



ACEs and Addiction

How Adverse Childhood Experiences
Can Help us Understand People with
Substance Use Disorders.





Learning Objectives

- Complete an ACE score calculation
- Explain how this correlates to risk of opioid use and health consequences





ACE- Adverse Childhood Experiences

ABUSE



Physical



Emotional



Sexual

NEGLECT



Physical



Emotional

HOUSEHOLD DYSFUNCTION



Mental Illness



Incarcerated Relative



Mother treated violently

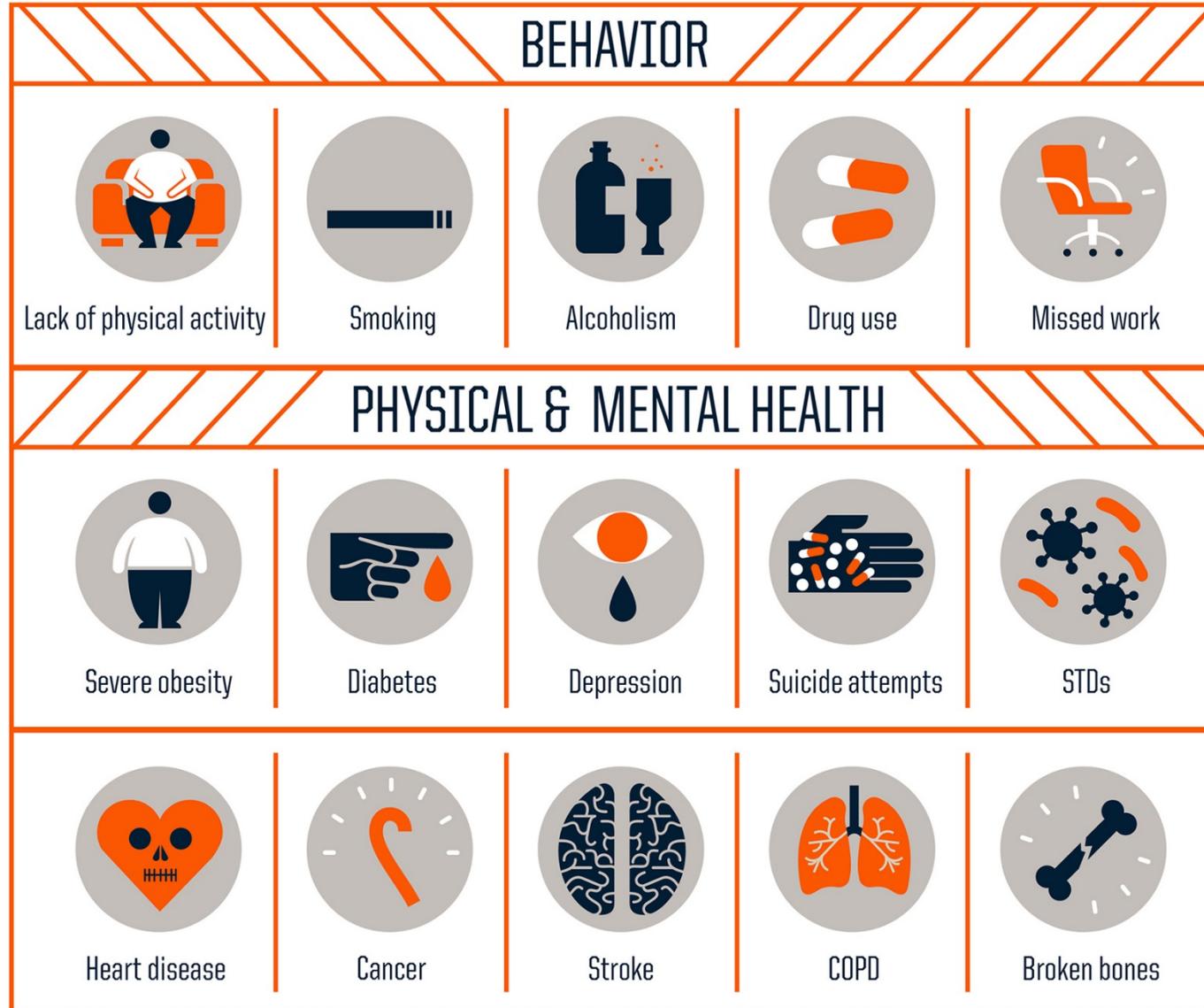


Substance Abuse



Divorce

Results



ACES can have lasting effects on....



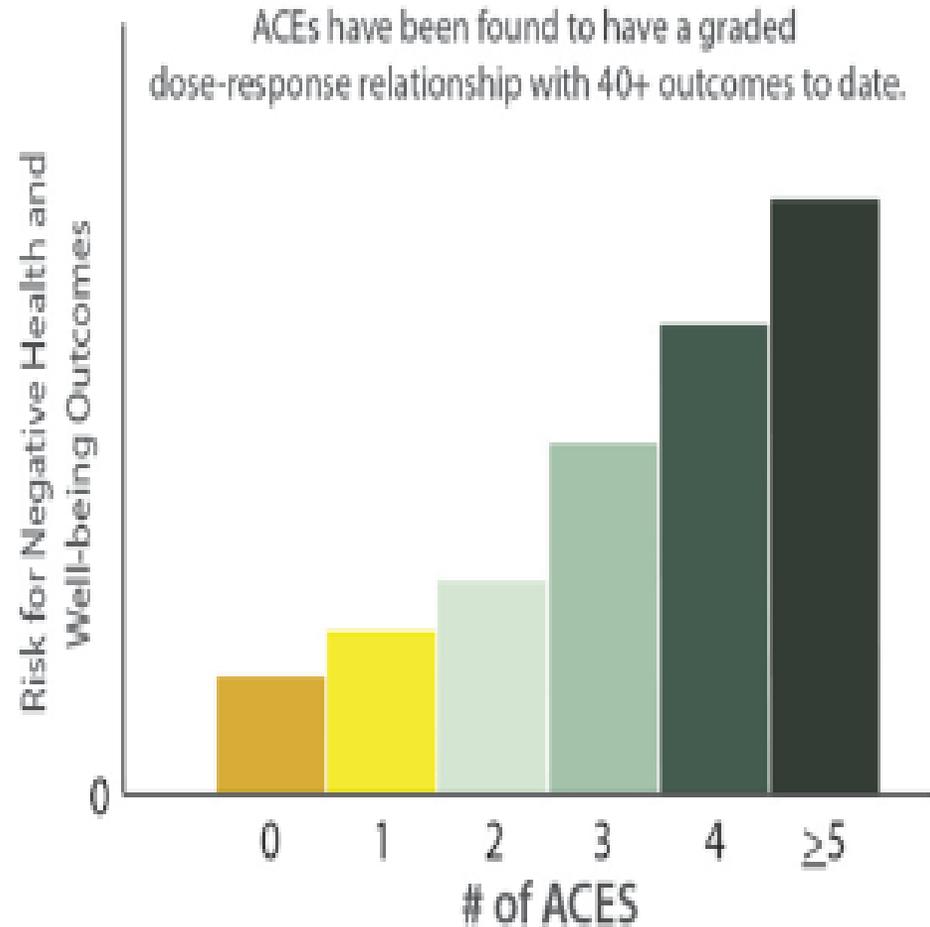
Health (obesity, diabetes, depression, suicide attempts, STDs, heart disease, cancer, stroke, COPD, broken bones)



Behaviors (smoking, alcoholism, drug use)



Life Potential (graduation rates, academic achievement, lost time from work)



*This pattern holds for the 40+ outcomes, but the exact risk values vary depending on the outcome.



ACE Study Part 2

- 2 survey waves were conducted
 - Wave I (n = 9508) from Aug 1995 to Mar 1996
 - Wave II (n = 8667) from Jun 1997 and Oct 1997
- Wave II involved a more thorough analysis of the link between ACEs and addiction
- ≥ 5 = 7-10 fold more likely to report illicit drug use problem, addictions, and IV use
- 2016= ≥ 5 =3 times more likely to misuse prescription pain meds and 5x more likely for IV use



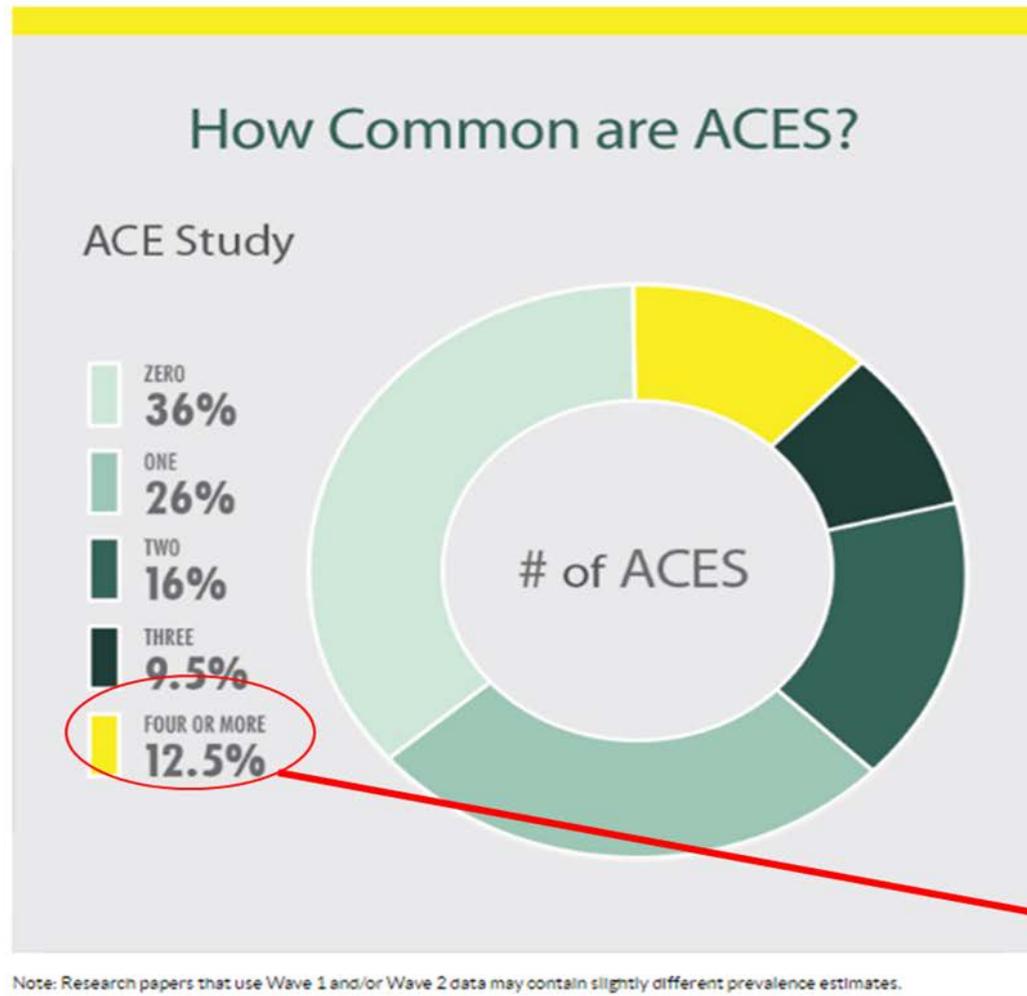
ACE Study Part 2

- Original study “we have found that the compulsive use of nicotine, alcohol, and injected street drugs increased proportionally in a strong, graded, dose-response manner that closely parallels the intensity of adverse life experiences during childhood.”



How Common?

ACE Score Prevalence for CDC-Kaiser ACE Study Participants, Waves 1 and 2.



- **64% people \geq 1 ACE**
- **12% \geq 4 ACE**
 - **Nearly doubled heart disease and cancer**

1 in 8 people!

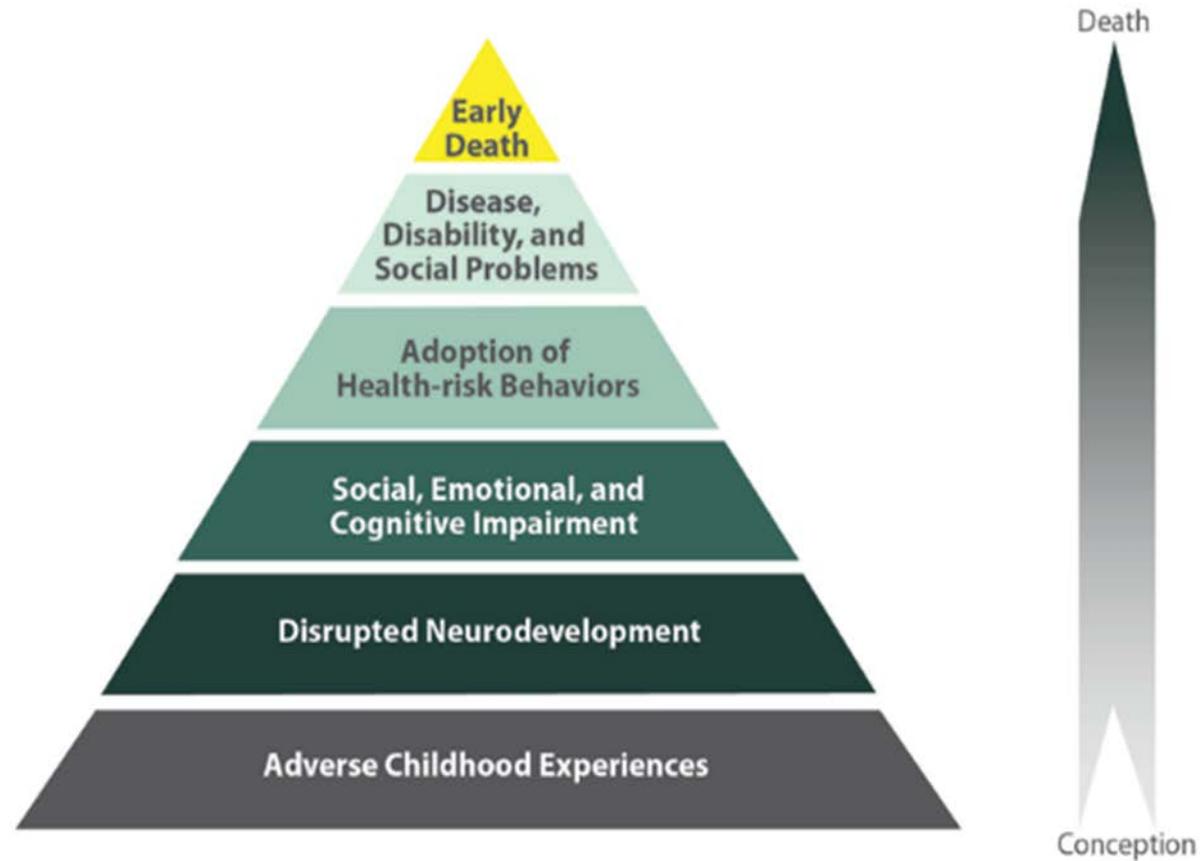


ACE Score Effects

- ≥ 4 ACE
 - 700% risk alcoholic
 - 1200% attempted suicide
- ≥ 5 ACE
 - 7-10 fold more likely to report illicit drug use problem, addictions, and IV use



Disruptions in Neurochemical Development



Mechanism by Which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan





ACEs and SUDs

- ACEs travel in clusters:
 - If exposed to 1 ACE, then median probability of exposure to second ACE was 86.5%
 - Median probability of exposure to 2 additional ACEs was 69.5%





ACEs and SUDs

- A higher ACE score reflected an increased risk of initiating illicit drug use during early adolescence (<14), mid-adolescence (14-18), and adulthood (>19) in a strong, graded manner
- Initiation during early adolescence had the strongest graded relationship with the ACE score
- This was statistically significant for ACE scores of 2 and above



Trauma-Informed Treatment

- Reconsider the cause of addiction;
 - Unrecognized ACEs are likely the major determinant of who becomes addicted to psychoactive substances
 - Individuals may be seeking, unconsciously, chemical relief from the ongoing effects of old trauma
- ACEs travel in clusters, revealing a complex failure of family and community systems
- Systems of oppression (e.g. war, racism) predispose to these adverse effects



Trauma-Informed Treatment

- A deep understanding of the impact of ACEs can improve our ability to use motivational interviewing (MI):
 - Express empathy: first principle of MI
 - Person-centered care: key tenet of MI
- Higher scores=more relapses= fewer resources
- No moral weakness /criminalizing



ACE Scores

- Address person's ACE in group and individual therapy
 - Treat people with respect
 - Provide MAT
 - Help find ritualized compulsive comfort seeking behavior



ACE Scores

- “Seeking safety”
 - Coping skills approach that addresses trauma-related problems and substance use at the same time.
 - Safety, help seeking, setting boundaries, emotional regulation, re-traumatization, self-care and recovery



ACE Scores

- “Prevention is the single most effective long-term solution to drug addiction (because) if we do not reduce the demand for drugs we will never reduce the supply.”
 - Home visiting programs
 - (nurse, family partnership)
 - “Triple P” positive parenting program
 - Secondary: promote resilience



“When children are exposed to chronic stressful events, their neurodevelopment can be disrupted. As a result, the child’s cognitive functioning or ability to cope with negative or disruptive emotions may be impaired...may adapt negative coping mechanisms.”

(SAMHSA)

- Disease/disability and social problems
- Early mortality





“ACE scores don’t tally the positive experiences in early life that can help build resilience and protect a child from the effects of trauma.” (NPR)

- Grandparent
- Teacher
- Friend





I bent until I damn near broke.
But that's the thing
about resilience...
It shows up just as your
soul begins to cry,
and catapults your strength
into over-drive.

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