# UNDERSTANDING

Adverse Childhood Experiences

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

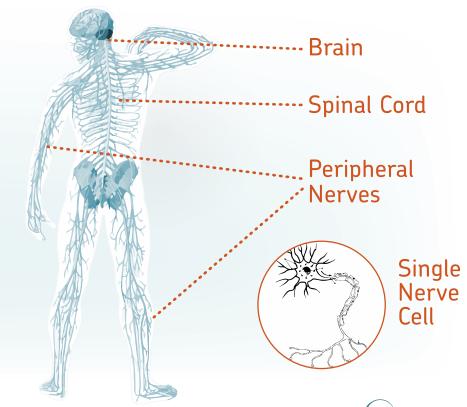
Over 17,000 study participants

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

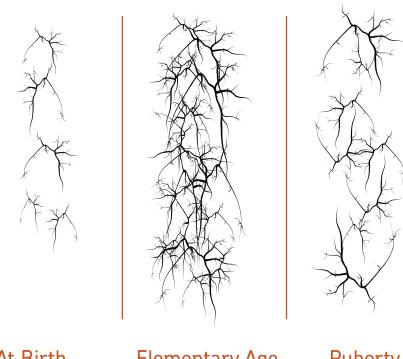
# **HUMAN NERVOUS SYSTEM**

Nervous system ORCHESTRATES BODY **FUNCTIONS & PERCEPTIONS** 

Veuroscience HELPS US UNDERSTAND WHY ARE SO POWERFUL



# **SYNAPTIC DENSITY**



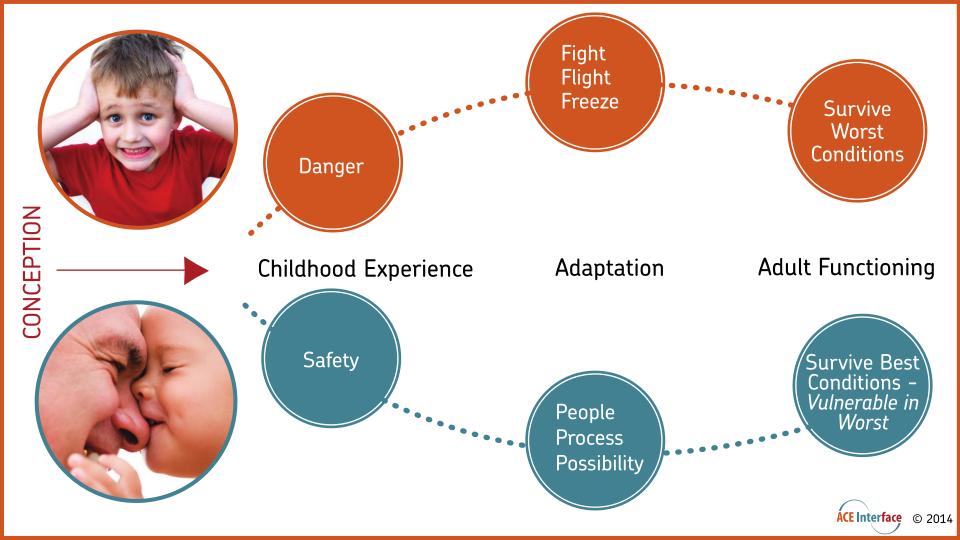


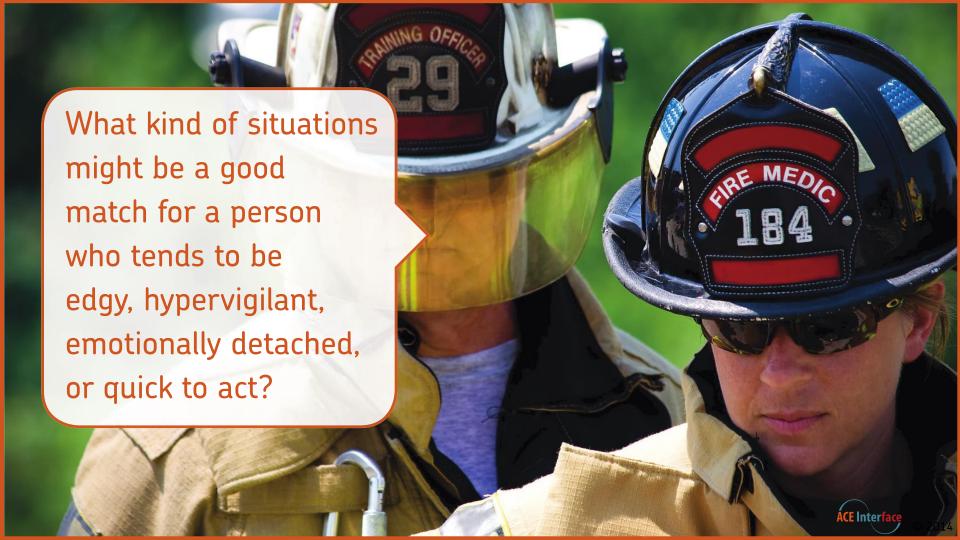
Single Neuron

At Birth

Elementary Age

**Puberty** 





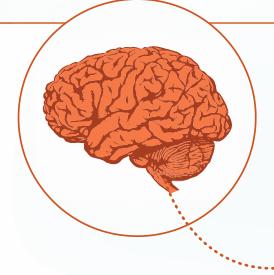
# ADAPTATIONS VS EXPECTATIONS

COULT COULT



EXPERIENCE & ADAPTATION sensitive periods

Cause-Effect







# STRESS

Interpretations Can Differ

set points in place by EARLY ADULTHOOD



SYNAPTIC DENSITY

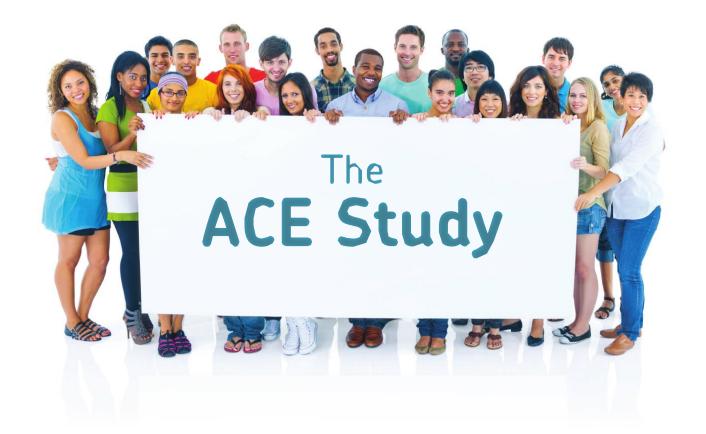


Elementary Age











#### FINDING MORE CONNECTIONS

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

# Adverse Childhood Experiences ARE COMMON

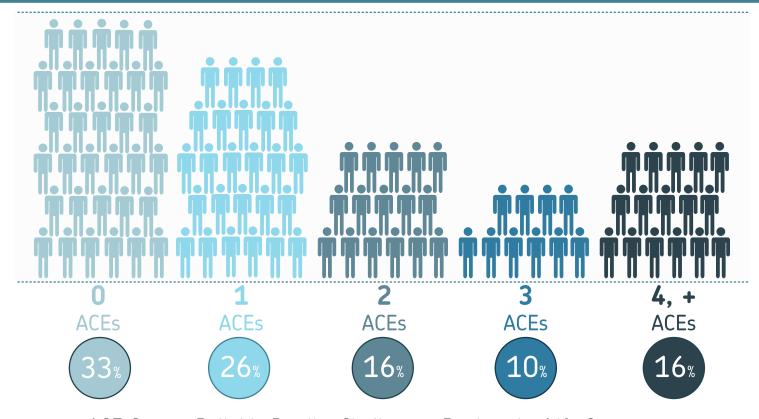
Household Dysfunction		
Substance Abuse	27%	
Parental Sep/Divorce	23%	
Mental Illness	17%	
Battered Mothers	13%	
Criminal Behavior	6%	

Neglect	
Emotional	15%
Physical	10%





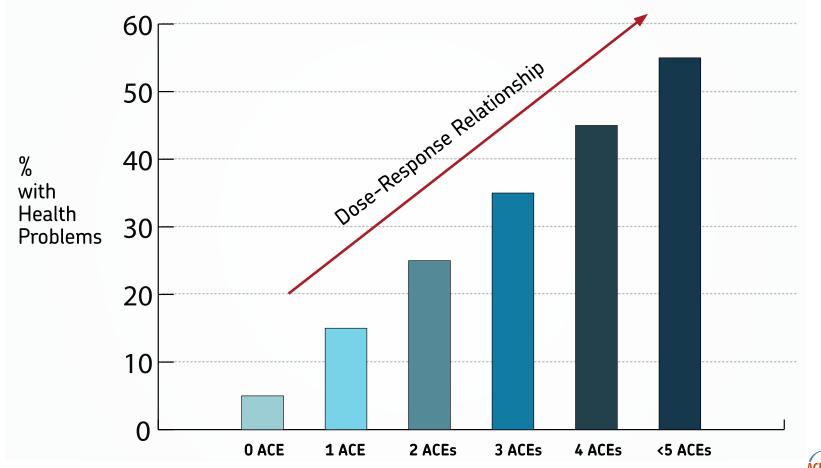
## ACE Score = Number of ACE Categories



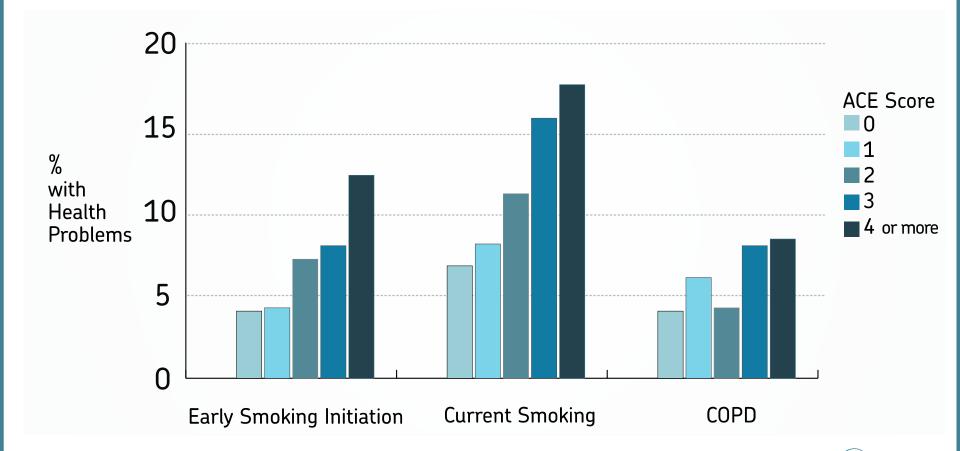
ACE Scores Reliably Predict Challenges During the Life Course



#### ACE Score and Health Problems



#### ACEs, Smoking and Lung Disease



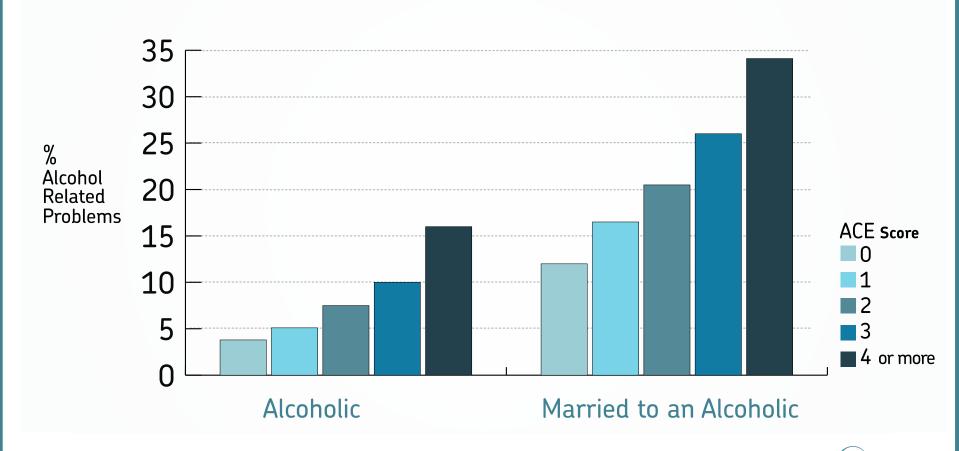


# Anxiety Depression Difficulty Concentrating

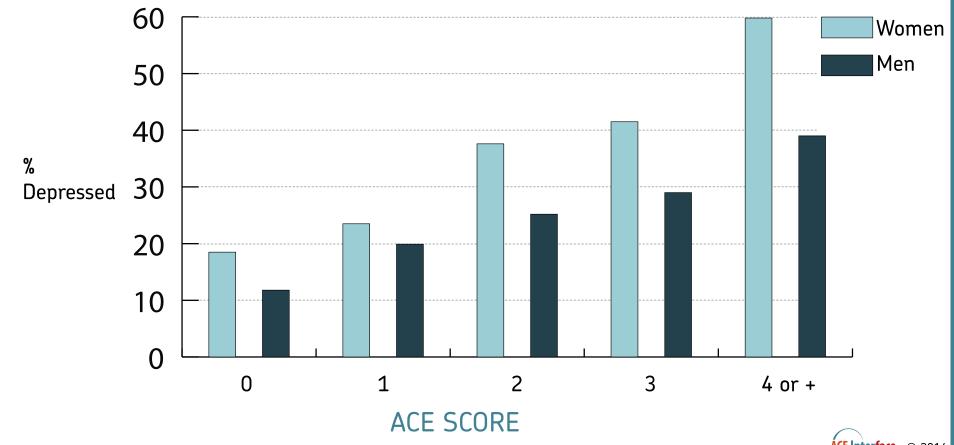
**SMOKING** 

**ÁCE Interface** © 2014

#### 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

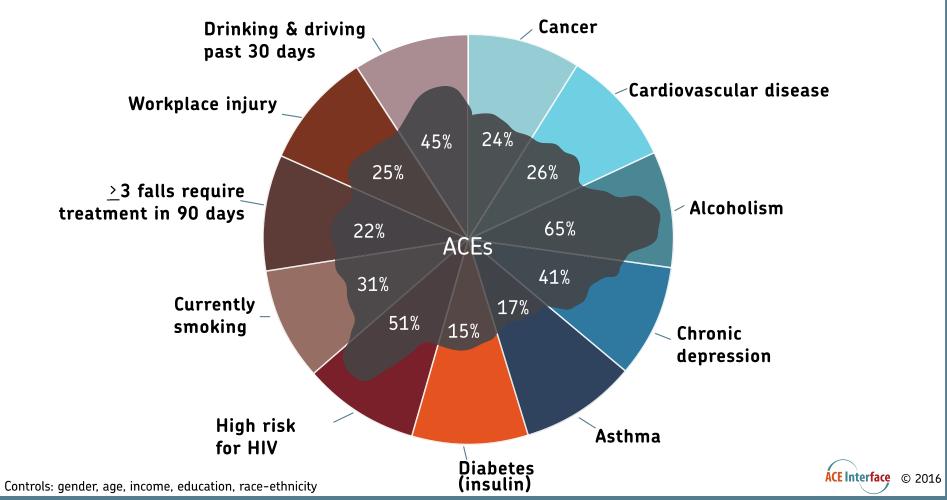


Increased Risk of Multiple Health and Social Problems



Intergenerational Transmission of ACEs

#### Population Attributable Risk



# 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** 



# Community Capacity Development

**Leadership Expansion** 

**Coming Together** 

**Shared Learning** 

**Results-Oriented Decisions** 





# 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.



# Thank You!

#### www.aceinterface.com

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 Sporeader - Martin Teicher - Wisconsin Children's Trust - Photographs of people in these slides are of models; none should be considered victims or perpetrators.