Childhood Adversity
Science and Solutions
Mining Converging Insights From Epidemiology, Biology, and Clinical Practice

• **Adverse childhood experiences.** Early risk factors for lifelong impairments in physical and mental health.

• **Toxic stress.** Postulated causal mechanisms that explain how significant adversity gets under the skin and becomes embedded biologically.

• **Trauma-informed care.** Specialized interventions to reduce or mitigate the biological disruptions and clinical consequences of toxic stress.

Source: **JACK P. SHONKOFF, M.D.**
Director, Center on the Developing Child at Harvard University
Mechanisms by Which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan
ACEs and Population Attributable Risks

% that ACEs contributes to these issues

- Disability days: 52%
- Current depression: 54%
- Domestic violence: 52%
- Promiscuity: 48%
- IV drug abuse: 78%
- Life dissatisfaction: 67%
- Alcoholism: 65%
- Hopelessness: 43%
- Suicide attempt: 58%
- Drug abuse: 50%
Early Death

Burden of dis/ease, distress, criminalization, stigmatization

Coping

Allostatic Load, Disrupted Neurological Development

Complex Trauma/ ACE

Race/Social Conditions/ Local Context

Generational Embodiment/Historical Trauma
10 Types of Adverse Childhood Experiences (ACEs)

The three types of ACEs include:

**ABUSE**
- Physical
- Emotional
- Sexual

**NEGLECT**
- Physical
- Emotional

**HOUSEHOLD DYSFUNCTION**
- Mental Illness
- Incarcerated Relative
- Mother treated violently
- Substance Abuse
- Divorce

Types of Adverse Childhood Experiences
Image courtesy of the Robert Wood Johnson Foundation
Adverse Childhood Experiences Are Common

**ABUSE**
- Emotional Abuse: 11%
- Sexual Abuse: 21%
- Physical Abuse: 28%

**FAMILY DYSFUNCTION**
- Incarcerated Relative: 11%
- Mother Treated Violently: 13%
- Mental Illness: 19%
- Parental Divorce: 23%
- Substance Abuse: 28%

**NEGLECT**
- Physical: 10%
- Emotional: 15%
Childhood Experiences Underline Chronic Depression

% With a Lifetime History of Depression

ACE Score

Women

Men

0
1
2
3
4
5
6
7
8

0
10
20
30
40
50
60
70
80
ACEs Score and the Risk of Perpetuating Domestic Violence
ACEs and Unemployment

![Graph showing the relationship between ACE Score and percent unemployed/unable to work.](image)

**POSITIVE STRESS**
Mild/moderate and short-lived stress response necessary for healthy development

**TOLERABLE STRESS**
More severe stress response but limited in duration which allows for recovery

**TOXIC STRESS**
Extreme, frequent, or extended activation of the body's stress response without the buffering presence of a supportive adult

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Social-emotional buffering, parental resilience, early detection, and/or effective intervention

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Intense, prolonged, repeated and unaddressed
Trauma: A Public Health Issue

Prevalence: Trauma is common among adults and children in social service systems

98% of female offenders have experienced trauma, often interpersonal trauma and domestic violence

96% of adolescent psychiatric inpatients have histories of exposure to trauma

93% of homeless mothers have a lifetime history of interpersonal trauma

90% of juvenile justice-involved youth have experienced trauma, often multiple traumas from an early age

75% of adults in substance abuse treatment report histories of trauma

70% of children in foster care have experienced multiple traumas

Lincoln High School in Walla Walla, WA, tries new approach to school discipline — suspensions drop 85%

Jim Sporleder, principal of Lincoln High School

THE FIRST TIME THAT principal Jim Sporleder tried the New Approach to Student Discipline at Lincoln High School in Walla Walla, WA, he was blown away. Because it worked. In fact, it worked so well that he never went back to the Old Approach to
Pediatricians screen parents for ACEs to improve health of babies

The Children's Clinic, tucked in a busy office park five miles outside downtown Portland, OR, and bustling with noisy babies, boisterous kids and energetic pediatricians, seems ordinary enough. But, for the last two years, a quiet revolution has been brewing in its exam rooms: When parents bring their four-month-old babies in for well-baby checkups, they talk about their own childhood trauma with their kid’s pediatrician.

Wait. What's Mom or Dad’s childhood got to do with the health of their baby? And aren't pediatricians supposed to take care of kids? Not kids’ parents?

It turns out that just 14 questions about the childhood experiences of parents provide information critical to the future health of their baby, say Children's Clinic pediatricians Teri Pettersen and RJ Gillespie. The answer to the questions can help determine not only if the child will succeed in school, but what the child becomes as an adult, whether she experiences anxiety, depression, problems with drugs or alcohol, marital problems, stigmas of pregnancy and child abuse.

The Children's Clinic has implemented the ACEs screening process in the last two years. To date, they say, about 400 parents, who have the option of declining to provide information, have agreed.

Children who were exposed to ACEs are at an increased risk of developing eating disorders, depression and PTSD, Pettersen says. And, the ACEs weren’t just the childhood experiences of the mother or father. Research suggests that ACEs also have an impact on the health of children’s children: the grandchildren of parents who were exposed to trauma.

"It starts way before birth," Pettersen says. "We need to help parents and other caregivers navigate and work through their own childhood experiences to help prevent the next generation from experiencing the same ACEs."
Trauma-informed judges take gentler approach, administer problem-solving justice to stop cycle of ACEs

Judge Lynn Tepper hugs Taylor, 11, at his final adoption hearing. Before finding his permanent home, he’d been returned by three foster homes.
A father in county jail is ordered to take a parenting class, but isn’t too enthusiastic about it. As part of the class, he learns about the ACE Study, and does his own ACE score.

“Oh my god!” he announces to the class. “I have 7 ACEs.” His mother’s an alcoholic. His dad’s been in and out of jail. He himself started dealing drugs at age 11, and doing drugs at 14.
NEAR@Home Toolkit: A Guided Process to Talk about Trauma and Resilience in Home Visiting

For the past year, a small facilitating workgroup and a large planning committee from federal Health Resources and Services Administration Region X (Alaska, Idaho, Oregon and Washington) have come together virtually and by phone to create NEAR@Home, a toolkit for addressing Adverse Childhood Experiences (ACEs) in home visiting. The group agrees that the ACEs framework and the NEAR science has the ability to strengthen the work in home visiting and improve outcomes for children and families. Thank you to all who contributed to this process.

Home visitors knowledgeable about ACEs research are interested in bringing this information to families but worry about causing harm. The NEAR@Home toolkit addresses these concerns and provide strategies for engaging parents in discussing and using the ACEs questionnaire in a safe, respectful, and effective way for both home visitor and family.

We now understand how adversity becomes embedded into biology, behavior, and risk and resilience. ACEs are associated with many chronic diseases and other health issues, as well as behavior and cognitive problems.
"The consequences of toxic stress are among the most expensive problems society deals with. **Prison** is incredibly more expensive than early childhood programs. **Economic dependence** is much more expensive than people earning a living and paying taxes. Being healthy is much less expensive than paying for heart disease and diabetes and stroke. All of this is not only morally imperative, but it has huge financial cost implications."
Resources

- **ACEs 101** – FAQs about adverse childhood experiences research with links to reports, stories and videos.

- **Got Your ACE Score?** – Do your ACE score and your resilience score, and find out more about the consequences of each.

- **ACEsTooHigh.com** – A news site for the general public. It covers research about ACEs and how people, organizations, agencies and communities are implementing trauma-informed, resilience-building practices based on ACEs research.

- **ACEsConnection.com** – A social network for people who are implementing – or thinking about implementing – trauma-informed and resilience-building practices based on ACEs research.

- **The CDC-Kaiser Permanente ACE Study** – The official ACE Study site, provided by the CDC.

- **The Center on the Developing Child at Harvard University** – Here, take a deep dive into a site rich with reports, tools and videos about the neurobiology of toxic stress and resilience.

- **SAMHSA’s Concept of Trauma and Guidance for a Trauma-Informed Approach** -- Introduces a concept of trauma and offers a framework for how an organization, system, or service sector can become trauma-informed. Includes a definition of trauma (the three "E's"), a definition of a trauma-informed approach (the four "R's"), 6 key principles, and 10 implementation domains.
Thank you!

Elizabeth Prewitt – ACEs Connection Network

• ACEsTooHigh.com - news site
• ACEsConnections.com - social network

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