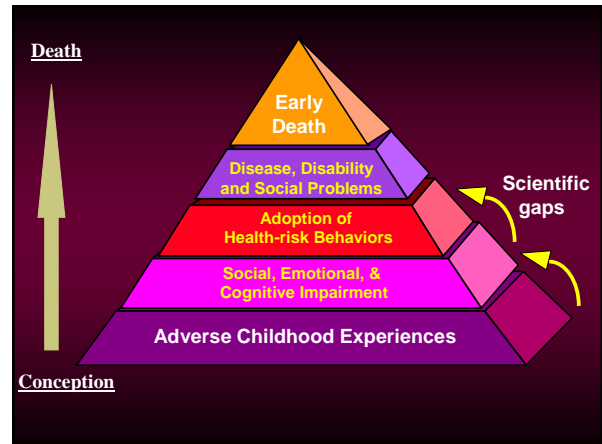


## Overview of the Adverse Childhood Experiences (ACE) Study

Robert F. Anda, MD, MS  
Co-Principal Investigator

[www.acestudy.org](http://www.acestudy.org)

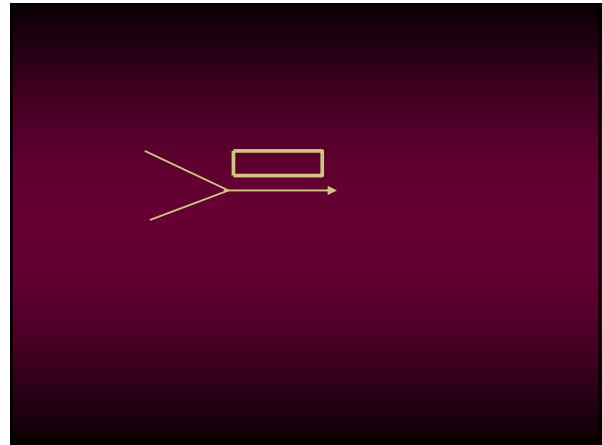


### The Adverse Childhood Experiences (ACE) Study

Examines the health and social effects of ACEs throughout the lifespan among 17,421 members of the Kaiser Health Plan in San Diego County

### What do we mean by Adverse Childhood Experiences?

- childhood abuse and neglect
- growing up with domestic violence, substance abuse or mental illness in the home, parental discord, crime



### Adverse Childhood Experiences Are Common

#### Household dysfunction:

Substance abuse	27%
Parental sep/divorce	23%
Mental illness	17%
Battered mother	13%
Criminal behavior	6%

#### Abuse:

Psychological	11%
Physical	28%
Sexual	21%

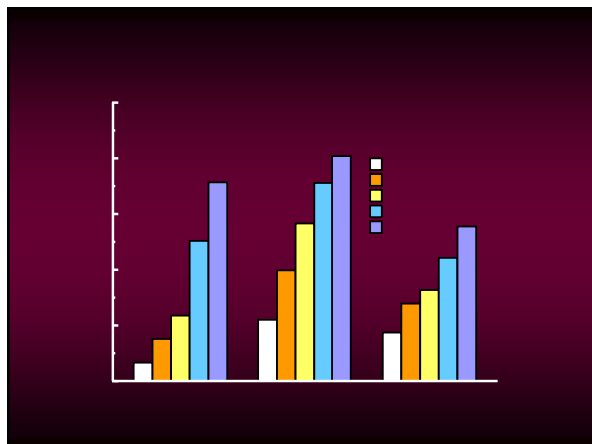
#### Neglect:

Emotional	15%
Physical	10%

Adverse Childhood Experiences Rarely Occur in Isolation...

They come in groups.

## Domestic Violence and the Risk of Other ACEs...



## ACEs tend to come in groups...

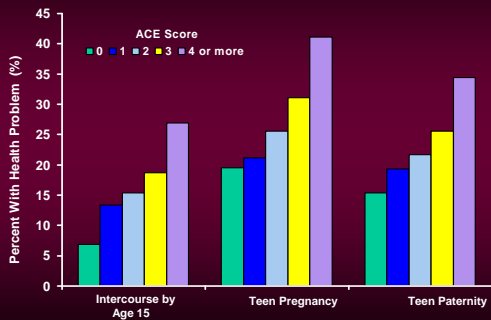
	Additional ACEs (%)				
	1	2	3	4	>=5
<i>If you had:</i>					
A battered mother	95	82	64	48	52

## Adverse Childhood Experiences Score Complex Trauma--Trauma "Dose"

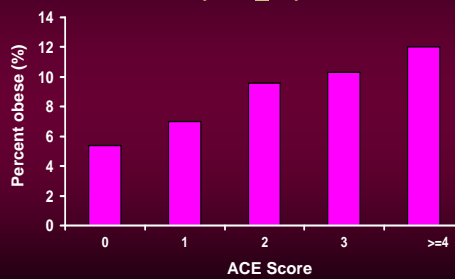
Number of individual types of adverse childhood experiences were summed...

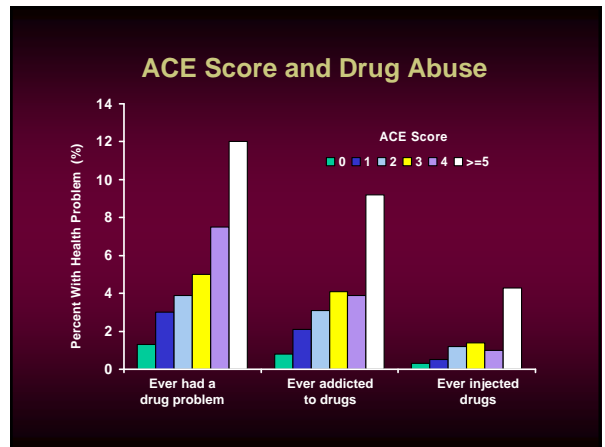
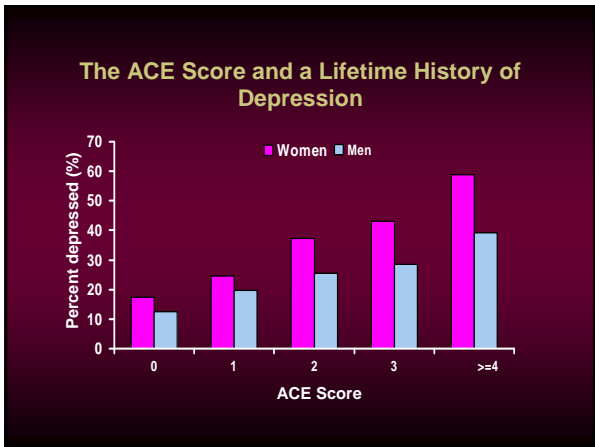
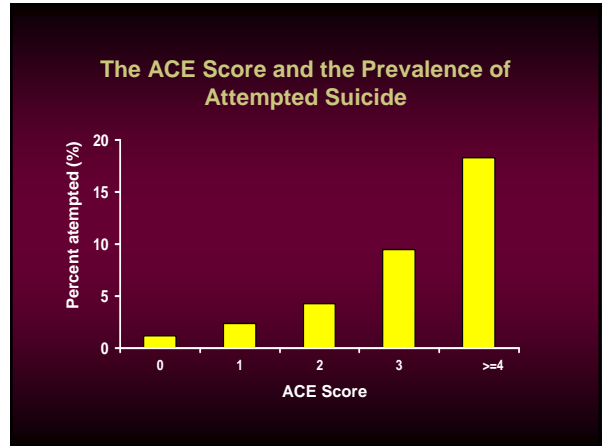
ACE score	Prevalence
0	33%
1	26%
2	16%
3	10%
4 or more	16%

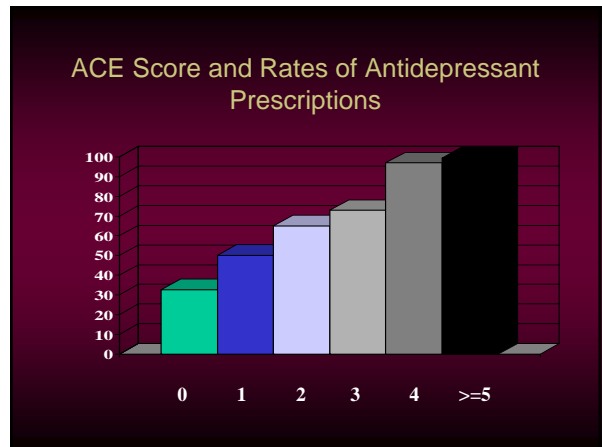
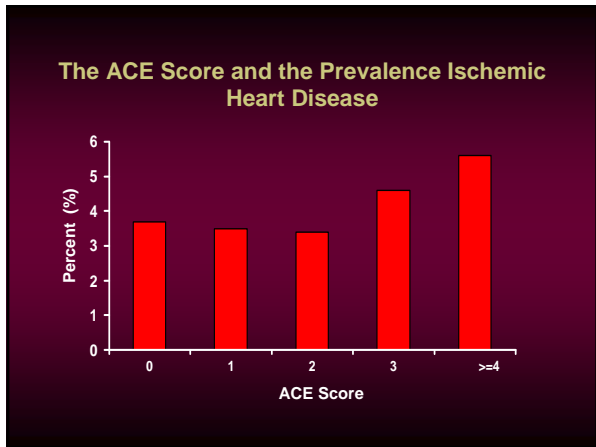
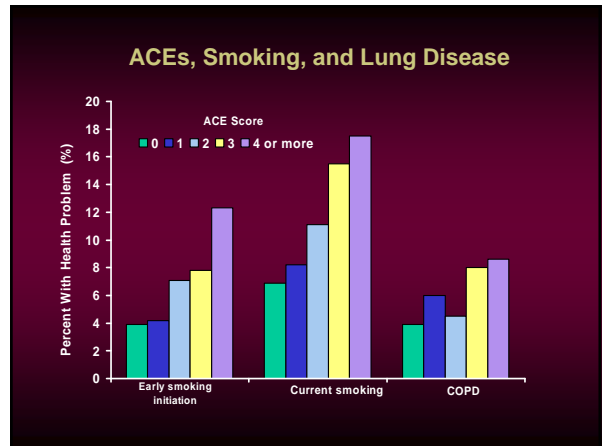
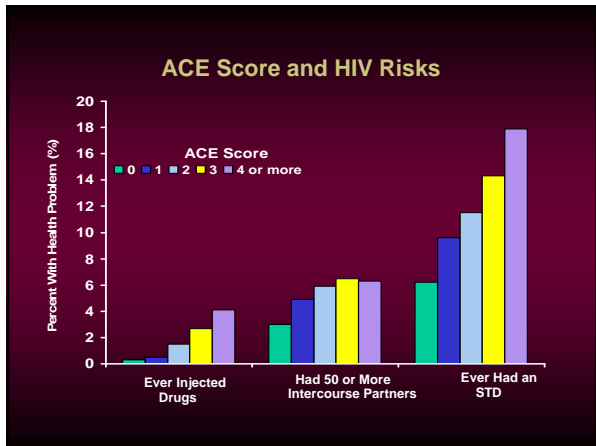
## ACE Score and Teen Sexual Behaviors

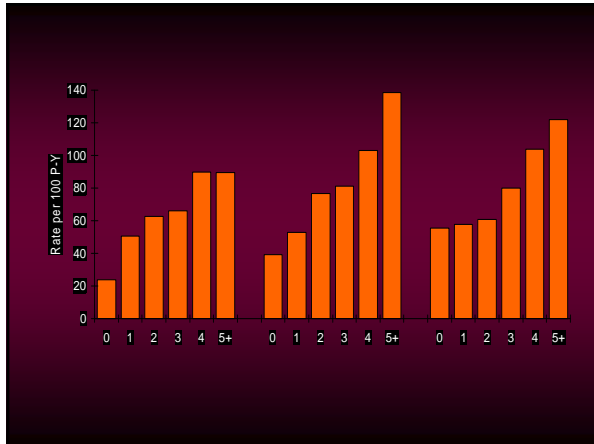


## The ACE Score and the Prevalence of Severe Obesity (BMI ≥35)









### Adverse Childhood Experiences as a Clinical and Public Health Issue

**ACEs:**

- are endemic
- highly interrelated
- have a cumulative stressor effect
- effects are biologically plausible

### Adverse Childhood Experiences As a National Health Issue

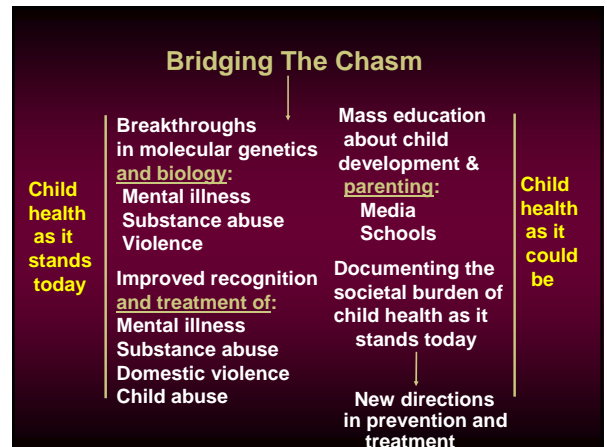
**ACEs have a strong influence on:**

- adolescent health
- reproductive health
- smoking
- alcohol abuse
- illicit drug abuse
- sexual behavior
- mental health
- risk of revictimization
- stability of relationships, homelessness
- performance in the workforce

### Adverse Childhood Experiences As a National Health Issue

**ACEs increase the risk of:**

- Heart disease
- Chronic Lung disease
- Liver disease
- Suicide
- Injuries
- HIV and STDs
- and other risks for the leading causes of death



## Bridging The Chasm

**Child health as it stands today**

Involving those who don't yet realize that they are working on issues that represent the "downstream" wreckage of child abuse and neglect--and other adverse childhood experiences--in the effort to bridge the chasm.

**Child health as it could be**

Routine screening for trauma is needed