



## ACE issue brief 2: child maltreatment

Findings of the Adverse Childhood Experience (ACE) Study  
Oklahoma KIDS COUNT Factbook, 2006-2007 Issue Brief 2 of 5

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## the ACE study

The Adverse Childhood Experience (ACE) 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 is a collaborative effort between the Centers for Disease Control and Prevention and Kaiser Permanente’s Department of Preventive Medicine.

The study conducted detailed biomedical and psychological evaluations of over 17,000 middle-aged, middle-class Kaiser patients. The study was designed to simultaneously assess childhood exposure to multiple types of abuse, neglect, parental substance abuse, domestic violence, and other types of serious household dysfunction. A scoring system was used to analyze the findings: a person exposed to none of the 10 factors had an ACE score of 0; a person exposed to any four factors had an ACE score of 4, and so on. The scores were then compared with the health status of these individuals.

## explaining the connection

The ACE Study provides insight into how our experiences as children evolve into risky behaviors, which, in turn, evolve into disease and death. Child abuse and household trauma leave a child vulnerable, actually disrupting the normal development of the brain. The study suggests that children and adolescents 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.

This series of issue briefs will explore the implications of the ACE Study in Oklahoma, and provide a basis for discussion among parents and other child advocates, health and social service professionals, policy makers and community leaders.

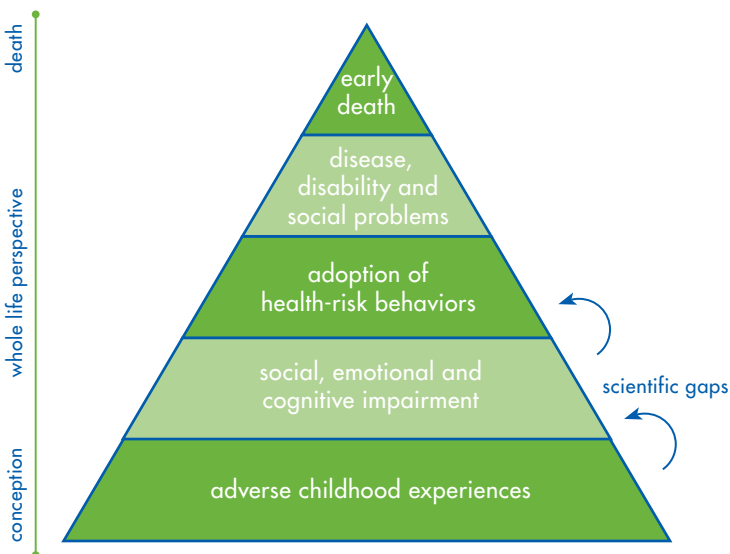
## findings

The results were startling. Adverse childhood experiences are vastly more common than generally recognized. Almost three-quarters 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 adult health status decades later.

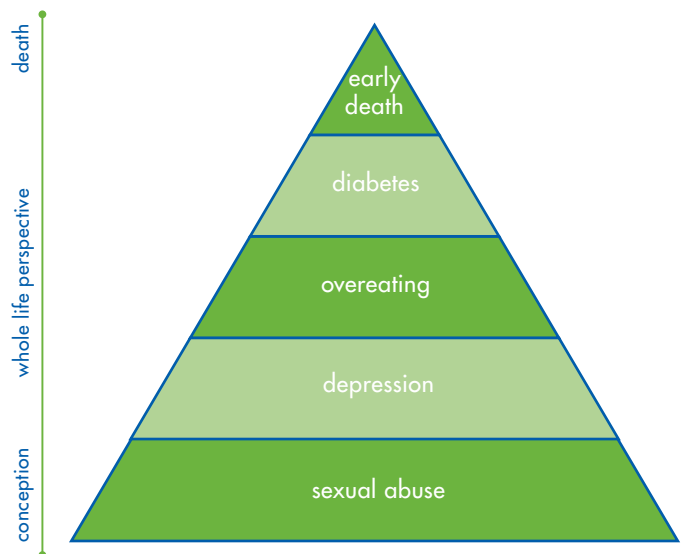
number of adverse childhood experiences (ACE score)	total
0	33%
1	26%
2	16%
3	10%
4 or more (up to 10)	12.5%

Compared to persons with an ACE score of 0, those with an ACE score of 4 or more were twice as likely to be smokers, 12 times more likely to have attempted suicide, 7 times more likely to be alcoholic, and 10 times more likely to have injected street drugs.

### ACE Pyramid: Conceptual Framework



### ACE Pyramid: Real Life Scenario





## major findings of the ACE study

Many studies have examined the impact of a single type of maltreatment on children. Yet the ACE Study found that co-occurrence of multiple forms of childhood abuse and household dysfunction is common, and their effects are cumulative.

In Oklahoma, there is no data to track co-occurrence of abuse or dysfunction on individual children and families, i.e. whether a single child is victimized in multiple ways. Oklahoma KIDS COUNT has gathered county-by-county data to determine which counties report high incidents of adverse childhood experiences.



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	Respondents were asked whether their family made them feel special, loved, and if their family was a source of strength, support, and protection. 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.
Physical Neglect	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. 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.

## child maltreatment: state level findings

In 2005, over 13,300 Oklahoma children were confirmed victims of child abuse and neglect. This is an increase of almost 1,000 children from the year before, and represents a dramatic reversal in the trends of steady decline in child abuse since reaching an all-time high in 1998.

Contrary to common belief, the overwhelming majority of confirmed cases of maltreatment—82%—are due to neglect. Only 5% are due to sexual abuse, and the remaining 13% are due to physical abuse. The most common form of neglect stems from substance abuse. Over half of the perpetrators are mothers; one-quarter are fathers. Most of the rest are relatives. Even in sexual abuse cases, the majority of the abusers are people the child knows.

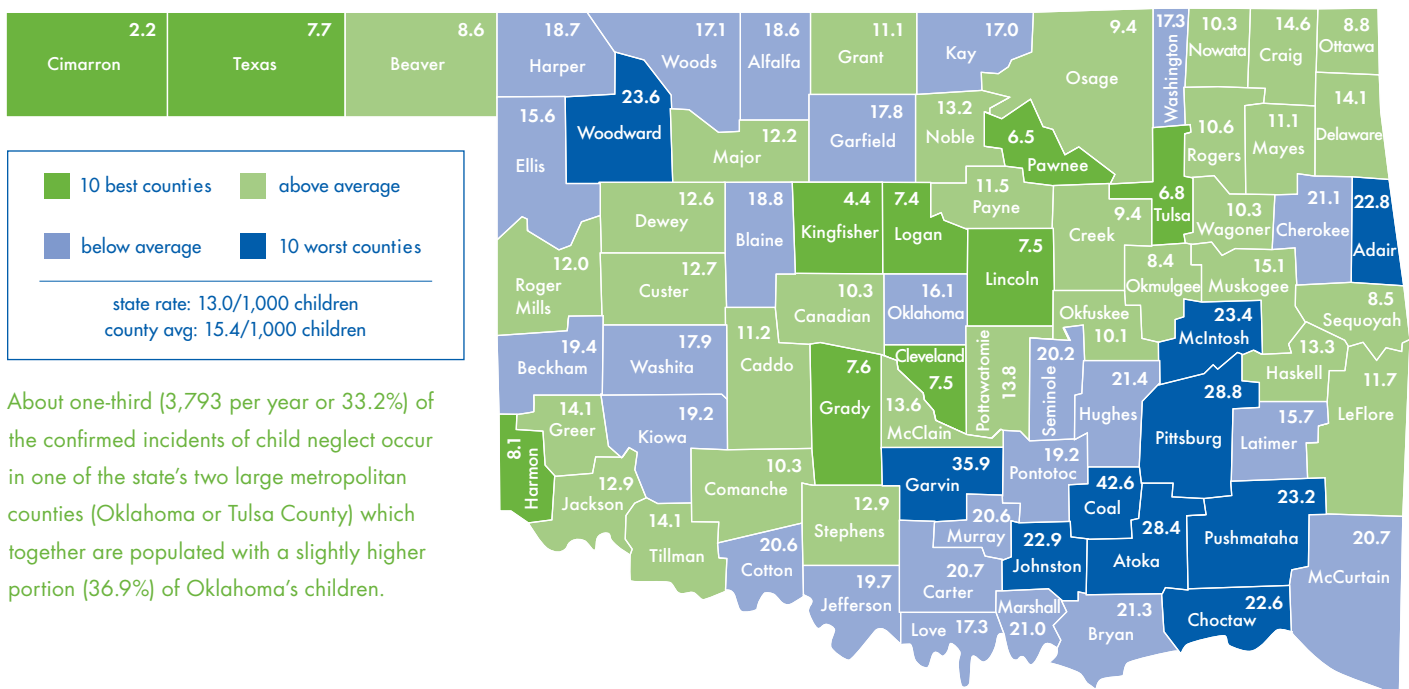
## implications of ACE study

Children who suffer from abuse or neglect develop a range of maladaptive and self-destructive behaviors and thoughts by trying to cope with the abuse and understand why it is happening. In addition, children are forced into a situation of having to “hide the family secret,” preventing them from having real relationships with their caretakers. The physical stress of multiple exposures to abuse or trauma can cause a state of hyper-arousal, leaving a child vulnerable to permanent physiological changes and at a higher risk for illness. Throughout their childhoods, those who suffer abuse and neglect may also suffer serious developmental delays, causing academic

and social difficulties, which in turn evolve into high risk behaviors.

The researchers of the ACE Study report that the high risk behaviors adopted by these children increase their risk for future adult disease conditions that are among the leading causes of mortality in Oklahoma. These include heart disease, cancers, chronic lung disease (COPD) and diabetes. As of 2005, Oklahoma ranked first in the nation for deaths due to heart disease. In hospitalizations alone, the high morbidity of cardiovascular disease costs Oklahoma residents more than \$2.5 billion annually.

## emotional & physical neglect, confirmed child neglect (FY2003–FY2005)



About one-third (3,793 per year or 33.2%) of the confirmed incidents of child neglect occur in one of the state’s two large metropolitan counties (Oklahoma or Tulsa County) which together are populated with a slightly higher portion (36.9%) of Oklahoma’s children.

## policy opportunities

### prevent

Invest in young children and families to prevent adverse childhood experiences:

- Fund parent education and child abuse prevention programs
- Provide enriching after school and positive youth development programs
- Increase access to substance abuse prevention and treatment programs
- Increase mental health treatment for families
- Support domestic violence prevention programs

Develop interdisciplinary approaches to treat families  
 Develop curricula for identifying ACEs as underlying causes of disease

### diagnose

Create new diagnostic tools and training for health professionals:

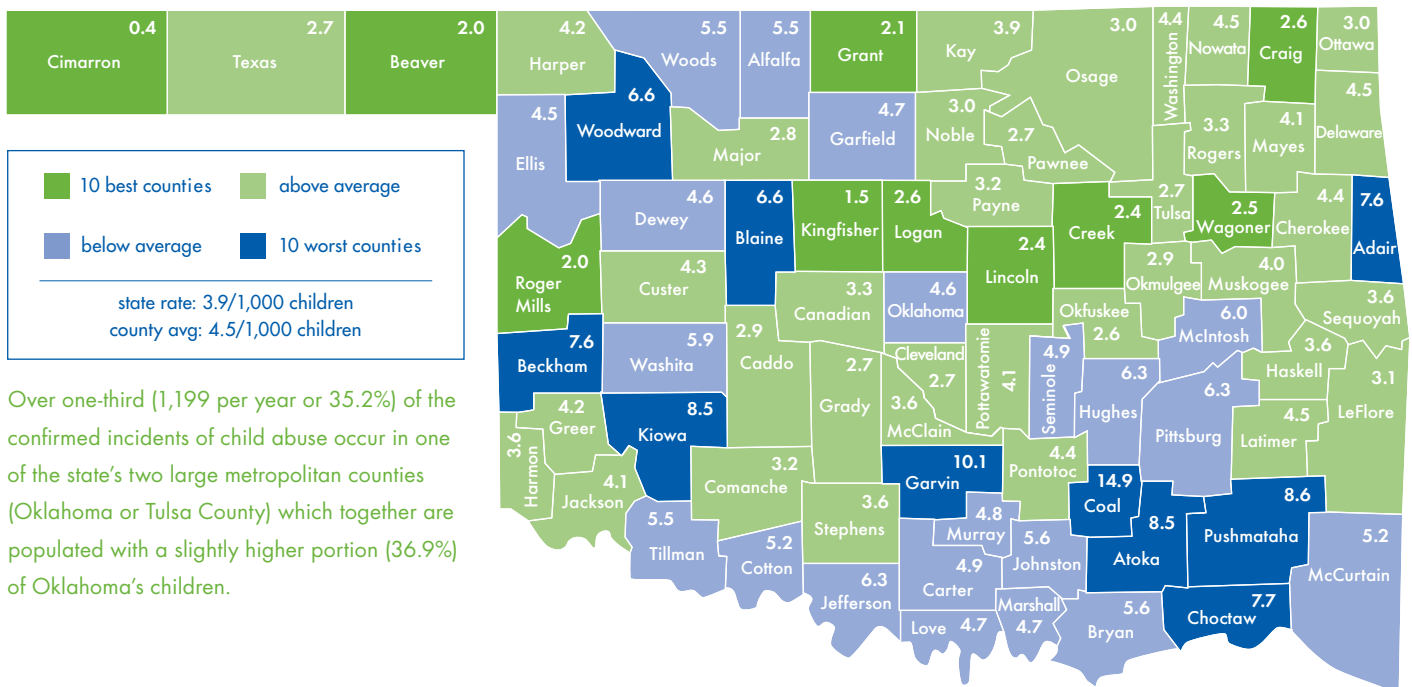
- Continue researching optimal methods to translate research into practice

### treat

Provide interventions for young people and their families, especially those at highest risk, i.e. families in crisis and/or children in need of immediate services:

- Increase adolescent substance abuse and mental health treatment services
- Increase suicide prevention and intervention services

## physical & sexual abuse, confirmed child abuse (FY2003–FY2005)



Over one-third (1,199 per year or 35.2%) of the confirmed incidents of child abuse occur in one of the state's two large metropolitan counties (Oklahoma or Tulsa County) which together are populated with a slightly higher portion (36.9%) of Oklahoma's children.

# abuse & neglect index

county name	Child Maltreatment Abuse ACE <i>Psychological, Physical &amp; Sexual Abuse</i>				Child Maltreatment Neglect ACE <i>Emotional &amp; Physical Neglect</i>				county name	Child Maltreatment Abuse ACE <i>Psychological, Physical &amp; Sexual Abuse</i>				Child Maltreatment Neglect ACE <i>Emotional &amp; Physical Neglect</i>			
	three year number FY2003-2005 confirmed child abuse	average annual confirmed FY2003-2005 child abuse	three year abuse rate /1000 children FY2003-2005	abuse rank	three year number FY2003-2005 confirmed child neglect	average annual confirmed FY2003-2005 child neglect	three year neglect rate /1000 children FY2003-2005	neglect rank		three year number FY2003-2005 confirmed child abuse	average annual confirmed FY2003-2005 child abuse	three year abuse rate /1000 children FY2003-2005	abuse rank	three year number FY2003-2005 confirmed child neglect	average annual confirmed FY2003-2005 child neglect	three year neglect rate /1000 children FY2003-2005	neglect rank
STATE TOTALS	10,209	3,403	3.9		34,300	11,433	13.0		Latimer County	34	11	4.5	45	119	40	15.7	44
Adair County	145	48	7.6	70	437	146	22.8	69	Le Flore County	117	39	3.1	23	439	146	11.7	27
Alfalfa County	17	6	5.5	59	57	19	18.6	52	Lincoln County	59	20	2.4	6	187	62	7.5	6
Atoka County	81	27	8.5	73	272	91	28.4	74	Logan County	64	21	2.6	9	184	61	7.4	5
Beaver County	8	3	2.0	3	35	12	8.6	13	Love County	30	10	4.7	52	110	37	17.3	49
Beckham County	105	35	7.6	71	267	89	19.4	57	McClain County	76	25	3.6	28	290	97	13.6	36
Blaine County	53	18	6.6	69	151	50	18.8	54	McCurtain County	144	48	5.2	56	572	191	20.7	62
Bryan County	150	50	5.6	62	571	190	21.3	66	McIntosh County	78	26	6.0	64	306	102	23.4	72
Caddo County	71	24	2.9	18	275	92	11.2	25	Major County	14	5	2.8	17	60	20	12.2	29
Canadian County	240	80	3.3	27	736	245	10.3	18	Marshall County	44	15	4.7	51	197	66	21.0	64
Carter County	172	57	4.9	54	724	241	20.7	63	Mayes County	122	41	4.1	36	332	111	11.1	24
Cherokee County	146	49	4.4	43	694	231	21.1	65	Murray County	42	14	4.8	53	179	60	20.6	60
Choctaw County	90	30	7.7	72	265	88	22.6	68	Muskogee County	212	71	4.0	34	801	267	15.1	42
Cimarron County	1	0	0.4	1	5	2	2.2	1	Noble County	25	8	3.0	22	109	36	13.2	34
Cleveland County	410	137	2.7	14	1,138	379	7.5	7	Nowata County	36	12	4.5	44	83	28	10.3	21
Coal County	68	23	14.9	77	195	65	42.6	77	Okfuskee County	21	7	2.6	11	82	27	10.1	17
Comanche County	300	100	3.2	24	967	322	10.3	20	Oklahoma County	2,402	801	4.6	49	8,356	2,785	16.1	45
Cotton County	25	8	5.2	57	99	33	20.6	61	Okmulgee County	91	30	2.9	19	258	86	8.4	11
Craig County	27	9	2.6	10	152	51	14.6	41	Osage County	99	33	3.0	20	310	103	9.4	15
Creek County	128	43	2.4	7	503	168	9.4	16	Ottawa County	74	25	3.0	21	214	71	8.8	14
Custer County	74	25	4.3	40	217	72	12.7	31	Pawnee County	34	11	2.7	13	82	27	6.5	3
Delaware County	122	41	4.5	46	384	128	14.1	40	Payne County	126	42	3.2	25	453	151	11.5	26
Dewey County	13	4	4.6	48	36	12	12.6	30	Pittsburg County	186	62	6.3	65	854	285	28.8	75
Ellis County	11	4	4.5	47	38	13	15.6	43	Pontotoc County	111	37	4.4	42	486	162	19.2	56
Garfield County	197	66	4.7	50	750	250	17.8	50	Pottawatomie County	206	69	4.1	35	696	232	13.8	37
Garvin County	197	66	10.1	76	704	235	35.9	76	Pushmataha County	74	25	8.6	75	201	67	23.2	71
Grady County	98	33	2.7	16	272	91	7.6	8	Roger Mills County	4	1	2.0	4	24	8	12.0	28
Grant County	7	2	2.1	5	37	12	11.1	23	Rogers County	199	66	3.3	26	649	216	10.6	22
Greer County	13	4	4.2	38	44	15	14.1	39	Seminole County	93	31	4.9	55	381	127	20.2	59
Harmon County	8	3	3.6	30	18	6	8.1	10	Sequoyah County	113	38	3.6	29	269	90	8.5	12
Harper County	9	3	4.2	39	40	13	18.7	53	Stephens County	108	36	3.6	31	386	129	12.9	33
Haskell County	33	11	3.6	32	121	40	13.3	35	Texas County	45	15	2.7	15	128	43	7.7	9
Hughes County	58	19	6.3	67	196	65	21.4	67	Tillman County	37	12	5.5	58	95	32	14.1	38
Jackson County	97	32	4.1	37	303	101	12.9	32	Tulsa County	1,196	399	2.7	12	3,023	1,008	6.8	4
Jefferson County	28	9	6.3	66	88	29	19.7	58	Wagoner County	121	40	2.5	8	496	165	10.3	19
Johnston County	42	14	5.6	61	173	58	22.9	70	Washington County	153	51	4.4	41	602	201	17.3	48
Kay County	141	47	3.9	33	609	203	17.0	46	Washita County	47	16	5.9	63	144	48	17.9	51
Kingfisher County	16	5	1.5	2	47	16	4.4	2	Woods County	26	9	5.5	60	80	27	17.1	47
Kiowa County	58	19	8.5	74	131	44	19.2	55	Woodward County	87	29	6.6	68	312	104	23.6	73

This issue brief is the second in a series describing the impact of adverse childhood experiences on adult health status. These briefs are made possible through Project ACT (All Children can Thrive), a project of the Oklahoma Institute for Child Advocacy funded by INTEGRIS Health, in partnership with Oklahoma KIDS COUNT. All five issue briefs and the Oklahoma KIDS COUNT Factbook will be available online at [www.oica.org](http://www.oica.org) in January of 2007.

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