

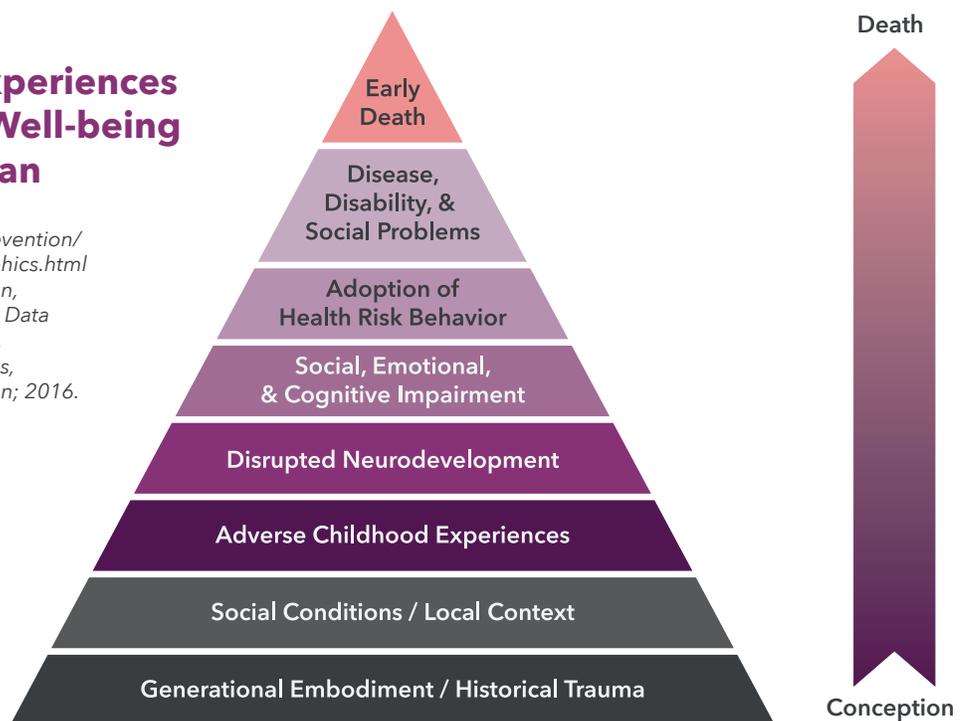
## ABOUT THE ACE STUDY

The Adverse Childhood Experiences (ACE) Study was one of the largest investigations ever conducted on the links between childhood maltreatment and later-life health and well-being; measuring traumatic or stressful life events experienced before age eighteen. In the 1998 Kaiser study, more than 17,000 patients underwent a comprehensive physical examination and chose to provide detailed information about their adverse childhood experiences. Adverse Childhood Experiences (ACEs) were categorized into three groups: abuse, neglect, and household challenges. Each category was further divided into multiple subcategories, with a total of 10 measurable ACEs.

The study found that almost two-thirds of study participants reported at least one ACE, and more than one in five reported three or more ACEs.

## Mechanism by which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan

Source: <https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/ace-graphics.html>  
Centers for Disease Control and Prevention, Kaiser Permanente. *The ACE Study Survey Data [Unpublished Data]*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2016.



## PHILADELPHIA ACES

The findings from the original 1998 Kaiser study were composed of primarily white, middle-class, and highly educated individuals. The Institute for Safe Families (ISF)<sup>1</sup> formed the ACE Task Force in 2012 with an interest in examining the prevalence and impact of ACEs in Philadelphia, an urban city with a socially and racially diverse population. The Philadelphia ACEs Study expanded the survey to measure community-level indicators such as: witnessing violence, living in foster care, bullying, experiencing racism or discrimination, or feeling unsafe in your neighborhood.

In Philadelphia, where roughly a quarter of residents live in poverty, researchers found that almost seven in ten adults had experienced one ACE and one in five had experienced four or more. Researchers found that almost 40 percent of Philadelphians had experienced four or more of these expanded, community-level ACEs.

## TYPES OF ACES

### ABUSE

Emotional Abuse  
Physical Abuse  
Sexual Abuse

### NEGLECT

Emotional or Physical

### HOUSEHOLD CHALLENGES

Intimate Partner Violence  
Substance Abuse  
Mental Illness  
Separation/Divorce  
Incarcerated Household Member

### PHILADELPHIA ACES

Neighborhood Safety/  
Neighborhood Trust  
Bullying  
Witness Violence  
Racism  
Foster Care

**As the number of ACEs increases, so does the risk for negative health outcomes.**



ACE scores of 4 or more resulted in four times the risk of emphysema or chronic bronchitis; over four times the likelihood of depression; and 12 times the risk of suicide. ACE scores were directly related with early initiation of smoking and sexual activity, adolescent pregnancy, and risk for intimate partner violence.

## LASTING IMPACTS/POSSIBLE RISK OUTCOMES

The ACE Study findings suggest that these experiences are major risk factors for the leading causes of illness and death as well as poor quality of life in the United States.



### INJURY

- Traumatic Brain Injury
- Fractures
- Burns



### CHRONIC DISEASE

- Cancer
- Diabetes
- Heart disease



### INFECTIOUS DISEASE

- HIV
- STDs



### MENTAL HEALTH

- Depression
- Anxiety
- Suicide attempts
- PTSD



### MATERNAL HEALTH

- Unintended pregnancy
- Pregnancy complications
- Fetal death



### RISKY BEHAVIORS

- Alcohol Abuse
- Substance Abuse
- Unsafe Sex

Sources: <https://www.cdc.gov/violenceprevention/childabuseandneglect/cestudy> | <http://www.philadelphiaaces.org/philadelphia-ace-survey>