults.

Through the generosity of our donors, we make life-saving educational resources available to all through our Learning Center and The Happy Child app. A Better Future Starts Here!

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