

Adverse Childhood Experiences

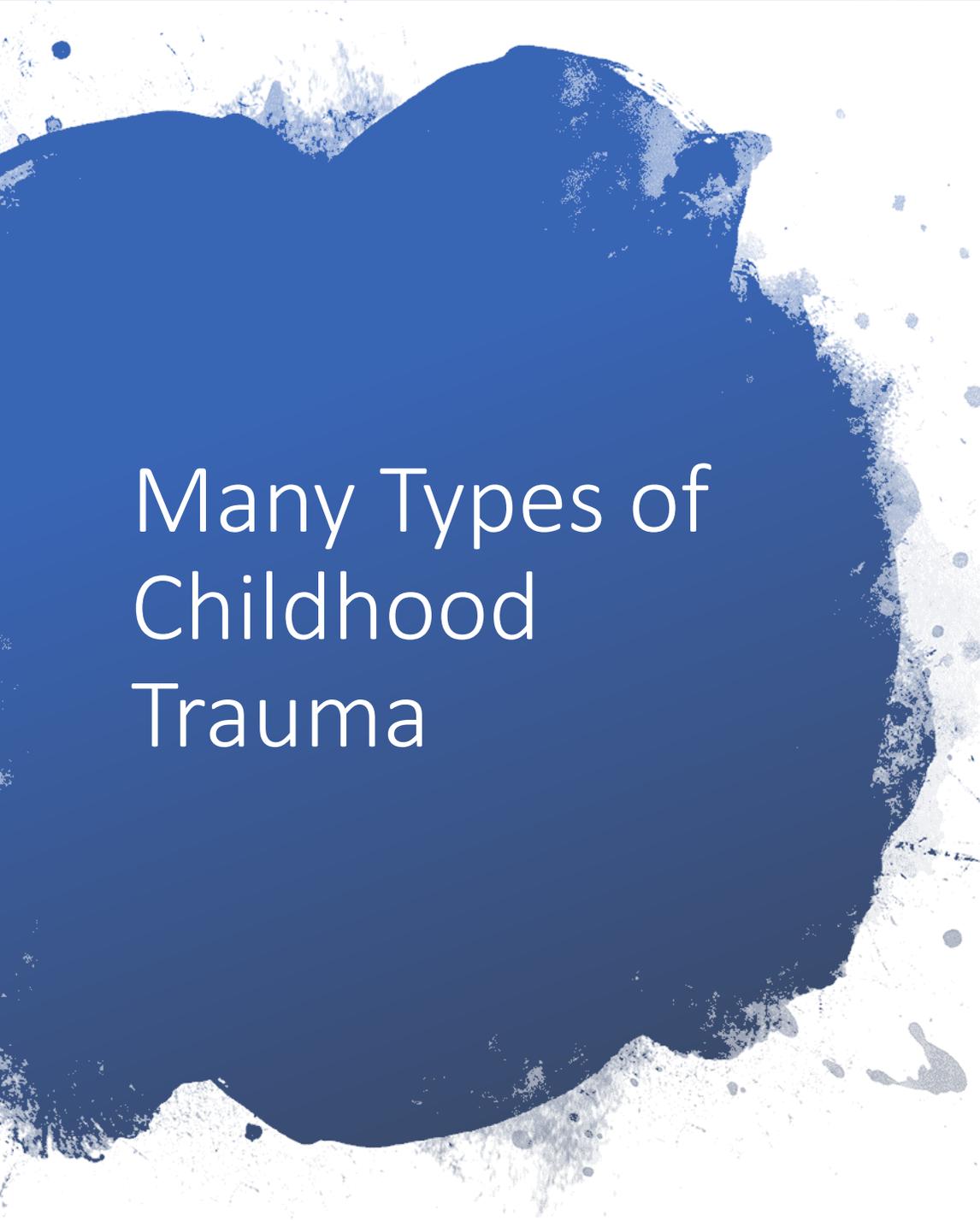
<https://www.youtube.com/watch?v=95ovIJ3dsNk>

<https://acestoohigh.com/resources/>

Please note these slides are provided as a follow up to our training, some slides may not make sense outside the context of our workshop.

What is your ACE Score?

- **What's Your ACE Score? (and, at the end, What's Your Resilience Score?)**
- There are 10 types of childhood trauma measured in the ACE Study. Five are personal — physical abuse, verbal abuse, sexual abuse, physical neglect, and emotional neglect. Five are related to other family members: a parent who's an alcoholic, a mother who's a victim of domestic violence, a family member in jail, a family member diagnosed with a mental illness, and the disappearance of a parent through divorce, death or abandonment. Each type of trauma counts as one. So a person who's been physically abused, with one alcoholic parent, and a mother who was beaten up has an ACE score of three.



Many Types of Childhood Trauma

- There are, of course, many other types of childhood trauma — racism, bullying, watching a sibling being abused, losing a caregiver (grandmother, mother, grandfather, etc.), homelessness, surviving and recovering from a severe accident, witnessing a father being abused by a mother, witnessing a grandmother abusing a father, involvement with the foster care system, involvement with the juvenile justice system, etc. The ACE Study included only those 10 childhood traumas because those were mentioned as most common by a group of about 300 Kaiser members; those traumas were also well studied individually in the research literature.

1-3

Prior to your 18th birthday:

Did a parent or other adult in the household often or very often... Swear at you, insult you, put you down, or humiliate you? or Act in a way that made you afraid that you might be physically hurt?

No ___ If Yes, enter 1 ___

Did a parent or other adult in the household often or very often... Push, grab, slap, or throw something at you? or Ever hit you so hard that you had marks or were injured?

No ___ If Yes, enter 1 ___

Did an adult or person at least 5 years older than you ever... Touch or fondle you or have you touch their body in a sexual way? or Attempt or actually have oral, anal, or vaginal intercourse with you?

No ___ If Yes, enter 1 ___

4-6

Did you often or very often feel that ... No one in your family loved you or thought you were important or special? or Your family didn't look out for each other, feel close to each other, or support each other?

No ___ If Yes, enter 1 ___

Did you often or very often feel that ... You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you? or Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?

No ___ If Yes, enter 1 ___

Were your parents ever separated or divorced?

No ___ If Yes, enter 1 ___

7-8

Was your mother or stepmother:

Often or very often pushed, grabbed, slapped, or had something thrown at her? or Sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard? or Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

No ___ If Yes, enter 1 ___

Did you live with anyone who was a problem drinker or alcoholic, or who used street drugs?

No ___ If Yes, enter 1 ___

9-10

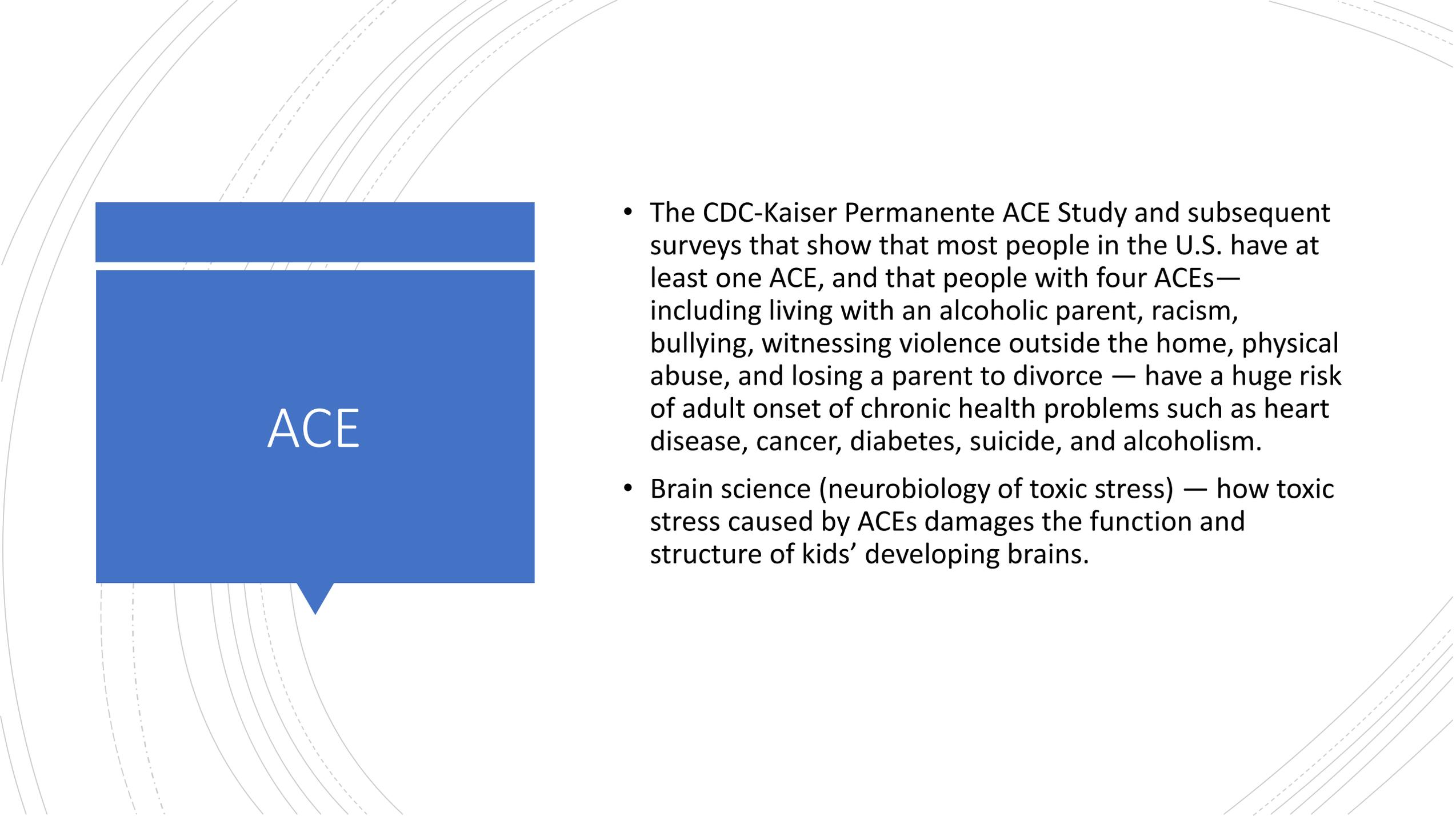
Was a household member depressed or mentally ill, or did a household member attempt suicide? No ___ If Yes, enter 1 ___

Did a household member go to prison? No ___ If Yes, enter 1 ___

Now add up your “Yes” answers: _ This is your ACE Score

ACE

- The CDC's Adverse Childhood Experiences Study ([ACE Study](#)) [uncovered](#) a stunning link between childhood trauma and the chronic diseases people develop as adults, as well as social and emotional problems. This [includes](#) heart disease, lung cancer, diabetes and many autoimmune diseases, as well as depression, violence, being a victim of violence, and suicide.
- **What is ACEs science?**
- ACEs science refers to the research on the prevalence and consequences of adverse childhood experiences, and what to do to prevent them. It comprises:



ACE

- The CDC-Kaiser Permanente ACE Study and subsequent surveys that show that most people in the U.S. have at least one ACE, and that people with four ACEs— including living with an alcoholic parent, racism, bullying, witnessing violence outside the home, physical abuse, and losing a parent to divorce — have a huge risk of adult onset of chronic health problems such as heart disease, cancer, diabetes, suicide, and alcoholism.
- Brain science (neurobiology of toxic stress) — how toxic stress caused by ACEs damages the function and structure of kids' developing brains.



ACE & TOXIC STRESS

- Health consequences — how toxic stress caused by ACEs affects short- and long-term health, and can impact every part of the body, leading to autoimmune diseases, such as arthritis, as well as heart disease, breast cancer, lung cancer, etc.
- Historical and generational trauma (epigenetic consequences of toxic stress) — how toxic stress caused by ACEs can alter how our DNA functions, and how that can be passed on from generation to generation.

RESILIENCE & ACE

- Resilience research and practice — Building on the knowledge that the brain is plastic and the body wants to heal, this part of ACEs science includes evidence-based practice, as well as practice-based evidence by people, organizations and communities that are integrating trauma-informed and resilience-building practices. This ranges from looking at how the brain of a teen with a high ACE score can be healed with cognitive behavior therapy, to how schools can integrate trauma-informed and resilience-building practices that result in an increase in students' scores, test grades and graduation rates.

THE DEVELOPING BRAIN

- ACEs are adverse childhood experiences that harm children's developing brains and lead to changing how they respond to stress and damaging their immune systems so profoundly that the effects show up decades later. ACEs cause much of our burden of chronic disease, most mental illness, and are at the root of most violence.

- “ACEs” comes from the [CDC-Kaiser Adverse Childhood Experiences Study](#), a groundbreaking public health study that discovered that childhood trauma leads to the adult onset of chronic diseases, depression and other mental illness, violence and being a victim of violence, as well as financial and social problems. The ACE Study [has published about 70 research papers since 1998](#). Hundreds of additional research papers based on the ACE Study have also been published.

ACE

- The first research results [were published in 1998, followed by more than 70 other publications through 2015.](#) They showed that:
- childhood trauma was very common, even in employed white middle-class, college-educated people with great health insurance;
- there was a direct link between childhood trauma and adult onset of chronic disease, as well as depression, suicide, being violent and a victim of violence;
- more types of trauma increased the risk of health, social and emotional problems.
- people usually experience more than one type of trauma – rarely is it only sex abuse or only verbal abuse.

Childhood Toxic Stress

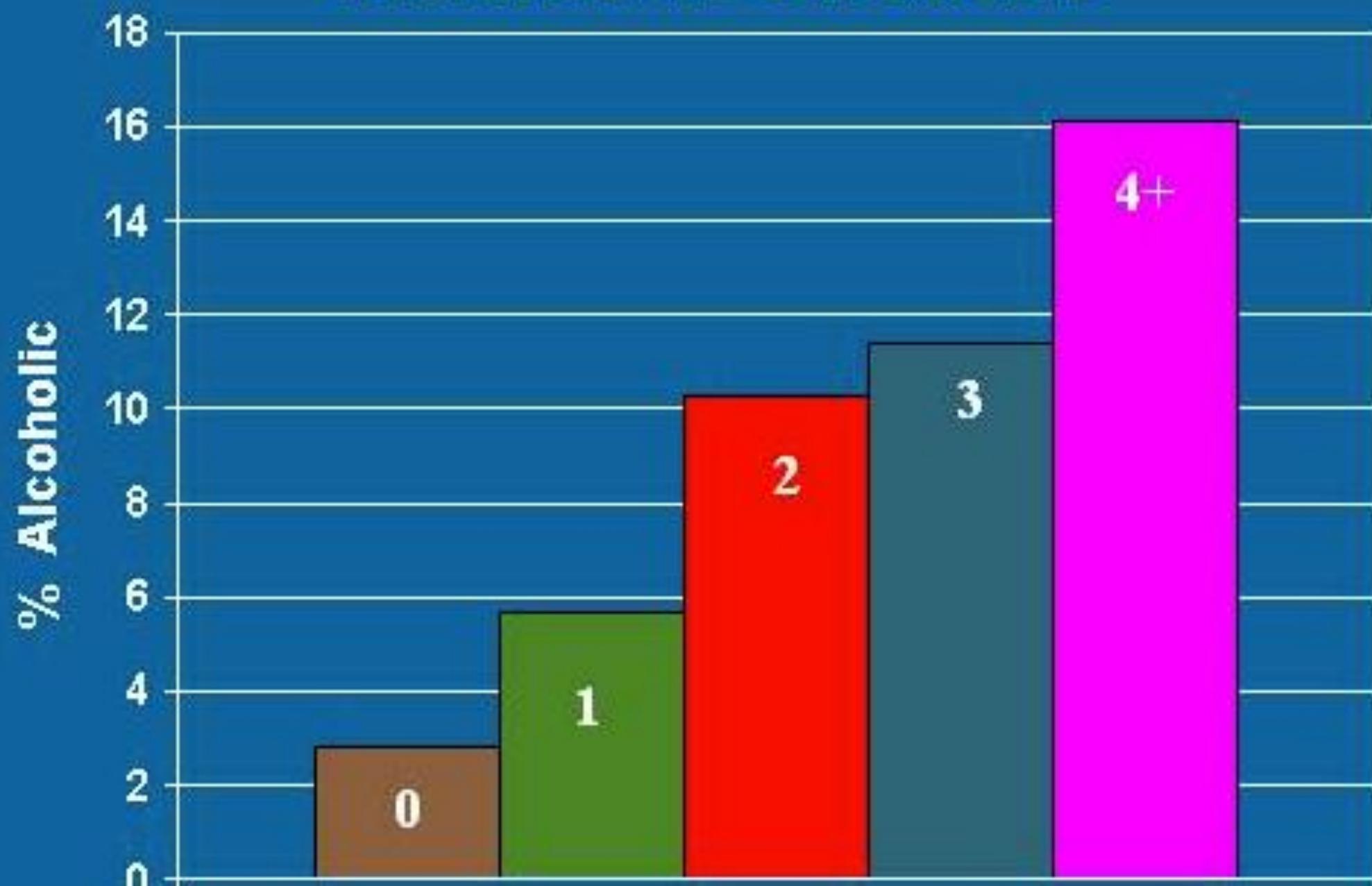
- The study's researchers came up with an ACE score to explain a person's risk for chronic disease. Think of it as a cholesterol score for childhood toxic stress. You get one point for each type of trauma. The higher your ACE score, the higher your risk of health and social problems. (Of course, other types of trauma exist that could contribute to an ACE score, so it is conceivable that people could have ACE scores higher than 10; however, the ACE Study measured only 10 types.)

ACE SCORE

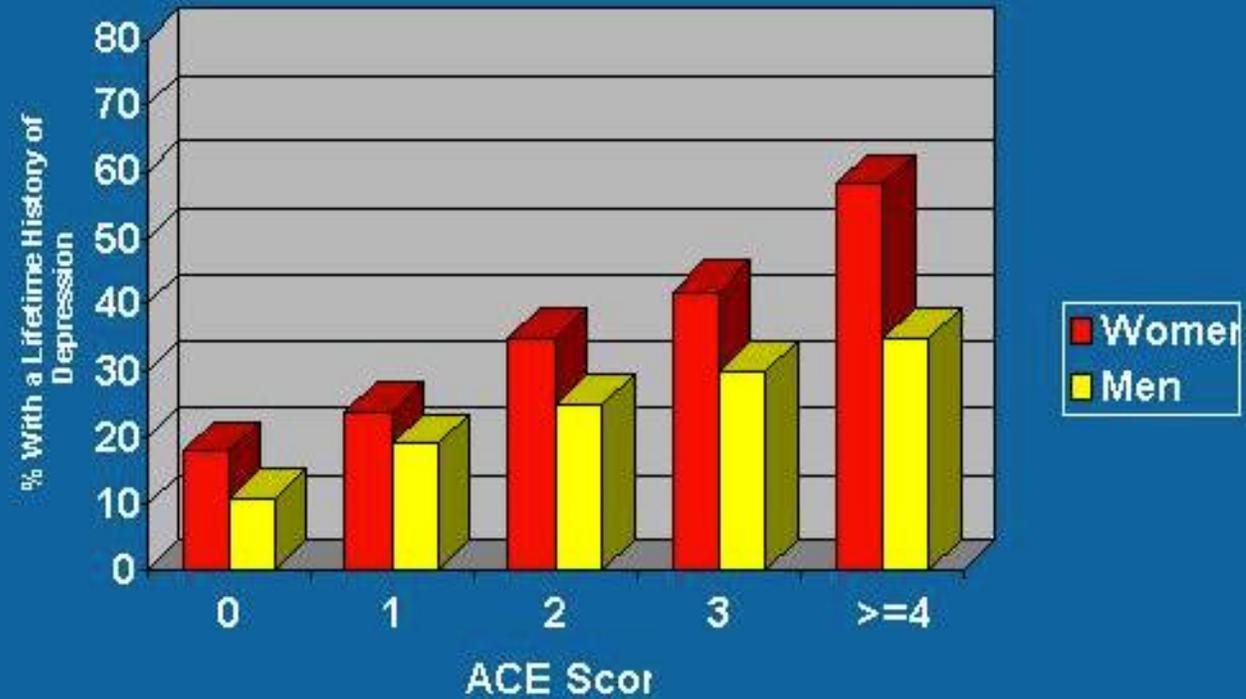
As your ACE score increases, so does the risk of disease, social and emotional problems. With an ACE score of 4 or more, things start getting serious. The likelihood of chronic pulmonary lung disease increases 390 percent; hepatitis, 240 percent; depression 460 percent; attempted suicide, 1,220 percent.

The study's participants were 17,000 mostly white, middle and upper-middle class college-educated San Diegans with good jobs and great health care – they all belonged to the Kaiser Permanente health maintenance organization.)

Adult Alcoholism

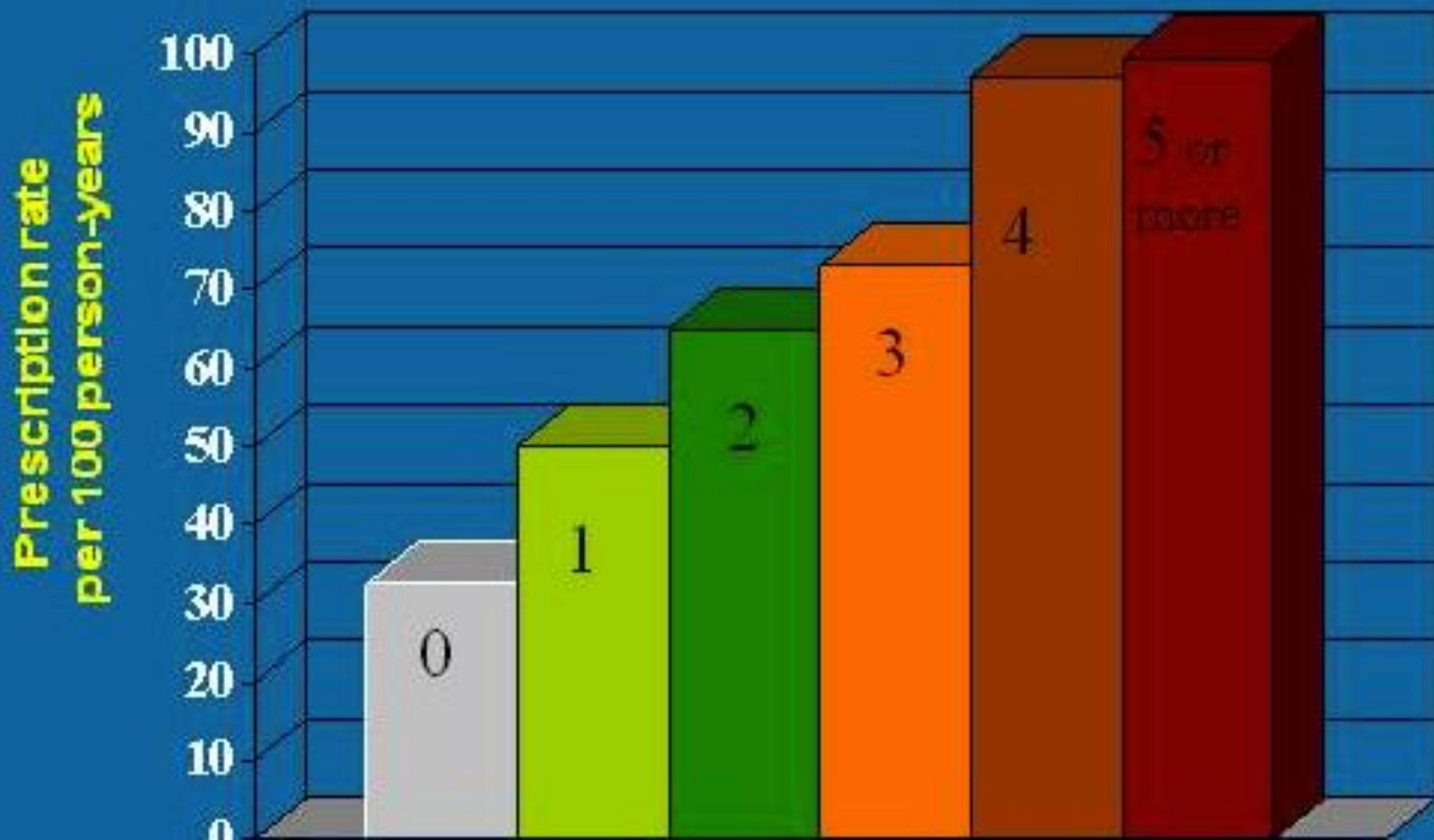


Childhood Experiences Underlie Chronic Depression

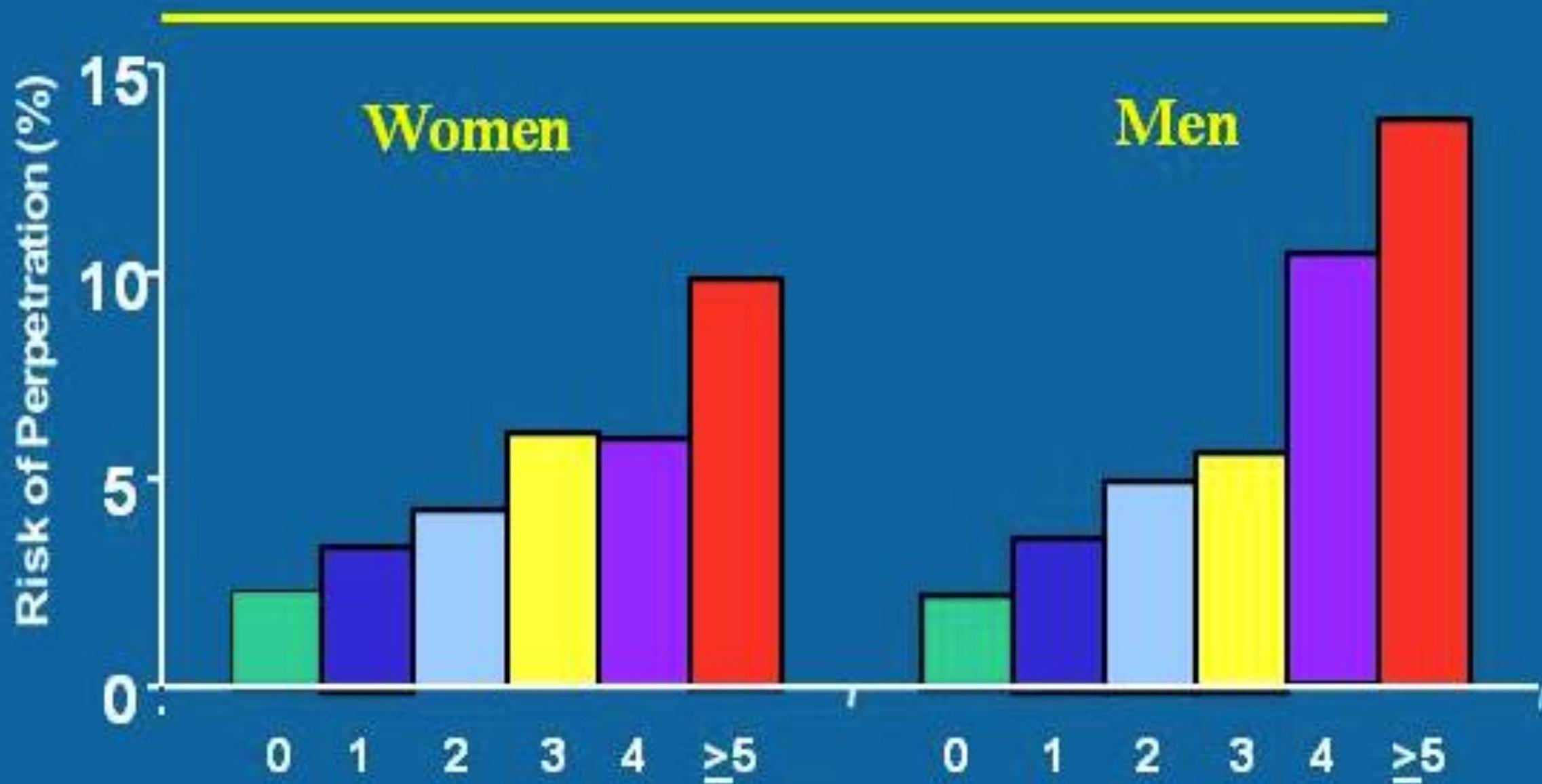


Antidepressant Prescriptions

approximately 50 years later



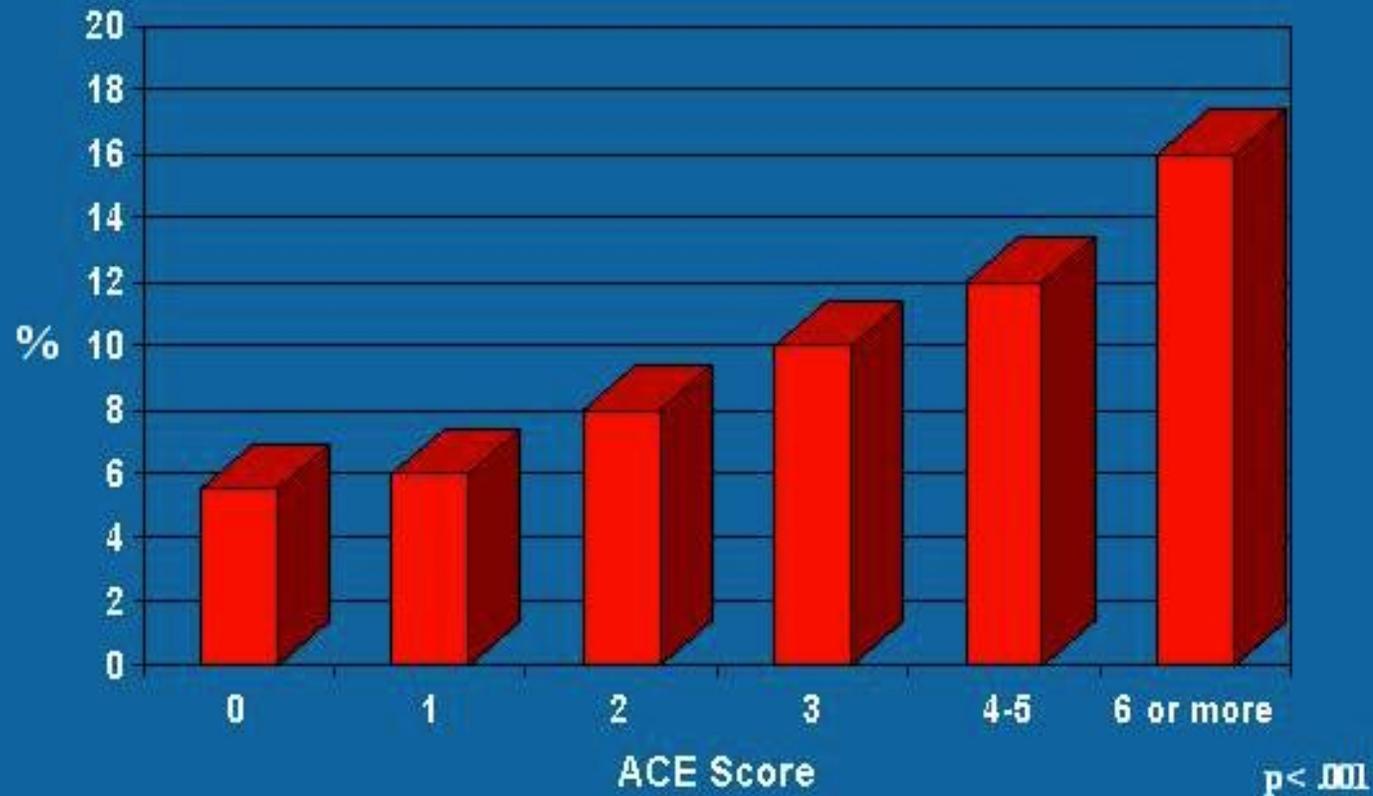
Risk of *Perpetrating* Domestic Violence



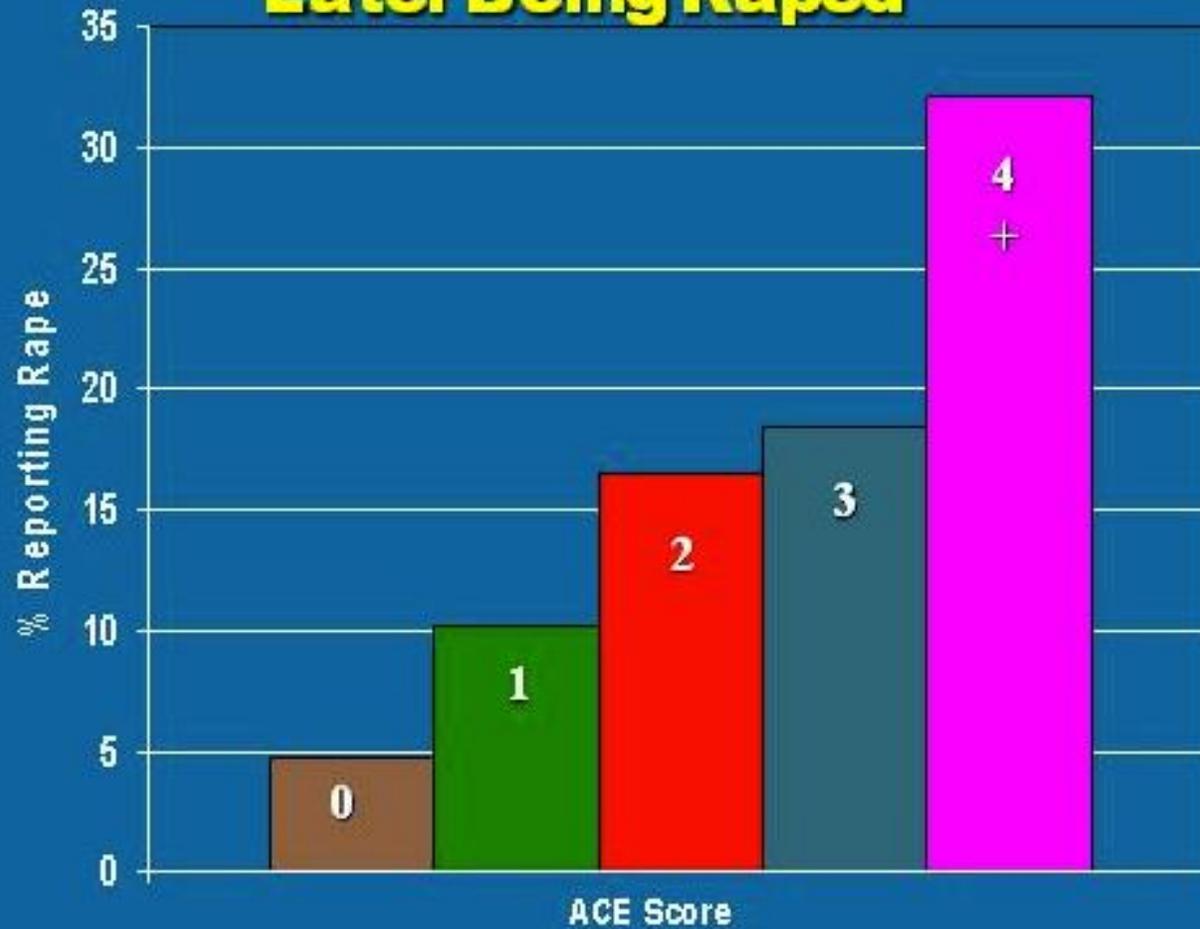
The ACE Score and the Prevalence of Liver Disease (Hepatitis/Jaundice)



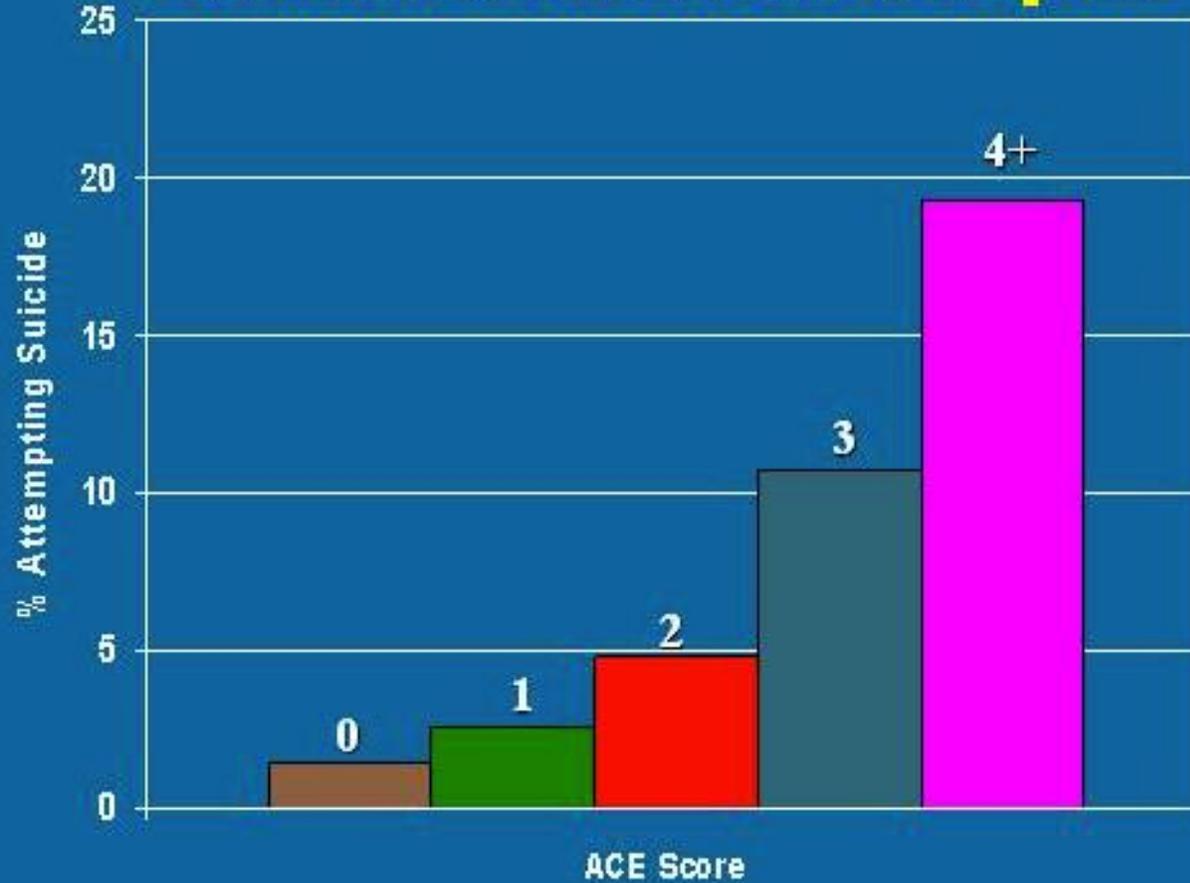
Adverse Childhood Experiences vs. Smoking as an Adult

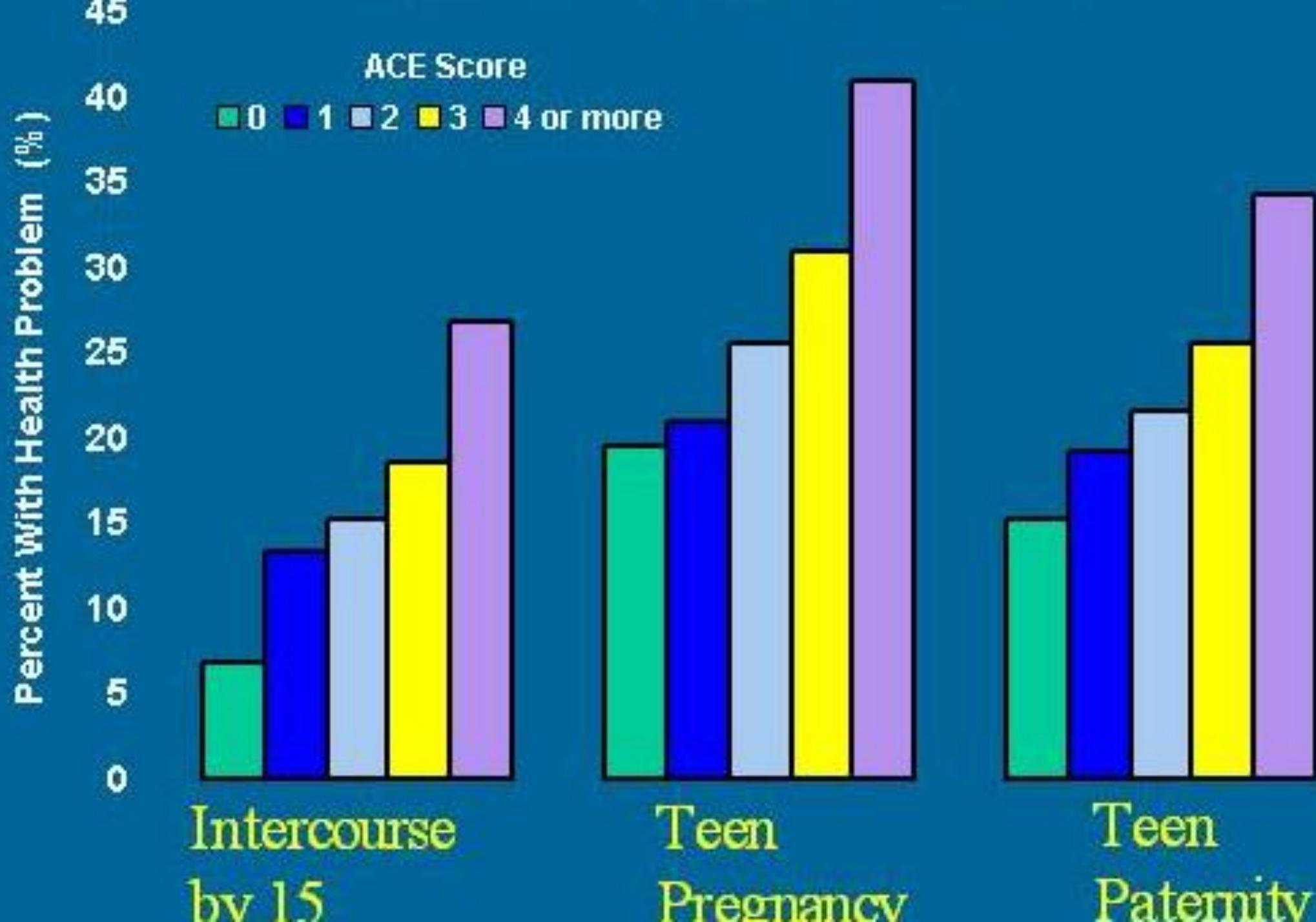


Childhood Experiences Underlie Later Being Raped



Childhood Experiences Underlie Suicide Attempts







Toxic Stress

- At the same time that the ACE Study was being done, parallel research on kids' brains found that [toxic stress physically damages a child's developing brain.](#)

Toxic Stress

- When children are overloaded with stress hormones, they're in flight, fright or freeze mode. They can't learn in school. They often have difficulty trusting adults or developing healthy relationships with peers (i.e., they become loners). To relieve their anxiety, depression, guilt, shame, and/or inability to focus, they turn to easily available biochemical solutions — nicotine, alcohol, marijuana, methamphetamine — or activities in which they can escape their problems — high-risk sports, proliferation of sex partners, and work/over-achievement. (e.g. Nicotine reduces anger, increases focus and relieves depression. Alcohol relieves stress.)