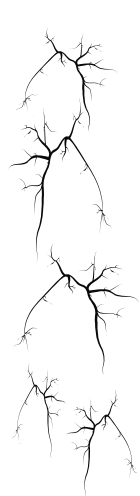


LEARNING IMPACTED BY TRAUMA

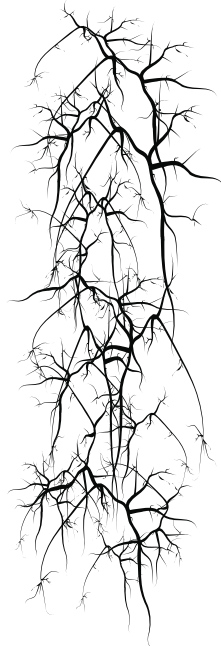
TIFANIE PETRO, MS
DIRECTOR OF
ADVOCACY AND
PREVENTION



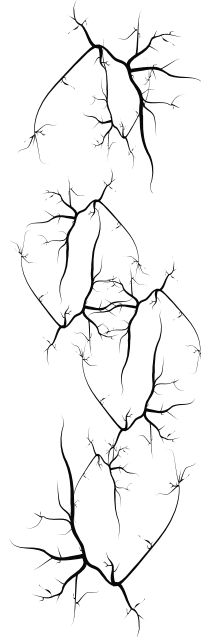
SYNAPTIC DENSITY



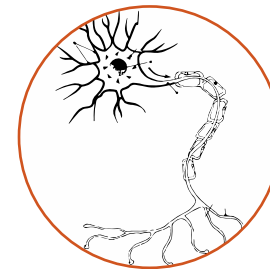
At Birth



Elementary Age

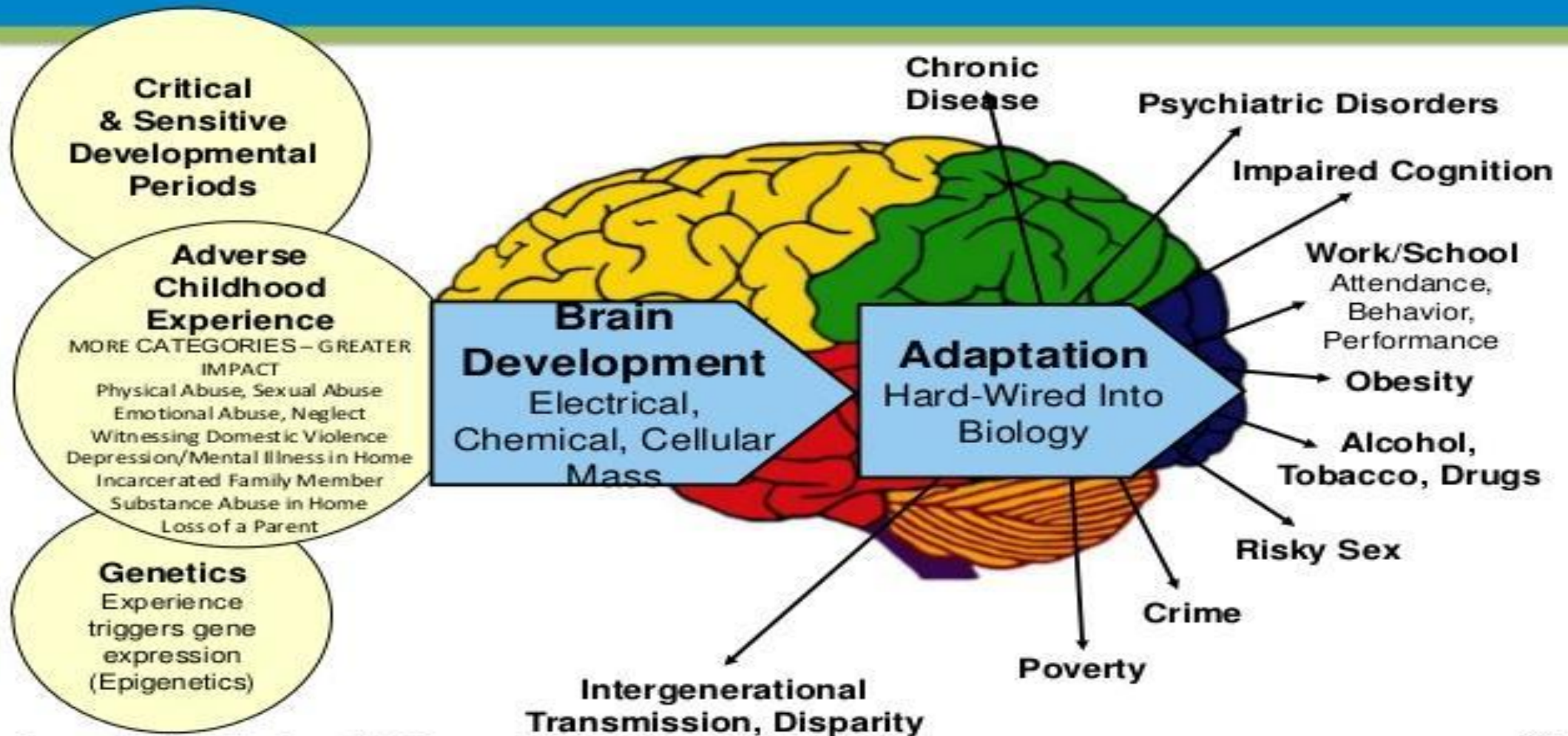


Puberty



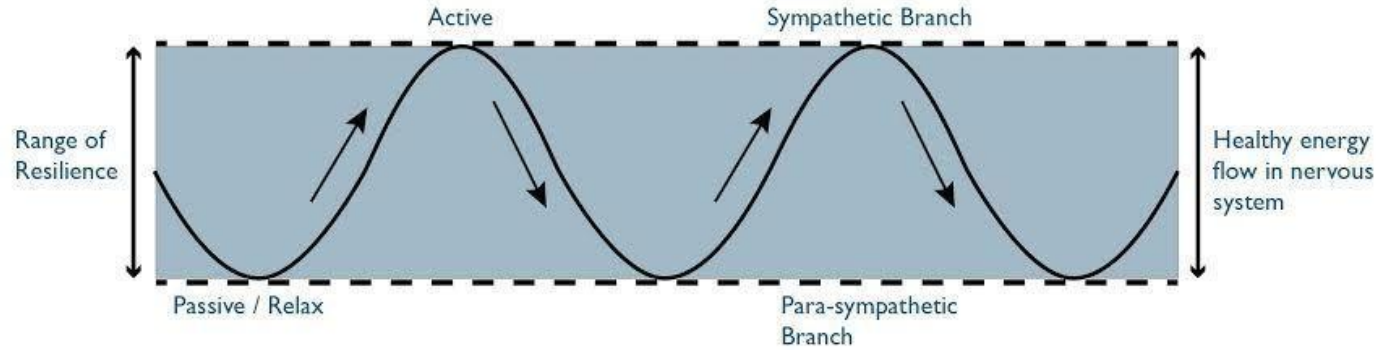
Single Neuron

Lifespan Impacts of ACEs

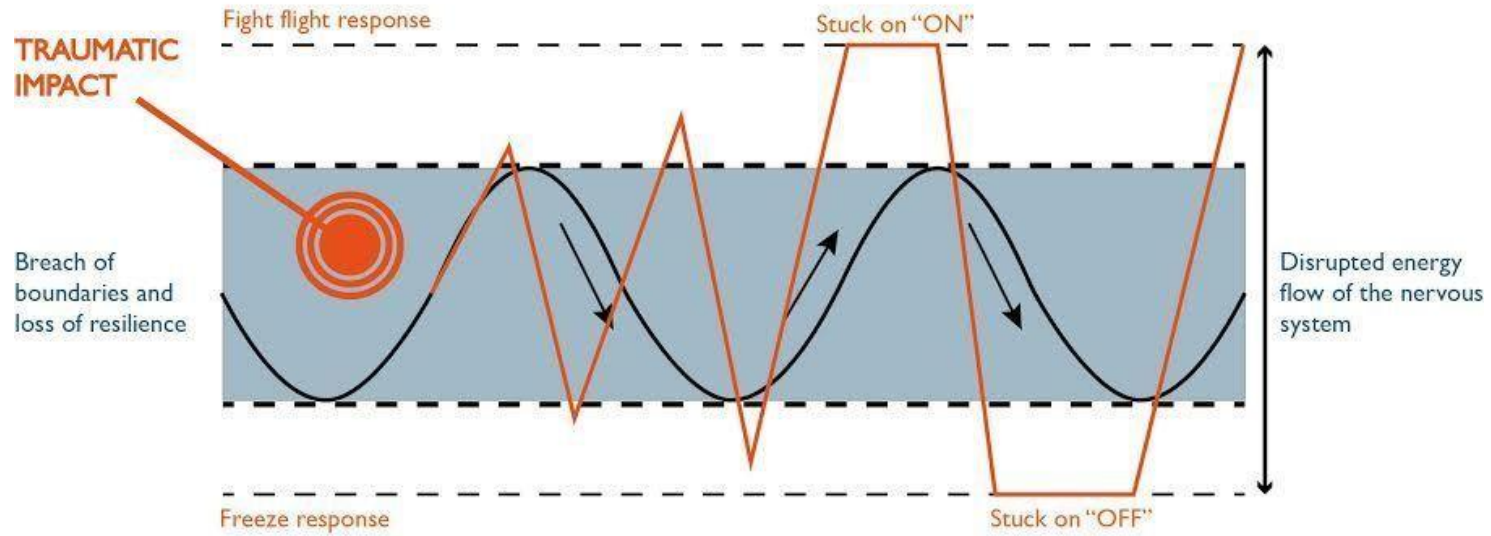


Source: Family Policy Council, 2012

This represents a healthy nervous system:



This is what happens when we go through Trauma:



ABUSE



Physical



Emotional



Sexual

NEGLECT



Physical



Emotional

HOUSEHOLD DYSFUNCTION



Mental Illness



Incarcerated Relative



Mother treated violently



Substance Abuse



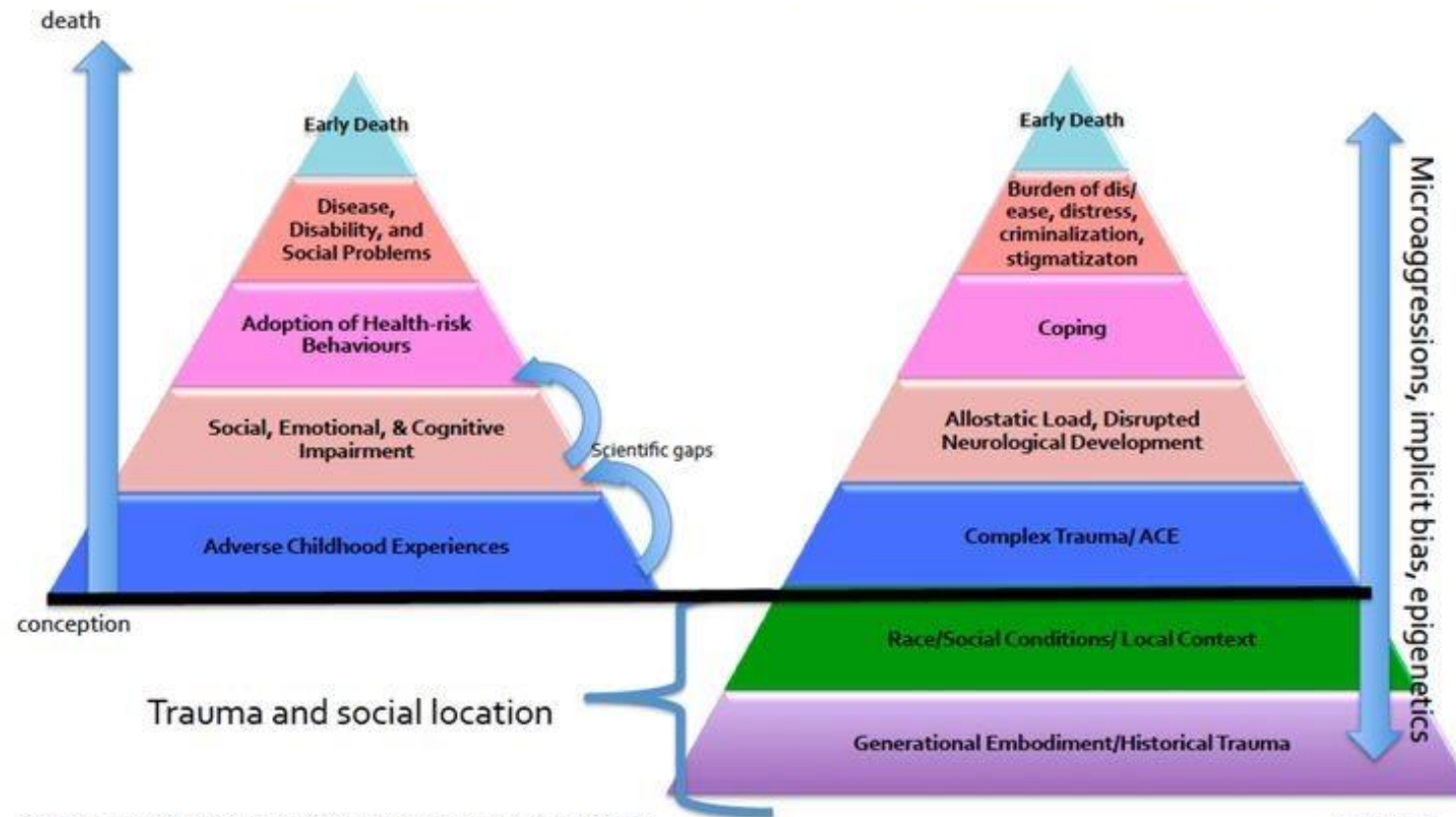
Divorce

Trauma and Social Location



Adverse Childhood Experiences*

Historical Trauma/Embodiment



*<http://www.cdc.gov/violenceprevention/acestudy/pyramid.html>

ACES can have lasting effects on....



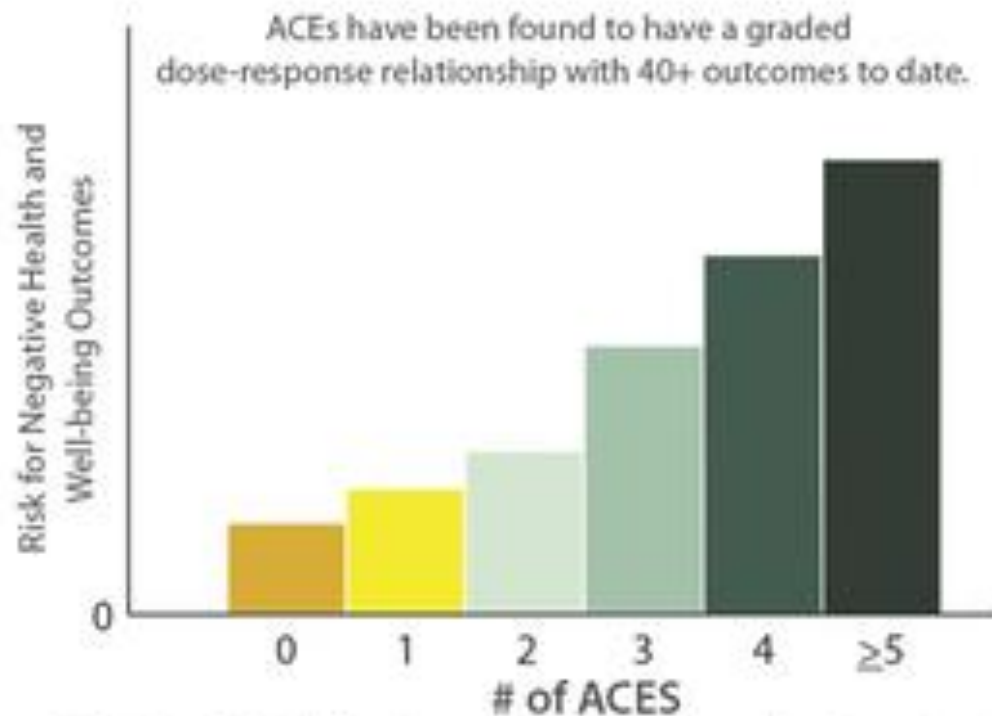
Health (obesity, diabetes, depression, suicide attempts, STDs, heart disease, cancer, stroke, COPD, broken bones)



Behaviors (smoking, alcoholism, drug use)

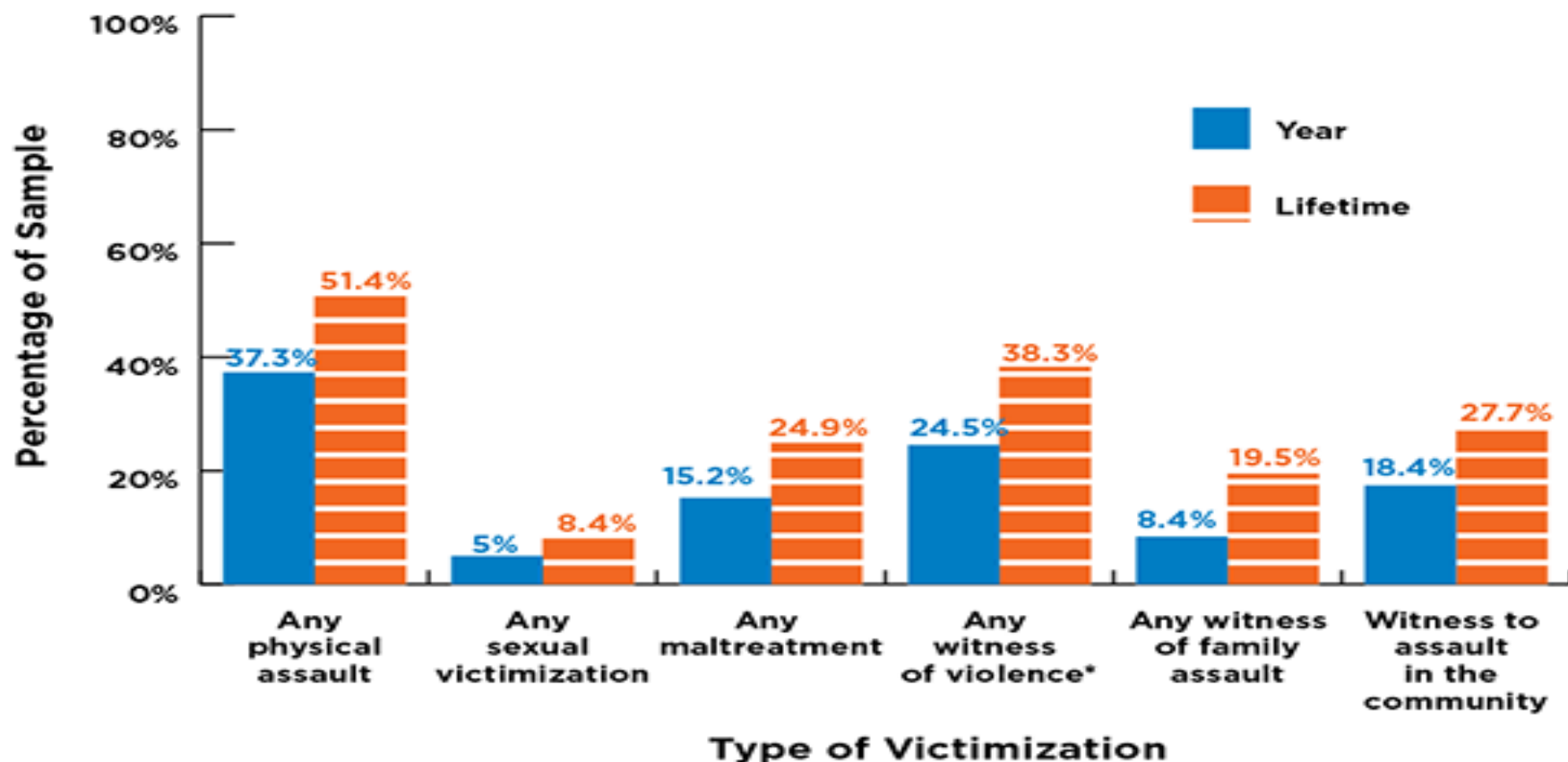


Life Potential (graduation rates, academic achievement, lost time from work)



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

Children's Exposure to Violence: Percentage Victimized, 2014



*Excludes indirect exposure to violence

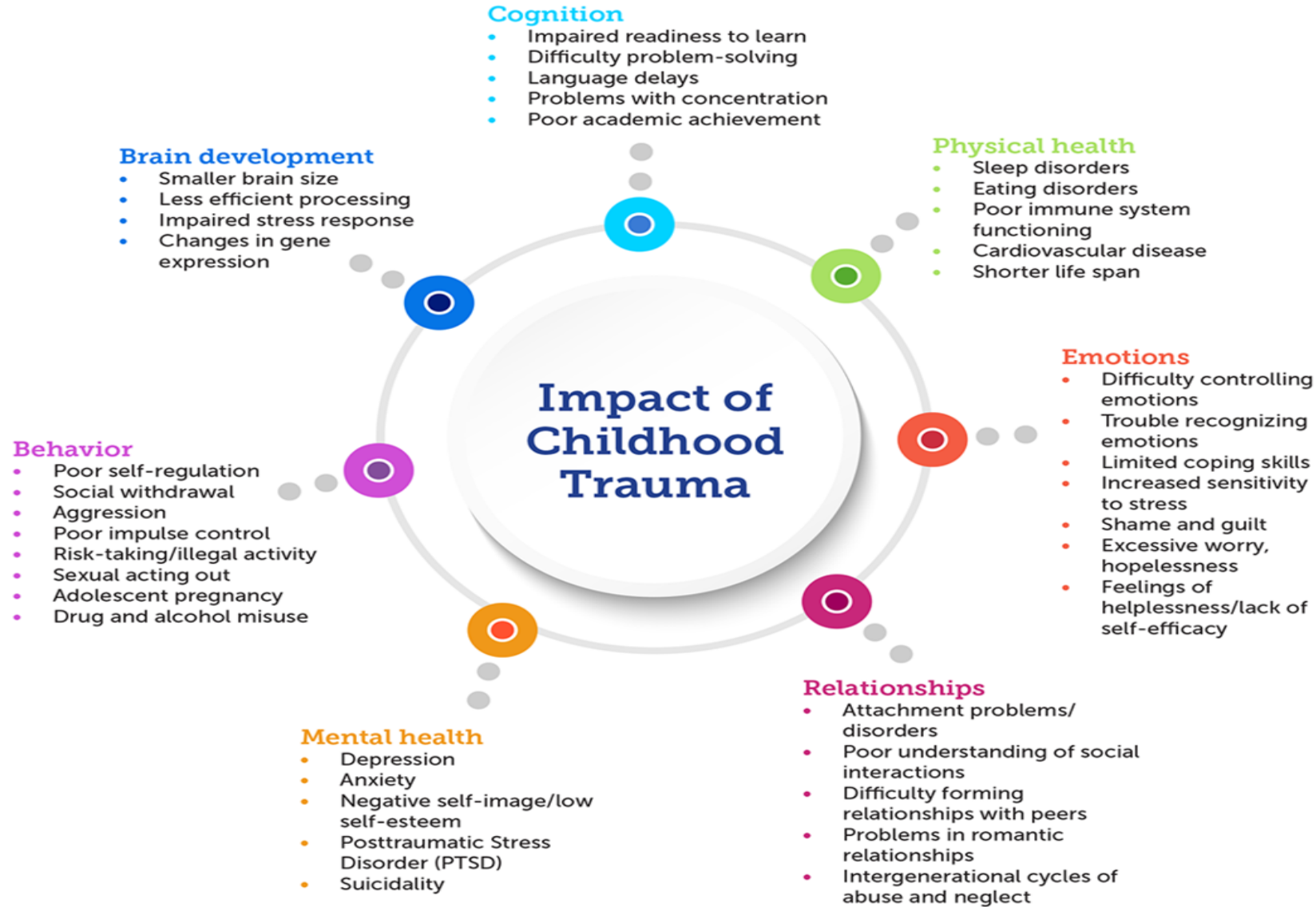
Source: Finkelhor, D., Turner, H. A., Shattuck, A., & Hamby, S. L. (2015) Prevalence of childhood exposure to violence, crime, and abuse: Results from the national survey of children's exposure to violence. *JAMA Pediatric*, 169(8), 746-754.

Impact on Child Development



- The ability to form healthy relationships is highly dependent on learned social skills
- Children's social skill learning is directly related to the characteristics of their environments
- Violence teaches withdrawal, anxiety, distrust, over-reaction and/or aggression as coping behaviors
- Disordered environments=dysfunctional skills

Impact of Childhood Trauma



Traumatized Children

World is punitive, judgmental, humiliating and blaming

Control is external, not internalized

People are unpredictable and untrustworthy

Defend themselves above all else

Believe that admitting mistakes is worse than telling truth

Positive Stress

Mild stress in the context of good attachment



Temporary, mild elevation in stress hormones & brief increase in heart rate

No buffering



support necessary

Increased **RESILIENCE** and confidence
Development of coping skills



Tolerable Stress

Serious, temporary stress, buffered by supportive relationships



More severe, continuing cardiovascular and hormonal response

Pres



buffering caring adult

Adaption and recovery with some possibility for physical/emotional damage



Toxic Stress

Prolonged activation of stress response system without protection

Prolonged activation of stress response system & disrupted development of brain and immune system



No adult



buffers

Lifelong consequences:

- Heart disease
- Alcoholism
- Memory & learning difficulties
- Anxiety/depression
- Cancer



Stress and Learning

Acute Stress

- Higher levels of cortisol result in:
 - Enhanced immunity
 - Enhanced memory

Chronic/Toxic Stress

- Higher levels of cortisol result in:
 - Lower immune response
 - Impaired cognitive functioning

Childhood

- Developmental Delays
- Expulsion



Adolescence

- Delinquency
- Mental Health
- Sexual Activity
- Drugs & Alcohol
- Violence



Adulthood

- Psychiatric Problems
- Drug Abuse
- Alcohol
- Crime

**Untreated Adverse Early Childhood Events
Only Exacerbate Over Time**

Impact of ACEs on School Performance

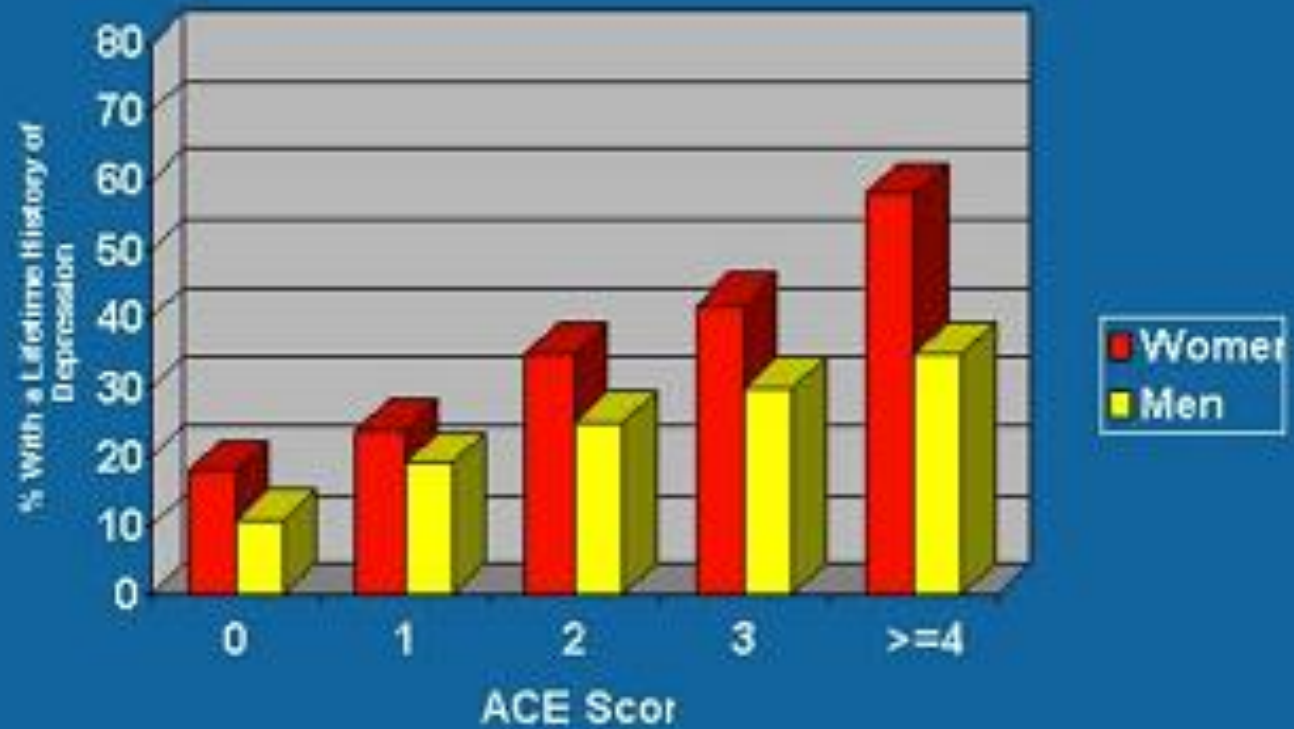
Children with 3 or more ACEs are nearly 4 times (OR=3.66) more likely to have developmental delays

Children with 4 or more ACEs are 32 times more likely to have behavioral problems in school

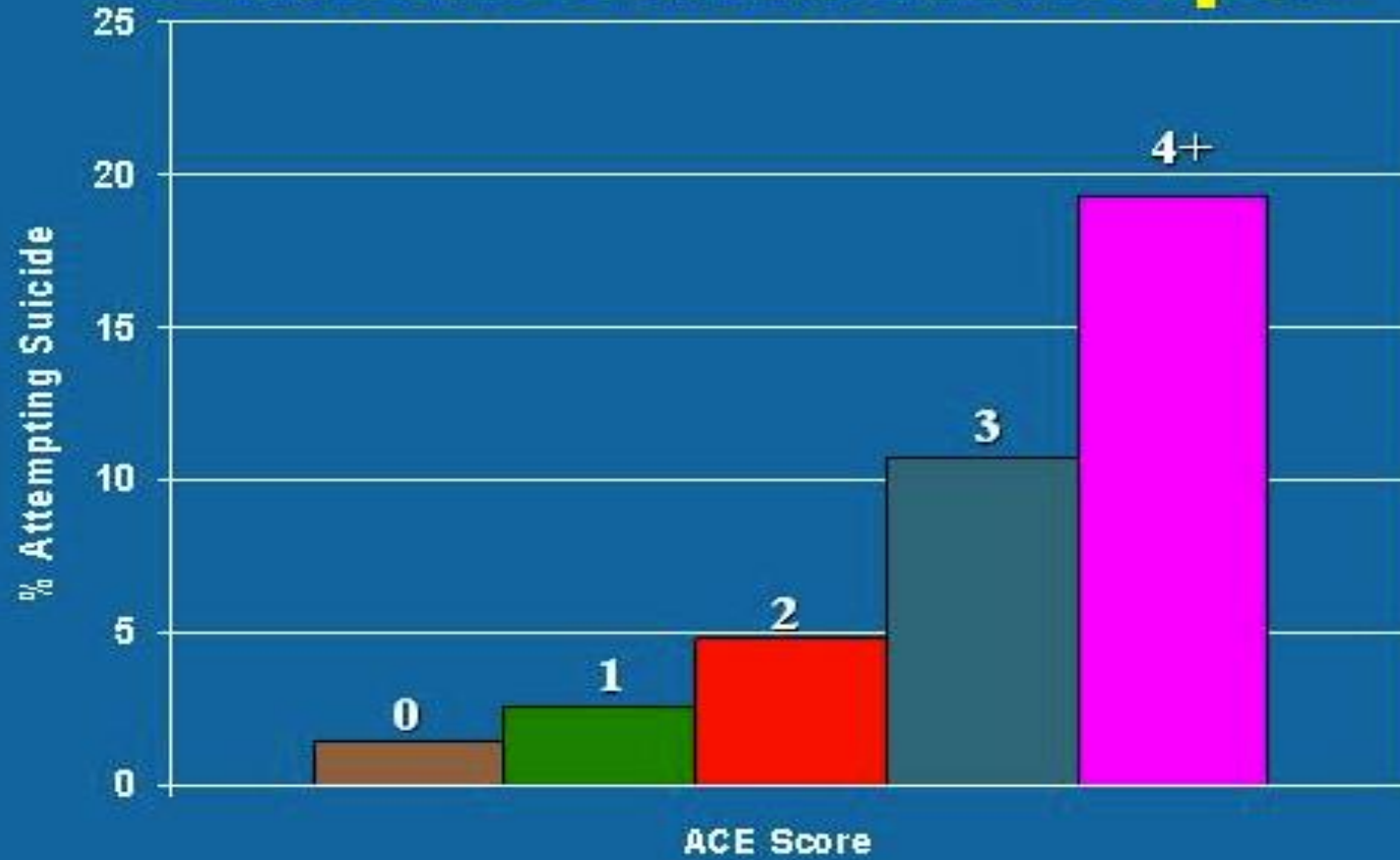
Chamberlain, L. "Trauma-Informed Approach Adverse Childhood Experiences (ACEs): Building Resilient Communities." 2014.

Mental Health

Childhood Experiences Underlie Chronic Depression

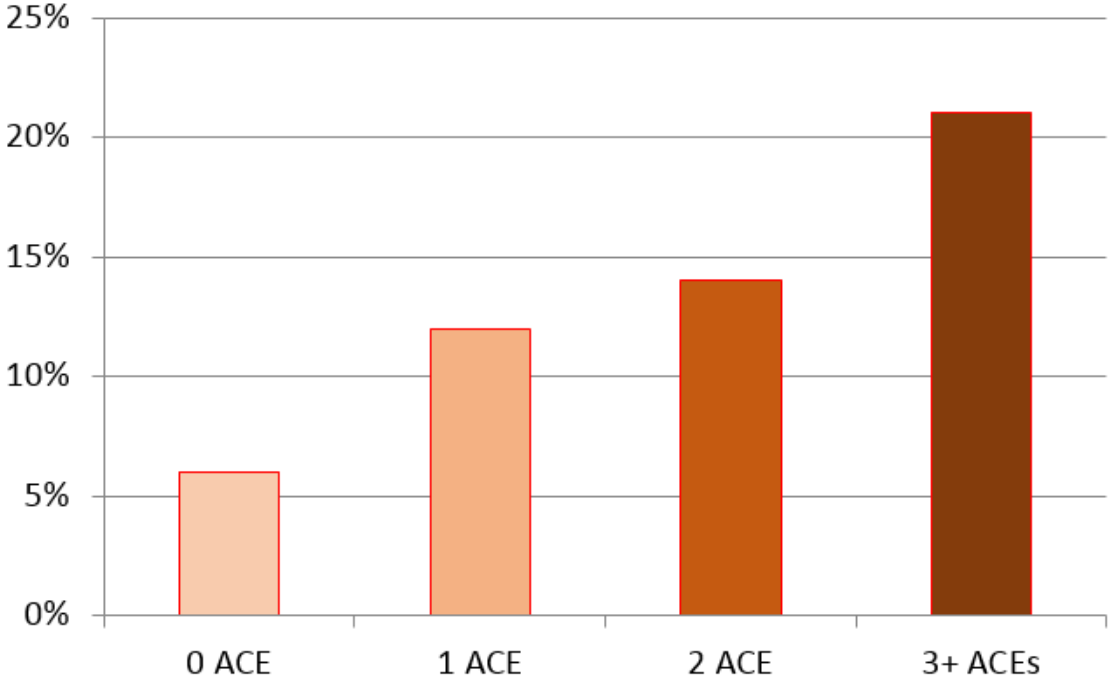


Childhood Experiences Underlie Suicide Attempts



ACE Effects in School

Grade Repetition

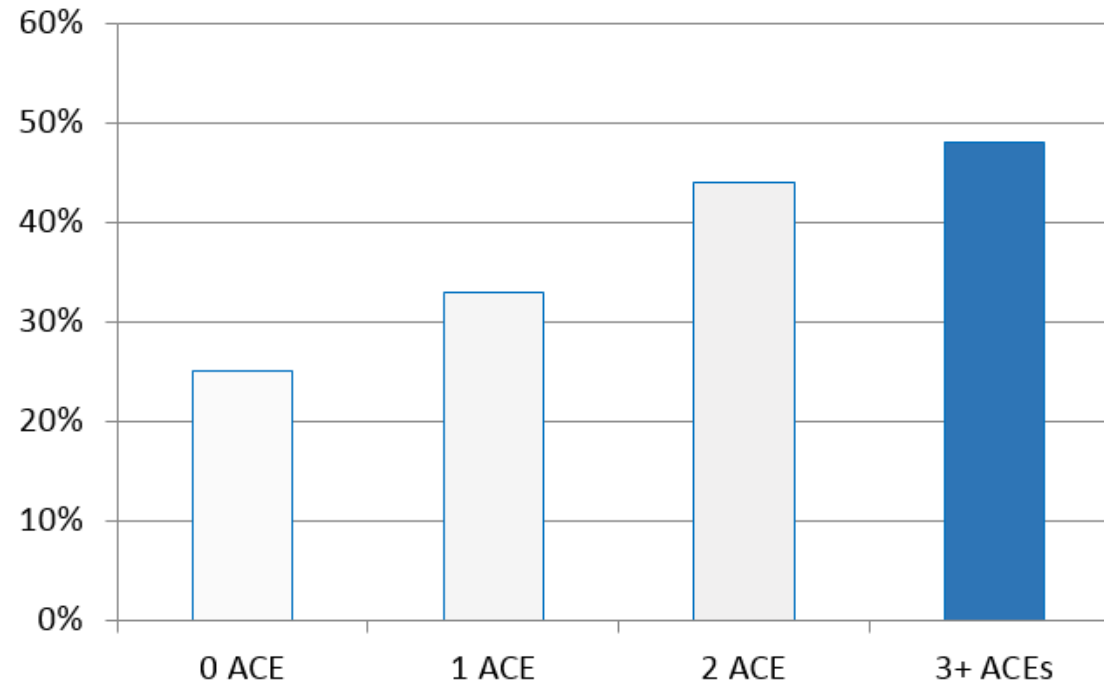


Source: National Survey of Children's Health, Johns Hopkins University (2012)

ACE Effects in School

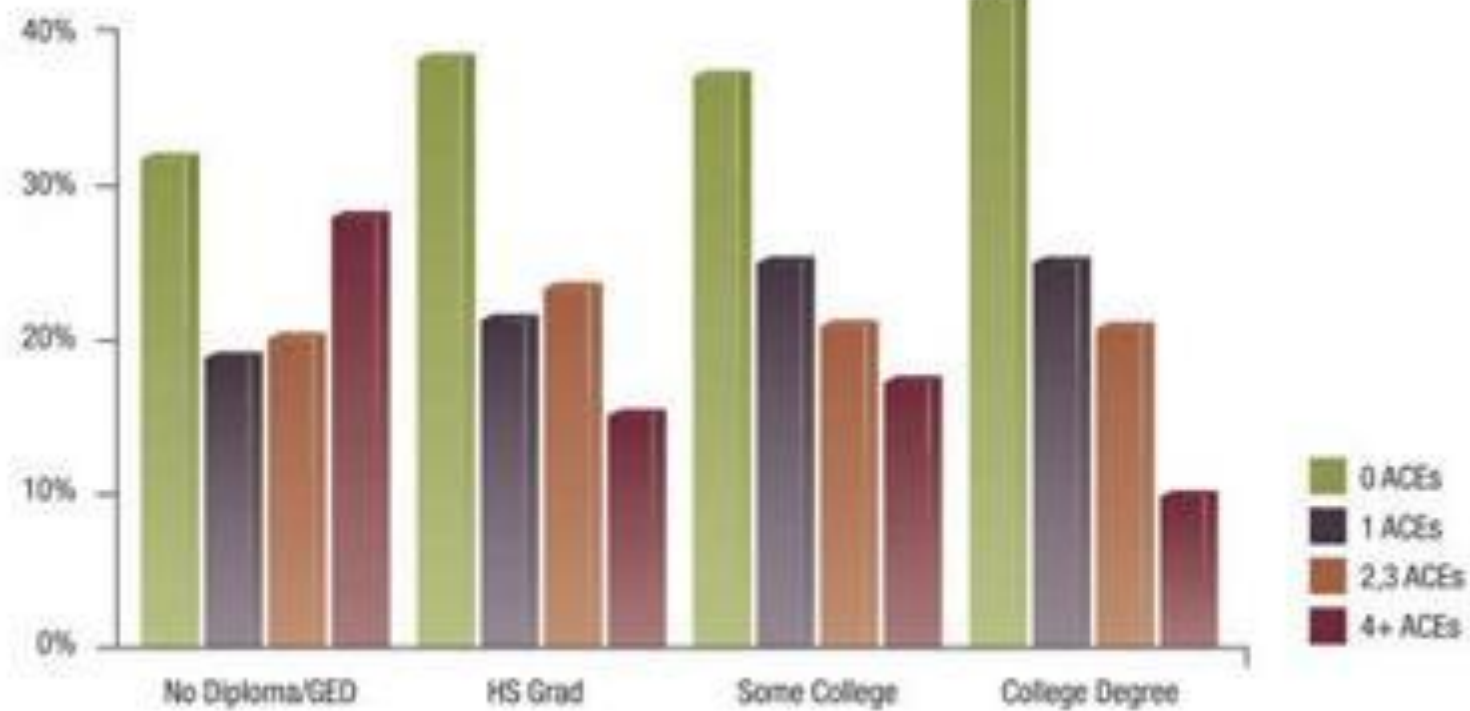
Low School Engagement

The student only “sometimes,” “rarely,” or “never” cares about school or does all the required homework.

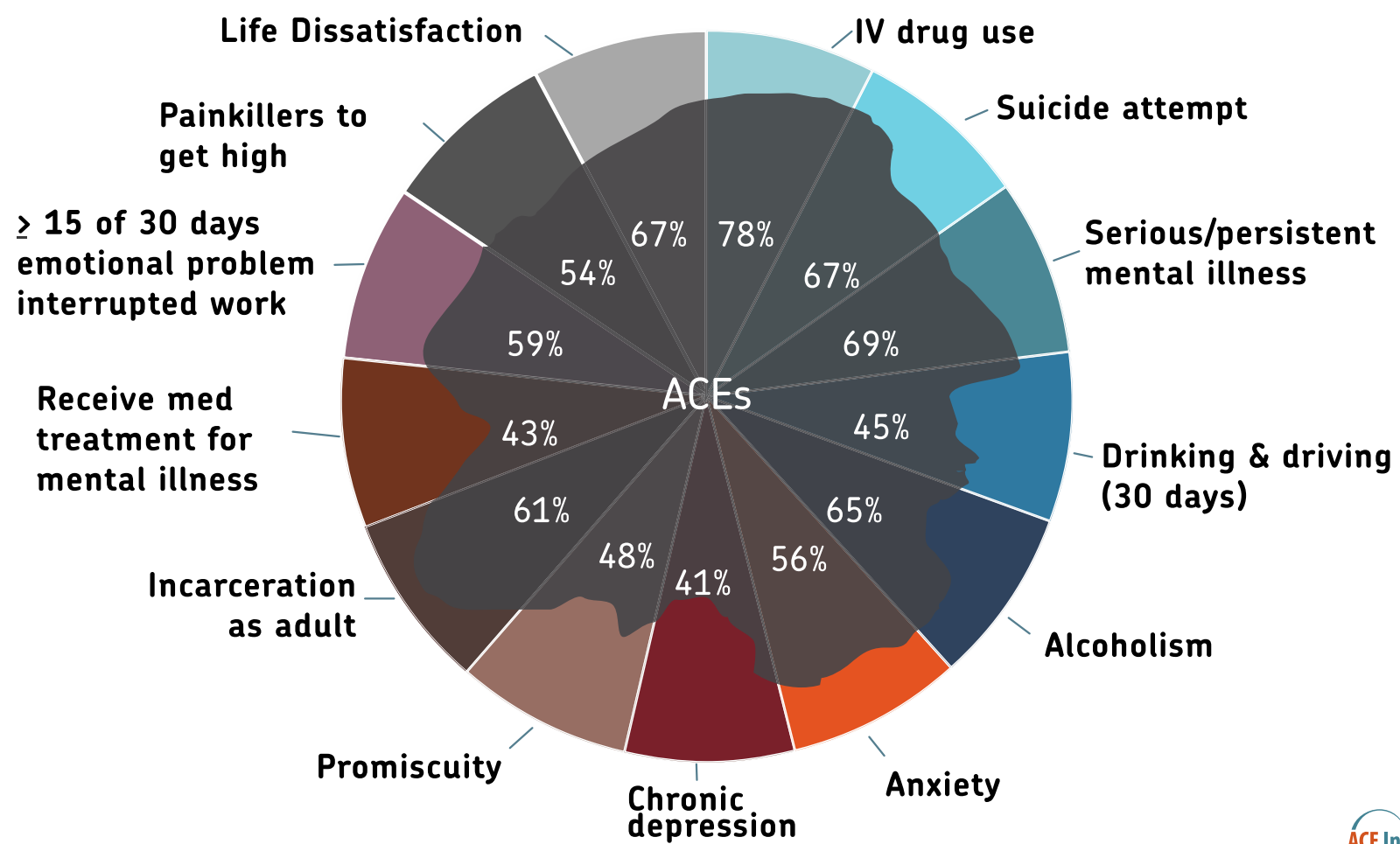


Source: National Survey of Children’s Health, Johns Hopkins University (2012)

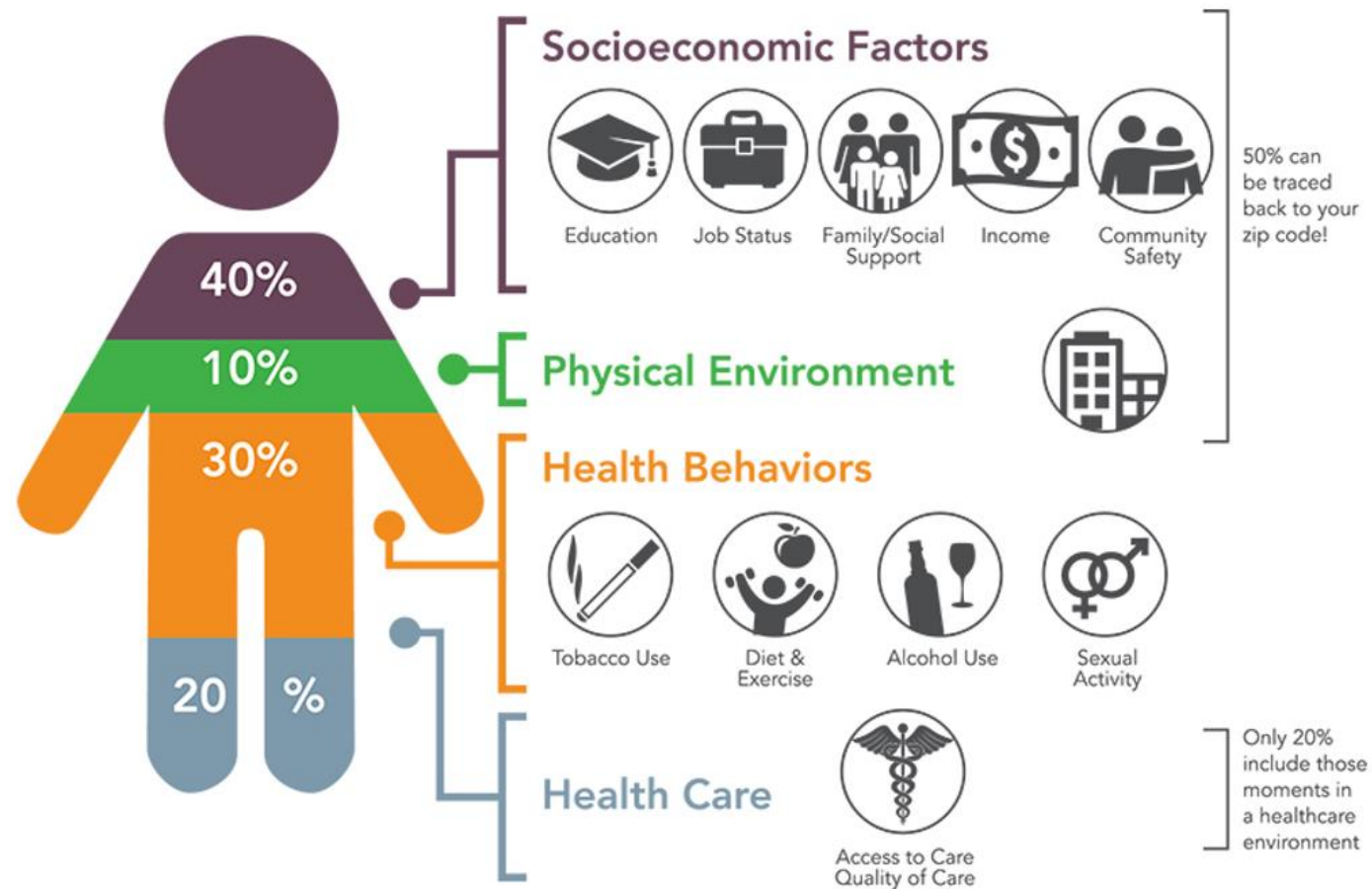
ACEs and Educational Attainment



Population Attributable Risk



Controls: gender, age, income, education, race-ethnicity



Core Protective Systems

Capabilities

Attachment
&
Belonging

Community
Culture
Spirituality

“Nurturing the healthy development of these protective systems affords the most important preparation or ‘inoculation’ for overcoming potential threats and adversities in human development. Similarly, damage or destruction of these systems has dire consequences for the positive adaptive capacity of individuals.”

Ann Masten, 2009



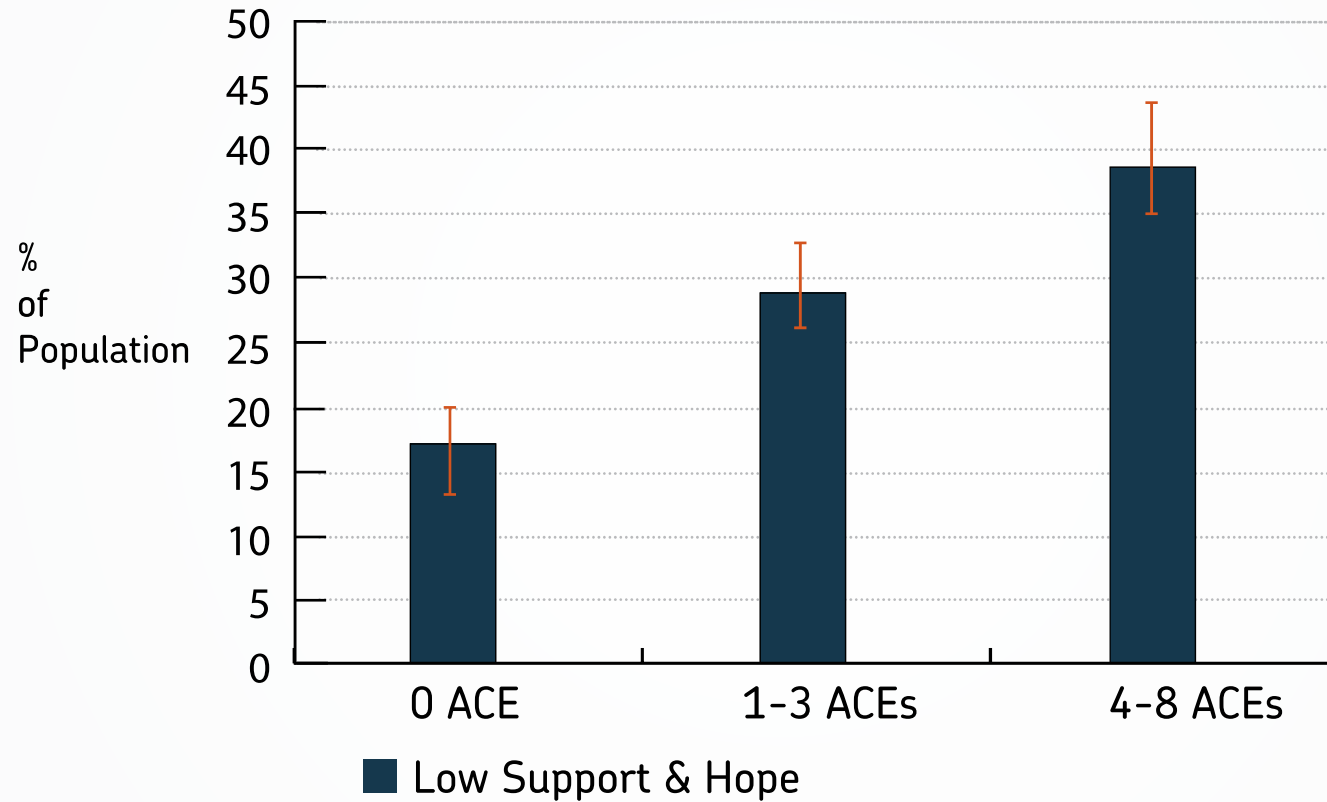
Help that Helps

Four Resilience Factors that Make a Difference
They are even more powerful when we Layer Up...

1. Feeling social/emotional support and hope
2. Having 2 or More People Who Help (two or more people who give concrete help when needed)
3. Community reciprocity in watching out for children, intervening when they are in trouble, doing favors for one another
4. Social Bridging – People reach outside their social circle to get help for their family and friends

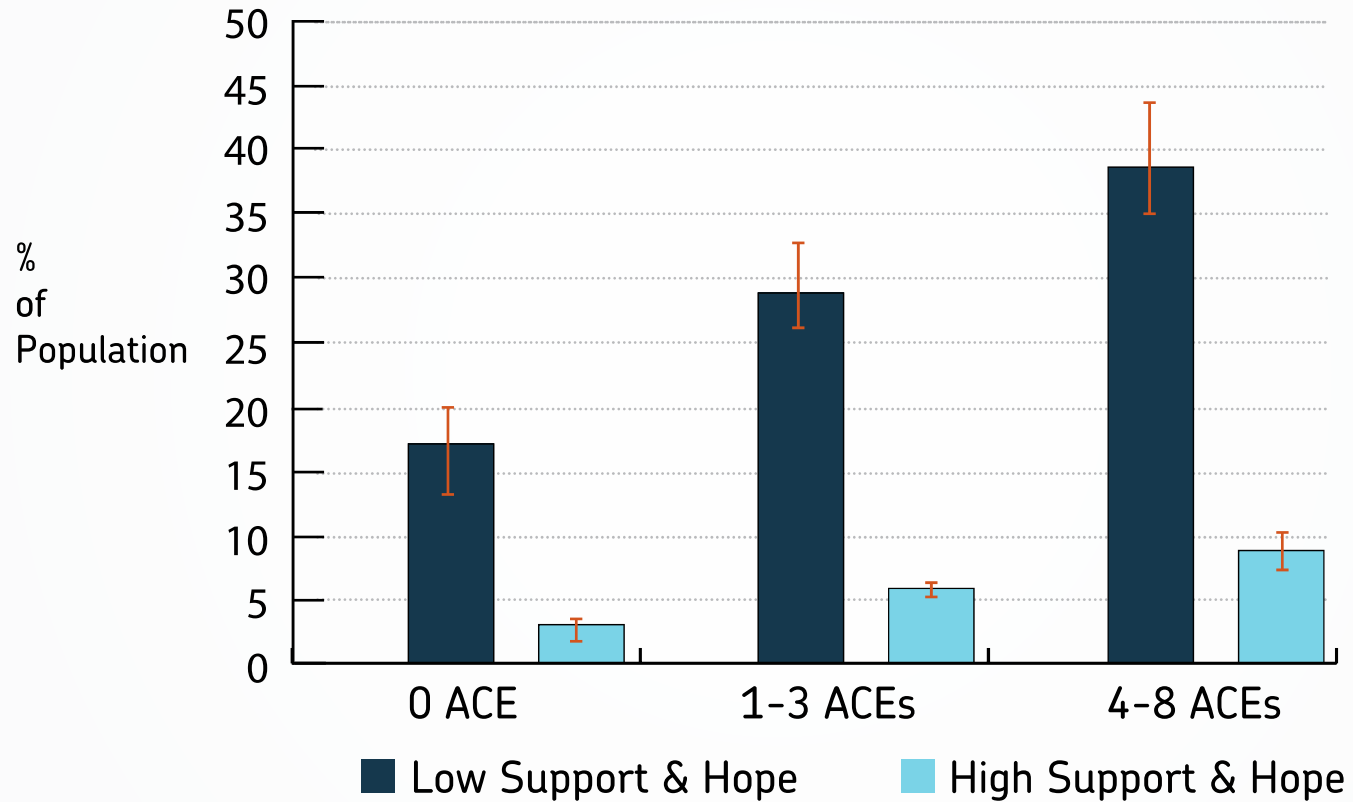
ACEs & Poor Mental Health

Poor Mental Health More Than Half Last Month With Low Support & Hope

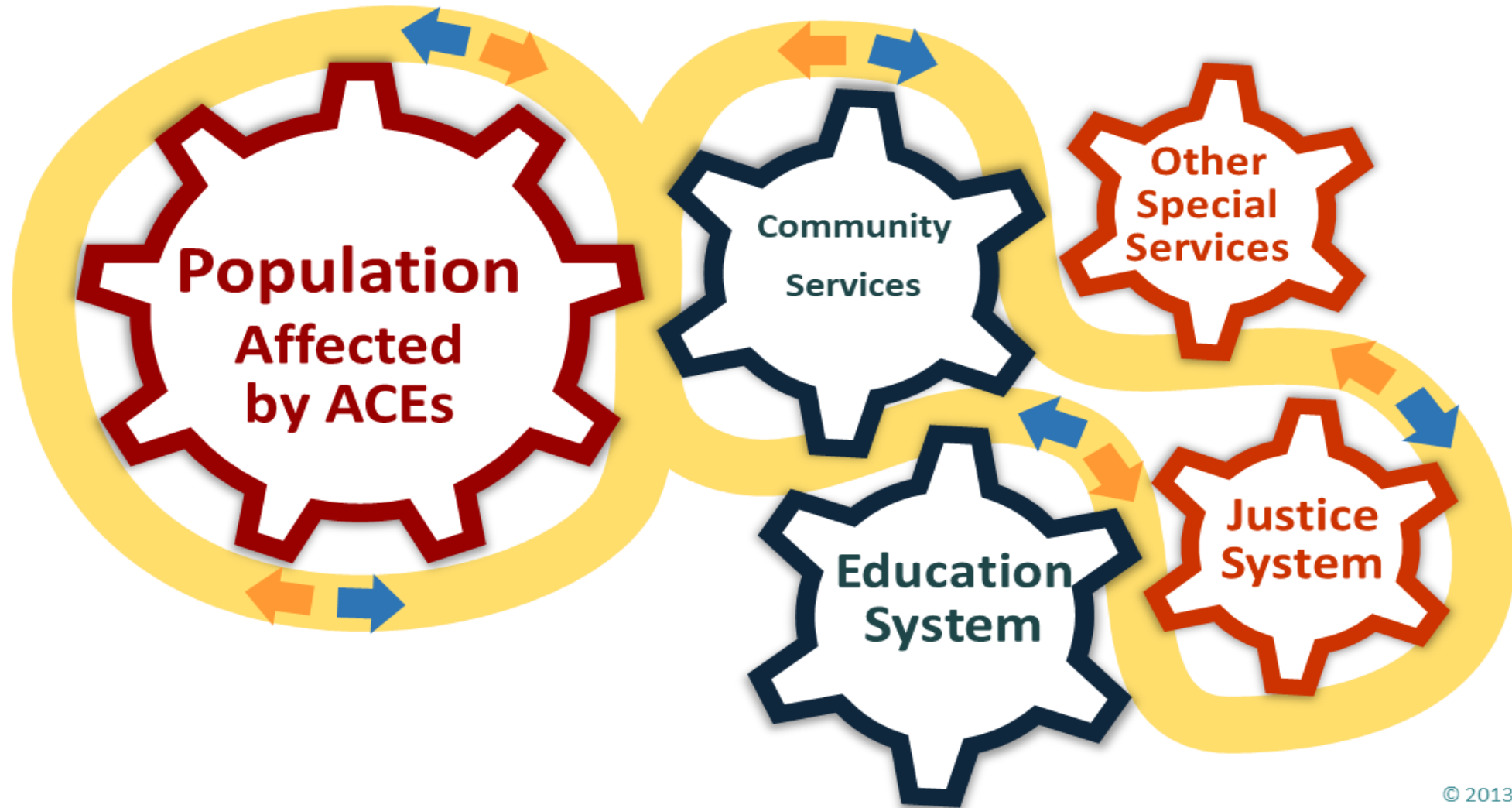


Mental Health & Support

Poor Mental Health More Than Half Last Month With High Support & Hope



Building Self-Healing Communities



○ For more information or to schedule a training:

○ Tifanie.petro@chssd.org

○ 605-484-2620

○ www.chssd.org/prevention

