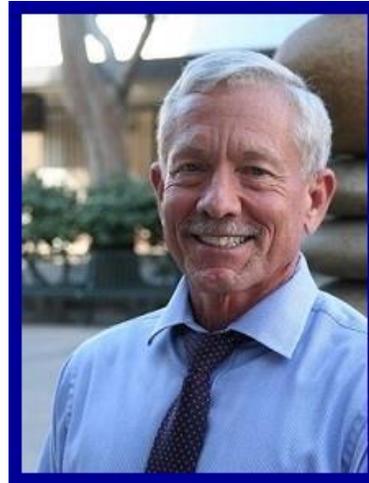


To Your HEALTH Fresno County

Highlighting public health issues and ways to improve personal, family, neighborhood and community health



ACEs and Public Health

September 27, 2016

Eighteen years ago the Centers for Disease Control and Prevention (CDC), along with Kaiser Permanente, published a study which demonstrated, what today seems fairly intuitive to most of us, and that is that childhood maltreatment not only results in the immediate health consequences of injury and illness, but also leads to increased risk of chronic disease and early death in adulthood.

The now famous Adverse Childhood Experiences (ACE) Study of 1998 found, “a strong graded relationship between the breadth of exposure to abuse or household dysfunction during childhood and multiple risk factors for several of the leading causes of death in adults.”¹

The study investigated the responses to ten questions within seven categories of adverse childhood experiences (psychological, physical, or sexual abuse; violence against mother; living with household members who were substance abusers, mentally ill or suicidal, or ever incarcerated) and compared these responses to measures of adult risk behavior, health status, and disease.

Compared to those who had experienced none, individuals who had experienced four or more categories of childhood trauma exposure were:¹

- 4 to 12 times more likely to experience alcoholism, drug abuse, and depression, and to attempt suicide.
- 2 to 4 times more likely to smoke, rate their health as poor, contract sexually transmitted disease, and have fifty or more sexual intercourse partners.
- 1.4 to 1.6 times more likely to be physically inactive and severely obese.
- 1.6 to 3.9 times more likely to develop heart disease, cancer, stroke, chronic bronchitis, and diabetes.

Parallel studies have found that the toxic stress derived from these experiences physically damages a child’s developing brain by impairing cell growth, interfering with the formation of health circuitry, and altering the neural structure of the brain itself.^{2,3} Additionally, stress hormones from chronic stress keep these children in perpetual fight, flight, or freeze mode, making it difficult to learn and to develop healthy relationships.³ “To relieve their anxiety, depression, guilt, shame, and/or inability to focus, they turn to easily available biochemical solutions – nicotine, alcohol, marijuana, methamphetamine – or

activities in which they can escape their problems – high risk sports, proliferation of sex partners, and work/over-achievement.”³

This toxic stress, defined as the excessive or prolonged activation of the physiologic stress response systems in the absence of the buffering protection afforded by stable, responsive relationships, also adversely affects the cardiovascular, immune, and metabolic regulatory systems, and leads to abnormal inflammatory responses, all of which lead to chronic disease.^{3,4}

What makes this even more alarming is the pervasiveness of these traumatic experiences. In the study, of 17,000 mostly white, middle and upper class college educated San Diegans with good jobs and health coverage through Kaiser Permanente, more than half experienced one or more adverse childhood experiences, and 6.2% reported four or more.^{1,3} In 2007, public child protective services agencies received reports of alleged maltreatment involving 5.8 million children (more than six times the number of children enrolled in all Head Start programs that year).² And this probably substantially undercounts the total population of children who experience abuse or neglect.

Worse still, experiences of childhood maltreatment are more common in households with lower income and parental education and who live in communities with greater concentrations of disadvantage, and these exposures effect behavioral, educational, and economic outcomes that exacerbate and sustain socioeconomic, racial, and ethnic disparities across generations.^{2,4}

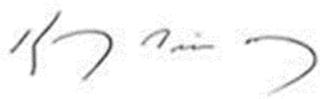
With the evidence showing that a healthier population begins in childhood, preventing maltreatment can be a powerful lever to move the population towards greater health and well-being.²

This primary prevention of adverse childhood experiences will be difficult, but through the collective impact of the [Fresno County Pillars of Public Health](#) we can bring about the societal changes required to improve the quality of family and household environments during childhood, and thus severely limit these exposures and their distressing individual and public health consequences.¹

I can imagine, like Doctors Francis Zimmerman and James A. Mercy, in their article A Better Start, “a community where all of the adults who interact with children – parents, family members, child care providers, teachers, doctors, nurses, clergy, and neighbors – actively engage in preventing child maltreatment before an incident of abuse or neglect occurs, ... a community where there is a wide continuum of prevention activities that extends well beyond providing direct services to individual families; a continuum that includes public education efforts to change social norms and behavior, neighborhood activities that engage parents, and public policies and institutions that support families.”²

Find your ACE score here: <https://acestoohigh.com/got-your-ace-score/>

Here's to your health!



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Please join me on Facebook, where I will keep the community informed on all Public Health issues and ways to improve personal, family and community health.

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Citations:

- 1) <http://www.theannainstitute.org/ACE%20folder%20for%20website/4RCH.pdf>
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- 3) <https://acestoohigh.com/got-your-ace-score/>
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