

# UNDERSTANDING

Adverse Childhood Experiences

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Building Self-Healing Communities



01/12/14

**NEWS**

## Early Adversity Increases Physical, Mental, Behavioral Problems, Scientists Report



Dr. Robert Anda & Dr. Vincent Felitti  
Investigators

Centers for Disease Control & Prevention,  
Kaiser Permanente Study

Over 17,000 study participants

The ACE Study confirms, with scientific evidence, that adversity early in life increases physical, mental and behavioral problems later in life.

# HUMAN NERVOUS SYSTEM

Nervous system

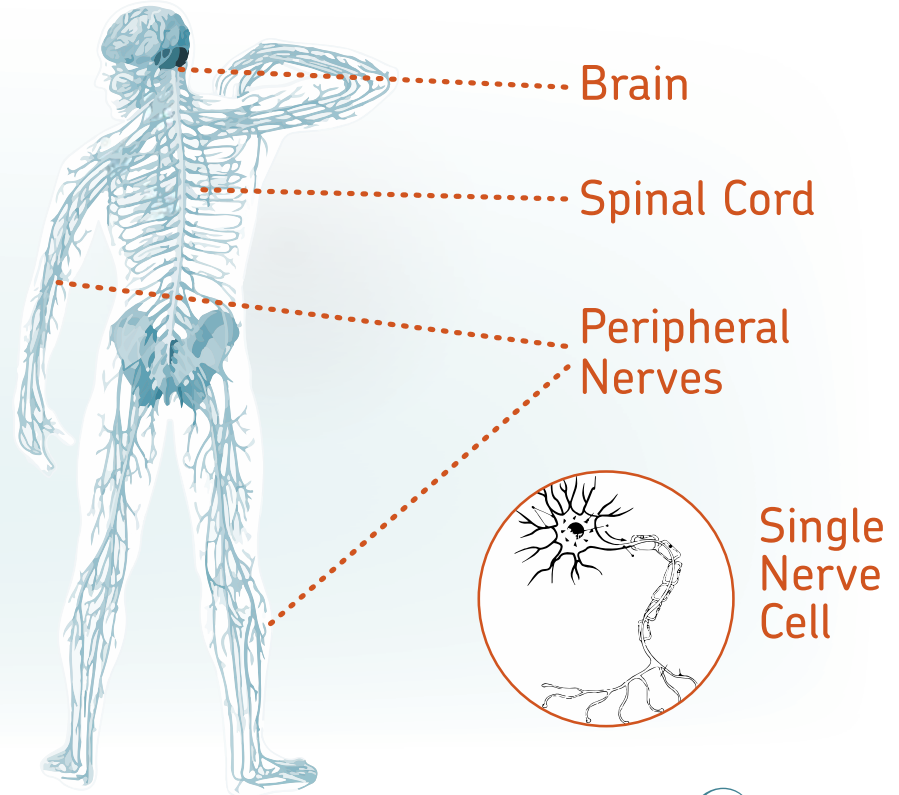
ORCHESTRATES BODY  
FUNCTIONS & PERCEPTIONS

Neuroscience

HELPS US UNDERSTAND WHY

**A C E S**

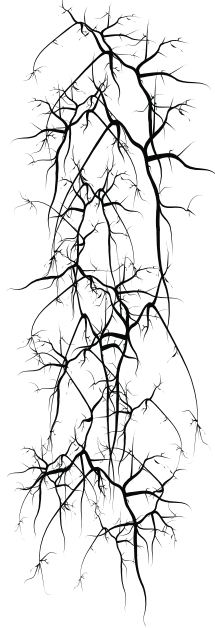
ARE SO POWERFUL



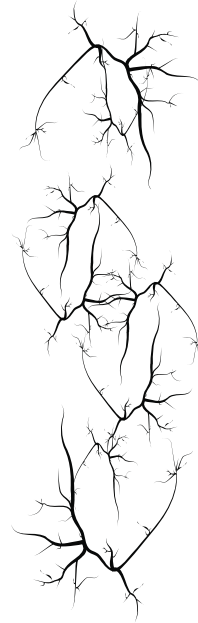
# SYNAPTIC DENSITY



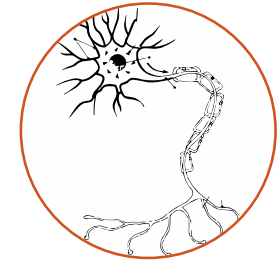
At Birth



Elementary Age



Puberty



Single  
Neuron

CONCEPTION



Danger

Fight  
Flight  
Freeze

Survive  
Worst  
Conditions

Childhood Experience

Adaptation

Adult Functioning




Safety

People  
Process  
Possibility

Survive Best  
Conditions -  
*Vulnerable in  
Worst*





What kind of situations might be a good match for a person who tends to be edgy, hypervigilant, emotionally detached, or quick to act?

# ADAPTATIONS VS EXPECTATIONS

WHEN BIOLOGY

collides

WITH SOCIAL  
EXPECTATIONS  
we run into

**TROUBLE**



EXPERIENCE & ADAPTATION  
sensitive periods  
**Cause-Effect**





# STRESS

Interpretations Can Differ

set points in place by  
EARLY ADULTHOOD



At Birth

SYNAPTIC DENSITY



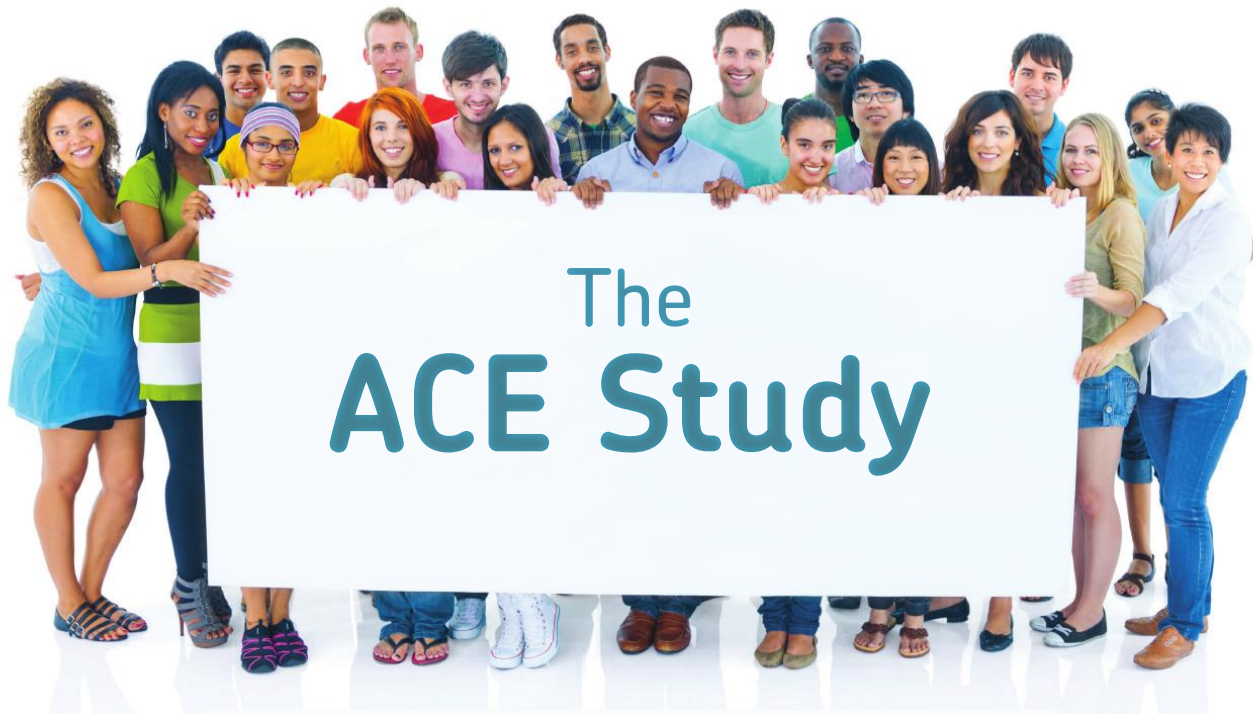
Elementary Age





have a collective  
**CHOICE**









## FINDING MORE CONNECTIONS

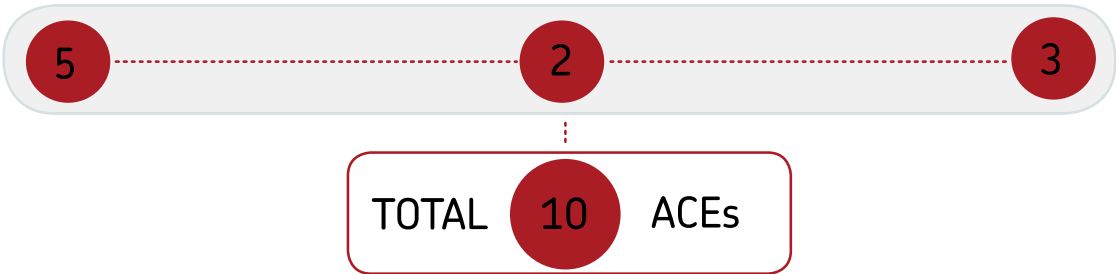
how multiple forms of **childhood adversity** can affect many important **PUBLIC HEALTH PROBLEMS**

# Adverse Childhood Experiences ARE COMMON

Household Dysfunction	
Substance Abuse	27%
Parental Sep/Divorce	23%
Mental Illness	17%
Battered Mothers	13%
Criminal Behavior	6%

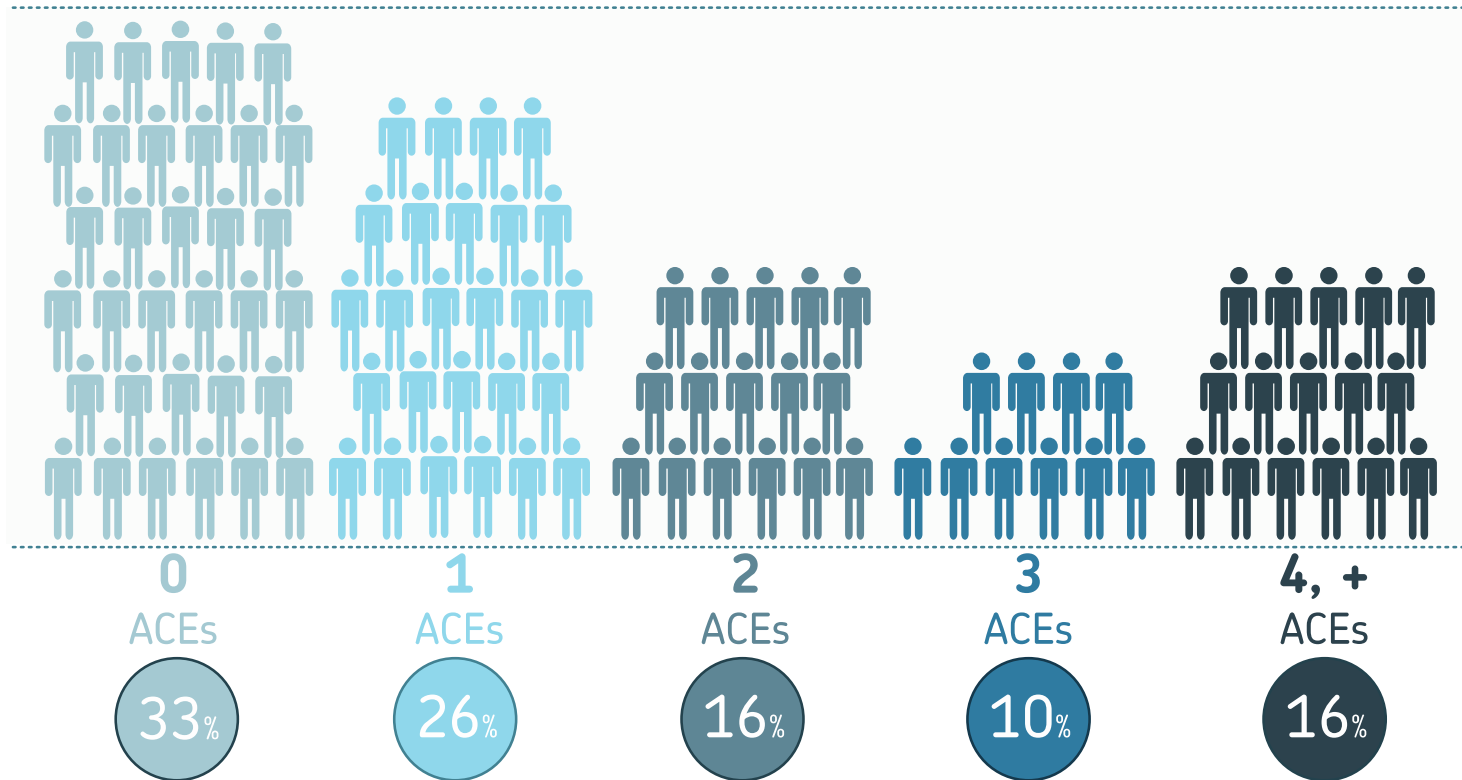
Neglect	
Emotional	15%
Physical	10%

Abuse	
Emotional	11%
Physical	28%
Sexual	21%

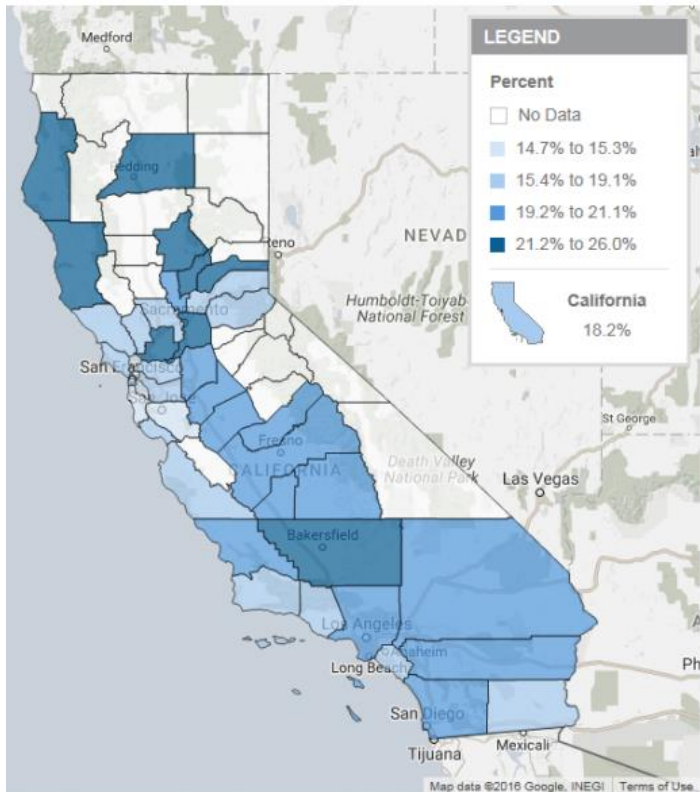




# ACE Score = Number of ACE Categories



ACE Scores Reliably Predict Challenges During the Life Course



## Children With Two Or More Adverse Experiences (Parent Reported): 2011-2012

**Sonoma County : 18.8%**

California: 18.2%

Source: Child and Adolescent Health Measurement Initiative, Data Resource Center for Child and Adolescent Health, Advancing data-in-action partnerships for children and children with special health care needs in California counties and cities using synthetic estimation from the 2011/12 National Survey of Children's Health and 2008-2012 American Community Survey (Jun. 2016).



# Prevalence of Adverse Childhood Experiences (Adult Retrospective): 2008-2013

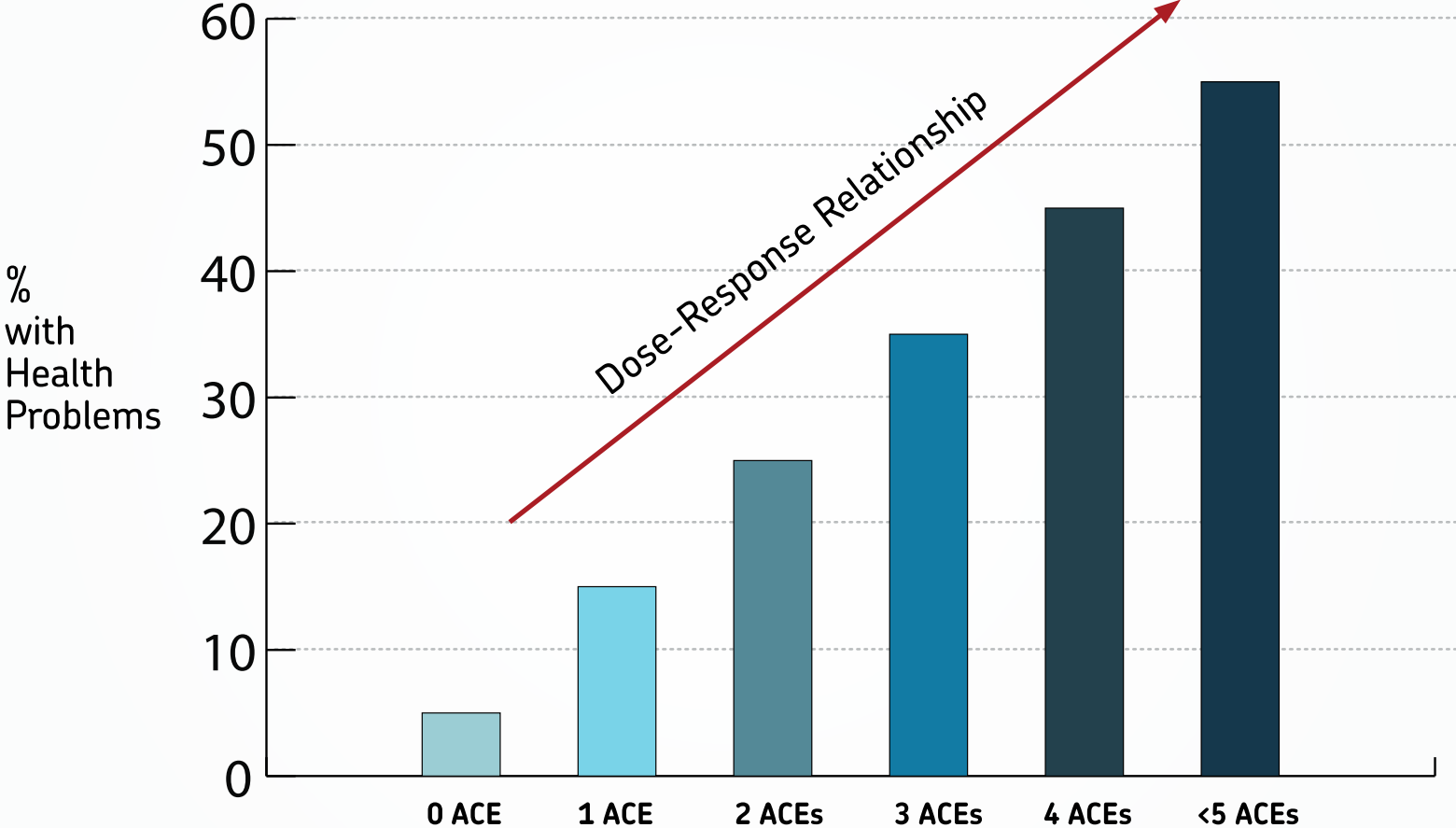
California	Percent		
Number of ACEs	Households with Children	Households without Children	All Households
0 ACEs	36.8%	40.8%	39.0%
1-3 ACEs	46.7%	43.9%	45.1%
4 or More ACEs	16.5%	15.3%	15.9%

Sonoma County	Percent		
Number of ACEs	Households with Children	Households without Children	All Households
0 ACEs	LNE	38.5%	37.5%
1-3 ACEs	LNE	39.2%	40.9%
4 or More ACEs	LNE	22.3%	21.6%

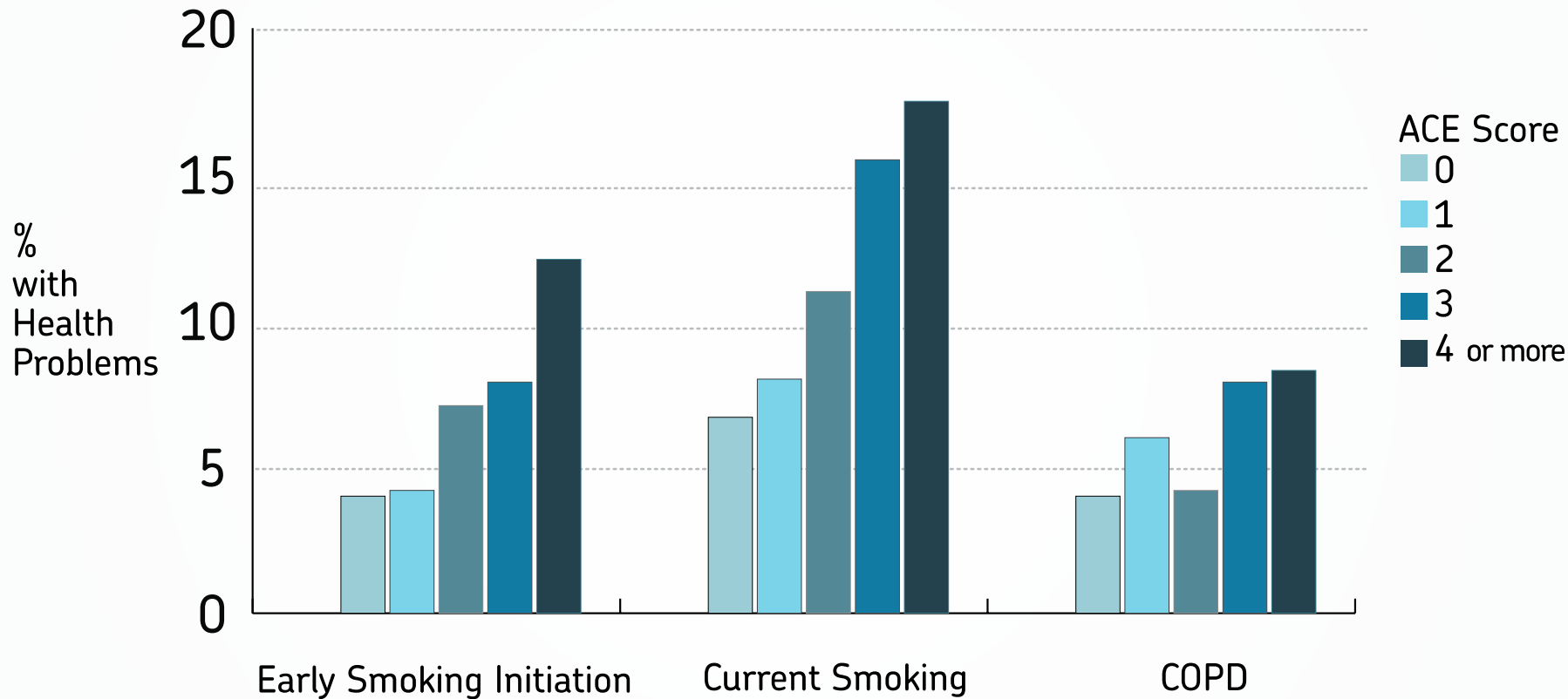
**Data Source:** Rodriguez, D., et al. (2016). *Prevalence of adverse childhood experiences by county, California Behavioral Risk Factor Surveillance System 2008, 2009, 2011, and 2013*. Public Health Institute, Survey Research Group.



# ACE Score and Health Problems



# ACEs, Smoking and Lung Disease







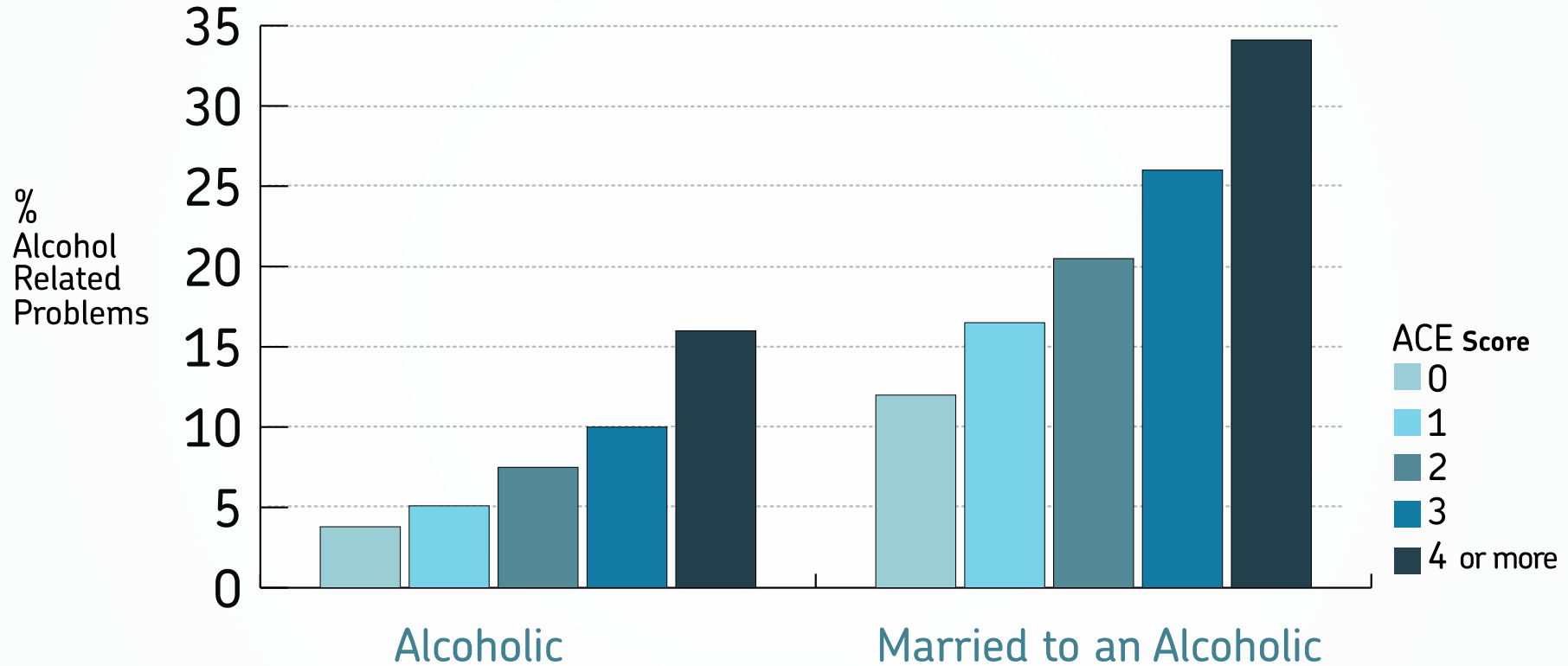
Anxiety  
Depression  
Difficulty Concentrating

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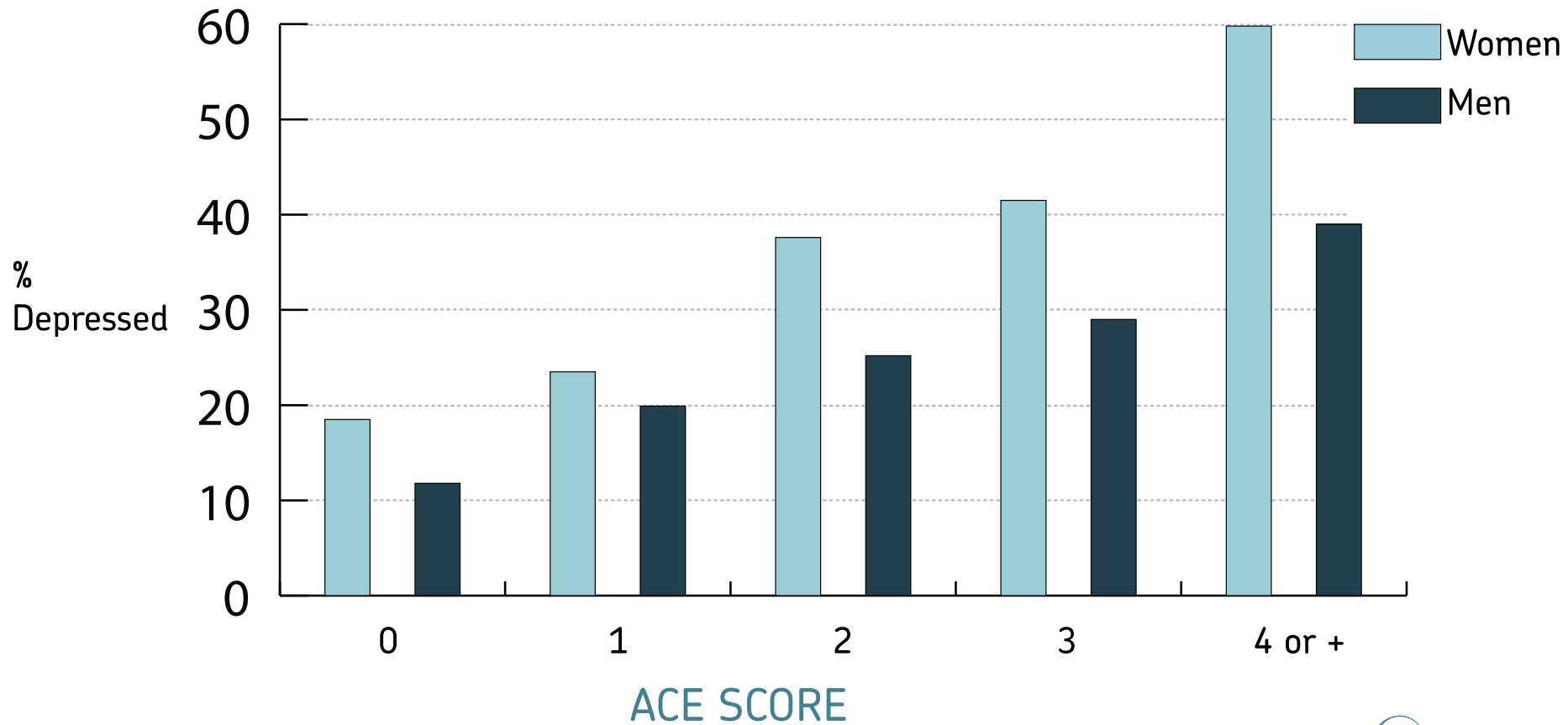
**SMOKING**

SMOKING

# ACEs & Alcoholism & Marrying an Alcoholic



# ACEs & Depression



# EXAMPLES OF ACE-ATTRIBUTABLE PROBLEMS

Alcoholism & Alcohol Abuse

Chronic Obstructive  
Pulmonary Disease

Coronary Heart Disease

Depression

Drug Abuse & Illicit Drug Use

Fetal Death

Intimate Partner Violence

Liver Disease

Mental Health Problems

Obesity

Sexual Behavior Problems

Smoking

Unintended Pregnancy

Violence

Workplace Problems

# ACEs are Common, Interrelated, Powerful



High ACE Scores  
in Population



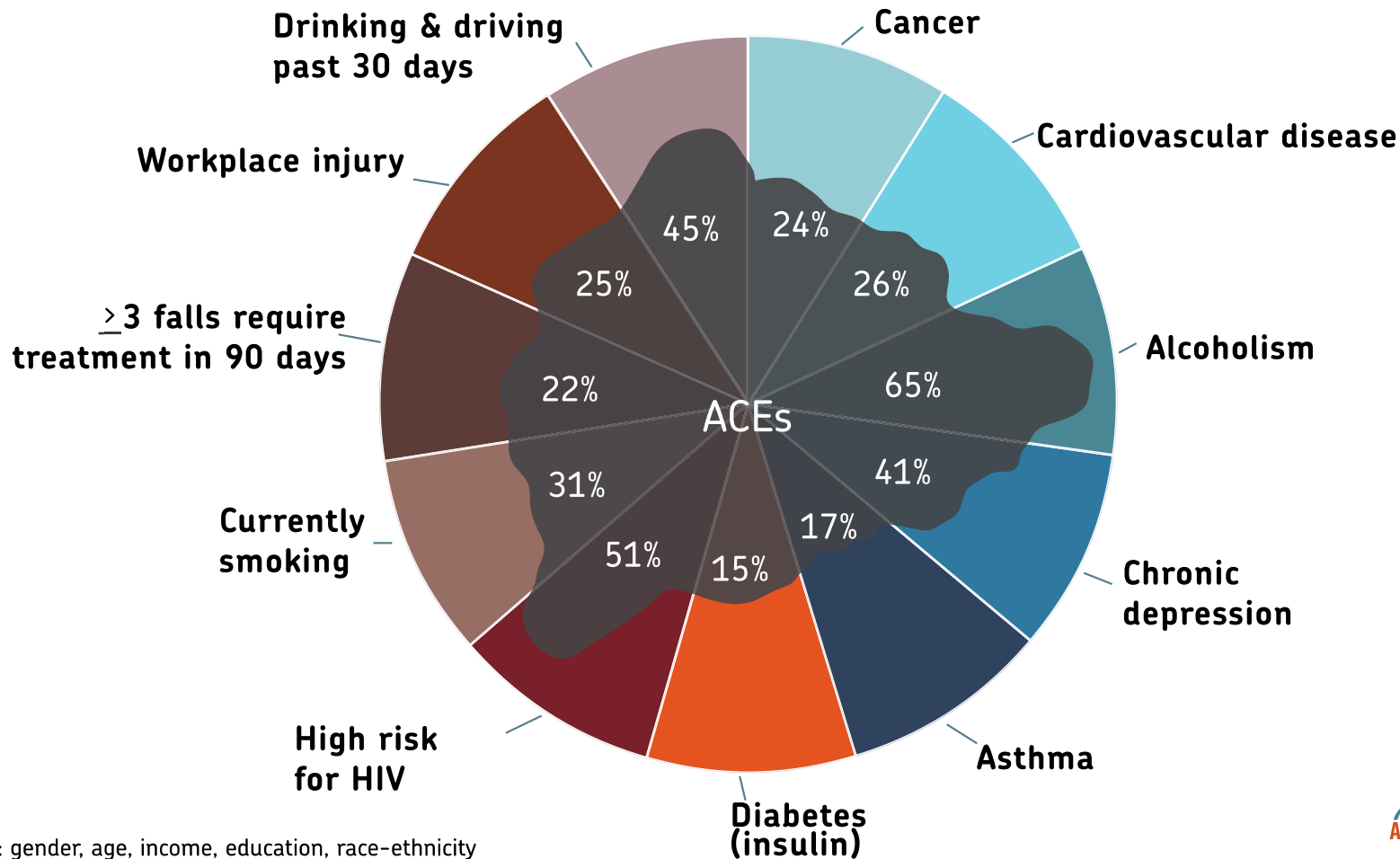
Increased Risk of Multiple  
Health and Social Problems



Intergenerational  
Transmission of ACEs



# Population Attributable Risk



Controls: gender, age, income, education, race-ethnicity

# We

have the power to  
shift the dynamics  
that lead to  
high ACE scores.



# Core Protective Systems

Capabilities

Attachment  
&  
Belonging

Community  
Culture  
Spirituality

**“Nurturing the healthy development of these protective systems affords the most important preparation or ‘inoculation’ for overcoming potential threats and adversities in human development. Similarly, damage or destruction of these systems has dire consequences for the positive adaptive capacity of individuals.”**

*Ann Masten, 2009*

# Attachment & Belonging

**RELATIONSHIPS**

with caring and competent

**people are**

**—VITAL—**

contributors to  
resilience & recovery







## Community, Faith & Cultural Processes



**f o s t e r  
t h r i v i n g  
c o m m u n i t i e s**

# Community Capacity Development

**Leadership Expansion**

**Coming Together**

**Shared Learning**

**Results-Oriented Decisions**



# *lifting* all beings



# CHANGE is up to US



It is shaped by our thoughts, our conversations, the way we relate with one another in relationships, in families, and in communities.





Building Self-Healing Communities

# Thank YOU!

[www.aceinterface.com](http://www.aceinterface.com)

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ACE Business Solutions - ALASKA Stock Photos - Theresa Barila - Victoria Bigelow - Jani Bryson Photography - Children's Resilience Initiative - Robert Anda - ChildWise Institute - Lina Cramer - Bonnie Duran - Krista Goldstine-Cole, KEN! - Kevin Kowalewski, Cryan Design - iStock Photos - Jane Kretsmann - Community Leaders - Ellen Lepinski - Dario Longhi - Kimberly Martin - Susan Miller - Minnesota Communities Caring for Children - Laura Porter - SaintA - Sasha Silveanu - Jim Spreader - Martin Teicher - Wisconsin Children's Trust - Photographs of people in these slides are of models; none should be considered victims or perpetrators.