



Understanding

N. E. A. R.

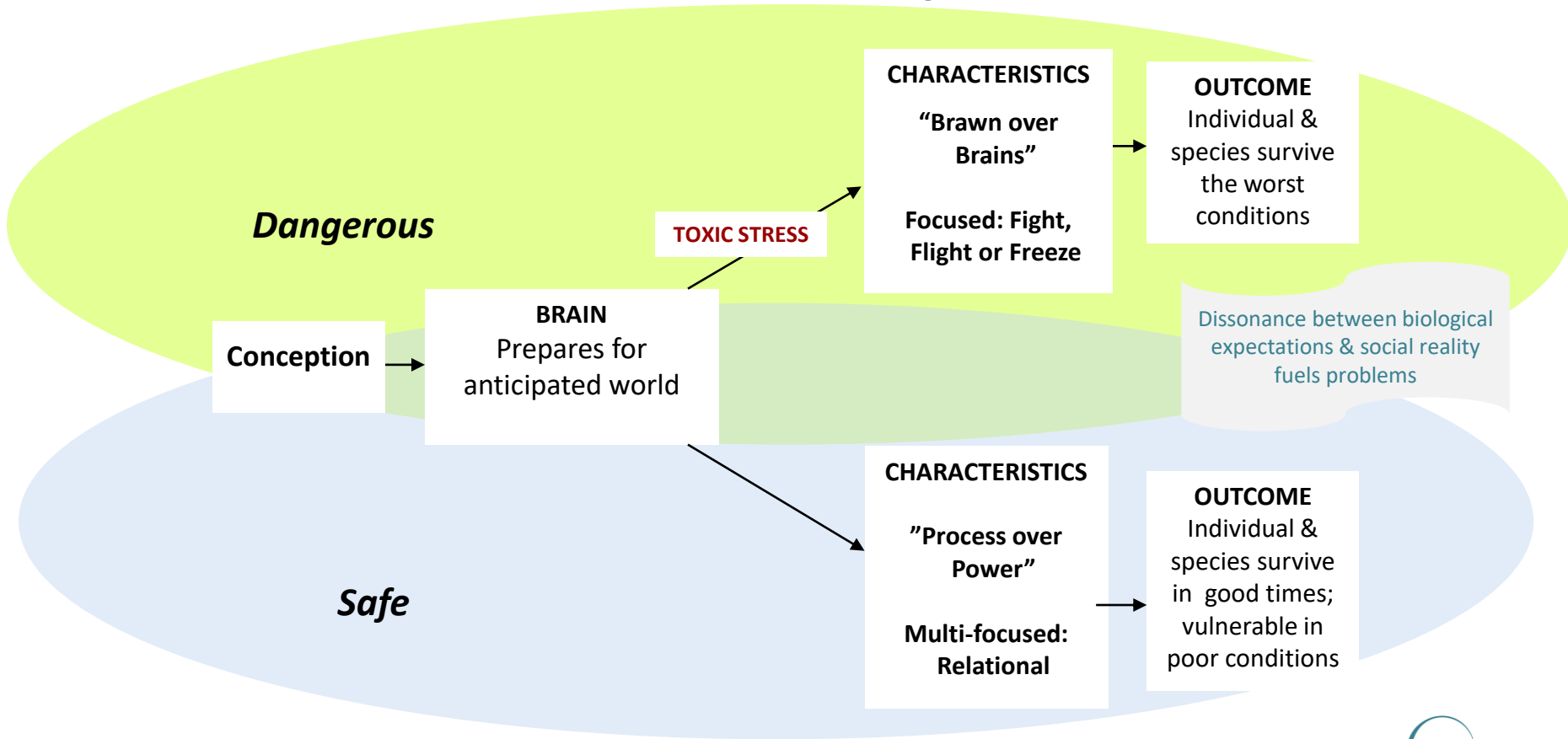
Neuroscience

Epigenetics

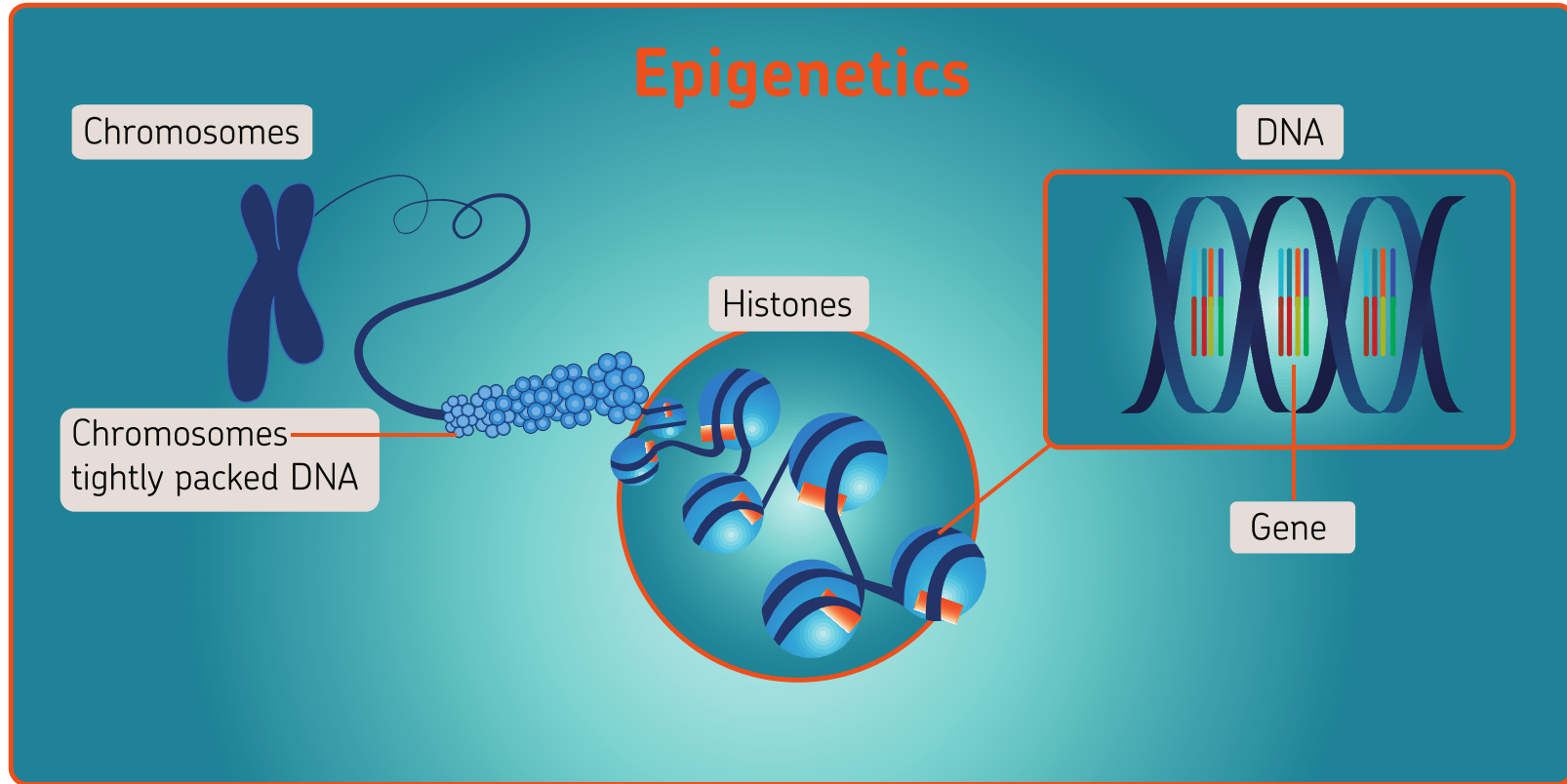
Adverse Childhood Experiences

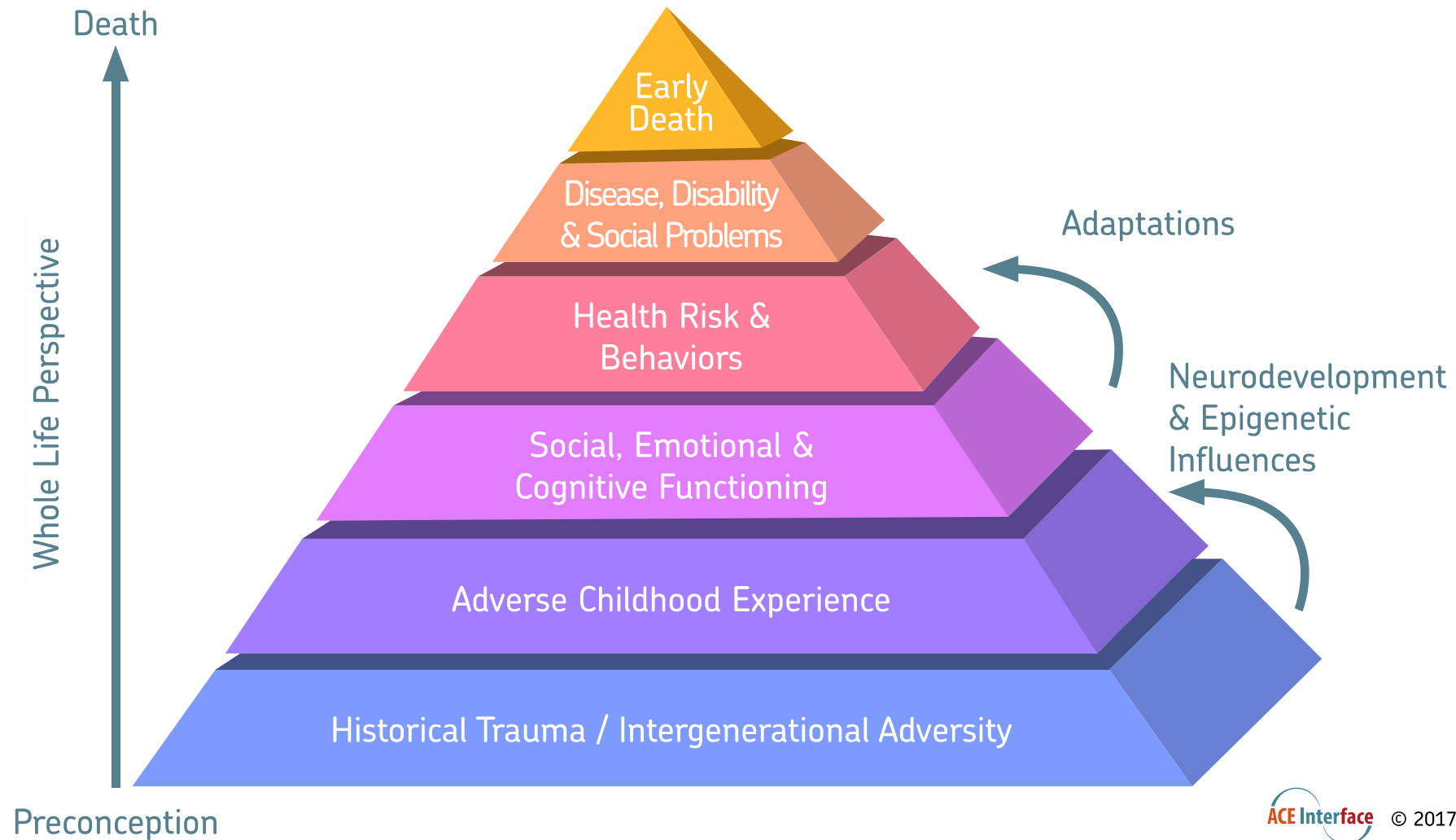
Resilience

Hardwired for Anticipated World



ACEs Influence Gene Expression





ACE Categories Considered in Study

Abuse

1. Child physical abuse
2. Child sexual abuse
3. Child emotional abuse

Neglect

4. Physical Neglect
5. Emotional Neglect

Indicators of Family Dysfunction

6. Mentally ill, depressed or suicidal person in the home
7. Drug addicted or alcoholic family member
8. Parental discord – indicated by divorce, separation
9. Witnessing domestic violence against the mother
10. Incarceration of any family member

ACE Study Major Findings

ACE Categories (ACEs) are Interrelated

ACEs are Common

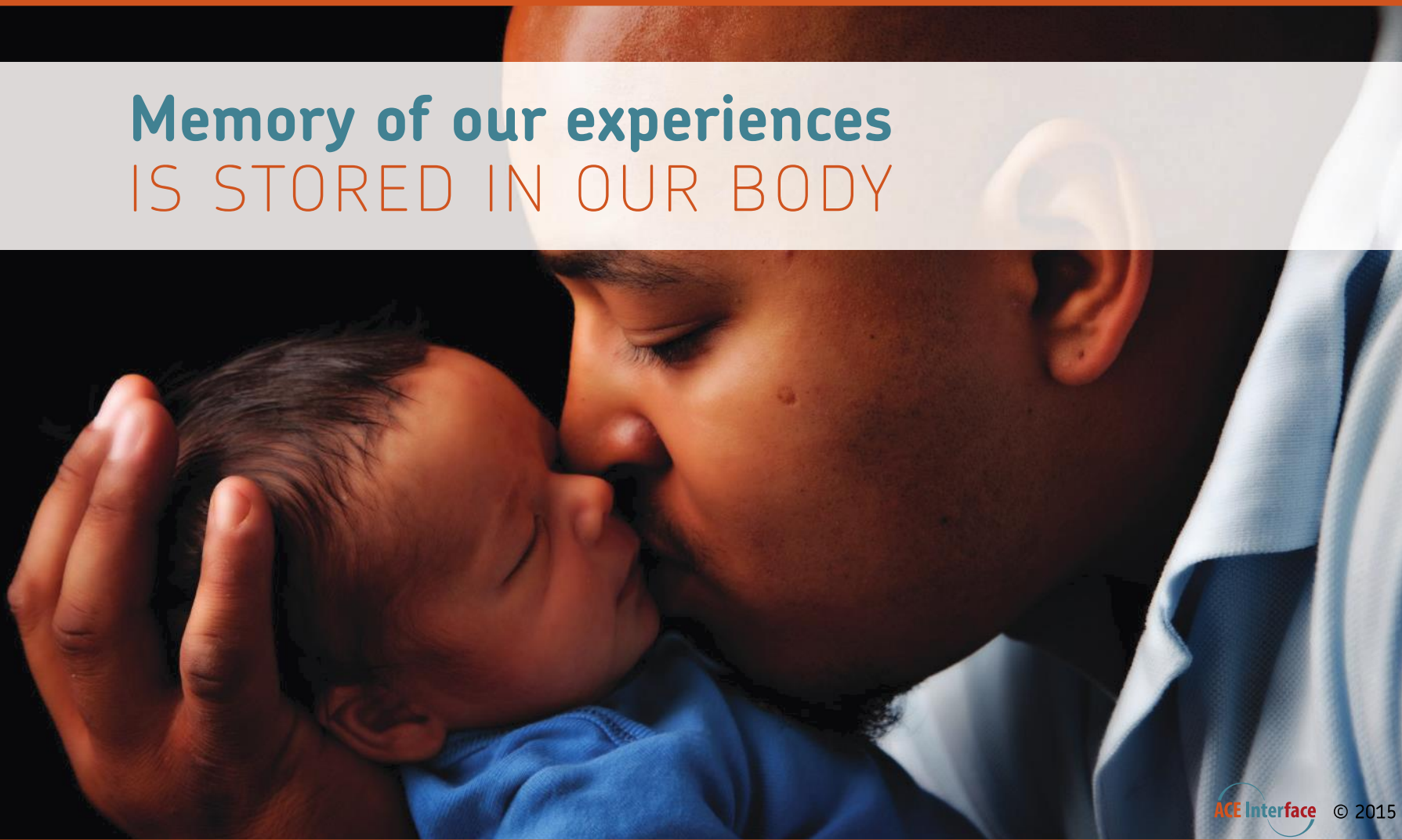
Accumulation Matters

Dose-Response: Disease, Disability, Social, Productivity

Scores= Good Proxy Measure Childhood Toxic Stress Dose

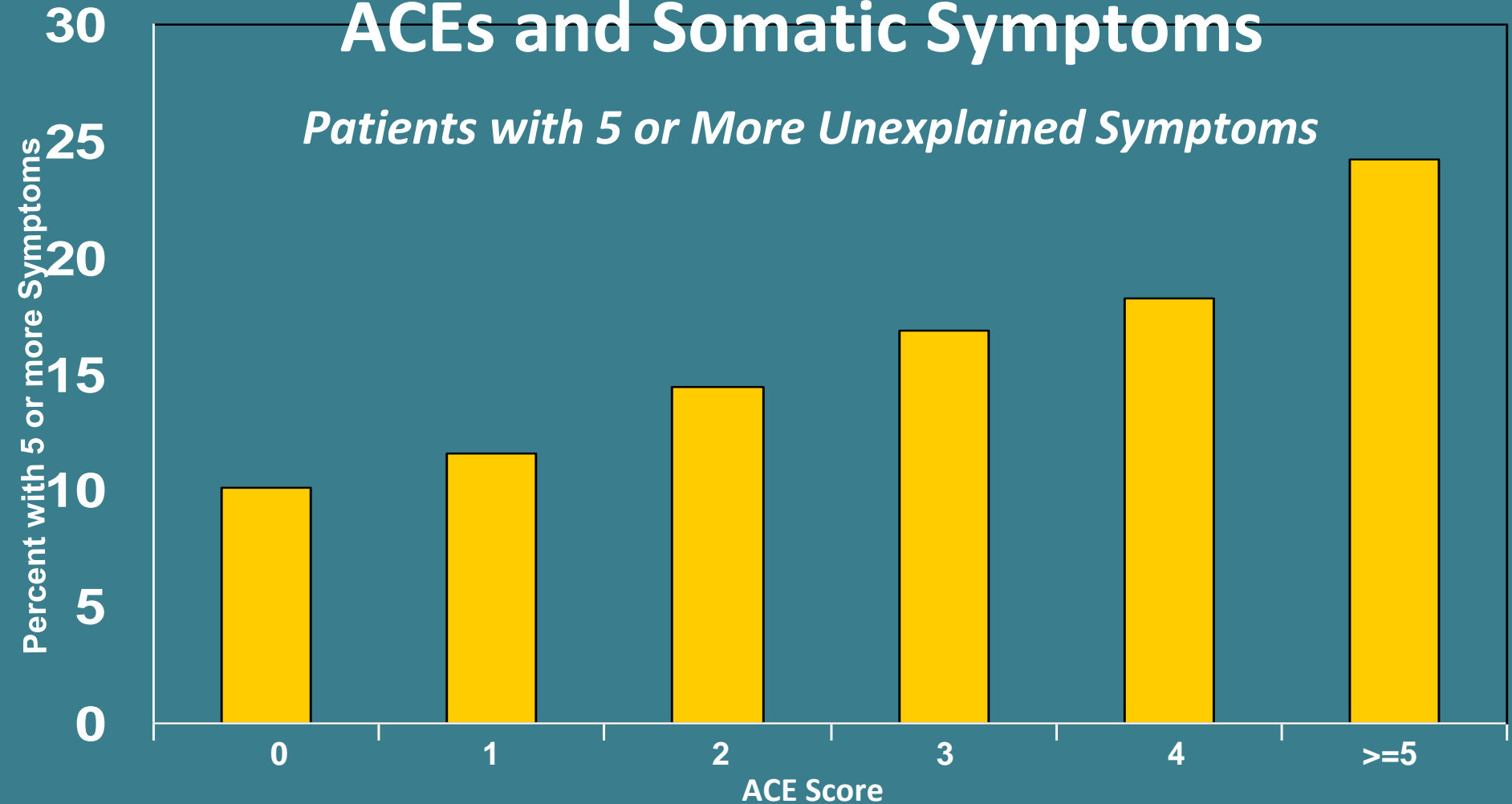
ACEs are the Most Powerful Known Determinant of Health

Memory of our experiences IS STORED IN OUR BODY



ACEs and Somatic Symptoms

Patients with 5 or More Unexplained Symptoms



“Self regulation depends on having a friendly relationship with your body. Without it you have to rely on external regulation – from medication, drugs like alcohol, constant reassurance, or compulsive compliance with the wishes of others.”

ACEs and Polypharmacy

8 or More Classes of Drugs

18-44 years

Percent with polypharmacy

30
25
20
15
10
5
0

0

1

2

3

4

>=5

ACE Score

Used with Permission: Dr. Robert Anda



Adverse Childhood Exposures and Alcohol Dependence Among Seven Tribes

American Journal of Preventative Medicine, 2003, pp.
238-244; Koss, M., Polacca, M., Yuan N., et al

Adverse Childhood Exposures

Analysis from “The Ten Tribes Study”

ABUSE AND NEGLECT

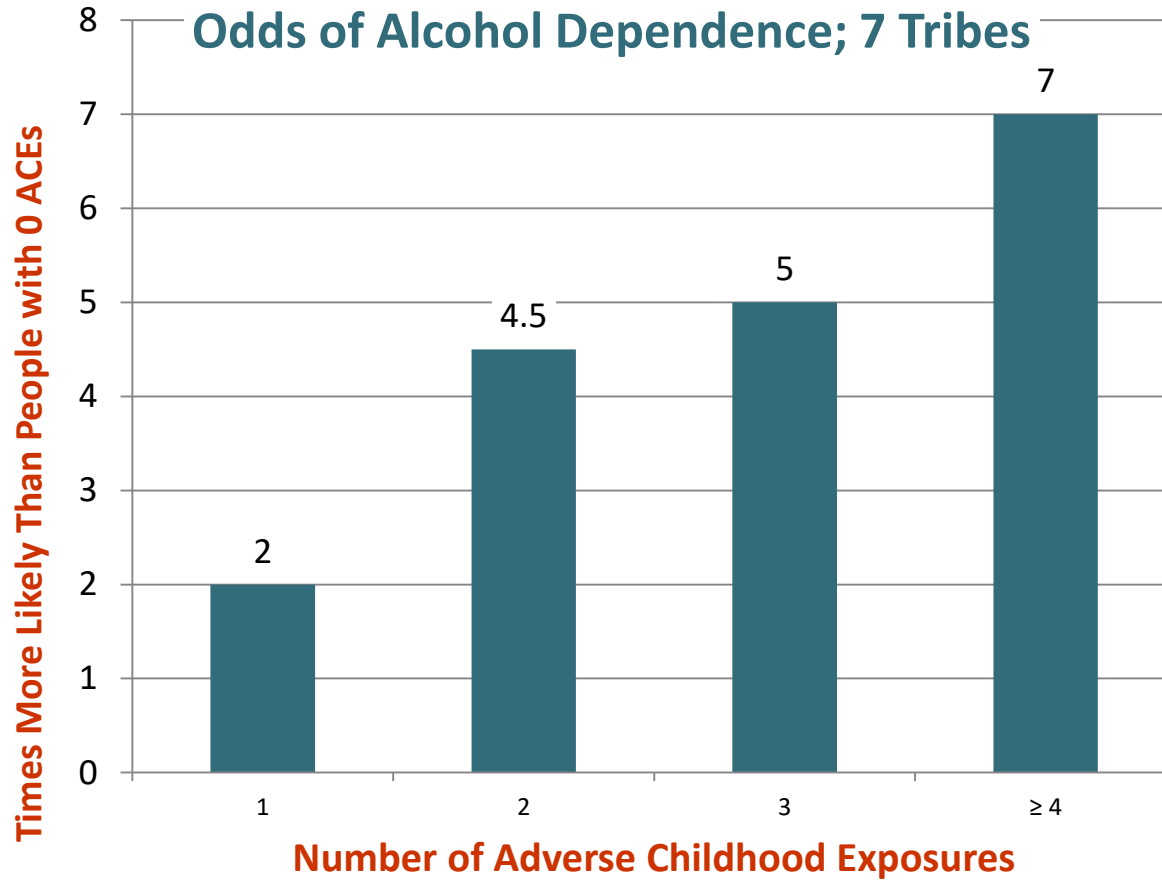
1. Physical abuse (men: 40%; women: 42%)
2. Sexual Abuse (men: 26%; women: 31%)
3. Emotional abuse (men: 26.5%; women: 36.4%)
4. Physical neglect (men: 45%; women: 43%)
5. Emotional neglect (men: 20%; women: 23%)

86% participants experienced one or more categories

FAMILY/CONTEXT

6. Boarding school placement (25%)
7. Foster care placement, (men: 10%; women: 14.5%)
8. Adoption (5%)
9. Having an alcoholic parent(s) (men: 66%; women: 66.5%)

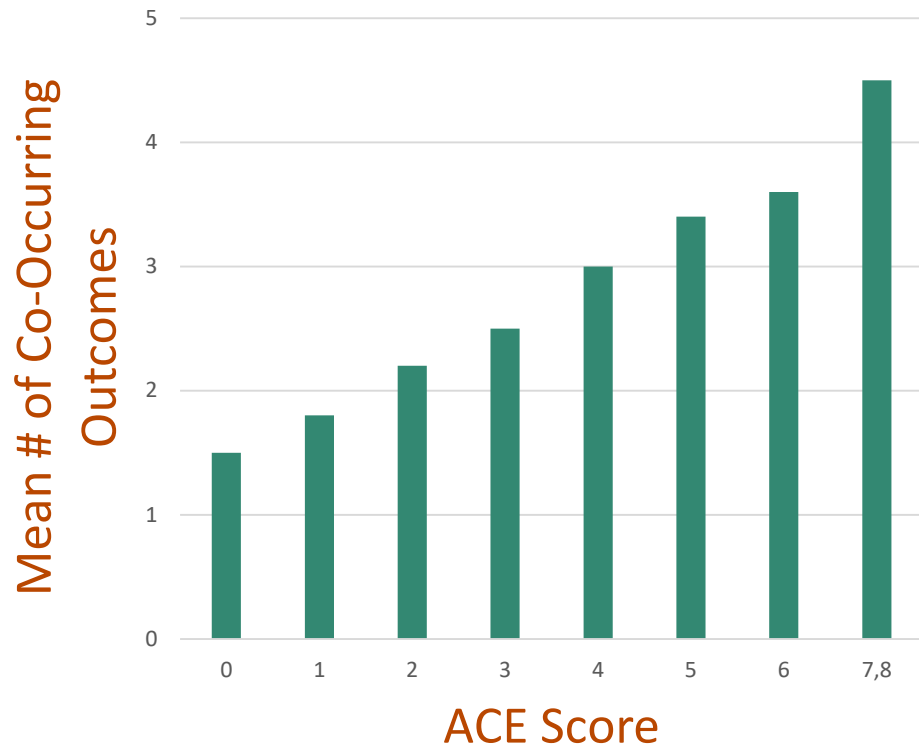
33% reported four or more categories.



- Combined sexual and physical abuse increased alcohol dependence for men.

- Combined sexual abuse and boarding school attendance were significant for women.

ACEs and Co-Occurring Problems



Health & Social Problems

Panic Reactions

Depression

Anxiety

Hallucinations

Sleep Disturbances

Severe Obesity

Pain

Smoking

Alcoholism

Illicit Drug Use

IV Drug Use

Early Intercourse

Promiscuity

Sexual Dissatisfaction

Amnesia (Childhood)

Problems with Anger

Perpetration of Family
Violence

Affect Regulation

Somatic Issues

Substance Use

Sexuality

Memory

Arousal

Parent ACE Scores Predict Child ACE Scores

Children of Parents with ACE Scores ≥ 4 , are:

1. 6.3x more likely to experience household substance abuse
2. 10.4x more likely to experience homelessness
3. 12.7x more likely to experience neglect
4. 44x more likely to be exposed to intimate partner violence

Population Risk Attributable to ACEs

Health Risk Behaviors and Experiences

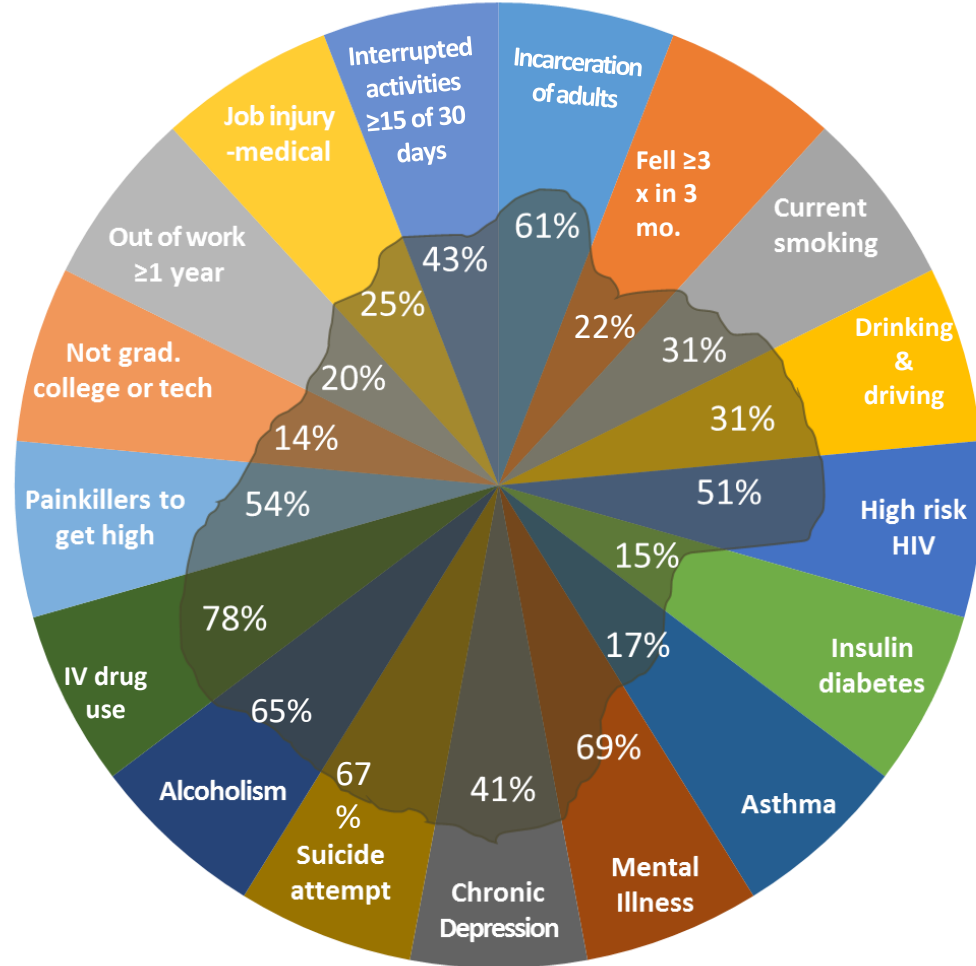
Physical Health

Mental Health

Relational Problems

Productivity Problems

Generational Transmission of Adversity



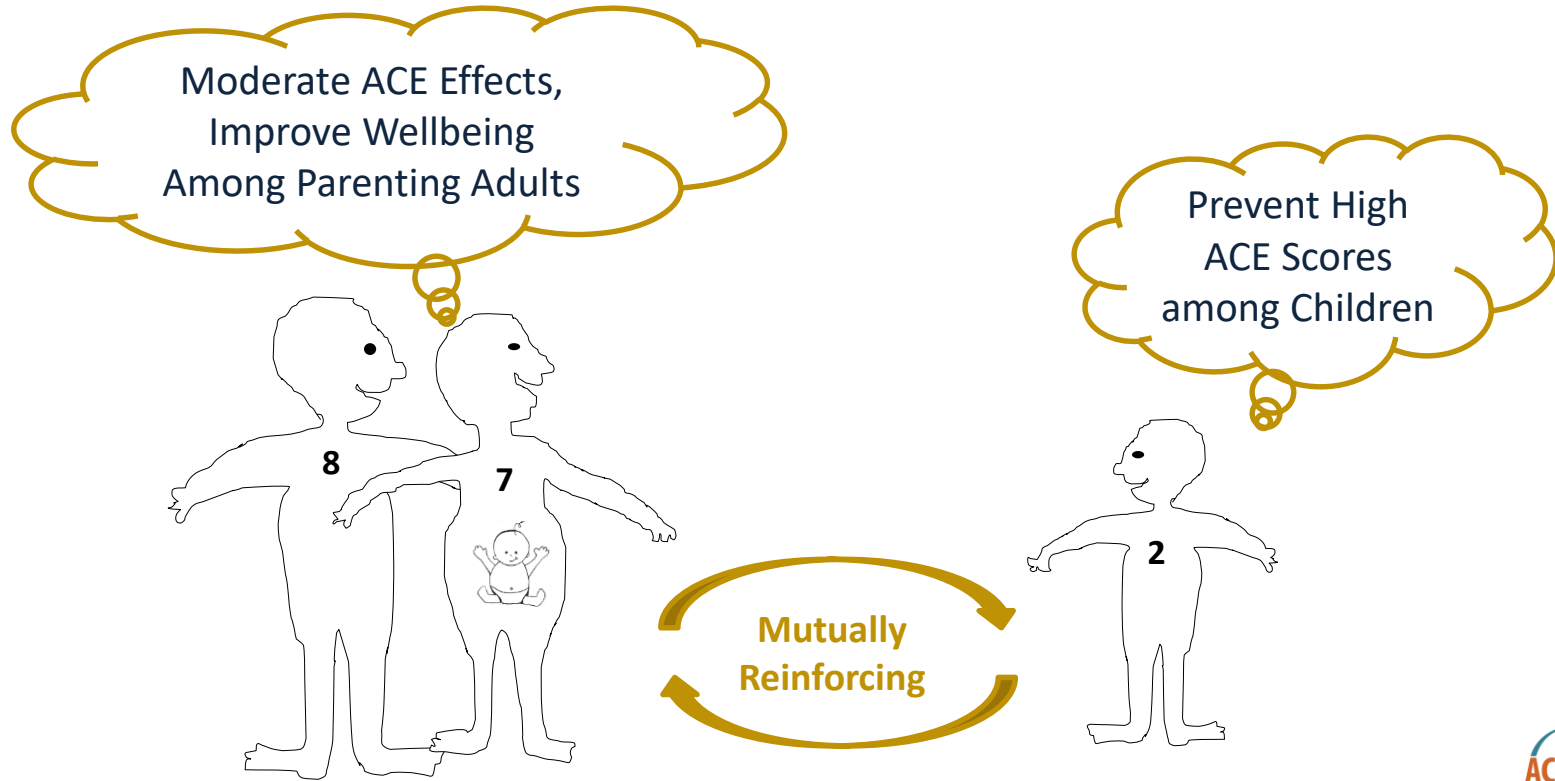
The ACE Score is NOT:

- A fun “quiz”
- A diagnostic assessment
- A screening test

Instead...

It is a history tool
to promote understanding, dialogue,
and a narrative about the impact of
ACEs...

Promote Virtuous Cycle of Health



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

Educate.... Trainers, Parent Café, Chicago Hospitals

Challenge Mental Models....

Parent & Peer Leadership, 2-Generation

Notice..... Opioid Collab, Crisis Nursery, Over Time

Practice..... Children's Clinic, Michigan, Alberta,
Columbia Gorge, SHC Rhythm of
Engagement

Train the Trainer

- Fidelity to the Science
- Common Language
- Common Meaning
- Tailored to Audience
- Widely Tested
- Delivers Understanding, Compassion, Motivation to Act



UNDERSTANDING
Adverse Childhood Experiences



Understanding
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Resilience

Challenge Mental Models

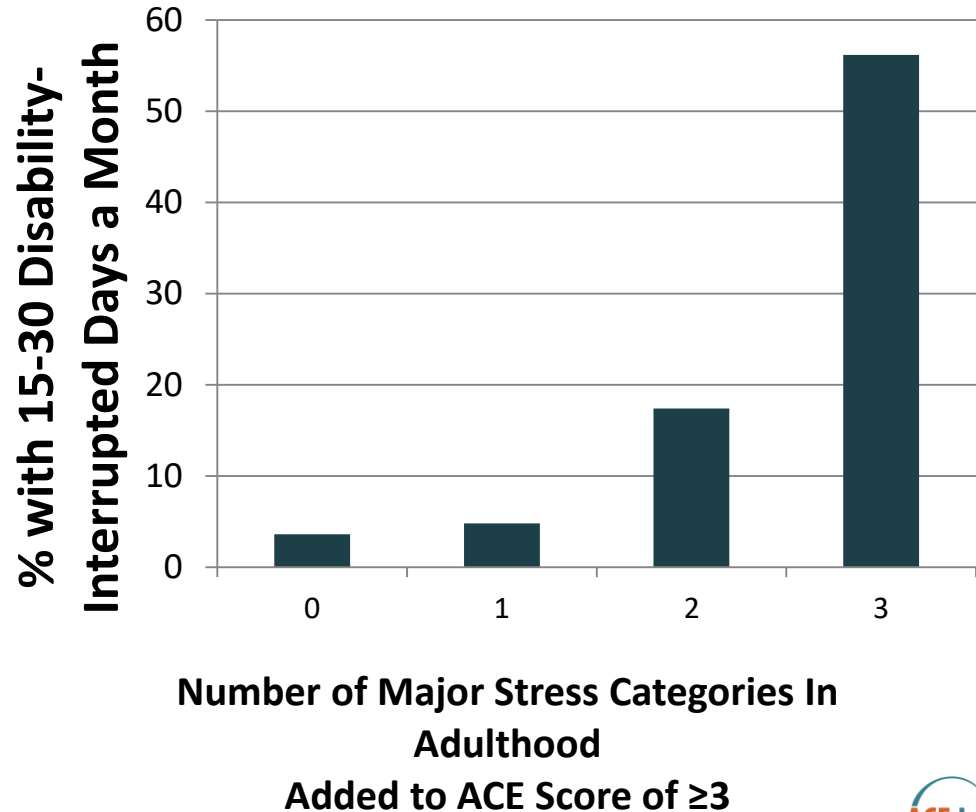
Support Functioning: Prevent Adult Adversity

Adults with ≥ 3 ACEs

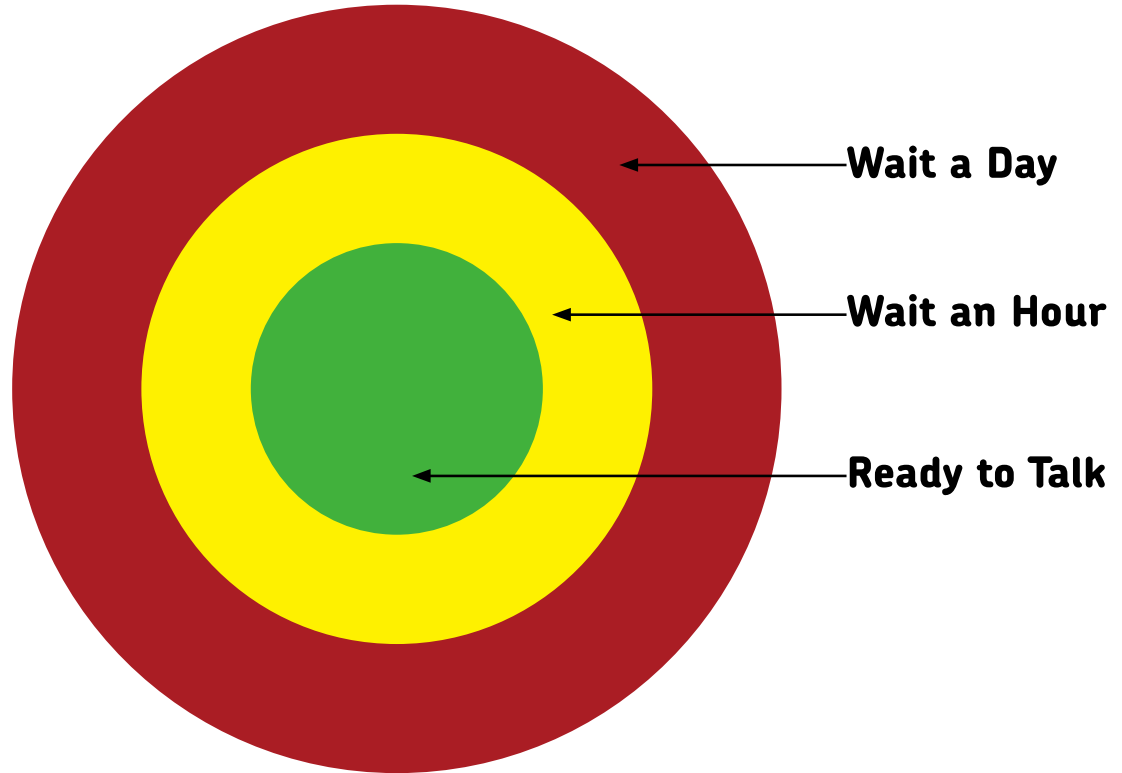
Plus

Major Stress Categories:

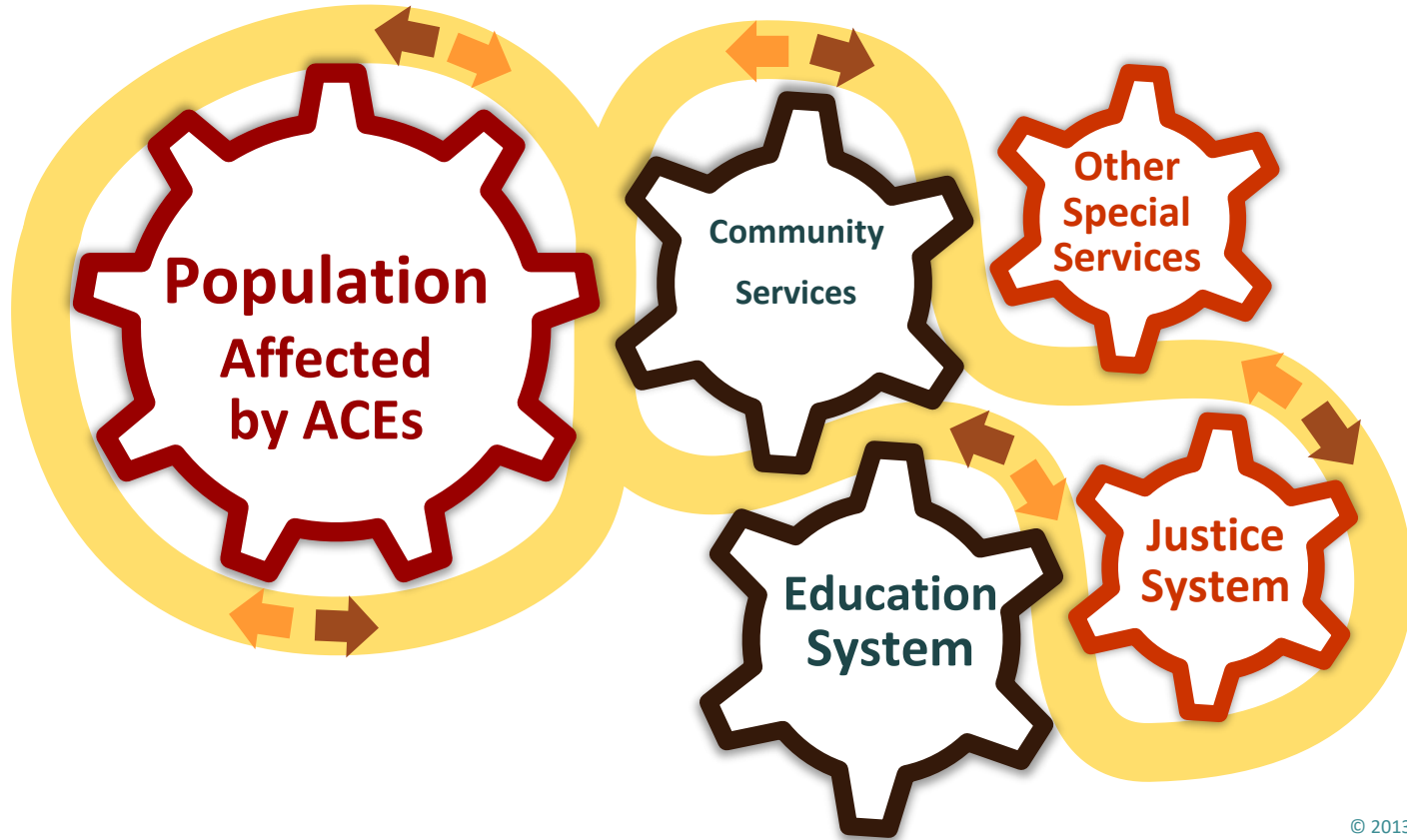
1. Homelessness
2. Incarceration
3. Chronic illness
4. Separation/Divorce
5. Severe Depression
6. Work-related Injury/ Illness



Trauma-Informed School Discipline



Building Self-Healing Communities



Prevention & Health Promotion

- Self Management & Care; e.g.: self regulation, executive skill building, sleep, narrative
- Trauma-Informed Practice; e.g.: Community Health Workers, Social Workers, Clinical psychologists, Primary Care Providers, Etc.
- Community Context

“Establishing Safety First is Paramount”

Dr. Kate McLaughlin



CAPABILITIES

- Self Efficacy
- Ability to Direct Attention
- Positive View
- Ability to Recognize ACE-attributable problems
- Self Regulation

What Helps Individuals Self-regulate?

Activate Social Engagement:

1. Healing Power of Community Expressed in Music, Rhythm, Theatre
2. Exercise & Play
3. Practicing Connection

Calm Physical Tensions in Body:

1. Massage, Movement, Breathing
2. Mindfulness, Reflection, Yoga
3. Tapping Acupressure Points
4. Biofeedback, Neurofeedback
5. Eye Movement Desensitization & Reprocessing



NEUROSCIENCE

EPIGENETICS

ADVERSE CHILDHOOD EXPERIENCES

RESILIENCE

NEAR@Home

*Addressing ACEs in Home Visiting by
Asking, Listening and Accepting*

Version 1 | March 2015
Prepared by Region X ACE Planning Team



NEAR@Home is a toolkit

Focused on face to face conversation
about ACE History in context of a safe,
trustworthy relationship

Free download:

<https://thrivewa.org/work/trauma-and-resilience-4/>

Understanding a person's adverse
childhood experience
takes nothing away from
understanding her resilience.

It puts into perspective how spectacularly resilient she may be, the strengths she is building on for the next phase of her life, and opens the space to talk about the life she wants for her self and her family.

Framing the ACE History In Care Settings

Adopt Protocol: Educate, Ask, Listen, Affirm, Remember

“We now know that childhood experience has a big impact on health throughout our lives. Understanding your history of adversity while you were growing up will help us to work together to improve your health and the health of your family.”

Respect the ACE History: Ask, then Listen

When you know the ACE score, ask:

“How have these experiences affected you through your life?”

“How do you think these experiences affect your parenting now?”

Responding to the ACE History: Affirm

Support the next steps in the conversation, e.g.:

- *“People with high ACE scores often have to work harder in many aspects of their lives... how have you managed to do so well?”*
(Build from their answer to affirm their strengths and resilience.)
- *“I am sorry these things happened in your childhood. We didn’t know back then; this science is new. Now that we know about the power of ACEs, how would you like to use that information to improve the health of your family?”*

“Social support is the most powerful protection against becoming overwhelmed by stress and trauma. The critical issue is reciprocity: being truly heard and seen by the people around us, feeling that we are held in someone else’s mind and heart.”

Noticing Journey

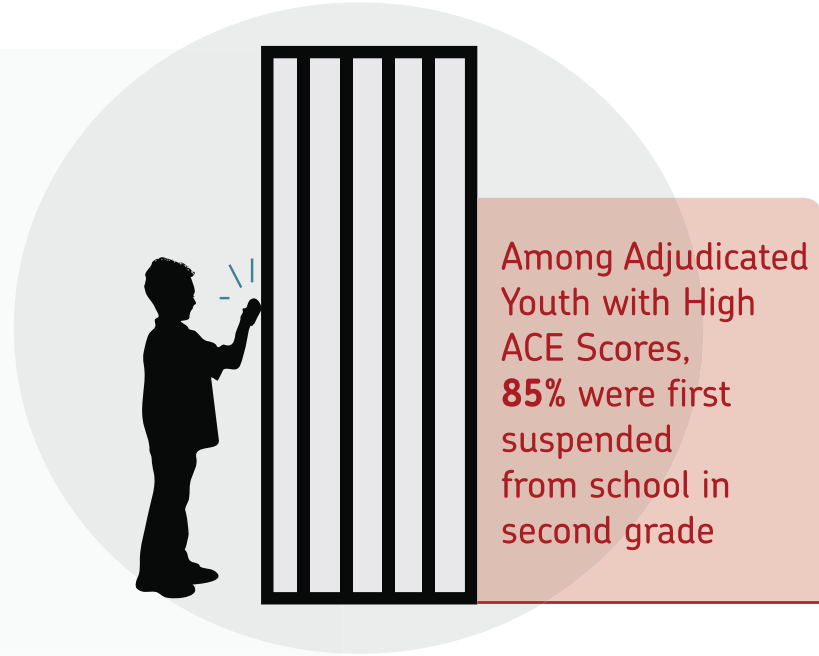
Results Oriented Decision Making: Data



Not Safe at Home

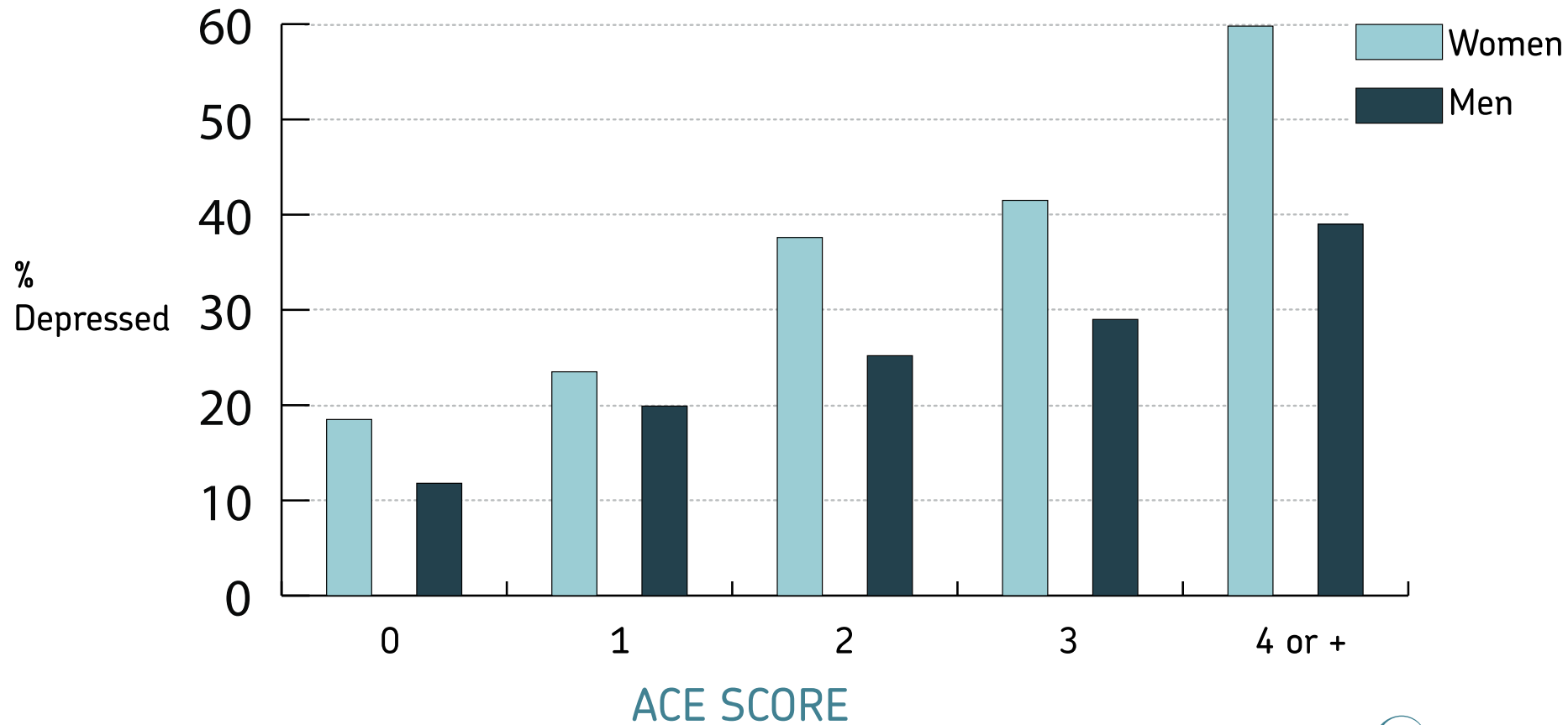


Not Welcome at School



Noticing Interrelatedness

ACEs & Depression

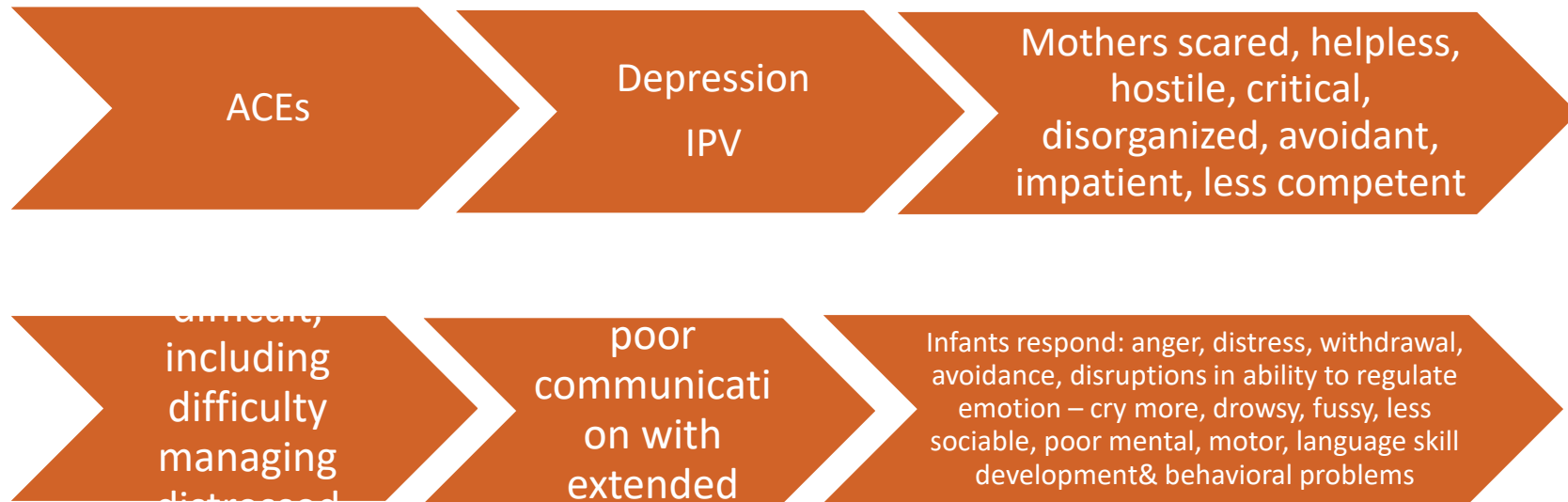


Depression

Among Caregivers of Young Children

- 12% to 17% of mothers of infants or toddlers report major depression
- Up to 50% of those report persistent depression for a year or more
- 25% of caregivers with report to CWS had major depression within past 12 months –leading risk factor: IPV
- 46.3% had “ever suffered” major depression

What's Predictable is Preventable



ACEs Are Not Destiny

People affected by ACEs are becoming the leaders of
Self-Healing Communities





Help *that* **Helps**

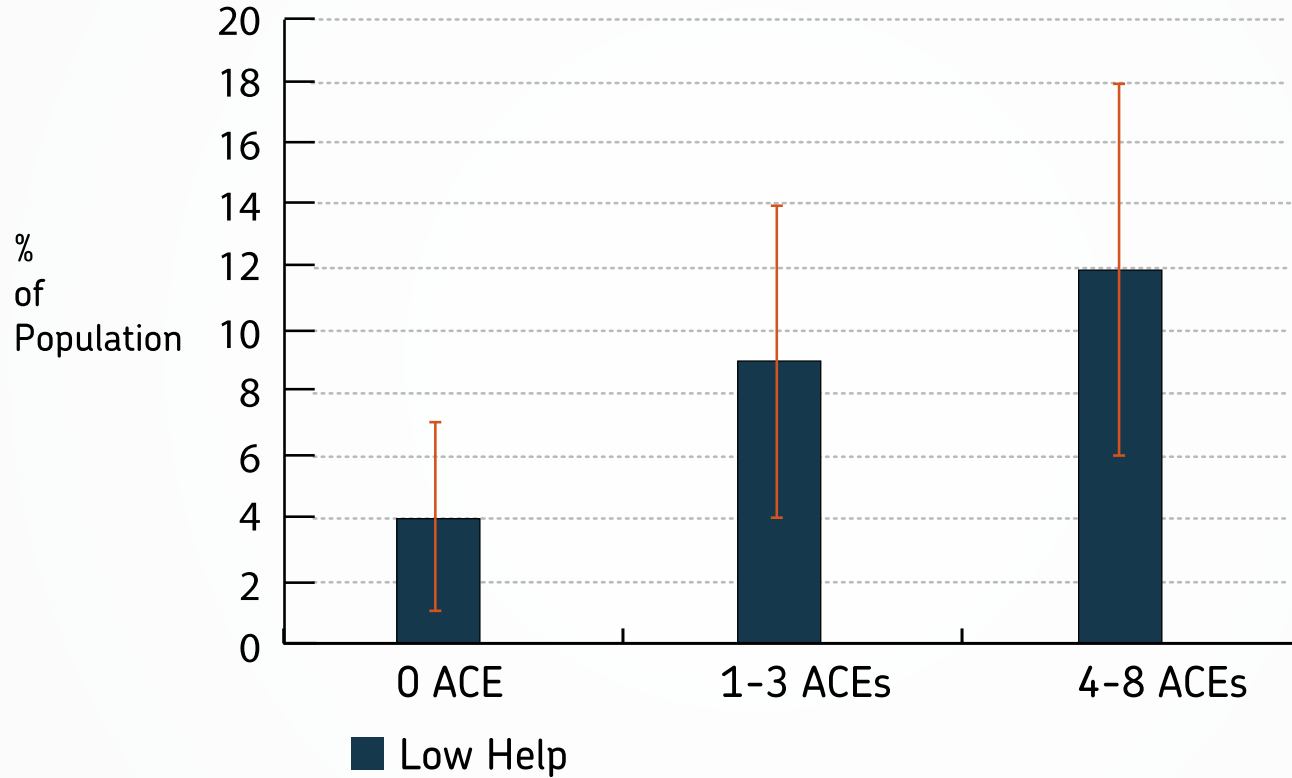
HELP

Having two
or more
people who
give concrete
help when
needed



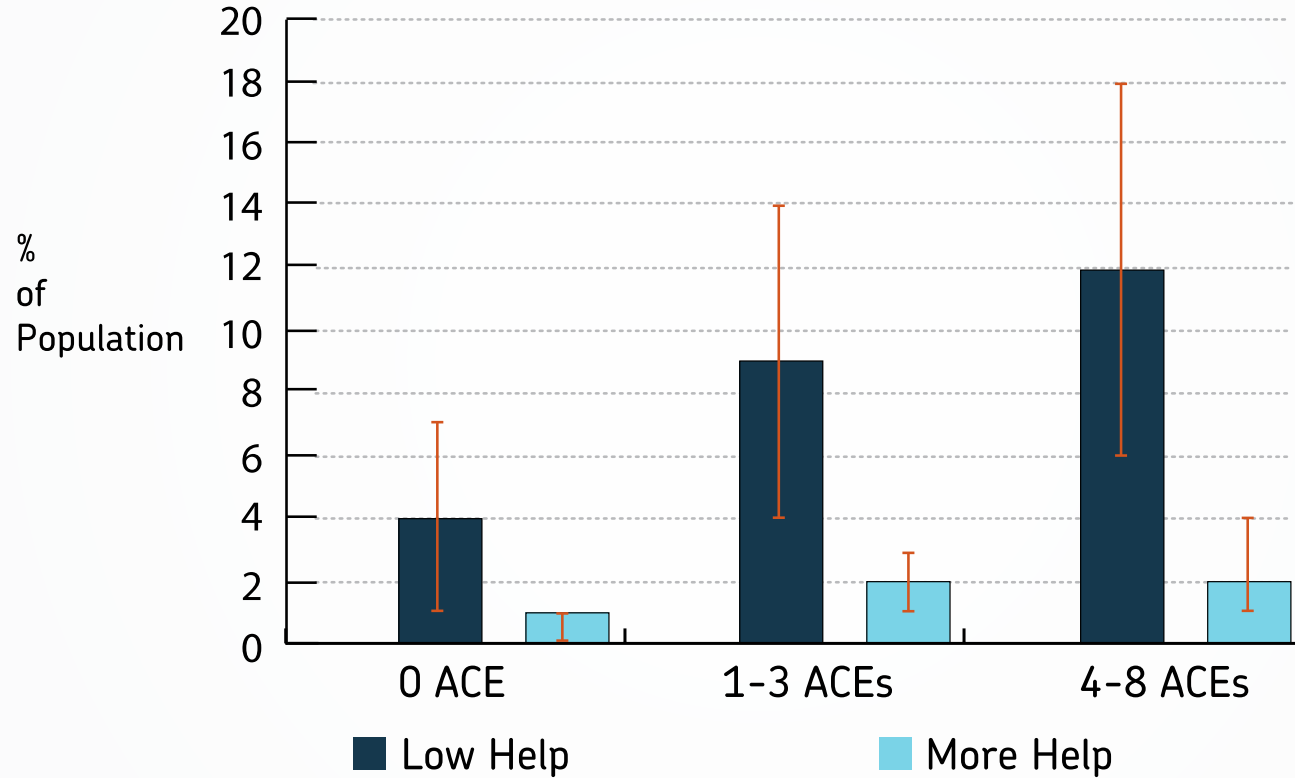
ACEs & Depression

Depress All or Most of Last Month With Help



Depression & Help

Depress All or Most of Last Month With Help



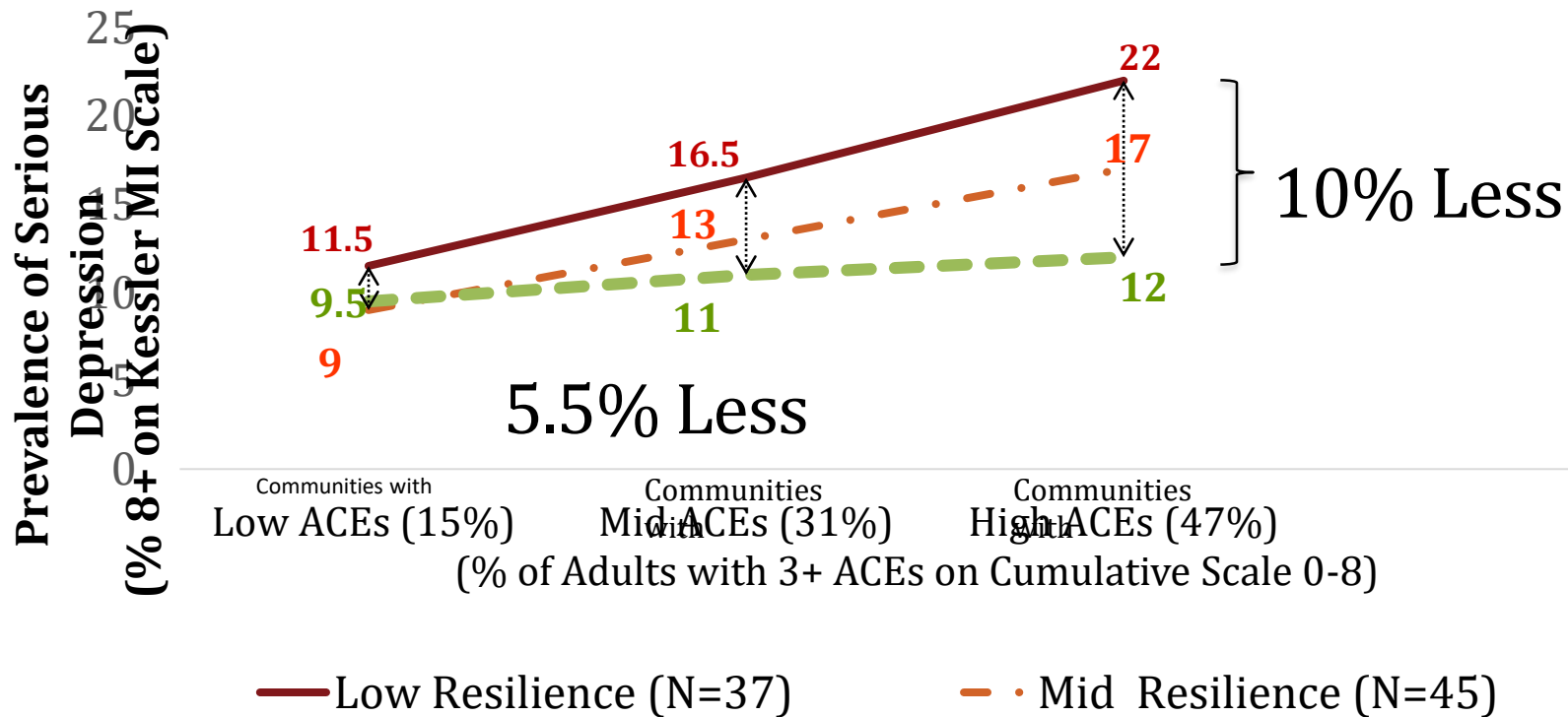
Community Reciprocity

1. Watching out for children
2. Intervening when children are in trouble
3. Doing favors for one another

When communities with high ACE prevalence
also have high rates of reciprocity,
do parenting adults experience less depression?

The answer is yes.

Reciprocity & Adult Depression



A Self-Healing Community

is a group of people linked
by geography or interests,

who intentionally use
culture, social structure, &
interactions

to improve
intergenerational well-
being and equity.



CULTURE

Culture is the abstract, learned, shared rules/standards/patterns for understanding experience and generating behavior.

Culture frequently acts as a kind of autopilot for everyday life.

Culture is co-created by the individual members of a group as they interact in daily life.

Culture change is also co-created by members of a group when they perceive that new ways will be better ways.

Community Capacity Building



Investing in the people with the most at stake – create conditions for them to:

- Contribute their core gifts,
- Experience belonging, and
- Intentionally shape the future they would like for next generations.

Community Capacity Development is a public health approach to solving interrelated problems by improving people's connections, their shared responsibility, and the collective impacts of their efforts.

“In Self-Healing Communities, services are delivered in ways that also build community and social networks that will remain in the lives of clients after formal services have ended.”



Porter, Martin, & Anda (2015) Self Healing Communities, A Transformational Process Model for Improving Intergenerational Health; In Press, Robert Wood Johnson Foundation

Self-Healing Communities

produce safe, stable nurturing relationships & environments

They have a rhythm of engagement that includes:

1. Continuous expansion of **leadership opportunities**.
2. Safe and regularly scheduled ways of coming together to **focus** on matters of local importance and promote belonging and cooperative action.
3. Networked social and inter-organizational processes: **learning**, reciprocity, social bridging, and efficacy.
4. Shared times and venues for reflection and decision making about the **results** they want for future generations.





Successful Journey

Child Safety

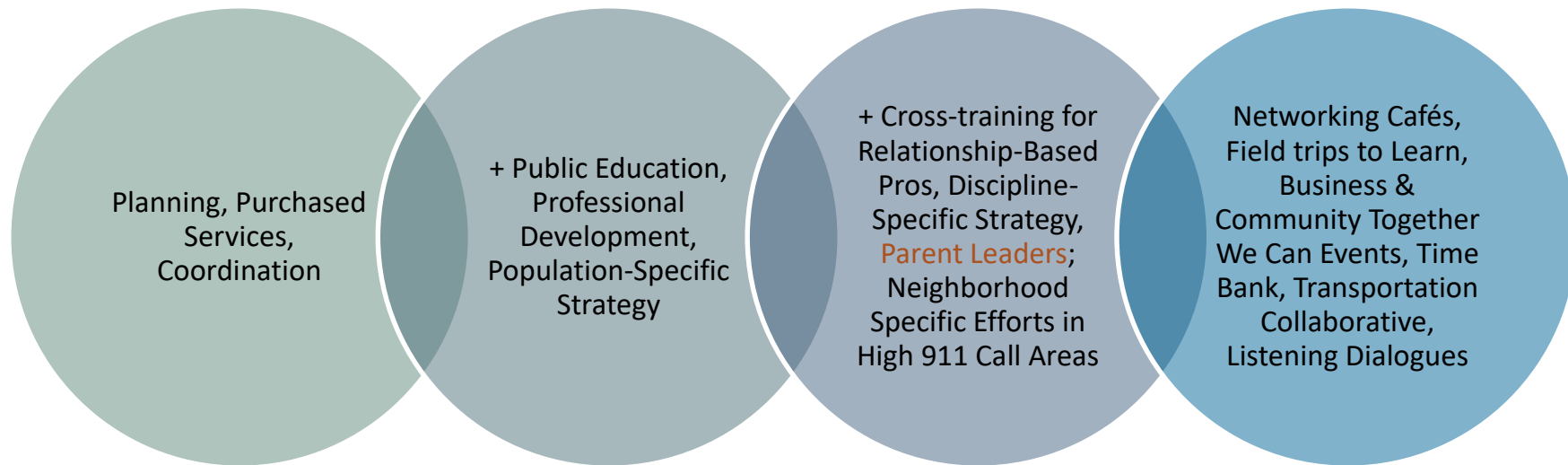


Photo credit: Håkan Axelsson

In this place:

- History of natural disasters
- History of assault on way of life
- Historical trauma affects large portion of population
- High ACE prevalence – bi-modal split in scores
- Stunning success for a small investment

Strategy Layering Over Time

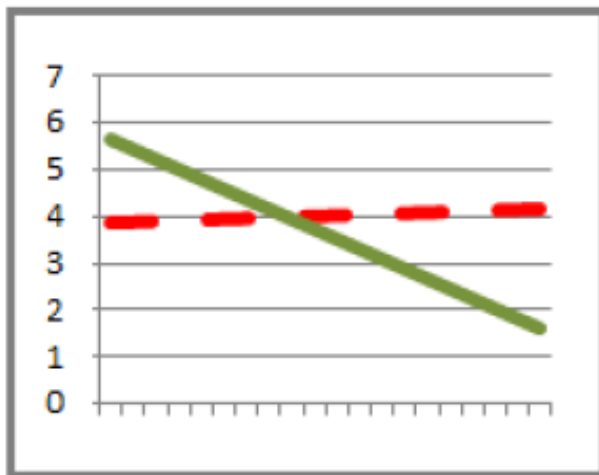


Turning Point: “Improve parent skills so parents can give sound advice and be good mentors to their children, and, in turn will gain skills and relationships to give sound advice to the community – and that advice will make a better system of help for them and for other families.”

— Cowlitz County

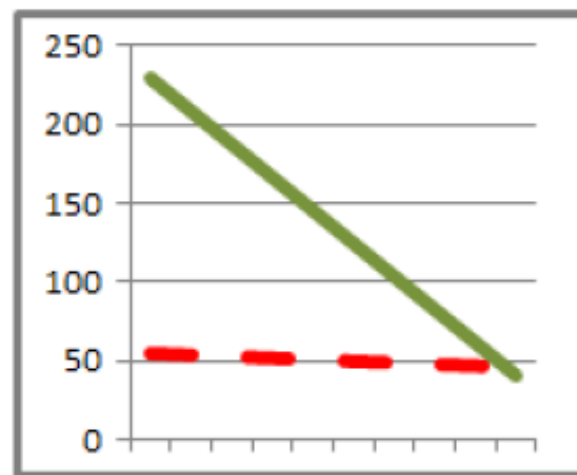
- - - Washington State

Child Injury Hospitalizations 1994-2012



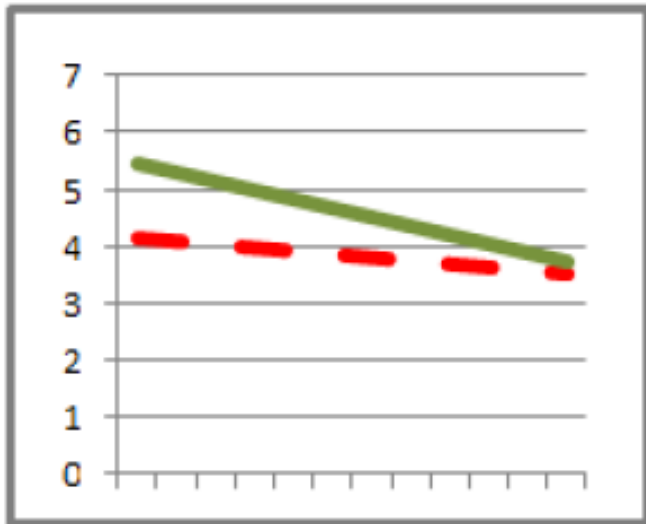
Difference in slopes $p = 0.000$

Suicides & Suicide Attempts 1998-2006



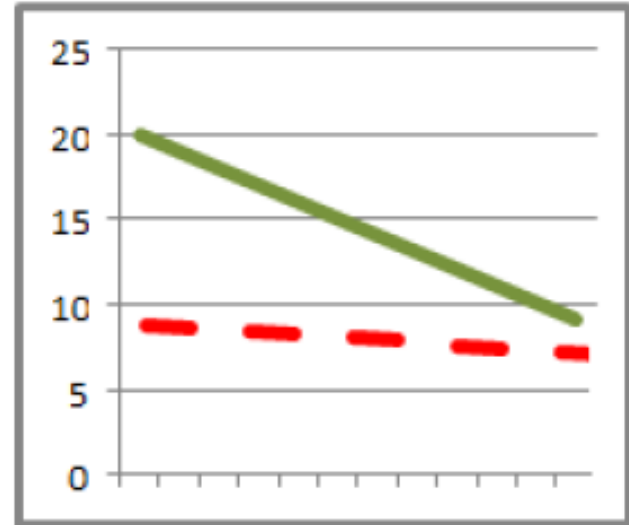
Difference in slopes $p = 0.000$

Hospitalizations
1994-2004



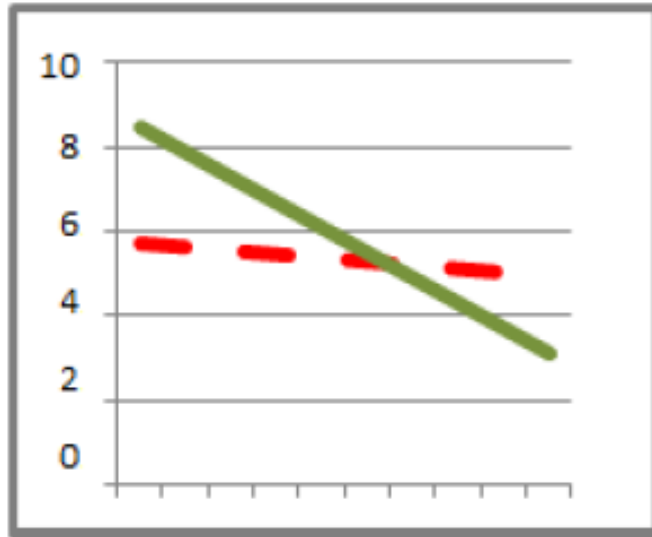
Difference in slopes $p=0.003$

Alcohol Arrests
1994-2004



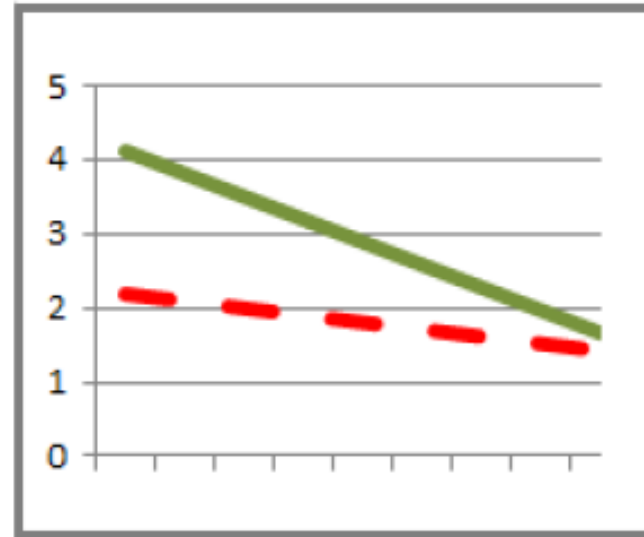
Difference in slopes $p=0.008$

Infant Mortality
1998-2006



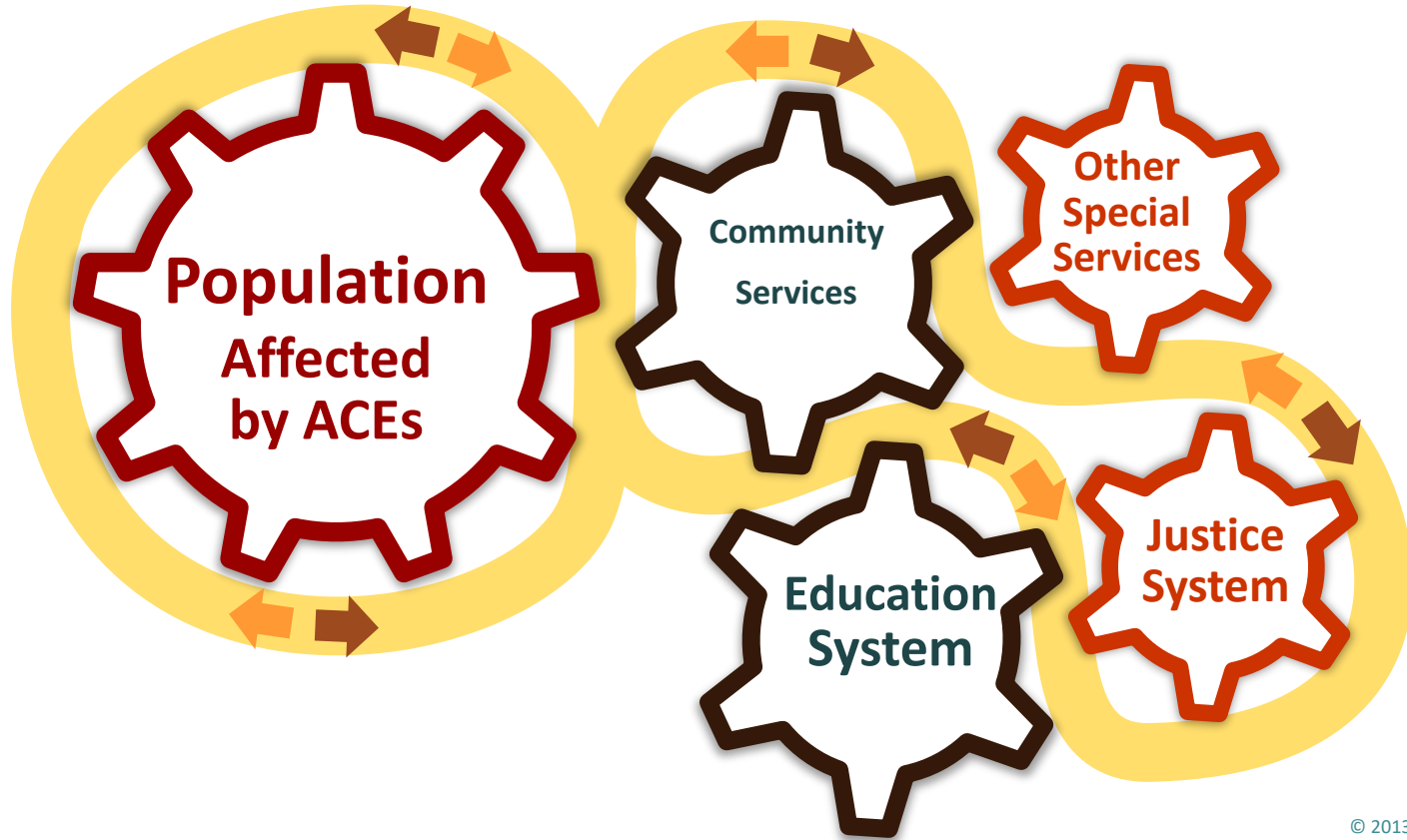
Difference in slopes $p=0.043$

Filings for Juvenile Offenses
1998-2006



Difference in slopes $p=0.000$

Building Self-Healing Communities



Thank You
Laura Porter, ACE Interface
lauraportergarden@gmail.com