

Stress and early brain growth

Understanding Adverse Childhood Experiences (ACEs)

What are ACEs?

ACEs are serious childhood traumas -- a list is shown below -- that result in toxic stress that can harm a child's brain. This toxic stress may prevent a child from learning or playing in a healthy way with other children, and can result in long-term health problems.

Adverse Childhood Experiences can include:

1. Emotional abuse
2. Physical abuse
3. Sexual abuse
4. Emotional neglect
5. Physical neglect
6. Mother treated violently
7. Household substance abuse
8. Household mental illness
9. Parental separation or divorce
10. Incarcerated household

Exposure to ACEs can increase the risk of:

- Adolescent pregnancy
- Alcoholism and alcohol abuse
- Depression
- Illicit drug use
- Heart disease
- Liver disease
- Multiple sexual partners
- Intimate partner violence
- Sexually transmitted diseases (STDs)
- Smoking
- Suicide attempts
- Unintended pregnancies

How do ACEs affect health?

Through stress. Frequent or prolonged exposure to ACEs can create toxic stress which can damage the developing brain of a child and affect

Increases difficulty in making friends and maintaining relationships.

Lowers tolerance for stress, which can result in behaviours such as fighting, checking out or defiance.

May cause lasting health problems.

Increases problems with learning and memory, which can be permanent.

Reduces the ability to respond, learn, or figure things out, which can result in problems in school.

Increases stress hormones which affects the body's ability to fight infection.



A Survival Mode Response to toxic stress increases a child's heart rate, blood pressure, breathing and muscle tension. Their thinking brain is knocked off-line. Self-protection is their priority.

In other words: **"I can't hear you! I can't respond to you! I am just trying to be safe!"**

