



a state profile: adverse childhood experience

adverse childhood experience

For most Oklahoma children time heals nothing. Traumatic experiences and exposure to family dysfunction during childhood result, decades later, in poor adult health status, early death and crippled communities.

Childhood experience can explain much of Oklahoma's present. Oklahomans currently face momentous and expensive challenges: the highest occurrence of mental illness in the nation, the only state in which physical health status worsened during the 1990s, and the fourth largest per capita prison population of any state.

Improved childhood experience will contribute greatly to a brighter Oklahoma.

adverse childhood experience, state of oklahoma

parental divorce or separation	incarcerated family member	mentally ill household member	substance abusing household member	violence against mother
5.2 divorce & annulment/1,000 residents	47.7 index crimes/1,000 residents	11.0% psychological distress rate	5.1% substance abuse rate	16.3 protective orders filed/1,000 adult women
household or family dysfunction ACEs				
child maltreatment ACEs				
3.9 child abuse confirmations/1,000 children			13.0 child neglect confirmations/1,000 children	
psychological, physical & sexual abuse			emotional & physical neglect	

As Oklahoma's youngest citizens experience less adversity during childhood, fewer will

adopt risky behaviors, improving their futures and Oklahoma's.

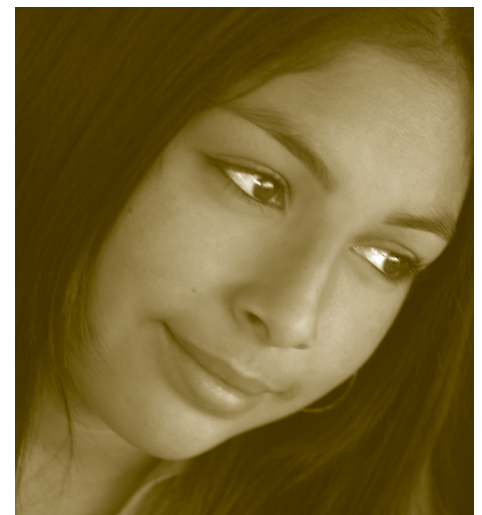
the adverse childhood experience (ACE) study

The Adverse Childhood Experience, or ACE, Study, one of the largest investigations of this type ever conducted, documents a direct correlation between the traumas and family dysfunction suffered in childhood with poor adult health status and premature death decades later. The ACE Study, a collaborative research project between the Centers for Disease Control and Prevention (CDC) and the Department of Preventive Medicine at Kaiser Permanente (KP) in San Diego, was prompted by the 1980s observations of Dr. Vincent J. Felitti. As he was conducting a Kaiser Permanente weight loss program, Dr. Felitti noticed that some of his most successful patients were dropping out of the program. In follow-up interviews with over 200 of these patients, he made a series of startling discoveries. Child sexual abuse was very common among these patients, typically preceding the onset of their

obesity problem. Many patients indicated their conscious awareness of an association between their childhood abuse and their current obesity. Finally, and perhaps most counterintuitive, Dr. Felitti reported that for many of these patients, their problem was not their obesity. Rather obesity was their protective solution, a way to deal with problems they could not talk about.

From Dr. Felitti's clinical observations, the CDC's Dr. Robert Anda designed research protocols to compare current adult health status to childhood experiences decades earlier. With the help of over 17,000 members of the Kaiser Permanente Health Plan, who agreed to cooperate through detailed biomedical and psychological evaluations, the ACE Study produced remarkable insight into how childhood experiences evolve into risky behaviors, which, in turn, evolve into disease and premature death.

The CDC-KP ACE Study examined a population of typical, middle class, employed adults with health insurance, more or less evenly divided between males and females. Because the average participant was 57 years old, the ACE Study could measure the effect of adverse childhood experiences on adult health status a half century later.

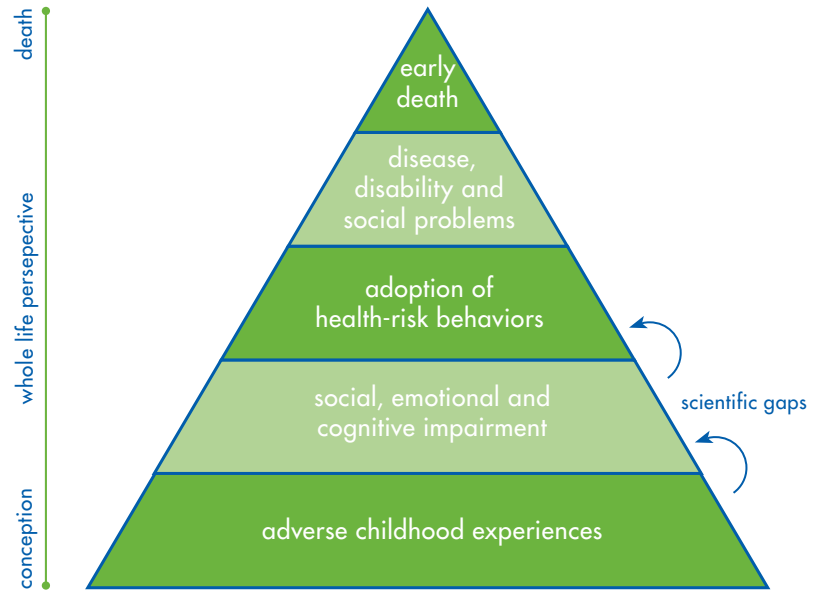


the adverse childhood experience (ACE) framework & methodology

The ACE Pyramid represents the conceptual framework for the CDC-KP ACE Study. The arrows depict the study's design to assess two "scientific gaps." First is an assessment of adverse childhood experiences as the underlying reason for risk behaviors that lead to an individual's social, emotional and cognitive impairment. Second is an assessment of how such impairments result in an individual's adoption of behaviors which put their health at risk. The resulting health and social consequences occur higher up the pyramid.

A complete medical evaluation was abstracted for every person included in the CDC-KP ACE Study, compiling a medical history, laboratory results and physical findings, including the presence of disease conditions. Each responded to

ACE Pyramid: Conceptual Framework



a questionnaire designed to gather the participant's health-related behaviors, self-

rated health appraisal and adverse childhood experiences (ACEs).

adverse childhood experience (ACE)

Borrowing from those experiences frequently mentioned in Dr. Felitti's weight loss program interviews, the ACE Study identified ten adverse childhood experiences (ACEs). Half (5) of the ACEs were experiences perpetrated against the child. Half (5) of the ACEs measured dysfunction within the child's household or family.

The ACE Study constructed a "score" by which to analyze the findings. A person experiencing none of the 10 adverse experiences during their childhood was assigned an ACE score of 0; a person experiencing any 4 adverse experiences during their childhood was assigned an ACE score of 4; and so on.

The ACE Study concluded that adverse childhood experiences are much more common than recognized or acknowledged.

Only about one-third of the average, middle-class population studied had a childhood free from adverse childhood experience. One in eight suffered through four or more adverse experiences during their childhood.

The findings affirm the long-held belief that risk factors do not occur in isolation, but are interrelated and appear in clusters. If a child lives in a home where domestic abuse occurs, for example, it is likely that additional

dysfunctional household members live with the child or the child is also a victim of abuse or neglect. In fact, the ACE Study found that given an exposure to one adverse childhood experience, there is an 80% likelihood of exposure to another. This suggests that studying each risk factor separately could lead to a limited understanding of the true burdens carried by children into their adult lives.

number of adverse childhood experiences (ACE score)	women	men	total
0	34.5%	38.0%	36.1%
1	24.5%	27.9%	26.0%
2	15.5%	16.4%	15.9%
3	10.3%	8.6%	9.5%
4 or more (up to 10)	15.2%	9.2%	12.5%

adverse childhood experience (ACE)

ACE Category	Definition for Inquiry into Childhood Experience
Child Maltreatment	
Emotional Abuse	Often or very often a parent or other adult in the household swore at you, insulted you, or put you down and/or sometimes, often or very often acted in a way that made you think you might be physically hurt.
Physical Abuse	Sometimes, often, or very often pushed, grabbed, slapped, or had something thrown at you and/or ever hit so hard that you had marks or were injured.
Sexual Abuse	An adult or person at least 5 years older ever touched you or fondled you in a sexual way, and/or had you touch their body in a sexual way, and/or attempted oral, anal, or vaginal intercourse with you and/or actually had oral, anal, or vaginal intercourse with you.
Emotional Neglect	Emotional neglect was defined using scale scores that represent moderate to extreme exposure on the Emotional Neglect subscale of the Childhood Trauma Questionnaire (CTQ) short form. Respondents were asked whether their family made them feel special, loved, and if their family was a source of strength, support, and protection.
Physical Neglect	Physical neglect was defined using scale scores that represent moderate to extreme exposure on the Physical Neglect subscale of the Childhood Trauma Questionnaire (CTQ) short form. Respondents were asked whether there was enough to eat, if their parents' drinking interfered with their care, if they ever wore dirty clothes, and if there was someone to take them to the doctor.
Household or Family Dysfunction	
Mother Treated Violently	Your mother or stepmother was sometimes, often, or very often pushed, grabbed, slapped, or had something thrown at her and/or sometimes, often, or very often kicked, bitten, hit with fist, or hit with something hard, and/or ever repeatedly hit over at least a few minutes and/or ever threatened or hurt by a knife or gun.
Household Substance Abuse	Lived with anyone who was a problem drinker or alcoholic and/or lived with anyone who used street drugs.
Household Mental Illness	A household member was depressed or mentally ill and/or a member attempted suicide.
Parental Separation or Divorce	Parents were ever separated or divorced
Incarcerated Household Member	A household member went to prison.

adverse childhood experience (ACE) study findings

Physical abuse was the most prevalent adverse childhood experience reported, having an incarcerated household member the least. Gender differences surfaced. For child maltreatment ACEs, boys were more often exposed to physical abuse and physical neglect, and girls more often exposed to emotional abuse, emotional neglect and sexual abuse. Girls were more commonly exposed to any one of the five household/family dysfunction ACEs (mother treated violently, household substance abuse, household mental illness, parental separation or divorce, and incarcerated household member.)

Adverse childhood experiences have a powerful relationship to adult health status half a century later. The ACE Study draws an unsettling connection between adverse childhood experiences and a myriad of risky adult behaviors (alcoholism, drug abuse, suicide attempts, smoking, multiple sex partners, physical inactivity, severe obesity,

adverse childhood experience (ACE)	women (n = 9,367)	men (n = 7,970)	total (n = 17,337)
emotional abuse	13.1%	7.6%	10.6%
physical abuse	27.0%	29.9%	28.3%
sexual abuse	24.7%	16.0%	20.7%
emotional neglect	16.7%	12.4%	14.8%
physical neglect	9.2%	10.7%	9.9%
mother treated violently	13.7%	11.5%	12.7%
household substance abuse	29.5%	23.8%	26.9%
household mental illness	23.3%	14.8%	19.4%
parental separation or divorce	24.5%	21.8%	23.3%
incarcerated household member	5.2%	4.1%	4.7%

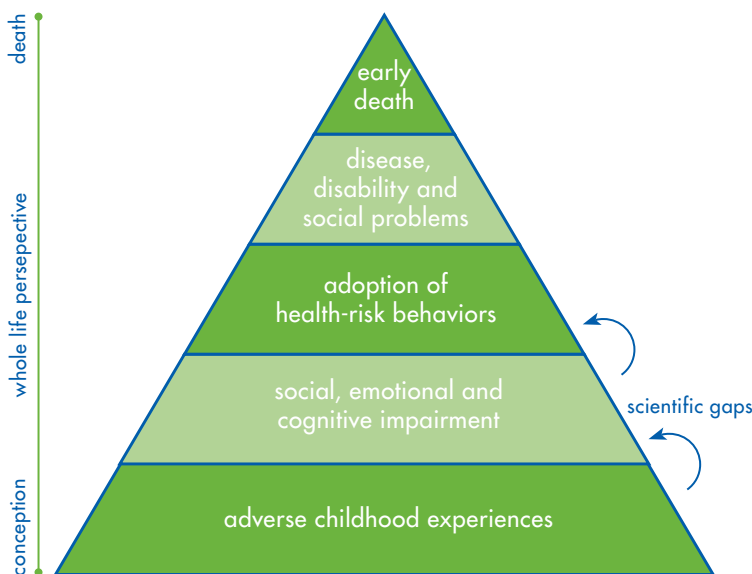
and so on). The greater the number of harmful experiences suffered by a child, the higher the likelihood that the child will adopt any one or several of these risk behaviors as a means to cope with or cover their pain.

In adulthood, the resulting behaviors directly link to the chronic diseases that are the most common causes of death and disability in Oklahoma, including heart

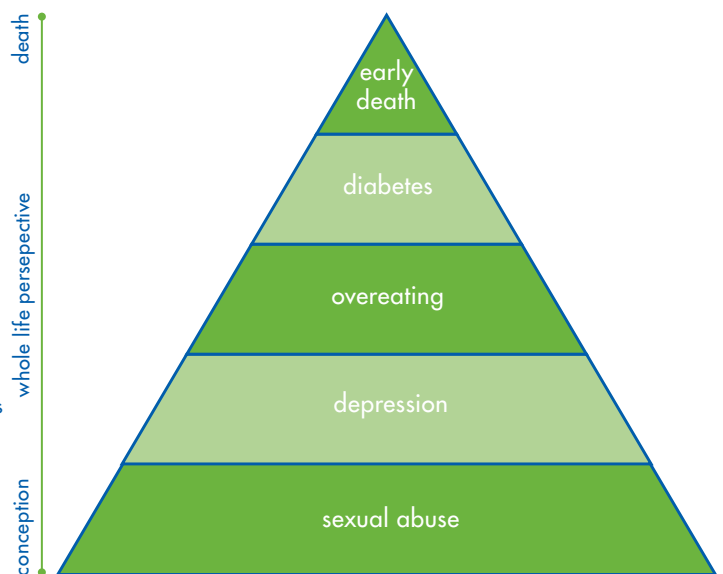
disease, cancer, stroke, diabetes and mental illness. These findings suggest that the impact of adverse childhood experiences on adult health status is strong and cumulative, making ACEs a leading cause of morbidity and mortality in adult life.

The following twin ACE Pyramids juxtapose the conceptual framework with an example drawn from the finding of the ACE Study.

ACE Pyramid: Conceptual Framework

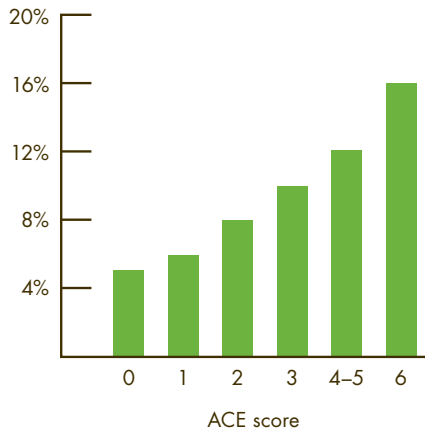


ACE Pyramid: Real Life Scenario

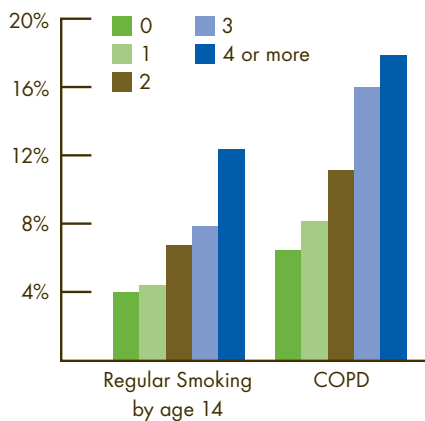


adverse childhood experience (ACE) study implications

ACEs & current smoking



ACEs, smoking & COPD



Traditionally, a risk behavior is linked with its resulting consequence. Common pairings include tobacco use with lung cancer, non-use of seat belts with motor vehicle deaths, and lack of physical activity with stroke. The public health response has been to educate the public to change their behaviors – to quit smoking, wear seat belts, and get moving.

The ACE Study indicates that what is commonly viewed as a problem behavior may instead be a solution behavior for a person trying to comfort themselves and cope with childhood trauma. Providing a single illustration, the ACE Study found a direct

and graded association between the number of ACEs in a person’s history, tobacco use, and onset of chronic obstructive pulmonary disease (COPD).

For years, public health campaigns have attempted to reduce smoking by asking people to change their behaviors. The ACE Study suggests that efforts to reduce smoking will not be successful without first understanding and dealing with the underlying reason for such behavior — adverse childhood experience. This requires a different kind of response from the medical, public health and social sciences communities.

conclusion: the complexities of adverse childhood experience (ACE)

The 2006–2007 Oklahoma KIDS COUNT Factbook highlights the fate of children who are traumatized and exposed to family dysfunction. Oklahoma and its communities clearly face momentous and expensive challenges when decades later these very children become ill or die prematurely.

For most Oklahoma children time heals nothing. Compassion, understanding and commitment are required to improve their futures and Oklahoma’s.



To begin the process of understanding, watch for and read the series of issue briefs created by the Oklahoma Institute for Child Advocacy (OICA) in conjunction with this 2006–2007 Oklahoma KIDS COUNT Factbook.

Findings and Overview of the Adverse Childhood Experience (ACE) Study

Child Maltreatment ACEs, Covering Emotional Abuse, Physical Abuse, Sexual Abuse, Emotional Neglect and Physical Neglect of Oklahoma Children

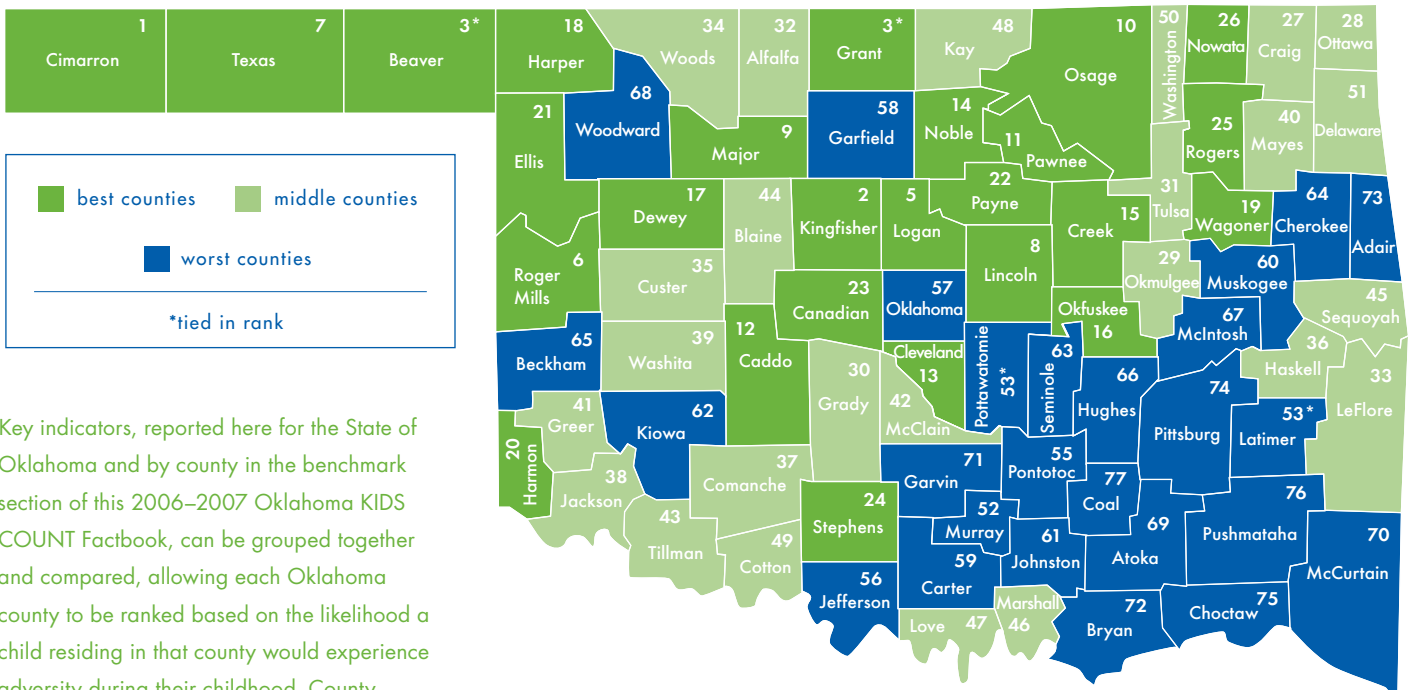
Violence Against Mothers ACE, Covering Domestic Violence Witnessed by Oklahoma Children

Mental Illness & Substance Abuse ACEs, Covering Oklahoma Children Living in Households in which a Member is Mentally-Ill, Abuses Drugs or Alcohol or is Suicidal

Absent Family ACEs, Covering Oklahoma Children With Family Members Absent as a Result of Parental Separation, Divorce or Incarceration



ranking of county adverse childhood experience indicators oklahoma counties, 2002–2005



Key indicators, reported here for the State of Oklahoma and by county in the benchmark section of this 2006–2007 Oklahoma KIDS COUNT Factbook, can be grouped together and compared, allowing each Oklahoma county to be ranked based on the likelihood a child residing in that county would experience adversity during their childhood. County indicators are weighted to replicate the relative importance of each type of adverse childhood experience in the CDC-KP ACE Study. The worse the county rank, the more likely children living there will accumulate ACEs. One half of each

county's ACE Index is comprised of indicators measuring Child Maltreatment (confirmed child abuse and confirmed child neglect). The other half of each county's ACE Index is comprised of indicators measuring Household or Family

Dysfunction (divorce, index crime, psychological distress, substance abuse and protective orders). Based on these indicators, Cimarron County is best, Coal County is worst.