

UNDERSTANDING THE SCIENCE OF ADVERSE CHILDHOOD EXPERIENCES

(ACEs)

Session One

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IMPACT OF CHILDHOOD TRAUMA



The CDC and Kaiser Permanente surveyed 17,000 of the health plan's members to ask whether they'd had adverse childhood experiences defined as:

ABUSE

Psychological
Physical
Sexual

NEGLECT

Emotional
Physical

HOUSEHOLD CHALLENGES

Family member experiencing:
Domestic abuse
Mental illness
Imprisonment

The landmark study found those with adverse childhood experiences were at higher risk for:



HEART, LUNG, AND LIVER
DISEASE



OBSESITY



DIABETES



DEPRESSION

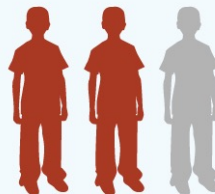


SUBSTANCE
ABUSE

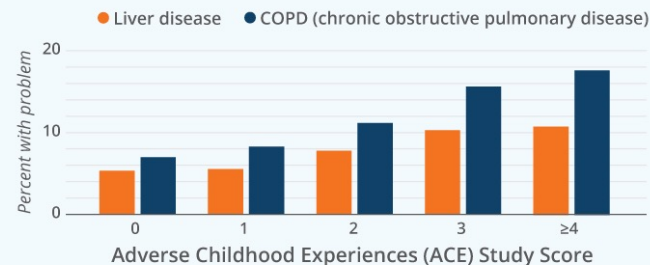
THE STUDY ALSO FOUND

**NEARLY
TWO
THIRDS**

of those surveyed
experienced at least one event.



The higher the score on ACE survey, the more likely people were to be in poor health:



3 Realms of ACEs

Adverse childhood and community experiences (ACEs) can occur in the household, the community, or in the environment and cause toxic stress. Left unaddressed, toxic stress from ACEs harms children and families, organizations, systems and communities, and reduces the ability of individuals and entities to respond to stressful events with resiliency. Research has shown that there are many ways to reduce and heal from toxic stress and build healthy, caring communities.



Thanks to Building Community Resilience Collaborative and Networks and the International Transformational Resilience Coalition for inspiration and guidance. Please visit ACEsConnection.com to learn more about the science of ACEs and join the movement to prevent ACEs, heal trauma and build resilience.

Adverse Childhood Experiences

How **Knowing** About **ACEs** HELPS

Dr. Burke Harris describes one woman's
reaction to learning about ACEs :

"These are tears of pure, unadulterated joy." "Why joy?" ... "Because I understand now why I am this way. I understand why my siblings are this way. I understand why my mother raised us the way she did. I understand that I can break this cycle for my children and I understand that I'm not a victim, I'm a survivor." p. 178

Nadine Burke Harris, MD The Deepest Well p 178

Educate Your Doctor

Free Downloadable **ACEs Fact Sheet**



Veronique Mead, MD, MA

Chronic Illness Trauma Studies.com





Center on the Developing Child

HARVARD UNIVERSITY

The healthy development of children provides a strong foundation for healthy and competent adulthood, responsible citizenship, economic productivity, strong communities, and a sustainable society.

What Develops?

Brain Architecture:


- Shaped by early experiences
- Simple skills come first; complex skills build on them
- Strong foundation improves odds for positive outcomes; a weak foundation increases the odds of problems later in life



Three Core Concepts in Early Development

1 Experiences Build Brain Architecture

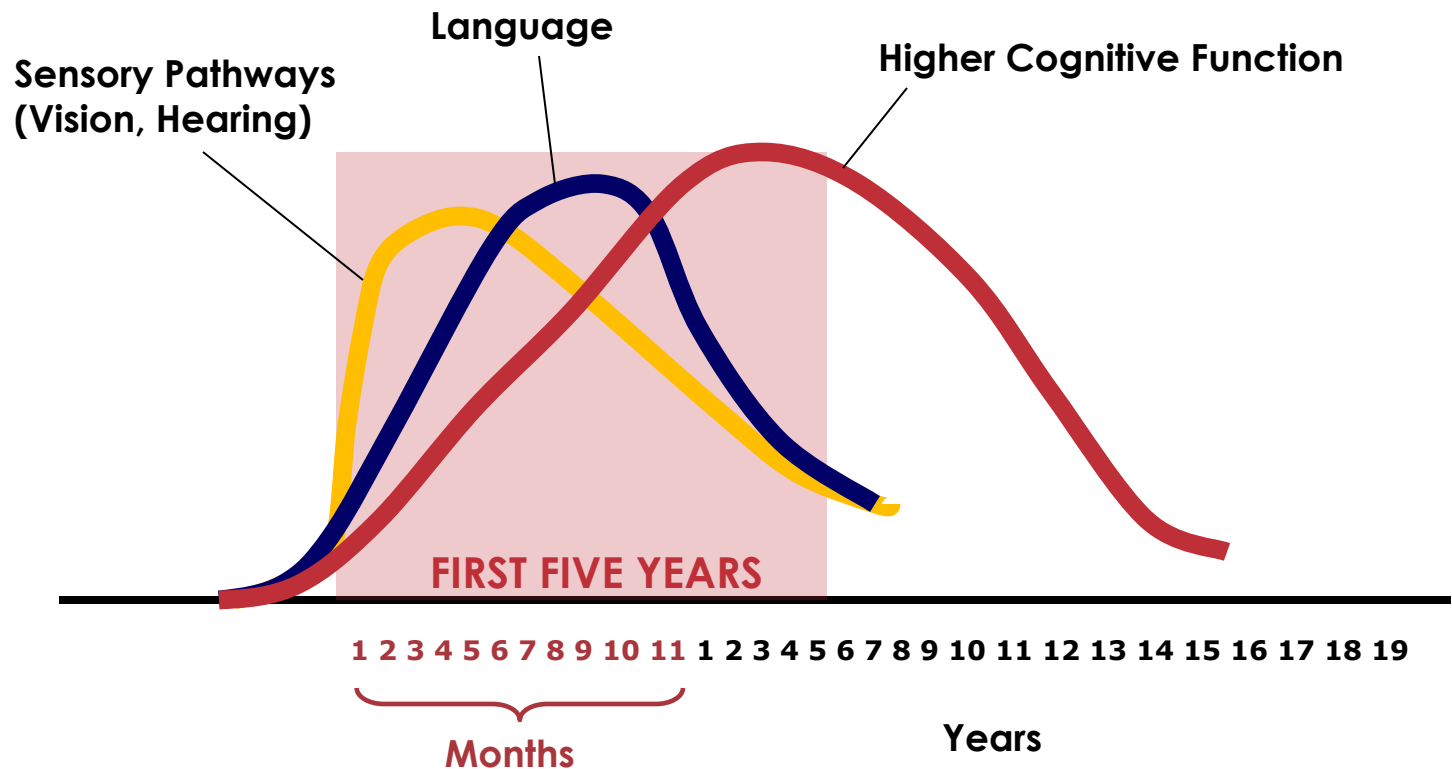
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Neural Circuits are Wired in a Bottom-Up Sequence

(700 synapses formed per second in the early years)



How?

Serve & Return Relationships

- Key to forming strong brain architecture
- Back-and-forth process: children reach out for connections and communications with adults, and adults reciprocate
- Wires the brain with the connections needed for healthy development



Three Core Concepts in Early Development

2 Serve & Return Interaction Shapes Brain Circuitry

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What Derails Development?

Toxic Stress

- Unlike mild, short-lived stress that can be good for growth, certain types of stress can weaken the brain's architecture.
- Experiences such as abuse, neglect or exposure to violence can cause toxic stress responses in the brain, with lifelong consequences in health, learning and behavior.



Three Core Concepts in Early Development

3 Toxic Stress Derails Healthy Development

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THE TRUTH ABOUT ACEs

WHAT ARE THEY?

ACEs are
ADVERSE
CHILDHOOD
EXPERIENCES

The three types of ACEs include

ABUSE



Physical



Emotional



Sexual

NEGLECT



Physical



Emotional

HOUSEHOLD DYSFUNCTION



Mental Illness



Substance Abuse



Substance Abuse

Divorce

HOW PREVALENT ARE ACEs?

The ACE study* revealed the following estimates:

ABUSE

Physical Abuse 28.3%

Sexual Abuse 20.7%

Emotional Abuse 10.6%

percentage of study participants that experienced a specific ACE

NEGLECT

Emotional Neglect 14.8%

Physical Neglect 9.8%

HOUSEHOLD DYSFUNCTION

Household Substance Abuse 26.9%

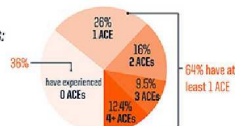
Parental Divorce 23.3%

Household Mental Illness 19.4%

Mother Treated Violently 12.7%

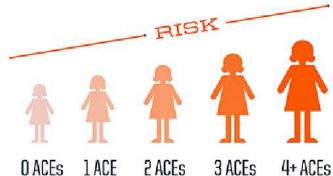
Incarcerated Household Member 4.7%

Of 17,000 ACE study participants:



WHAT IMPACT DO ACEs HAVE?

As the number of ACEs increases, so does the risk for negative health outcomes



Possible Risk Outcomes:

BEHAVIOR



Lack of physical activity



Smoking



Alcoholism



Drug use



Missed work

PHYSICAL & MENTAL HEALTH



Severe obesity



Diabetes



Depression



Suicide attempts



STDs



Heart disease



Cancer



Stroke



COPD



Broken bones

The Pair of ACEs

Adverse Childhood Experiences

Maternal
Depression

Physical &
Emotional Neglect

Emotional &
Sexual Abuse

Divorce

Substance
Abuse

Mental Illness

Incarceration

Domestic Violence

Homelessness

Adverse Community Environments

Poverty

Discrimination

Community
Disruption

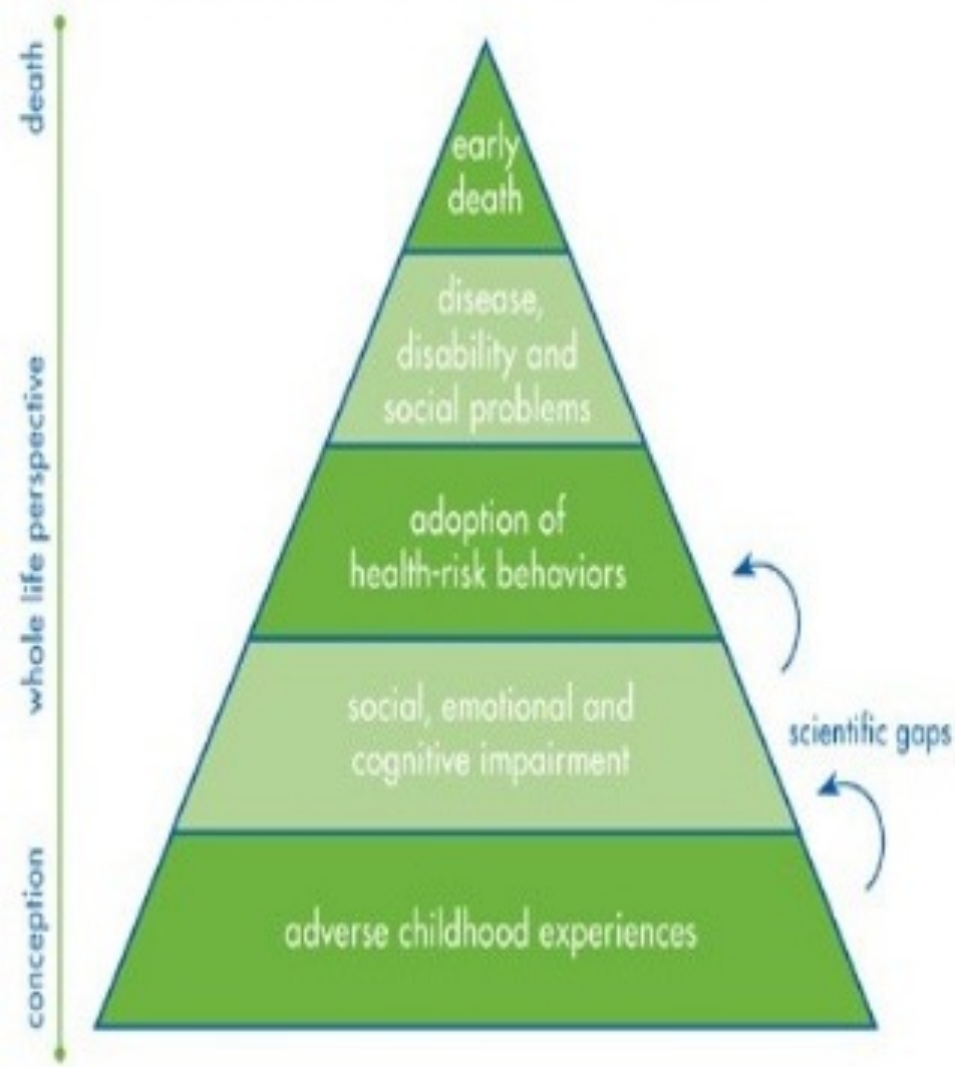
Lack of Opportunity, Economic
Mobility & Social Capital

Poor Housing
Quality &
Affordability

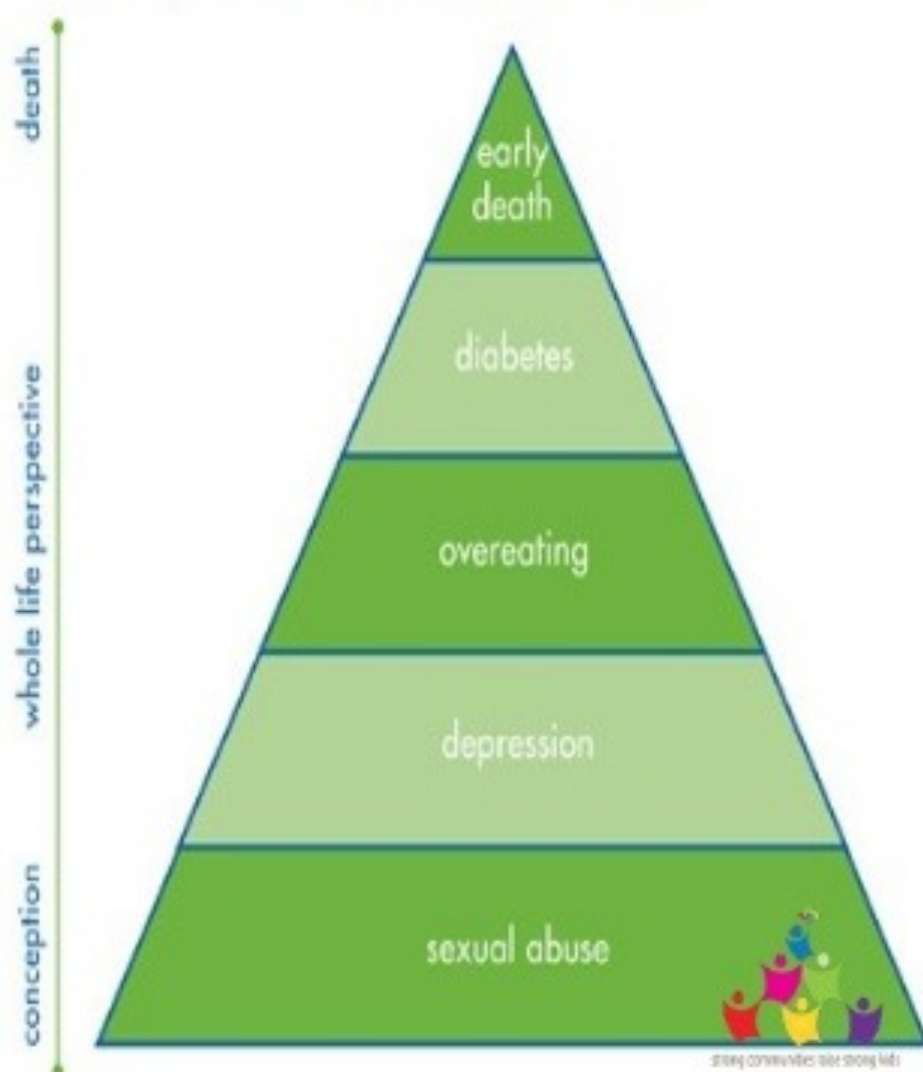
Violence

ACE Pyramid

ACE Pyramid: Conceptual Framework

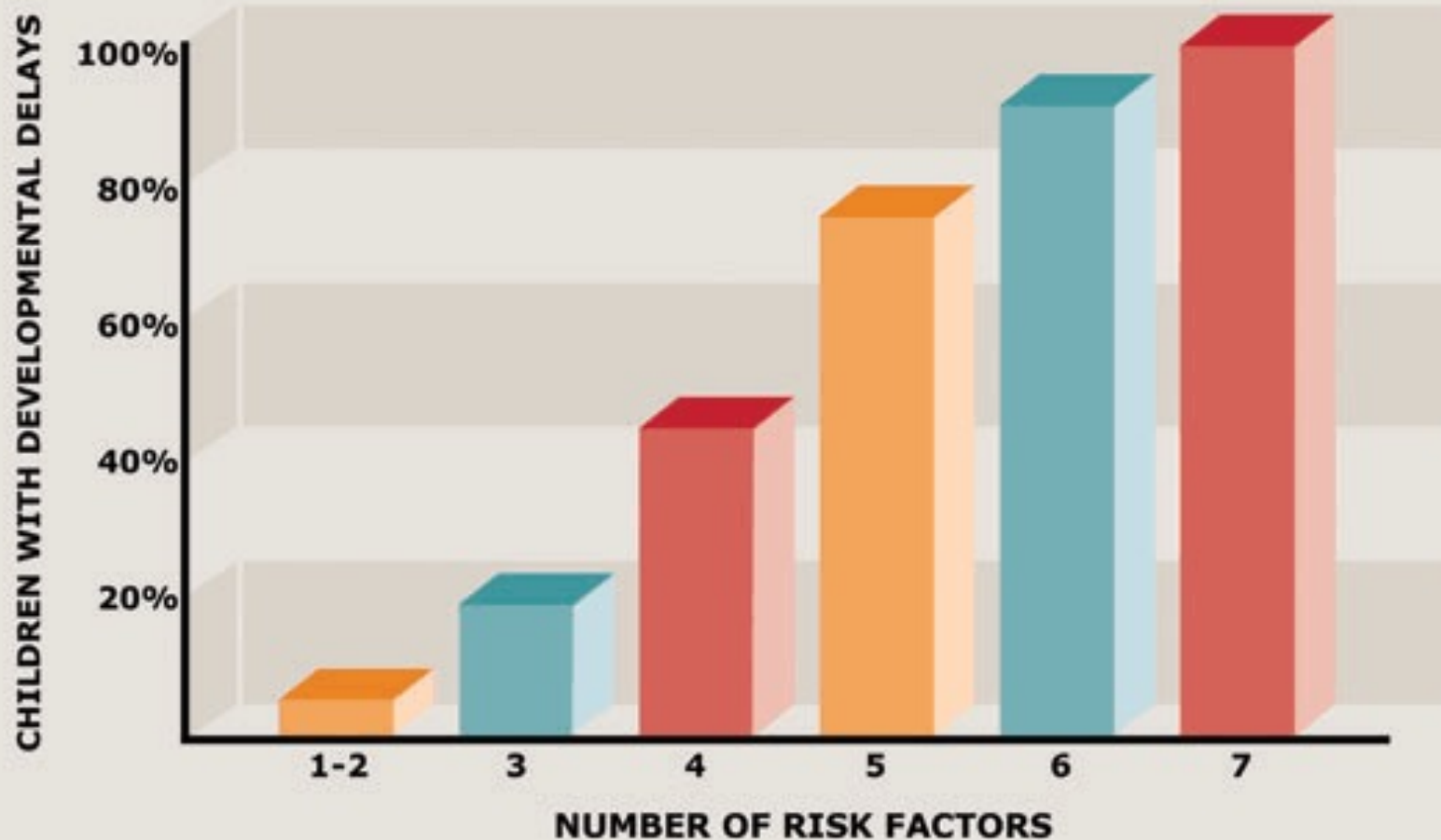


ACE Pyramid: Real Life Scenario

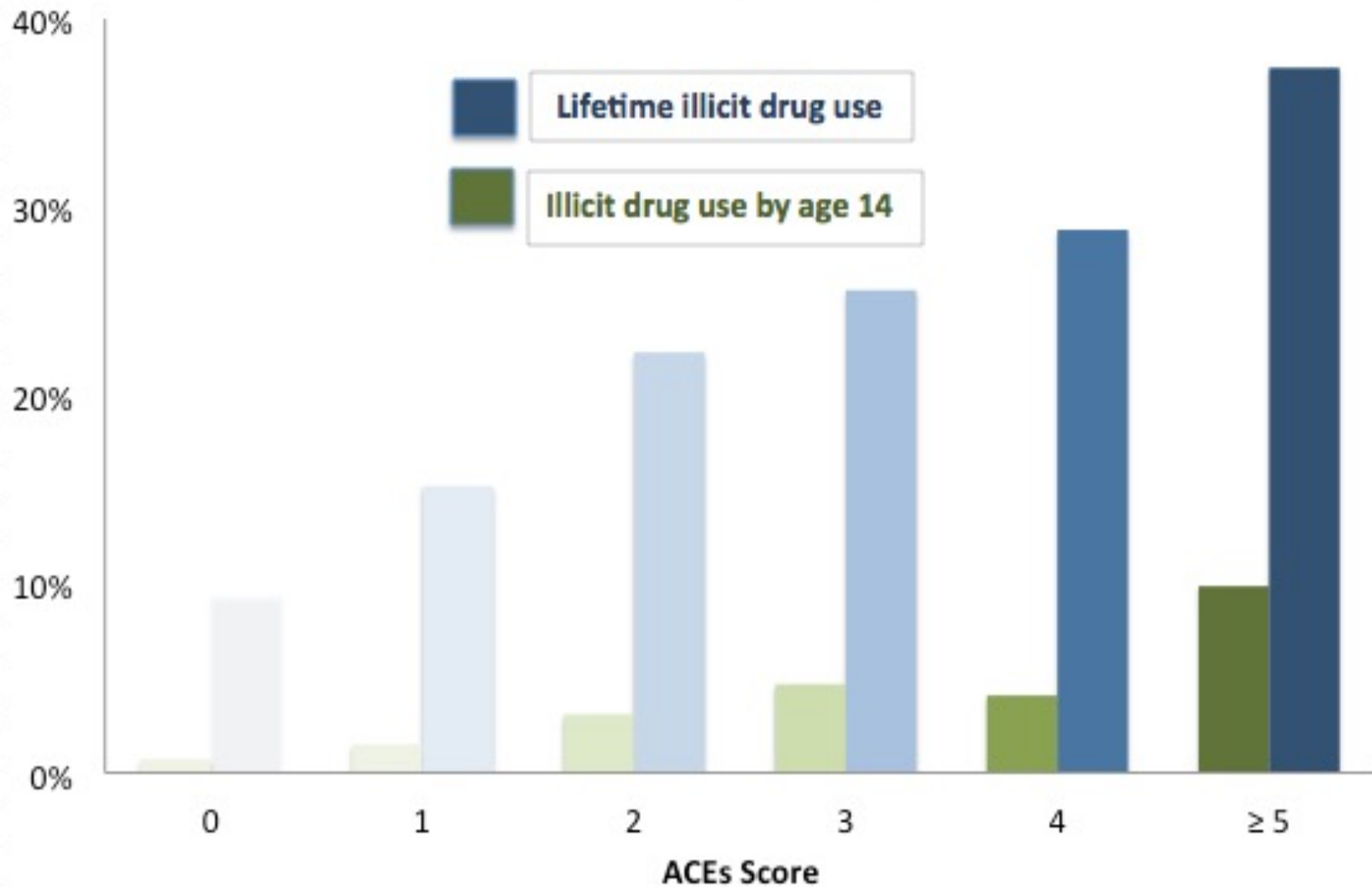


90-100

90-100% CHANCE OF
DEVELOPMENTAL DELAYS
WHEN CHILDREN EXPERIENCE 6-7 RISK FACTORS

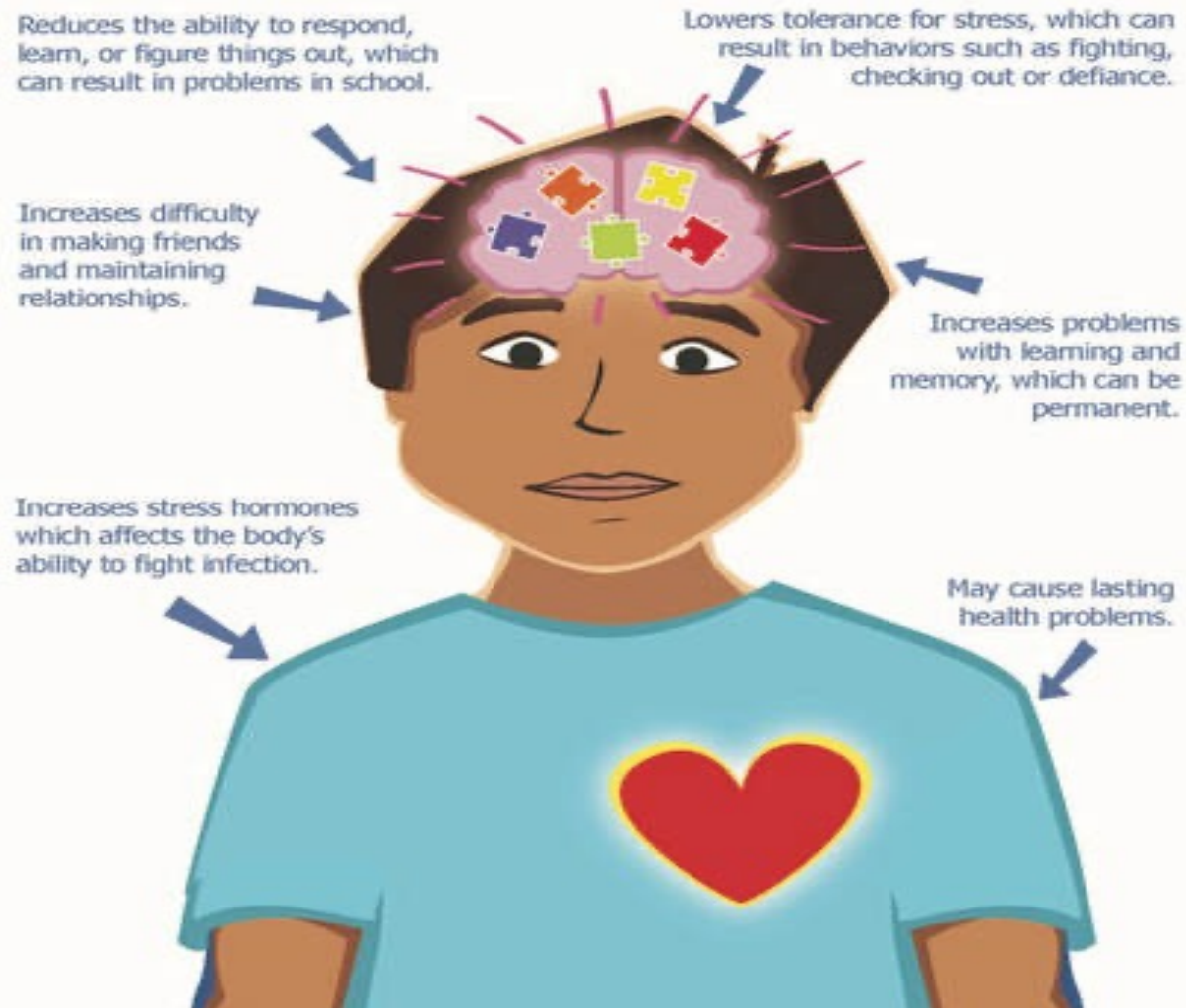


Prevalence of illicit drug use by ACEs score



How do ACEs affect health?

Through stress. Frequent or prolonged exposure to ACEs can create toxic stress which can damage the developing brain of a child and affect overall health.



How Can Children Overcome the Effects of Trauma?

Serve and Return Relationships

- The key to forming strong brain architecture is the “serve and return” relationships young children have with supportive adults in their lives.
- When children reach out for connections and communications with adults, and adults reciprocate, this back-and-forth process continues, literally wiring the brain with the connections needed for healthy development.



How Do We Address ACEs & Trauma?

Prevention and Promotion

- Highly specialized interventions with families as early as possible for children can decrease the effects of long-term toxic stress
- Put developmental and behavioral health at the forefront when talking about children
- Ensure safe, supportive environments and programs for children to develop and learn
- Mitigate toxic stress and health disparities by creating a shared vision and plan among community members and sectors



Access to Services?



Home visiting to pregnant women and families with newborns



Parenting training programs



Intimate partner violence prevention



Social support for parents



Parent support programs for teens and teen pregnancy prevention programs



Mental illness and substance abuse treatment



High quality child care



Sufficient Income support for lower income families



Self-Care

- Take care of yourself
- Fill your bucket, put on your oxygen mask
- Address your own trauma history

Questions ?



Resources

- Center on the Developing Child (2010). *The Foundations of Lifelong Health Are Built in Early Childhood*. Retrieved from www.developingchild.harvard.edu.
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