

# The Relationship of Adverse Childhood Experiences to Adult Health Status

A collaborative effort of Kaiser Permanente and The Centers for Disease Control

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# The Adverse Childhood Experiences (ACE) Study

- **The largest study of its kind ever done to examine the health, social and economic effects of adverse childhood experiences over the lifespan (18,000 participants)**

# Categories of Adverse Childhood Experiences

Category  
Prevalence (%)

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## Abuse, by Category

Psychological (by parents)	11%
Physical (by parents)	11%
Sexual (anyone)	22%

## Household Dysfunction, by Category

Substance Abuse	26%
Mental Illness	19%
Mother Treated Violently	13%
Imprisoned Household Member	3%

# Adverse Childhood Experiences Score

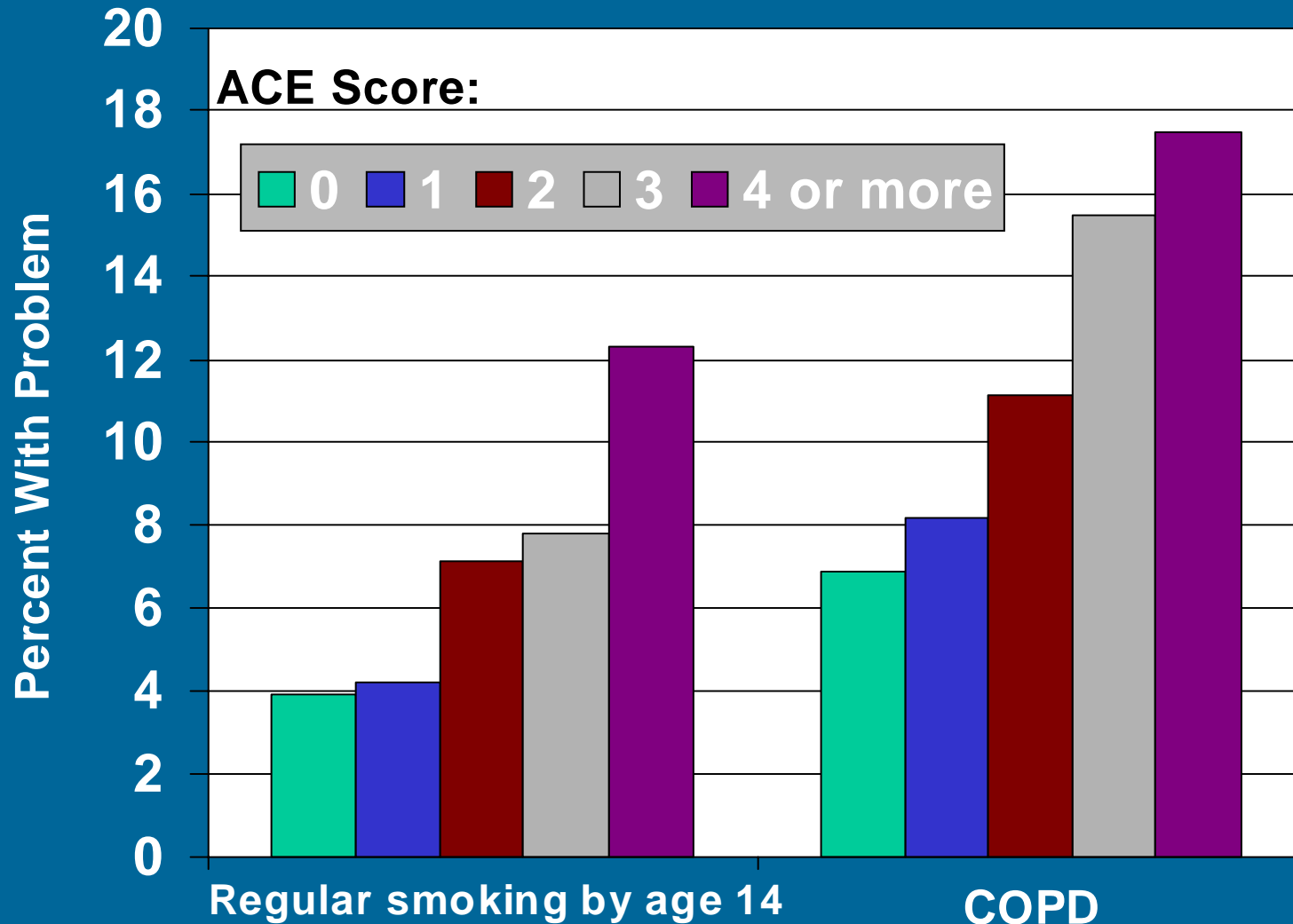
Number of categories adverse childhood experiences are summed ...

<i>ACE score</i>	<i>Prevalence</i>
0	48%
1	25%
2	13%
3	7%
4 or more	7%

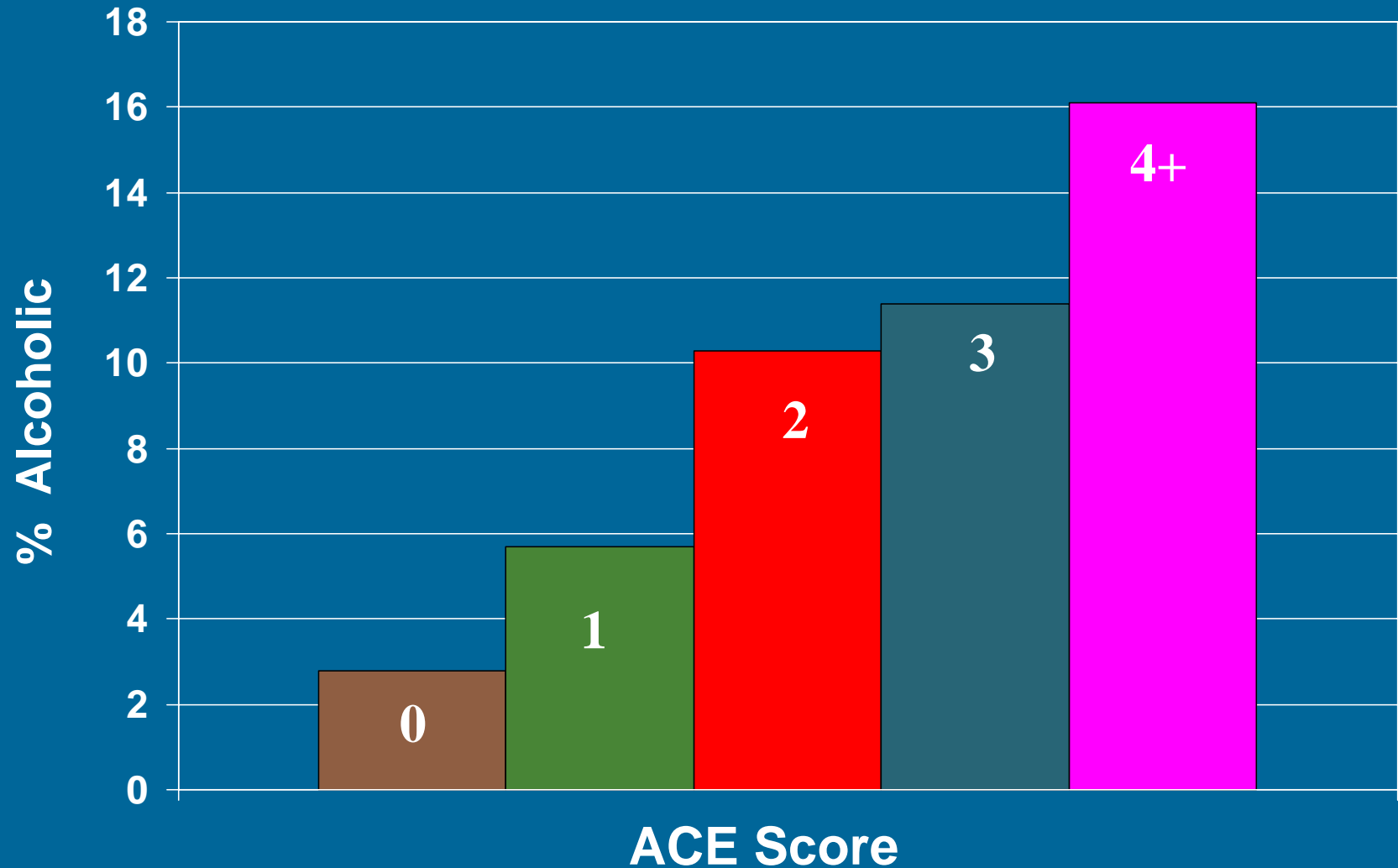


- More than *half* have at least one ACE
- If one ACE is present, the ACE Score is likely to range from 2.4 to 4

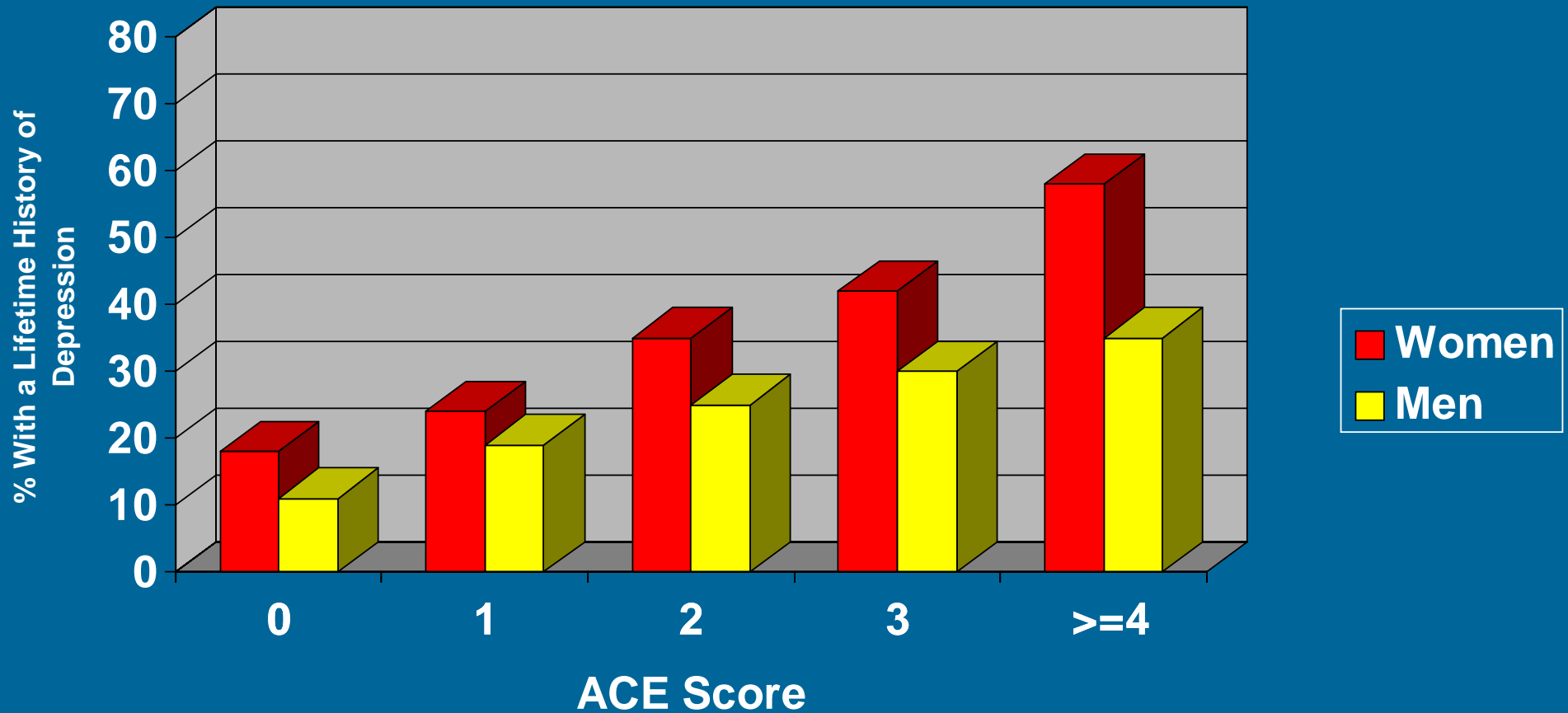
# ACE Score vs. Smoking and COPD



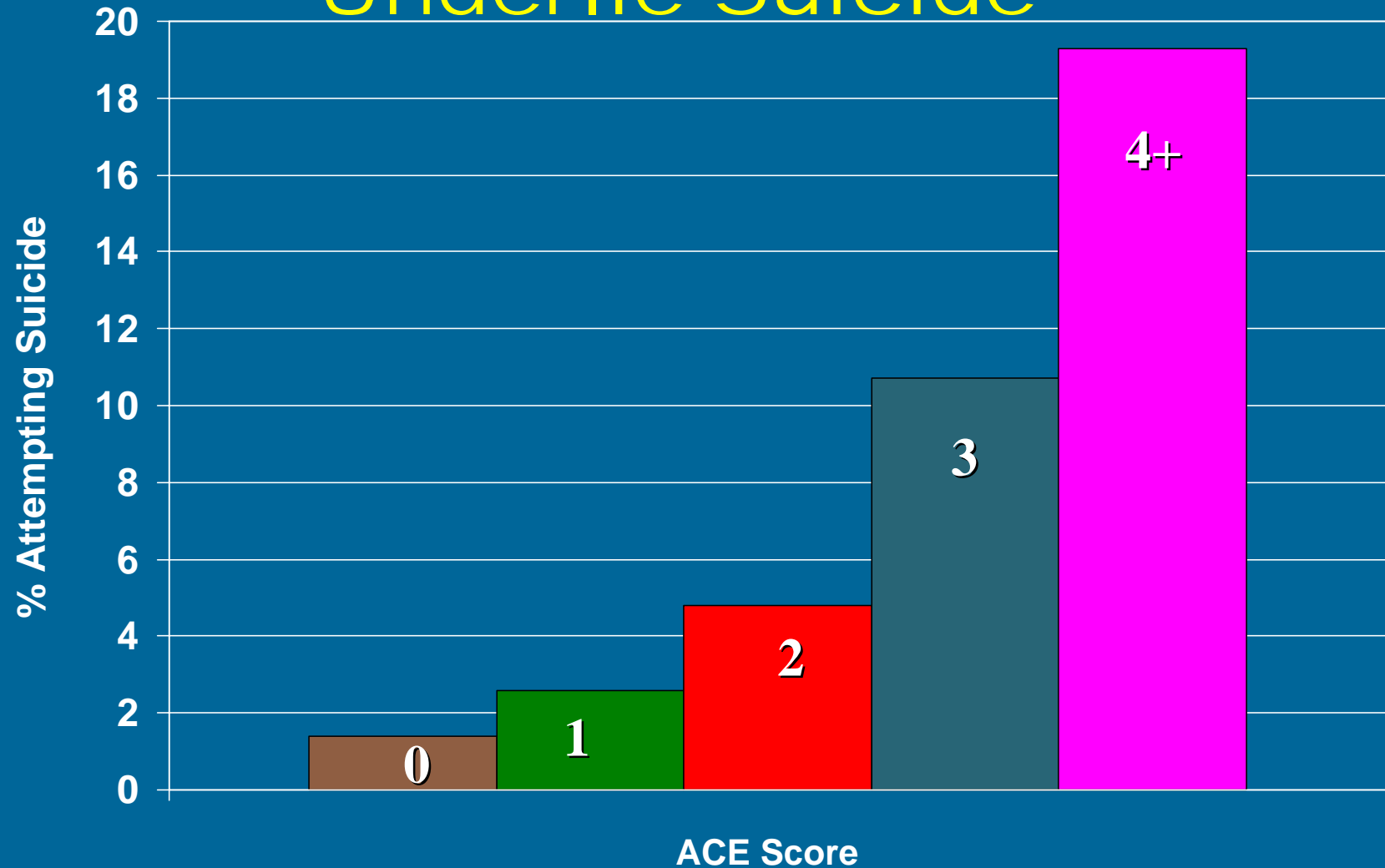
# Childhood Experiences vs. Adult Alcoholism



# Childhood Experiences Underlie Chronic Depression

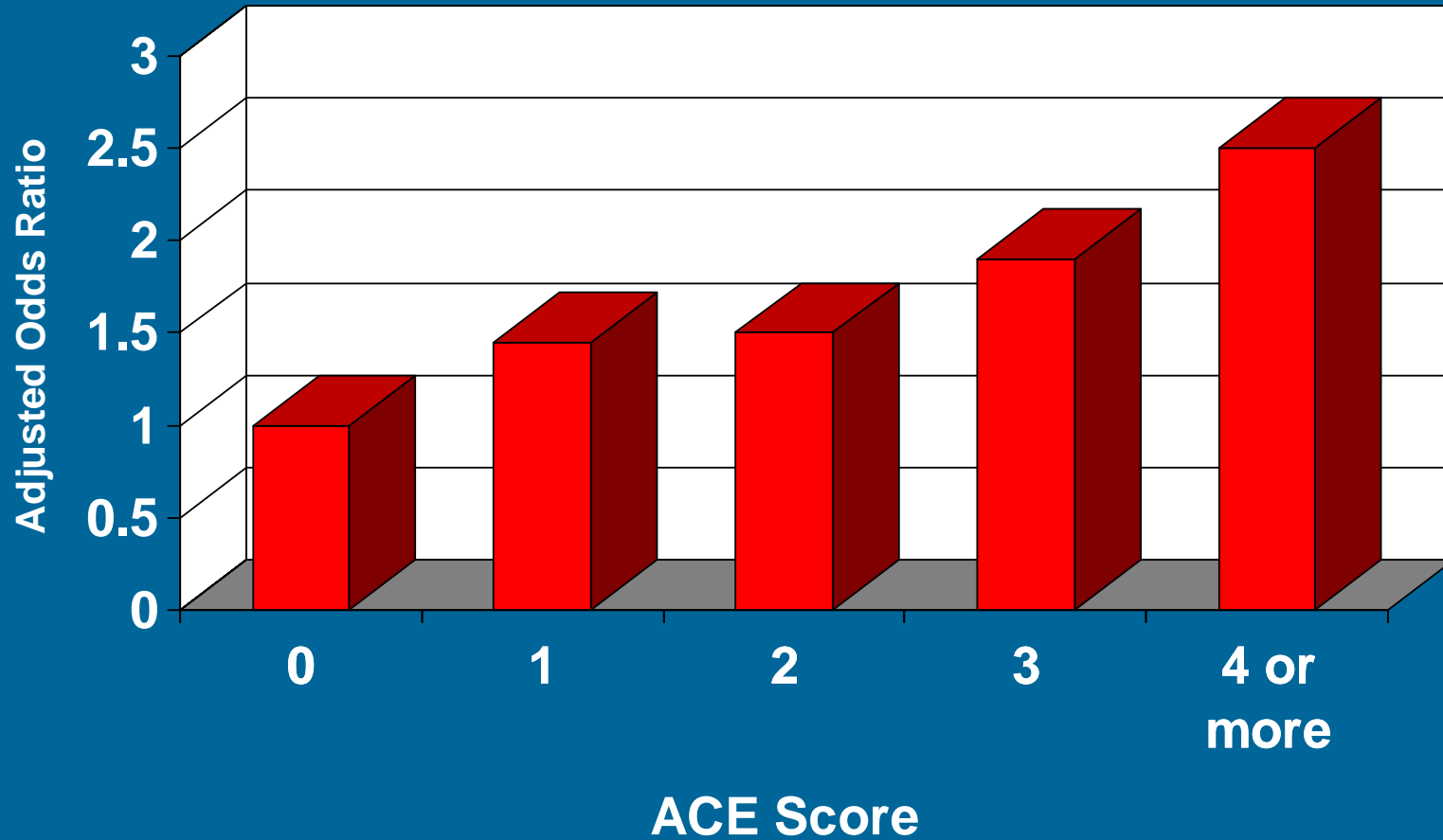


# Childhood Experiences Underlie Suicide

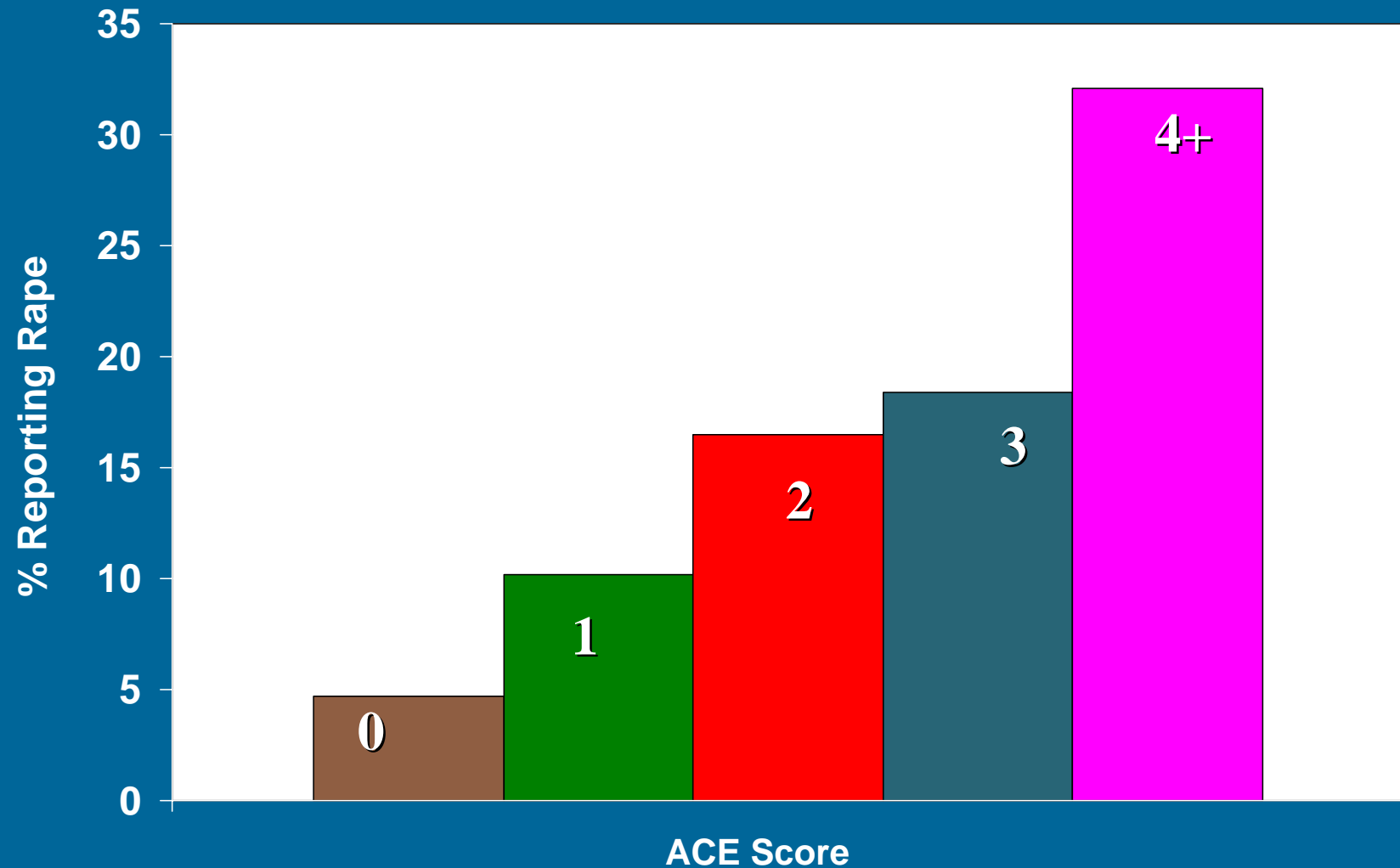




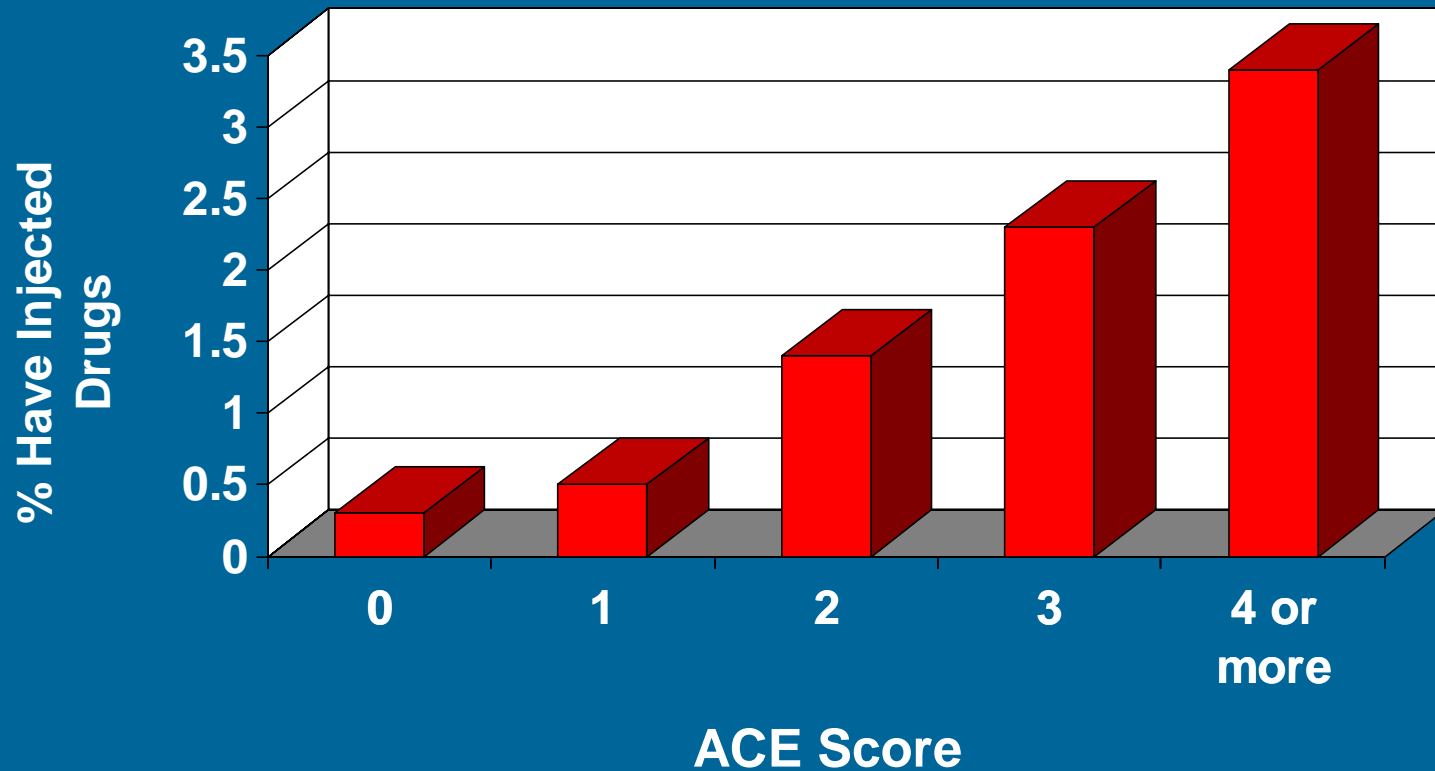
# Adverse Childhood Experiences vs. History of STD



# Childhood Experiences Underlie Rape



# ACE Score vs. Intravenous Drug Use



**N = 8,022**    **p < 0.001**

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

Mental Health	PAR
Current depression	54%
Chronic depression	41%
Suicide attempt	58%

\*That portion of a condition attributable to specific risk factors

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

<u>Drug Abuse</u>	<u>PAR</u>
Alcoholism	65%
Drug abuse	50%
IV drug use	78%

\*That portion of a condition attributable to specific risk factors

Adverse Childhood Experiences  
determine the likelihood of the  
ten most common causes of  
death in the United States.

**Top 10 Risk Factors:** smoking, severe obesity, physical inactivity,  
depression, suicide attempt, alcoholism, illicit drug use, injected drug use,  
50+ sexual partners, h/o STD.

With an ACE Score of 0, the majority of adults have few, if any, risk factors for these diseases.

However, with an ACE Score of 4 or more, the majority of adults have multiple risk factors for these diseases or the diseases themselves.

Dismissing them as “bad habits” or “self-destructive behavior” totally misses their function.





The risk factors  
underlying these adult  
diseases are effective  
short-term coping devices.

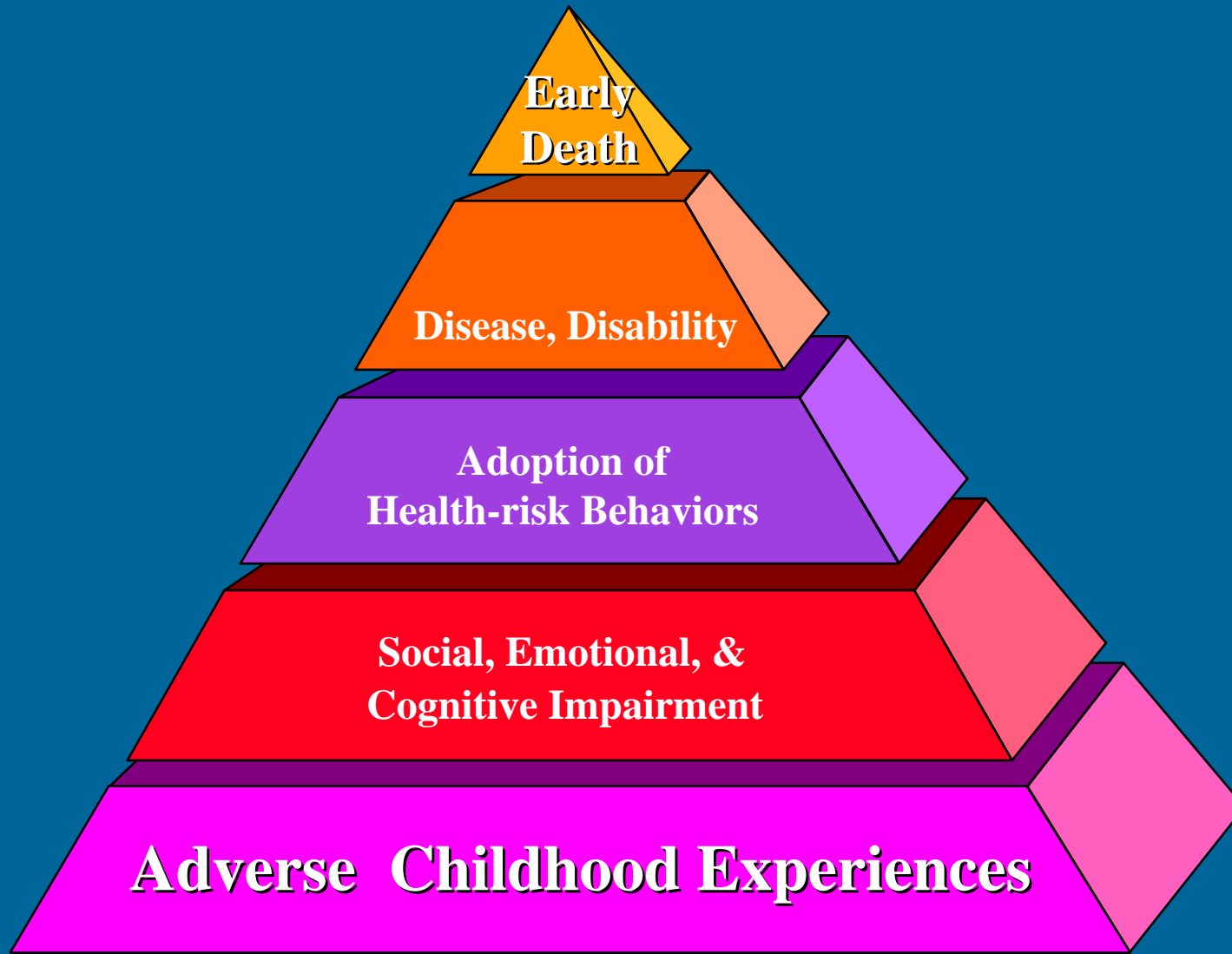
## Evidence from ACE Study Indicates:

Adverse childhood experiences are the most **basic** cause of health risk behaviors, morbidity, disability, mortality, and healthcare costs.

**Death**



**Birth**



The Influence of Adverse  
Childhood Experiences Throughout Life