

Adverse Childhood Experiences: Powerful Determinants of Iowan's Health

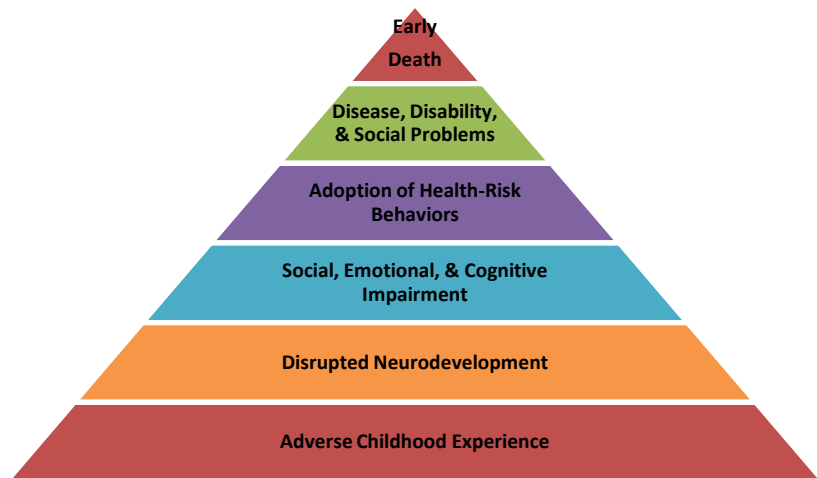
The Adverse Childhood Experiences (ACEs) Study shows a direct correlation between the traumas and family dysfunction suffered in childhood with poor adult health status and disease decades later.ⁱ A national study now adds an additional element to this mix, and provides even more motivation to invest in the health and well-being of our children and adults.

The ACEs study

The Adverse Childhood Experience (ACEs) Study is a large-scale, ongoing evaluation of the link between negative childhood experiences and the origins of risk behaviors that evolve into the leading causes of disease and disability in adulthood. The study conducted detailed biomedical and psychological evaluations of over 17,000 middle-aged, middle-class Kaiser Health Plan patients and was a collaborative effort between the Centers for Disease Control and Prevention and Kaiser Permanente's Department of Preventive Medicine. From these clinical observations, Dr. Robert Anda at the CDC compared current adult health status to childhood experiences decades earlier.ⁱⁱ

The results are startling. Adverse childhood experiences, such as physical or emotional abuse, drug abuse in the home, familial incarceration, neglect, or other traumatic childhood experiences, are vastly more common among the general population than typically recognized. 67% of the participants reported having experienced at least one ACE. More than one in five reported

three or more, indicating that risk factors rarely occur in isolation. For example, many cases of child abuse also involve drug abuse, domestic violence and divorce. *The study showed a powerful and compelling correlation between harmful experiences in childhood and poor adult health status decades later.ⁱⁱⁱ*



Recent research emerging from Washington State in response to their ACEs data, shows that the level of community capacity - the ability to respond to and provide effective social/emotional supports and protective factors for its population - plays a key role in determining rates of mental, behavioral, and physical disorders. In other words, when community capacity is high there is a higher rate of individual resilience to adverse childhood experiences and a lower rate of mental, behavioral and physical disorders. This comparison research found higher community capacities resulted in statistically lower rates of:

- Severe depression
- Binge drinking
- Smoking
- Obesity
- Diabetes.^{iv}

The Connection to Our Health

The ACE Study provides insight into how our experiences as children evolve into risky behaviors, which, in turn, evolve into disease and death. We now know from breakthroughs in neurobiology, that ACEs disrupt neurodevelopment and can have lasting effects on brain structure and function. The study suggests that children and adolescents may adopt risky behaviors as a means of coping or covering their pain. The more trauma they experience, i.e. the higher their ACE score, the greater the likelihood of adopting multiple risk behaviors, such as alcohol or drug abuse, smoking, overeating and promiscuity.

Stressful and traumatic childhood and adolescent experiences literally become embedded as “biology” affecting brain structure and function (as well as endocrine, immune, and other biologic functions) thus leading to persistent effects. Until now, these persistent effects were “hidden” from view of both neuroscientists and public health researchers. This is no longer the case. In fact, *with this information comes the responsibility to use it.^v*

The following table illustrates that “excessive stress and adversity has a cumulative and predictably negative effect on human development....*More is worse, adversity is cumulative; it can affect any human function.*”^{vi}

Probability of Outcomes Given 100 American Adults ^{vii}		
33 Report No ACEs	51 Report 1-3 ACEs	16 Report 4-8 ACEs
↓	↓	↓
WITH 0 ACEs <ul style="list-style-type: none"> • 1 in 16 smokes • 1 in 69 are alcoholic • 1 in 480 uses IV drugs • 1 in 14 has heart disease • 1 in 96 attempts suicide 	WITH 3 ACEs <ul style="list-style-type: none"> • 1 in 9 smokes • 1 in 9 are alcoholic • 1 in 43 uses IV drugs • 1 in 7 has heart disease • 1 in 10 attempts suicide 	WITH 7+ ACEs <ul style="list-style-type: none"> • 1 in 6 smokes • 1 in 6 are alcoholic • 1 in 30 use IV drugs • 1 in 6 has heart disease • 1 in 5 attempts suicide

Gather Iowa-Specific ACEs Score Data

In 2008 CDC developed questions similar to those used in the ACE Study for incorporation into the Behavioral Risk Factor Surveillance System (BRFSS). The BRFSS is the largest ongoing health survey in the world and has proven useful to define determinants of health in the United States. Numerous state health departments are now incorporating these questions (www.cdc.gov/brfss/questionnaires/pdf-ques/2009brfss.pdf).

Next Steps: Use Iowa-Specific ACEs Data

Based on Iowa-specific ACEs findings, convene representatives across multiple systems that include state government (i.e. education, child welfare, human services, and public health), business leaders, healthcare providers, philanthropy, and other child and family advocates, to develop recommendations for policy briefs and to implement changes in service delivery. For states that have integrated ACEs into their BRFSS, it is providing the necessary springboard for policy and programmatic changes that lead to better integration of systems serving prevention, social services, and legal venues, as well as more meaningful diagnoses, and earlier and improved treatment of exposed children and their caretakers.^{viii}

“The chronic public health disaster of adverse childhood experiences and their effects on human development are real. Data from [Washington’s] BRFSS properly informs about it. The first step toward healing comes with understanding the problem. The face of the disaster is in full view.”
 – Dr. Anda, Results from the 2009 Behavioral Risk Factor Surveillance System, Prepared for the Washington State Family Policy Council, July 2010.

Iowa-specific ACEs information could lead to similar policy and program changes

Examples include:

- 1) Increase understanding among our policy makers on the prevalence of ACEs in our state which can inform Iowa’s mental health redesign;
- 2) Integrate trauma-informed professional development across all departments & systems serving families; (this could include increasing counselor effectiveness, improving needs assessments, and expanding job preparation, skills development and employment opportunities for people with behavioral, mental and physical disabilities).
- 3) Infuse high quality, evidence-based practices into family-based programming;
- 4) Increase public/private co-investment partnerships around a shared understanding and common language about Adverse Childhood Experiences and align missions for a greater, collective impact.
- 5) Improve effectiveness by refining public health awareness campaigns strategies.

ⁱ Oklahoma KIDS COUNT Factbook, “Childhood Stress: A Ticking Time Bomb, Findings of the Adverse Childhood Experience (ACE) Study,” Issue Brief 1 of 6, (2006-2007).

ⁱⁱ Ibid.

ⁱⁱⁱ Ibid.

^{iv} Dario Longhi Ph.D. & Laura Porter, in collaboration with the Family Policy Council Staff and Community Network Staff, “Effects of Higher Community Capacity Among Young Adults: Fewer Adverse Childhood Experiences (ACEs), Higher Social/Emotional Support and Better Health,” Commissioned by the Washington State Family Policy Council, (November 3, 2010).

^v Ibid.

^{vi} Robert Anda, MD, MS, “The Health and Social Impact of Growing Up with Adverse Childhood Experiences, The Human and Economic Costs of the Status Quo,” Co-Principal Investigator *Adverse Childhood Experiences (ACE) Study*, (2009).

^{vii} “The High Cost of Adverse Childhood Experiences,” Power Point, Washington State Family Policy Council, (2007).

^{viii} Robert Anda, MD, MS & David Brown, DSc, MScPH, MSc, “Adverse Childhood Experiences & Population Health in Washington: The Face of a Chronic Public Health Disaster, Results from the 2009 Behavioral Risk Factor Surveillance System,” (July 2, 2010).