

1) Describe some of the ways that Adverse Childhood Experiences (ACE) impact health across a lifetime.

Some ways that ACE impacts health across a lifetime, can contribute to various health conditions that may be more severe for others that haven't dealt with ACEs, for example, individuals that have ACEs are more prone to having severe health conditions such as chronic pulmonary disease, hepatitis, etc, and also can contribute to various mental illnesses and suicidal ideation than those who have not experienced ACEs.

2a) What percentage of the population has experienced at least 1 ACE?

67%

2b) What percentage experienced at least 4 or more ACES?

12.6%

3a) How might childhood trauma impact brain development?

It affects areas in the brain that contribute to the pleasure and reward center of the brain, which may result in substance dependence, and inhibits the prefrontal cortex, which is needed full development for critical learning. High doses of adversity will result in high-risk behavior, but also can still contribute to other health concerns. The main area is the hypothalamic-pituitary-adrenal -axis which is the brain and body's stress response system which aids in our fight or flight response. Continual stress to these areas of the brain, might not allow for full and healthy development that could benefit the individual in the long run.

3b) How might that impact shape human behavior?

If your stress levels are constantly triggered each day, it becomes more of a maladaptive or health-damaging condition, which also affects different body systems such as immunity, hormones, and even DNA. Overtime this can also contribute to human behavior since the individual isn't fully developed to process certain emotions due to the various stresses that contributed to brain development.

4) What were some of the best practices mentioned to intervene with children and families impacted by adversity and toxic stress?

Routine screenings on ACEs and toxic stress can help reduce the risk of adversity through home visits, mental health care, nutrition, and various holistic interventions. Education parents on the results of adversities and ACEs, and covering the care needed for their developing child.