Adverse Childhood Experience ACES

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The ACE Study Summary of Findings:



- Adverse Childhood Experiences (ACEs)
 are very common, but largely unrecognized.
- ACEs are strong predictors of later death, disease, health risks, social functioning, well-being, and medical care costs.
- ACEs are the basis for much of adult medicine and of many major public health and social problems.
- Adverse childhood experiences are interrelated, not solitary.
- This combination makes Adverse Childhood Experiences
 the prime determinant of the health, social, and economic well-being of our nation.

Demographics of Research Participants

- Residents: 17,000 from San Diego, CA
- Mean Age: 56 years (range 19 92)
- Gender: Female 52.1%

 Male 47.9%
- Major Ethnic Group: White 79.4%
- Education: 43% college graduates
 6% did NOT graduate H.S.

ACES Personal Abuse

- Verbal
- Physical
- Sexual
- Psychological
 - Emotional Neglect
 - Catastrophic Experience
 - Abandonment

ACES Family Dysfunction

- Substance Abuse
- Mental Illness
- Domestic Violence
- Member of Household Imprisoned

Health Behavior Risk Factors

- Overeating (obesity)
- Smoking
- Drinking
- Drug Use
- Attempted Suicide
- Sexual Promiscuity (50+ partners)

Adverse Childhood Experiences Score

Number of categories (not events) is summed...

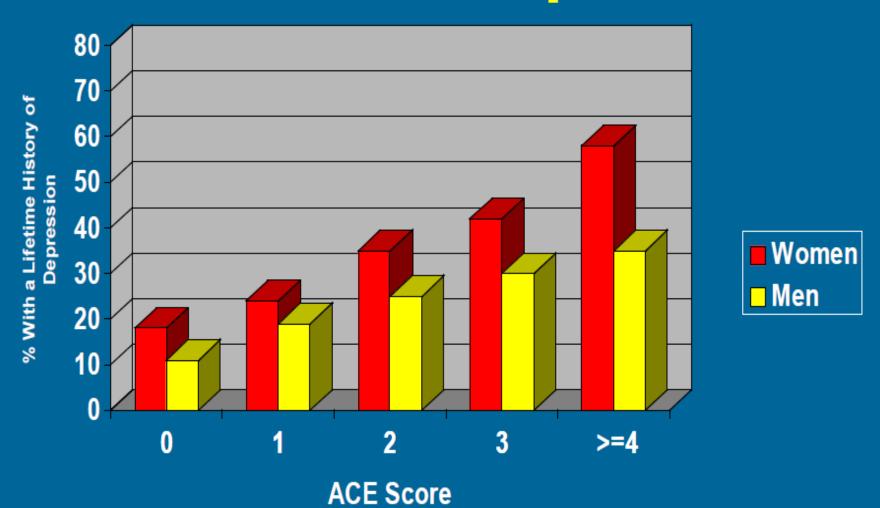
ACE Score	Prevalence
0	33%
1	25%
2	15%
3	10%
4	6%
5 or more	11%*



- Two out of three experienced at least one category of ACE.
- If any one ACE is present, there is an 87% chance at least one other category of ACE is present, and 50% chance of 3 or >.
- * Women are 50% more likely than men to have a Score >5.

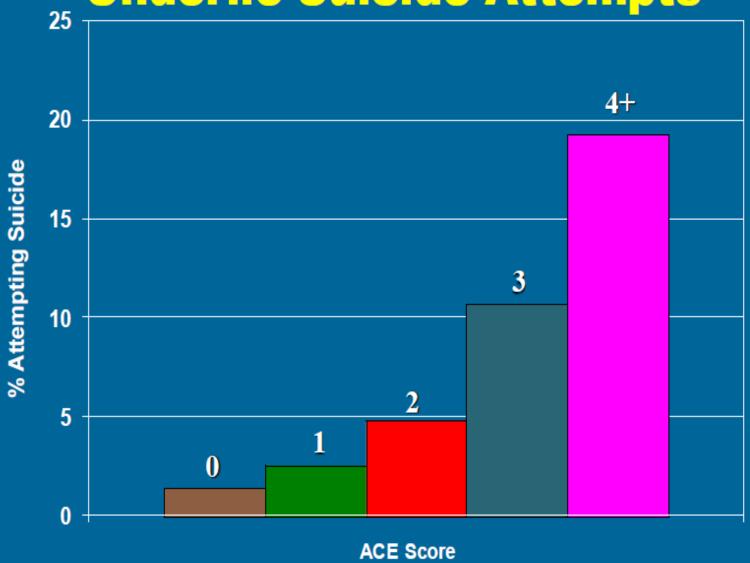
Well-being

Childhood Experiences Underlie Chronic Depression

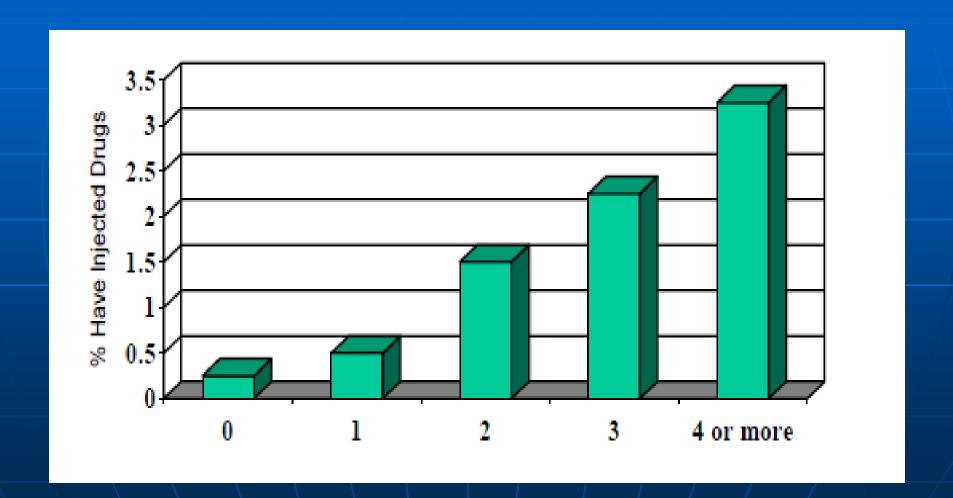


Well-being

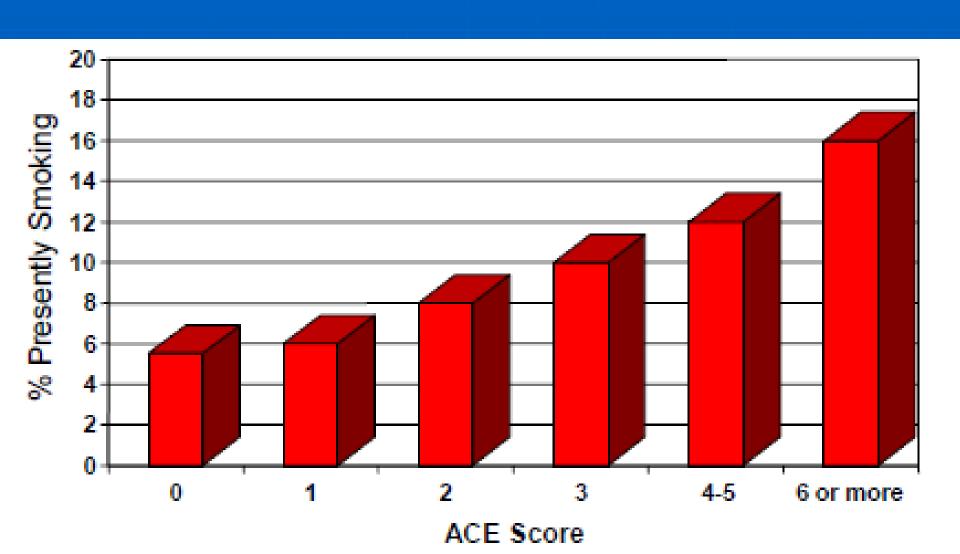
Childhood Experiences Underlie Suicide Attempts



ACE Score vs. Intravenous Drug Use



ACE Score vs. Smoking



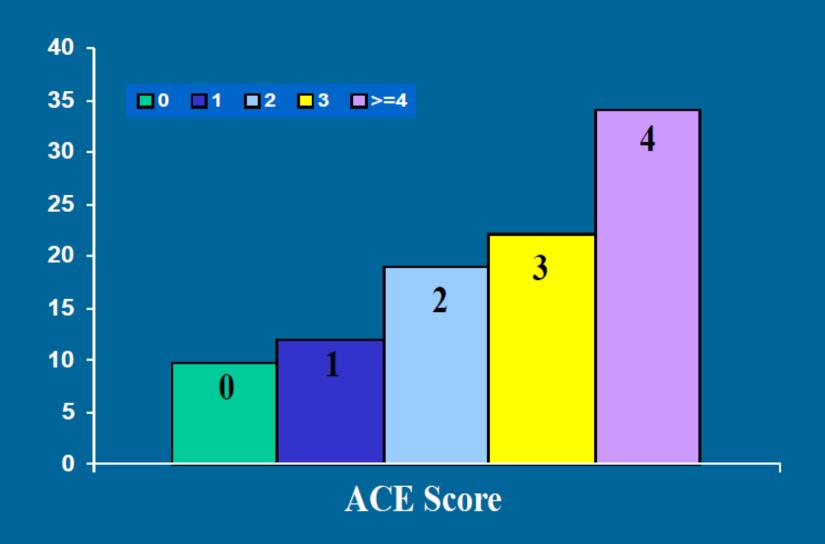
Health Risks

Childhood Experiences vs. Adult Alcoholism



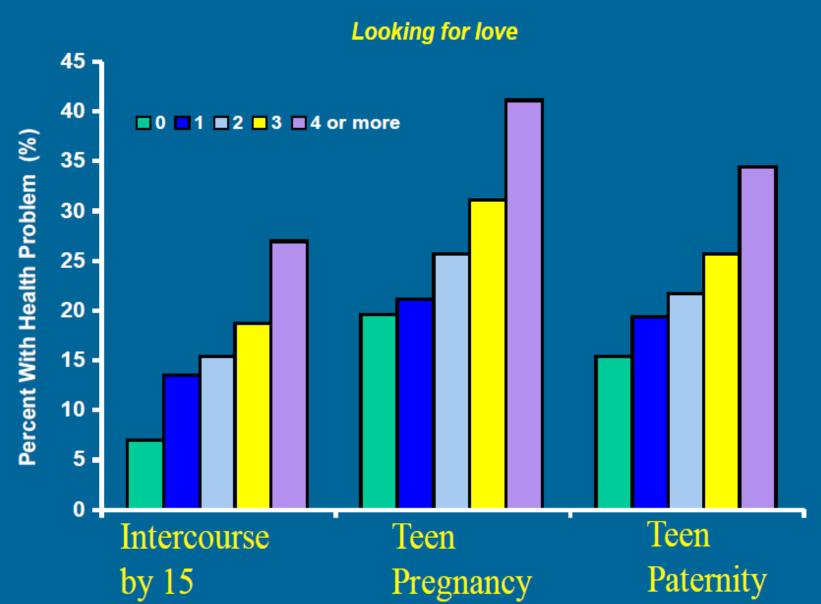
Well-being

ACE Score and Impaired Memory of Childhood



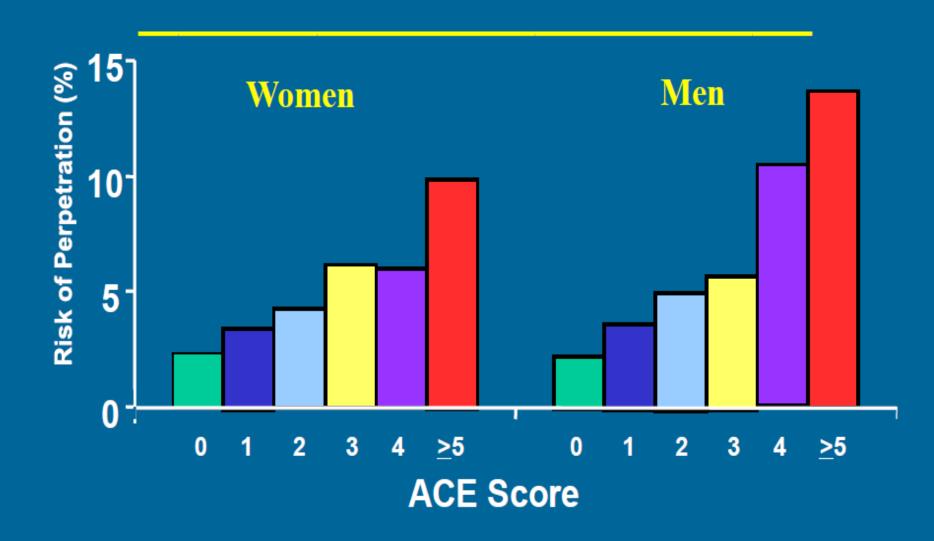
Social function

ACE Score and Teen Sexual Behaviors



Social function:

ACE Score and the Risk of *Perpetrating* Domestic Violence



Estimates of the Population Attributable Risk* of ACEs for Selected Outcomes in Women

	PAR
Alcoholism	65%
Drug abuse	50%
IV drug use	78%

^{*}That portion of a condition attributable to specific risk factors

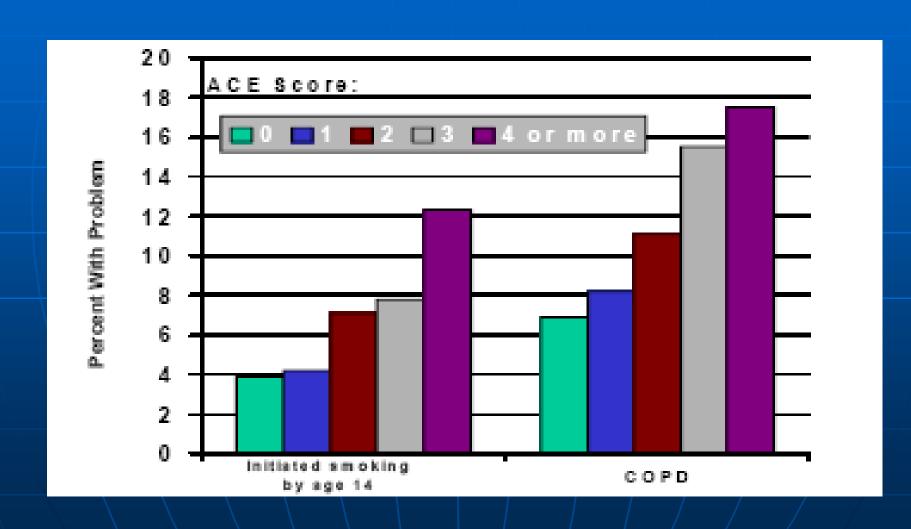
4 or more ACES

- 1220% more likely to attempt suicide
- 1030% more likely to be I.V. drug users
- 740% more likely to be alcoholics
- 460% more likely to suffer depression
- 220% more likely to smoke
- 160% more likely to be severely obese

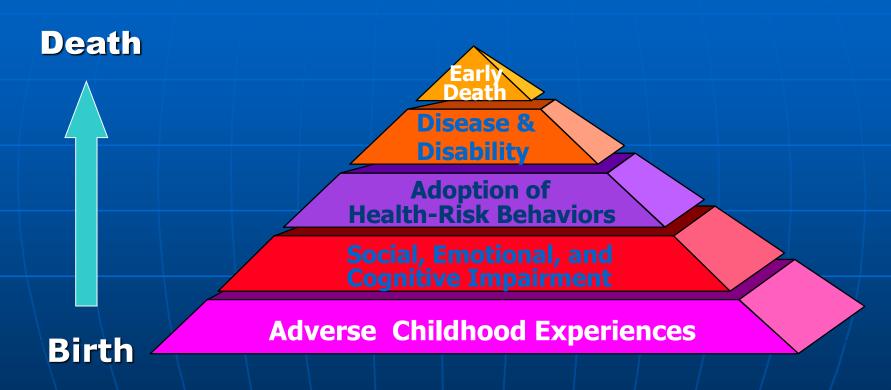
Resultant Organic Diseases

- Heart Disease
- Cancer
- Stroke
- Chronic Bronchitis/Emphysema
- Diabetes
- Skeletal Fracture
- Hepatitis
- Self-rated Fair or Poor Health

ACE Score vs. COPD



The True Nature of Preventive Medicine



Mechanisms By Which Adverse Childhood Experiences Influence Adult Health Status

Hardwired for Anticipated World

Dangerous World

NEUTRAL START BRAIN

Prepares for anticipated world

World with Challenges & Support

POSITIVE STRESS

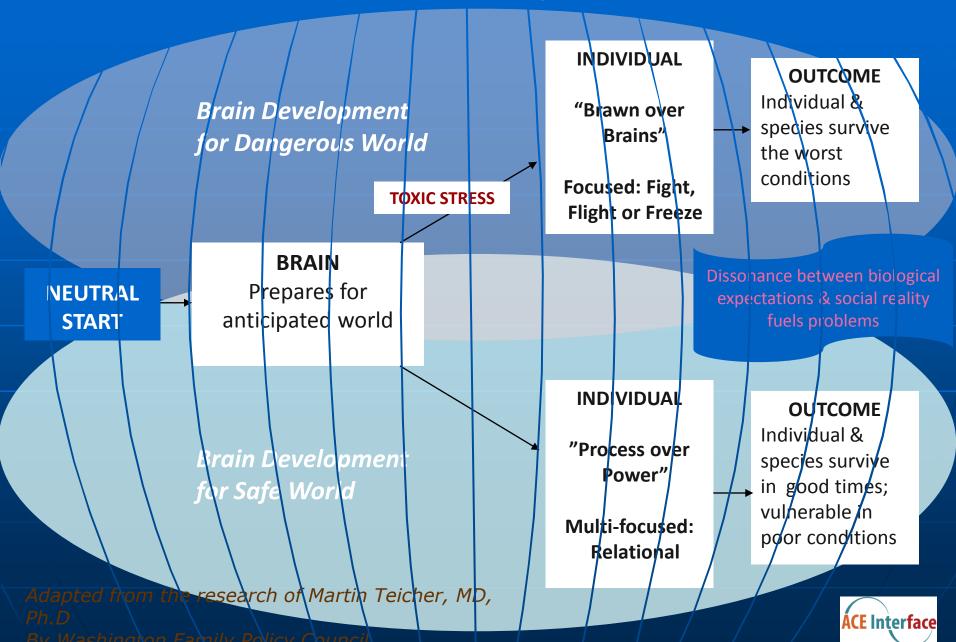
→ Stress is buffered by adult protection & nurturance

BIOLOGY &
SOCIETAL
EXPECTATIONS
ALIGN

Safe World

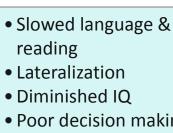


Hardwired for Anticipated World



The Fast Track to Poverty

EARLY TRAUMA & STRESS development, traits & behaviors Predictable patterns of brain



- Poor decision making skills
- Memory Problems
- Attention problems
- ADD
- ADHD
- Aggressive behavior
- Social isolation among peers
- Poor understanding of social cues = conflict

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prescription drugs

Alcohol, tobacco, illicit &

Significant risk of early use/abuse of:

Special education

- School failure
- Dropping out

- Suspension
- Expulsion
- Delinquency
- Dropping out

- Low-wage jobs
- Unemployment
- Public Assistance
- Prison
- Chronic health problems
- Debilitating mental health

ACE Interface

ACEs and Ability to Engage in Work/Life Activities

0

Attributable to ACEs:

Disability-Related Days when Can't Do Usual Activities

Worker Injury

Work-related Illness

Drugs/Alcohol

Hopelessness

Health Limits Activity

Serious Job Problems

Serious Financial Problems



≥ 3

Number of ACE Categories

≥ 6

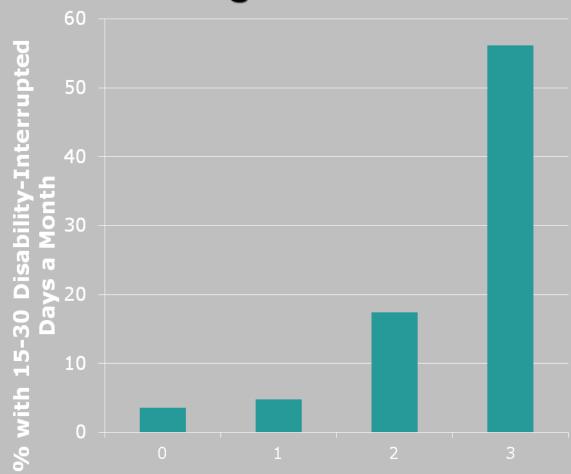


Cascade Effect: Difficulty with Daily Functioning

Adults with ≥3 ACEs Plus

Major Stress Categories:

- 1. Homelessness
- 2. Incarceration
- 3. Chronic illness
- 4. Separation/Divorce
- 5. Severe Depression
- 6. Work-related Injury/



Number of Major Stress Categories

During Adulthood

Added to ACE Score of ≥3

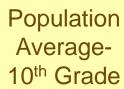
Washington School Classroom (30 Students)

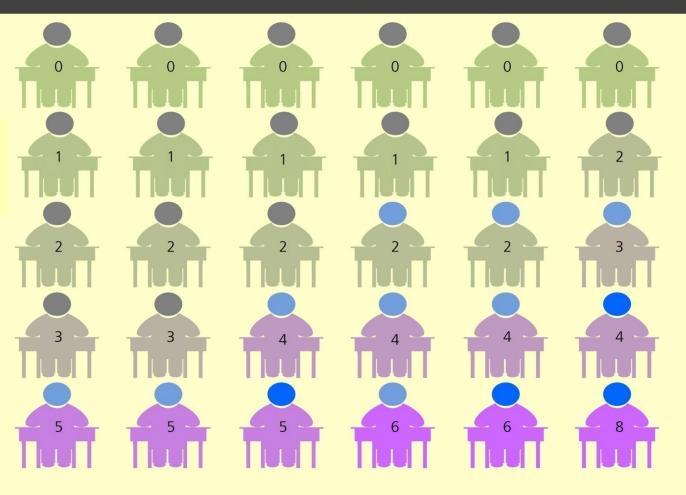
Adverse Childhood Experiences (ACEs)

6 students with no ACE
5 students with 1 ACE
6 students with 2 ACEs
3 students with 3 ACEs
7 students with 4 or 5 ACEs
3 students with 6 or more ACEs

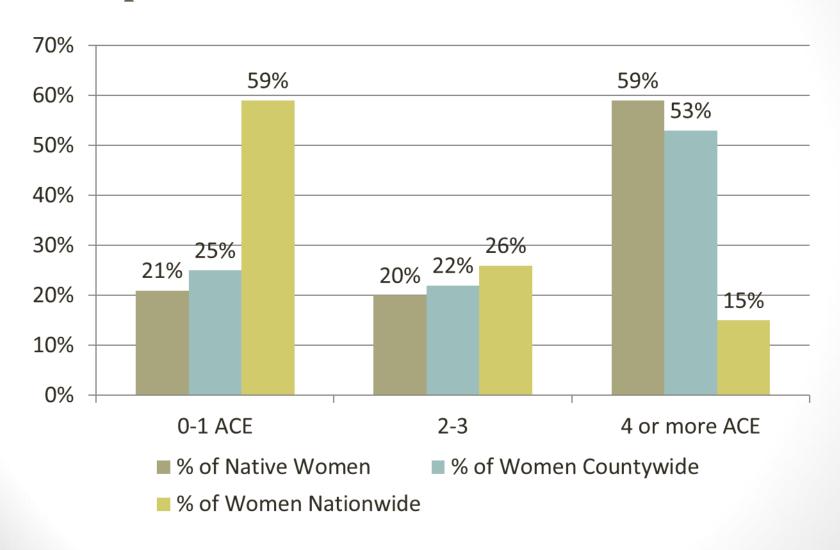
58% (17) students with <u>no</u> exposure to physical abuse or adult to adult violence 29% (9) of students exposed to physical abuse or adult to adult violence

13% (4) of students exposed to physical abuse <u>and</u> adult to adult violence





Lake County ACE Scores for Women Compared with National Results



What Now

- Complete the ACE self-assessment questionnaire
- If you have an ACE
 - Ask: "How Did It Affect My Later Life?"
 - Confide in Someone
- Be Open and Supportive if Someone Confides in You

"The past is never dead.

It's not even the past."

William Faulkner

