



The Adverse Childhood Experiences (ACE) Study

ABOUT THE STUDY: What everyone should know!

Over 17,000 Kaiser Permanente members voluntarily participated in a study to find out about how stressful or traumatic experiences during childhood affect adult health. After all the identifying information about the patients was removed, the Centers for Disease Control and Prevention processed the information the patients provided in their questionnaires,

Here's What We Learned:

Many people experience harsh events in their childhood. 63% of the people who participated in the study had experienced at least one category of childhood trauma. Over 20% experienced 3 or more categories of trauma which we call Adverse Childhood Experiences (ACEs).

- 11% experienced emotional abuse.
- 28% experienced physical abuse.
- 21% experienced sexual abuse.
- 15% experienced emotional neglect.
- 10% experienced physical neglect.
- 13% witnessed their mothers being treated violently.
- 27% grew up with someone in the household using alcohol and/or drugs.
- 19% grew up with a mentally-ill person in the household.
- 23% lost a parent due to separation or divorce.
- 5% grew up with a household member in jail or prison.

ACEs seem to account for one-half to two-thirds of the serious problems with drug use. They increase the likelihood that girls will have sex before reaching 15 years of age, and that boys or young men will be more likely to impregnate a teenage girl.

Adversity in childhood causes mental health disorders such as depression, hallucinations and post-traumatic stress disorders.



The more categories of trauma experienced in childhood, the greater the likelihood of experiencing:

- alcoholism and alcohol abuse
- chronic obstructive pulmonary disease (COPD)
- depression
- fetal death
- poor health-related quality of life
- illicit drug use
- ischemic heart disease (IHD)
- liver disease
- risk for intimate partner violence
- multiple sexual partners
- sexually transmitted diseases (STDs)
- smoking
- obesity
- suicide attempts
- unintended pregnancies

If you experienced childhood trauma, you're not alone.

Talk with your family health practitioner about what happened to you when you were a child. Ask for help.

For more information about the ACE Study, email carolredding@acestudy.org, visit www.acestudy.org, or the Centers for Disease Control and Prevention at: <http://www.cdc.gov/NCCDPHP/ACE/>

Adverse Childhood Experiences and Health and Well-Being Over the Lifespan

This chart shows the sequence of events that unaddressed childhood abuse and other early traumatic experiences set in motion. Without intervention, adverse childhood events (ACEs) can result in long-term disease, disability, chronic social problems and early death. 90% of public mental health clients have been exposed to multiple physical or sexual abuse traumas. Importantly, intergenerational transmission that perpetuates ACEs may continue without implementation of interventions to interrupt the cycle.

Adverse Childhood Experiences (Birth to 18)	Impact of Trauma and Adoption of Health Risk Behaviors to Ease Pain of Trauma	Long-Term Consequences of Unaddressed Trauma
<p>Abuse of Child</p> <ul style="list-style-type: none"> Emotional abuse 11% * Physical abuse 28% * Contact sexual abuse 22% <p>Trauma in Child's Household Environment</p> <ul style="list-style-type: none"> Alcohol or drug user by household member 27% Chronically depressed, emotionally disturbed or suicidal household member 17% Mother treated violently 13% Imprisoned household Member 6% Not raised by both biological parents 23% (Loss of parent by separation or divorce, natural death, suicide, abandonment) <p>Neglect of Child</p> <ul style="list-style-type: none"> Physical neglect 19% Emotional neglect 15% <p>*Above types of ACEs are the "heavy end" of abuse. Eg. Emotional: recurrent threats, humiliation, chronic criticism Physical: beating vs spanking Neglect: Lack of basic needs for attachment, survival/growth</p> <p>One ACE category = score of 1.</p> <p>List is limited to ACE study types. Other trauma may include: combat, poverty, street violence, historical, racism, stigma, natural events, persecution etc.</p>	<p>Neurobiologic Effects of Trauma</p> <ul style="list-style-type: none"> Disrupted neuro-development Difficulty controlling Anger - Rage Hallucinations Depression (and numerous other mental health problems - see below) Panic reactions Anxiety Multiple (6+) somatic problems Sleep problems Impaired memory Flashbacks Dissociation <p>Health Risk Behaviors</p> <ul style="list-style-type: none"> Smoking Severe obesity Physical inactivity Suicide attempts Alcoholism Drug abuse 50+ sex partners Repetition of original trauma Self-injury Eating disorders Perpetrate interpersonal violence, aggression, bullying, etc. 	<p>Disease and Disability</p> <ul style="list-style-type: none"> Ischemic heart disease Cancer Chronic lung disease Chronic emphysema Asthma Liver disease Skeletal fractures Poor self-rated health Sexually transmitted disease HIV/AIDS <p>Social Problems</p> <ul style="list-style-type: none"> Homelessness Prostitution Delinquency, violence and criminal behavior Inability to sustain employment Re-victimization: by rape, DV, bullying, etc Compromised ability to parent Negative alterations in self-perception and relationships with others Alterations in Systems of Meaning Intergenerational transmission of abuse Long-term use of multi human service systems, <p>At Annual Cost of: \$103,754,017,492.00</p>

Multiple studies reveal the origin of many mental health disorders may be found in childhood trauma, including Borderline Personality Disorder BPD, Anti-Social Personality Disorder, PTSD, Schizophrenia, Bipolar Disorder, Dissociative Identity Disorder DID, Anxiety Disorders, Eating Disorders including severe obesity, Attention Deficit Hyperactivity Disorder ADHD, Oppositional Defiant Disorder ODD and others.

Sources: *Adverse Childhood Experiences Study* (CDC and Kaiser Permanente, see <http://www.ACEstudy.org>) *The Damaging Consequences of Violence and Trauma* (see <http://www.NASMHPD.org>) and *Trauma and Recovery* (J Herman). Cost data: 2007 Economic Impact Study (PCAA). Chart created by Ann Jennings, PhD. <http://www.TheAnnInstitute.org> Revision: April 6, 2010