

Adverse Childhood Experiences

Many studies have examined the relationship between ACEs and a variety of known risk factors for disease, disability, and early mortality. The Division of Violence Prevention at the Centers for Disease Control and Prevention (CDC), in partnership with Kaiser Permanente, conducted a [landmark ACE study](#) from 1995 to 1997 with more than 17,000 participants. The study found:

- **ACEs are common.** For example, 28% of study participants reported physical abuse and 21% reported sexual abuse. Many also reported experiencing a divorce or parental separation, or having a parent with a mental and/or substance use disorder.
- **ACEs cluster.** Almost 40% of the Kaiser sample reported two or more ACEs and 12.5% experienced four or more. Because ACEs cluster, many subsequent studies now look at the cumulative effects of ACEs rather than the individual effects of each.
- **ACEs have a dose-response relationship with many health problems.** As researchers followed participants over time, they discovered that a person's cumulative ACEs score has a strong, graded relationship to numerous health, social, and behavioral problems throughout their lifespan, including substance use disorders. Furthermore, many problems related to ACEs tend to be comorbid or [co-occurring](#).

ACEs and Prevention Efforts

Preventing ACEs and engaging in early identification of people who have experienced them could have a significant impact on a range of critical health problems.

ACEs Research and Behavioral Health

Research has demonstrated a strong relationship between ACEs, substance use disorders, and behavioral problems. When children are exposed to chronic stressful events, their neurodevelopment can be disrupted. As a result, the child's cognitive functioning or ability to cope with negative or disruptive emotions may be impaired. Over time, and often during adolescence, the child may adopt negative coping mechanisms, such as substance use or self-harm. Eventually, these unhealthy coping mechanisms can contribute to disease, disability, and social problems, as well as premature mortality.

ACEs and Behavioral Problems

- **Suicide attempts.** ACEs in any category increased the risk of attempted suicide by 2- to 5-fold throughout a person's lifespan, according to a [2001 study](#). According to a recent [2017 article\(link is external\)](#), individuals who reported *6 or more ACEs* had 24.36 times increased odds of attempting suicide.
- **Lifetime depressive episodes.** Exposure to ACEs may increase the risk of experiencing depressive disorders well into adulthood—sometimes decades after ACEs occur. Learn more from a [2015 study on ACEs and the risk of geriatric depressive disorders](#).
- **Sleep disturbances in adults.** People with a history of ACEs have a higher likelihood of experiencing self-reported sleep disorders, according to a [2015 systematic review of research studies on ACEs and sleep disturbances in adults](#).
- **High-risk sexual behaviors.** Women with ACEs have reported risky sexual behaviors, including early intercourse, having had 30 or more sexual partners, and perceiving themselves to be at risk for HIV/AIDS. Learn more from a [2001 study on ACEs and sexual risk behaviors in women](#). Sexual minorities who experience ACEs also demonstrate earlier sexual debut [according to a 2015 study](#).

- **Fetal mortality.** Fetal deaths attributed to adolescent pregnancy may result from underlying ACEs rather than adolescent pregnancy, according to a [2004 study of the association between ACEs and adolescent pregnancy](#).
- **Pregnancy outcomes.** Each additional ACE a mother experienced during early childhood is associated with decreased birth weight and gestational age of her infant at birth, according to a [2016 study on the association between ACEs and pregnancy outcomes](#)
- **Negative physical health outcomes.** Experiencing adverse childhood family experiences may increase the risk for long-term physical health problems (e.g., diabetes, heart attack) in adults. Learn more from a [2015 study on long-term physical health consequences of adverse childhood experiences](#).
- **Poor dental health.** Children who have experienced at least one ACE are more likely to have poor dental health. Learn more from a [2015 study on the association between ACEs and dental health in children and adolescents](#)(link is external).

Publications and Resources

- [Archived Webinar: Trauma & Adverse Childhood Experiences: Implications for Preventing Substance Misuse](#)
- [The Role of Adverse Childhood Experiences in Substance Abuse and Related Behavioral Health Problems](#)
- [Adverse Childhood Experiences: Risk Factors for Substance Abuse and Mental Health Video – 2012](#)
- [Adverse Childhood Experiences: Implications for Transforming Our Systems of Care Video – 2012](#)

