

Adverse Childhood Experiences (ACE) Pyramid

The Adverse Childhood Experiences (ACE) Study is one of the largest investigations ever conducted to assess associations between childhood exposure to traumatic stressors and later-life health and well-being. The study is a collaboration between the Centers for Disease Control and Prevention and Kaiser Permanente's Health Appraisal Clinic in San Diego.

The ACE Study findings suggest that certain experiences are major risk factors for the leading causes of illness and death as well as poor quality of life in the United States. Progress in preventing and recovering from the nation's worst health and social problems is likely to benefit from understanding that many of these problems arise as a consequence of adverse childhood experiences.

The ACE Pyramid represents the conceptual framework for the study and was designed to assess what was considered to be "scientific gaps" about the origins of risk factors. These gaps are depicted as the two arrows linking Adverse Childhood Experiences to risk factors that lead to the health and social consequences higher up the pyramid. Specifically, the study was designed to provide data that would help answer the question: "If risk factors for disease, disability, and early mortality are not randomly distributed, what influences precede the adoption or development of them?" By providing

information to answer this question, we hoped to provide scientific information that would be useful for developing new and more effective prevention programs.



The ACE Study takes a whole life perspective, as indicated on the orange arrow leading from conception to death. By working within this framework, the ACE Study began to progressively uncover how adverse childhood experiences (ACE) are strongly related to development and prevalence of risk factors for disease and health and social well-being throughout the lifespan (Centers for Disease Control and Prevention, 2012, p. 1-2).

Adverse Childhood Experiences, Nebraska, 2010–2011

(The following information was shared by the Office of Epidemiology at the Nebraska Department of Health and Human Services as preliminary data. Listed below is an early snapshot of the findings. The comprehensive report regarding Nebraska ACE Study findings has not yet been published)

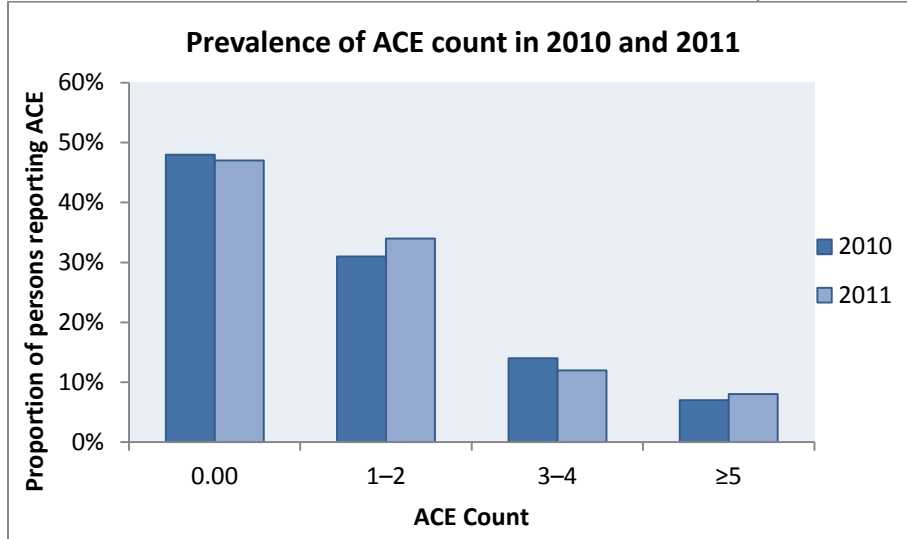
Nebraska's Behavioral Risk Factor Surveillance System (BRFSS) data from 2010 and 2011 were analyzed to evaluate associations between adverse childhood experiences (ACEs) and adverse health outcomes and behaviors during adulthood. Statistically significant associations were demonstrated between number of ACEs and tobacco use, obesity, reporting poor general health, arthritis, cardiovascular disease, COPD, depression, diabetes, and disability. In addition, associations between individual ACEs and multiple adverse health outcomes were found (Safranek, T., Buss, B., Yeoman, K., 2012, p. 2).

The results showed that ACEs are common in Nebraska residents and are associated with increased risk of multiple adverse behaviors and health outcomes. The Nebraska prevalence findings are consistent with other ACE studies in the United States. These findings highlight the need to detect and intervene in the lives of children affected by ACEs before they adopt risky behaviors and develop adverse health outcomes.

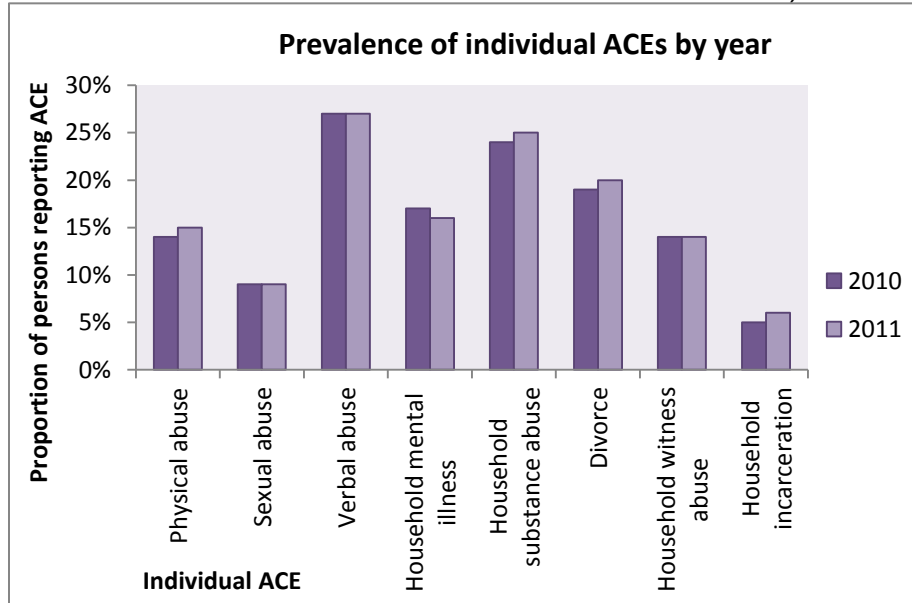
Nebraska ACE Study Findings

(Safranek, T., Buss, B., Yeoman, K., 2012, p. 11-12).

Prevalence estimates of ACE count in 1.37 million Nebraska adults, 2010 and 2011



Prevalence estimates of individual ACEs in 1.37 million Nebraska adults, 2010 and 2011



References

Centers for Disease Control and Prevention. (2012). Adverse Childhood Experiences (ACE) Study. *National Center for Chronic Disease Prevention and Health Promotion*. Retrieved from <http://www.cdc.gov/ace/>.

Safranek, T., Buss, B., Yeoman, K. (2012). Epidemiologic Investigation: Association between Adverse Childhood Experiences and Adverse Health Outcomes. *The Office of Epidemiology at the Nebraska Department of Health and Human Services*, 1-47.