Multiplying Connections
Positive development for all children

Trauma, Adversity, Toxic Stress and Brain Development

What Early Childhood Professionals Need to Know

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Objectives

At the end of this seminar you will be able to:

- Understand the relationships among trauma, adversity, toxic stress and brain development
- Be familiar with key terms related to trauma informed care
- Be familiar with scientific evidence that supports the need for a trauma informed approach with young children and their families
- Be familiar with national and local efforts to promote trauma informed practice for young children
- Discuss plans for next steps

Community Meeting

What is your name?

How are you feeling today?

What is your goal for the day?

Who can you ask for help?

Sanctuary Model®

WHAT IS TRAUMA

Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being.

http://www.samhsa.gov/traumajustice/traumadefinition/definition.aspx

WHAT IS PSYCHOLOGICAL TRAUMA

- … not an event itself, it is a RESPONSE to a stressful experience in which a person's ability to cope is dramatically undermined.

(Cole, et al, 2005)

(Hermann 1977)

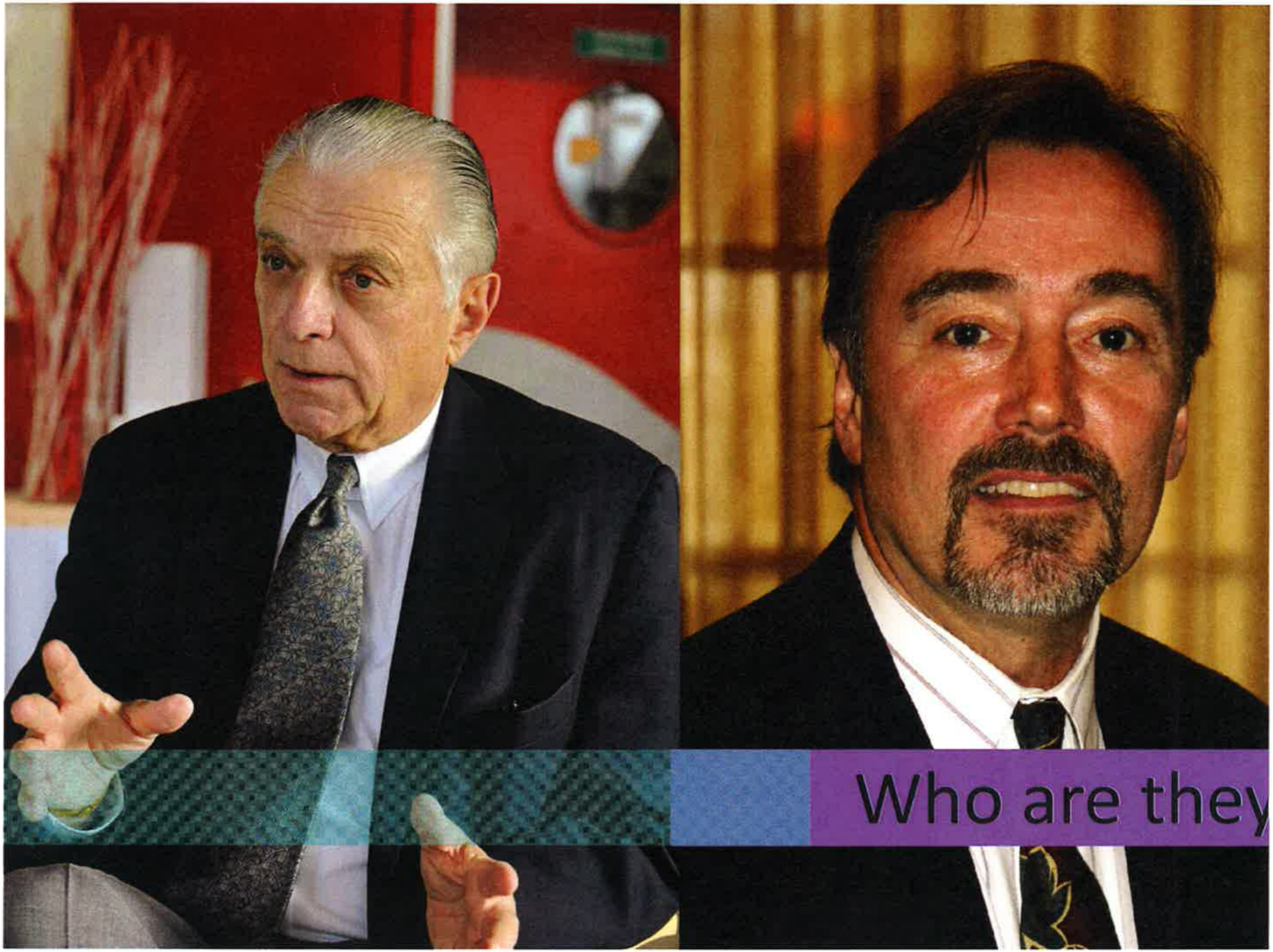
WHAT ARE TRAUMA INFORMED SERVICES

- Trauma informed services ***are intentionally designed*** to deliver services, (mental health, legal, child welfare, education, public health, addiction, housing supports, vocational or employment counseling services, etc.,) in a manner that ***acknowledges the role that trauma***, (violence and victimization) plays in the lives of many people seeking these services . . .

(adapted from Harris and Fallot, 2001)

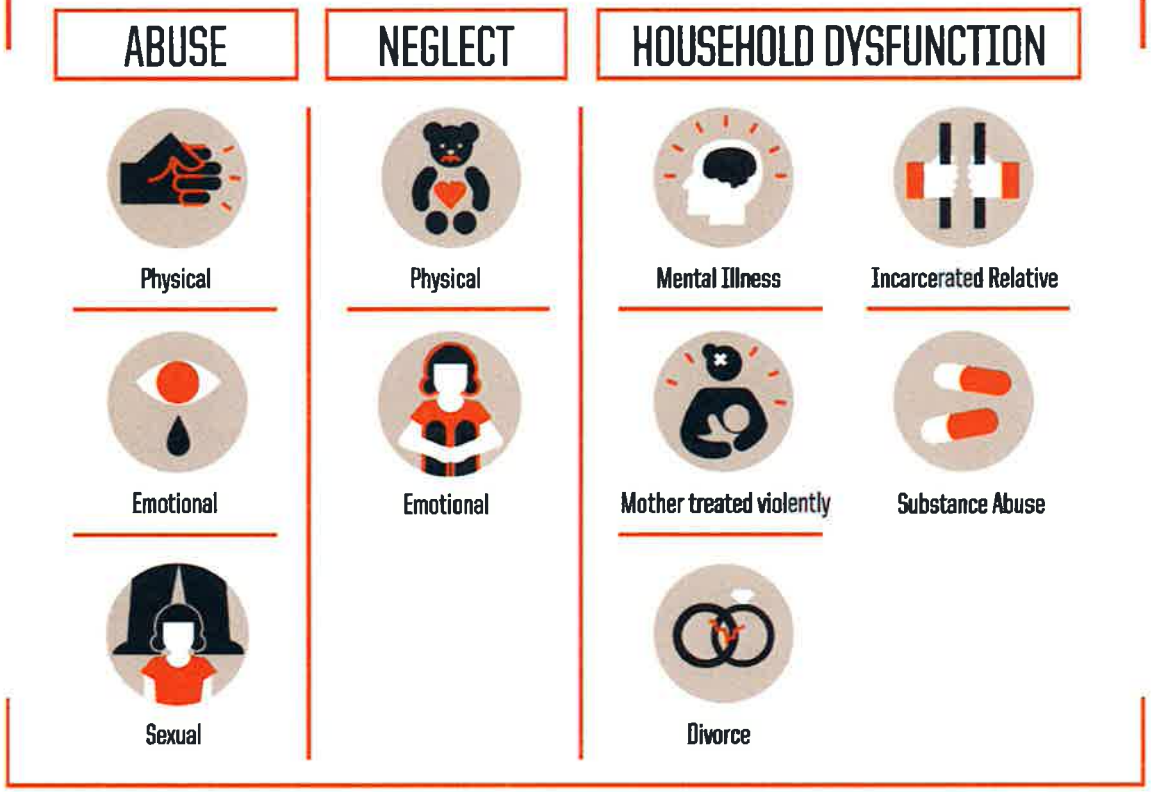
WHAT ARE TRAUMA SPECIFIC SERVICES

- Designed to treat the actual "symptoms" of traumatic experiences (e.g. PTSD, Complex Trauma, Trauma related depression)
- Provided by trained mental health clinicians
- Often combine psycho-education, cognitive behavioral therapy and are phase-oriented
- Include concepts of trauma-informed services


Who are they

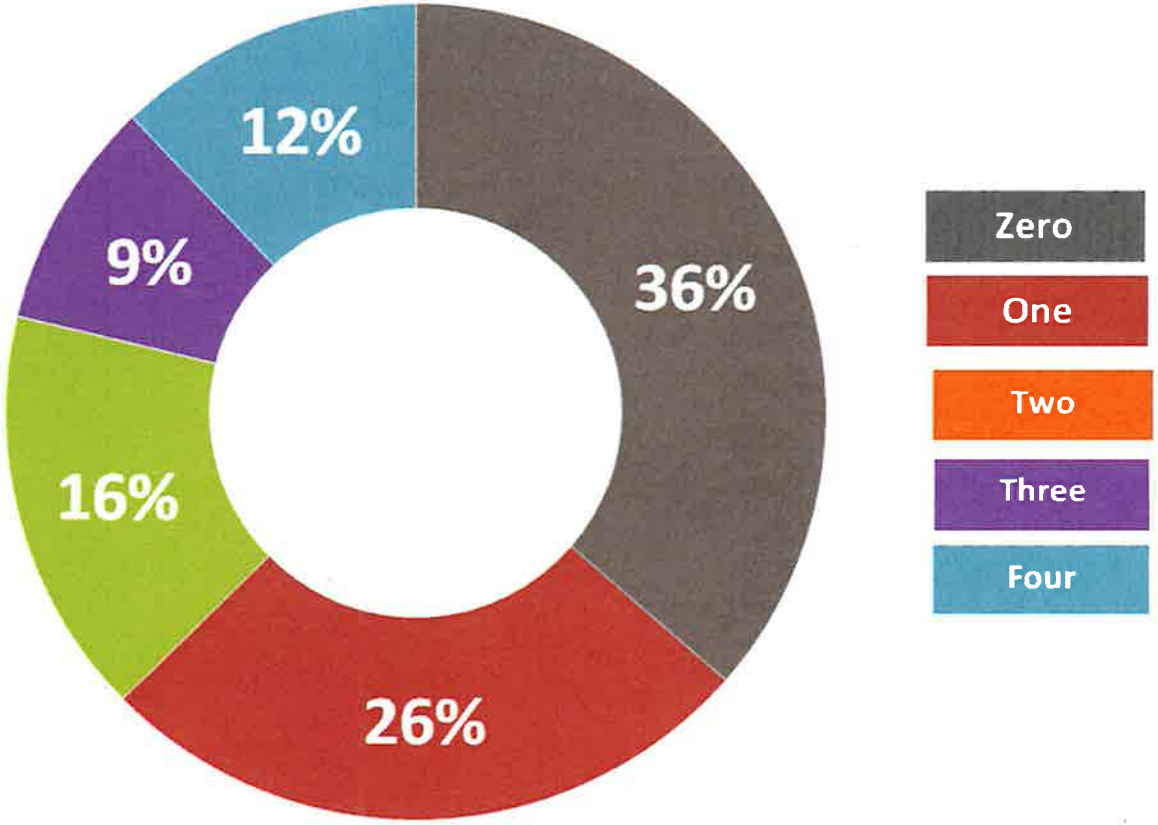
THE TRUTH ABOUT ACEs

The three types of ACEs include



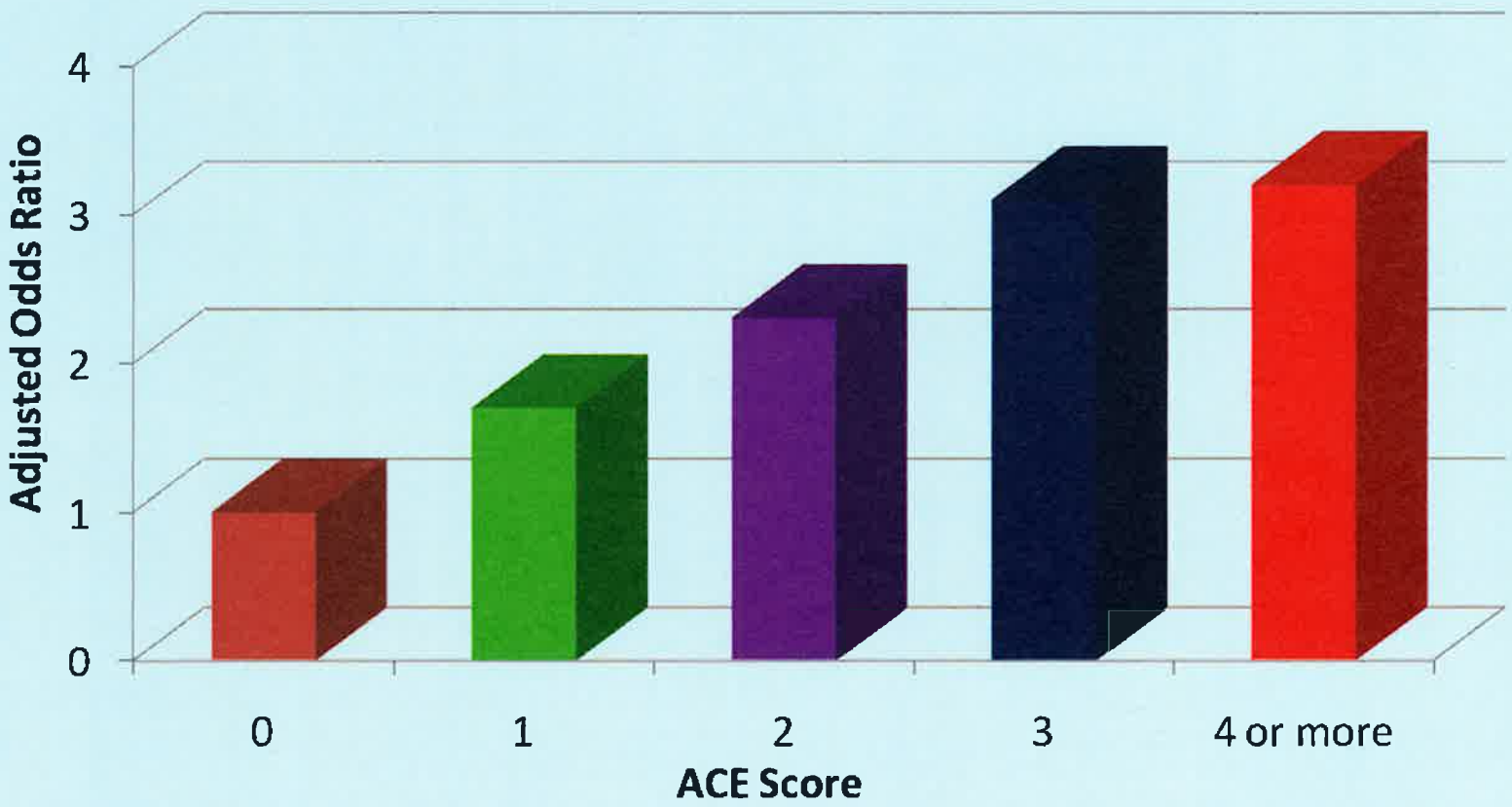
Used with permission from Robert Wood Johnson Foundation
http://www.rwjf.org/en/about-rwjf/newsroom/infographics/the-truth-about-aces.html

ACES ARE COMMON

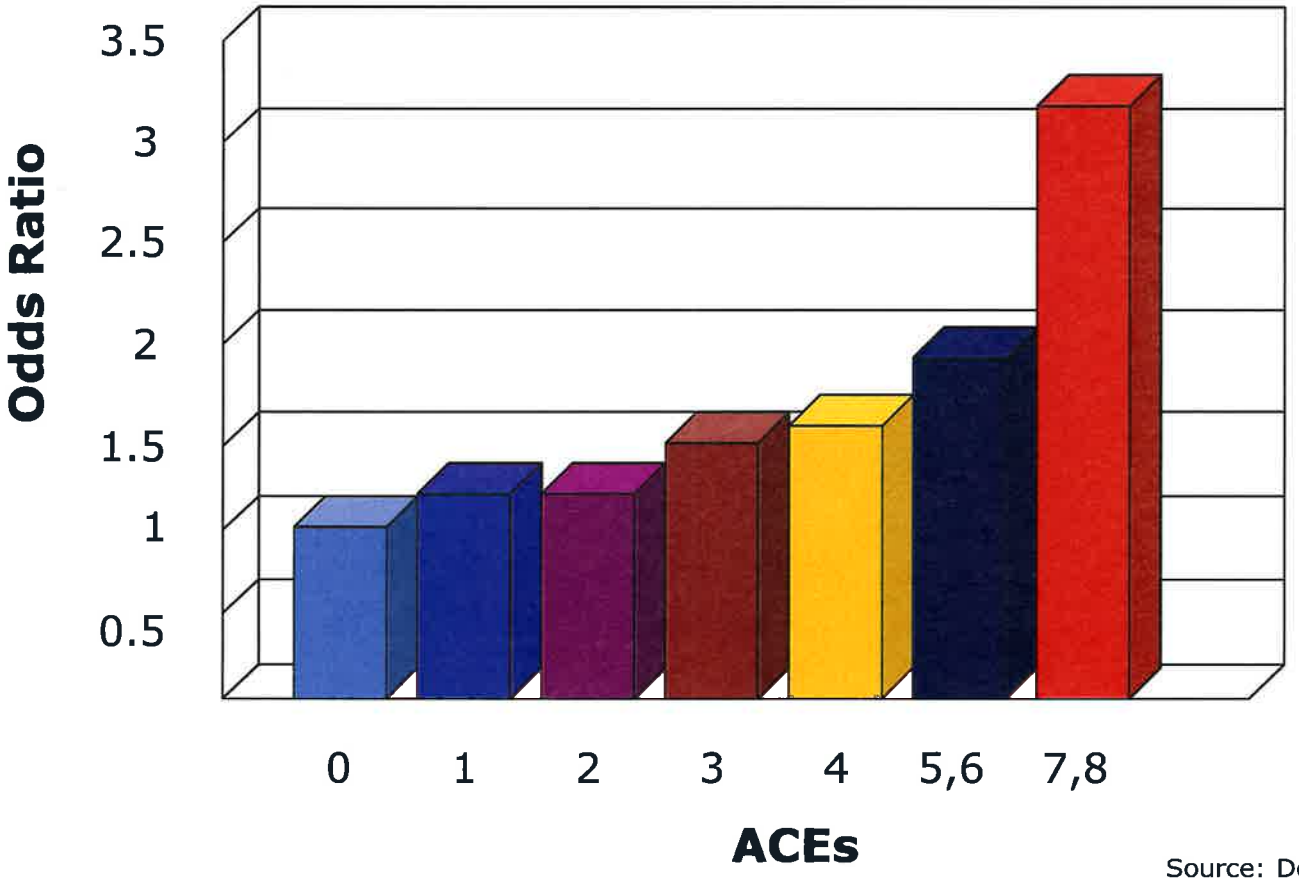


Adapted from CDC Infographic
https://vetoviolence.cdc.gov/childmaltreatment/phl/resource_center_infographic.html

Adverse Childhood Experiences and Likelihood of > 50 Sexual Partners

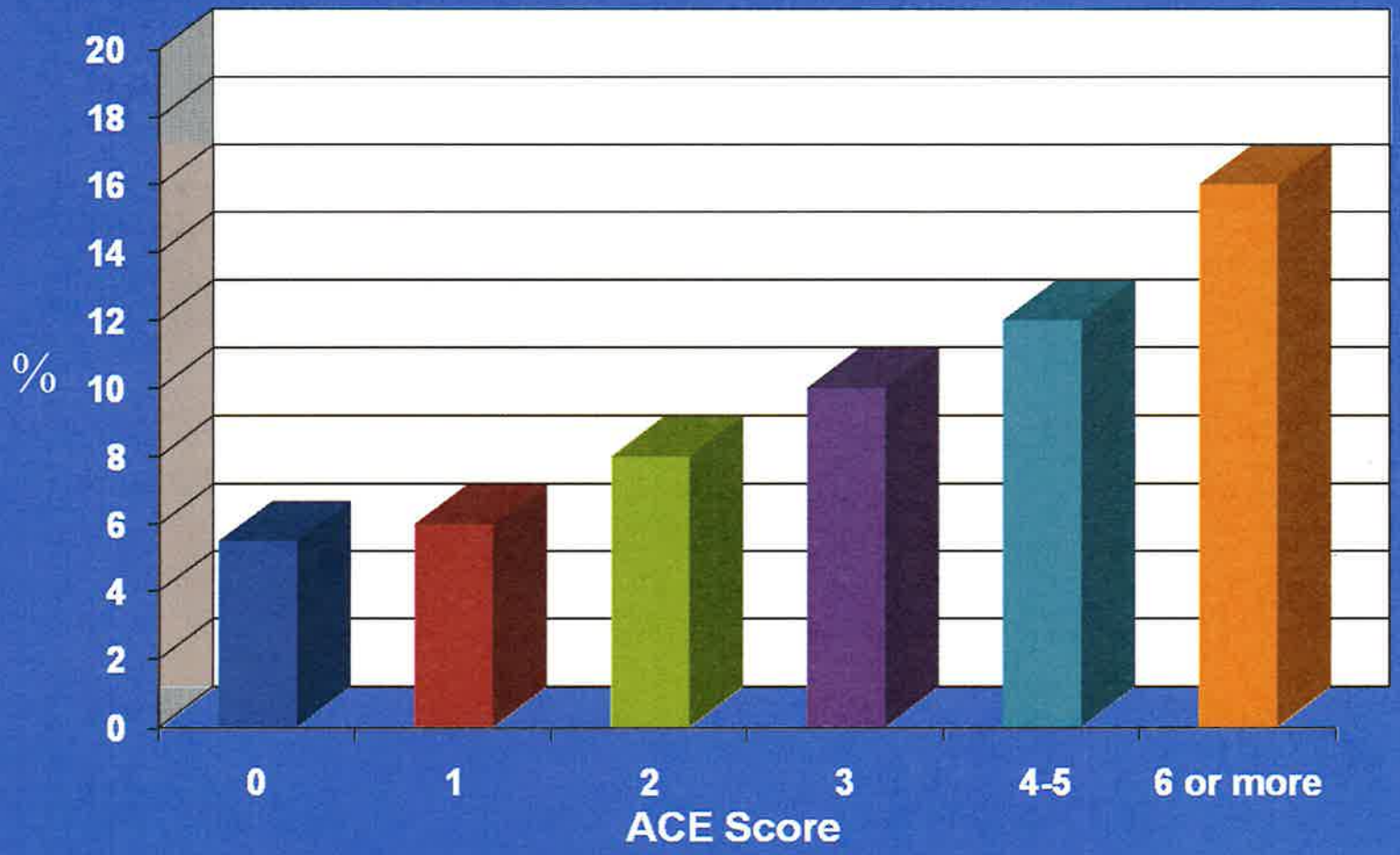


Adverse Childhood Experiences and Heart Disease

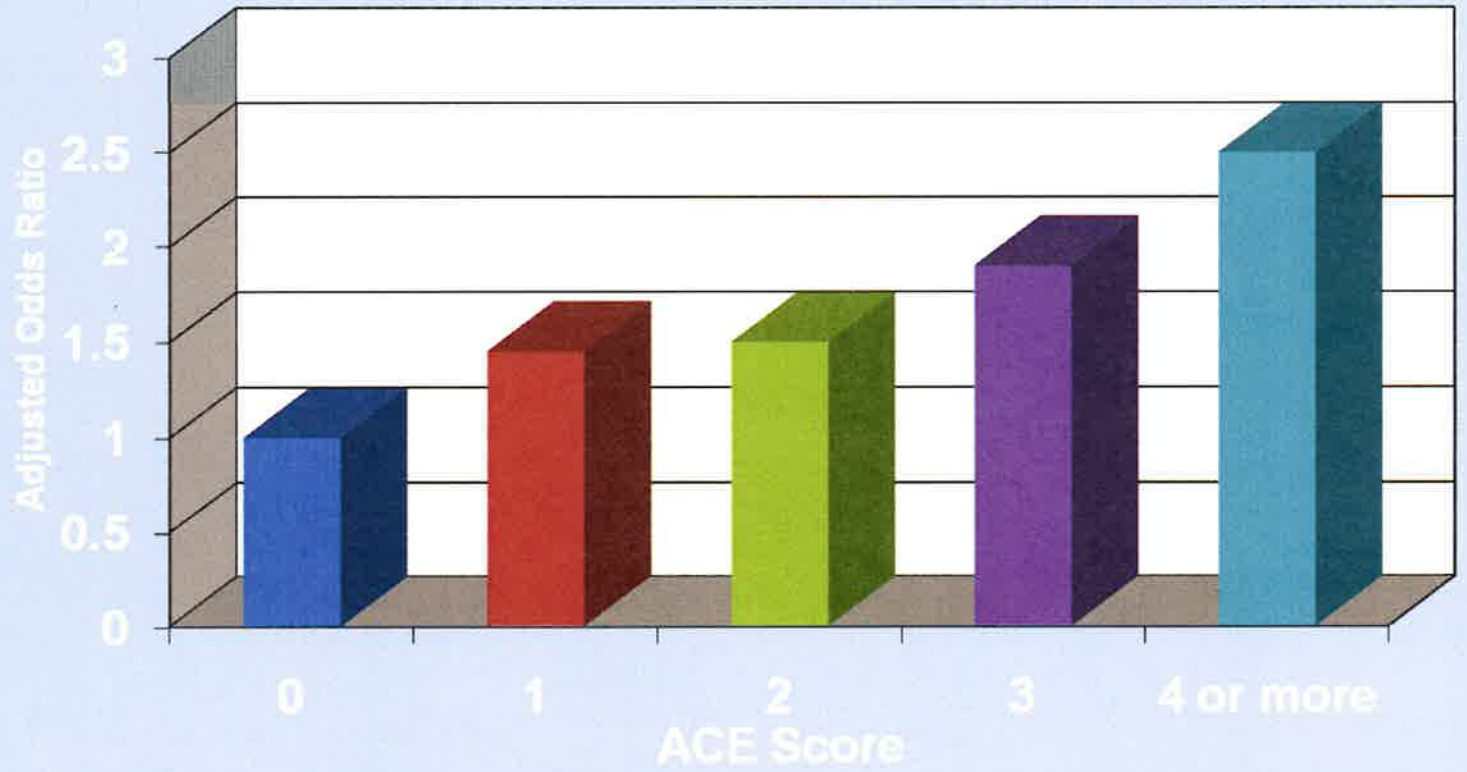


Source: Dong et al, 2004

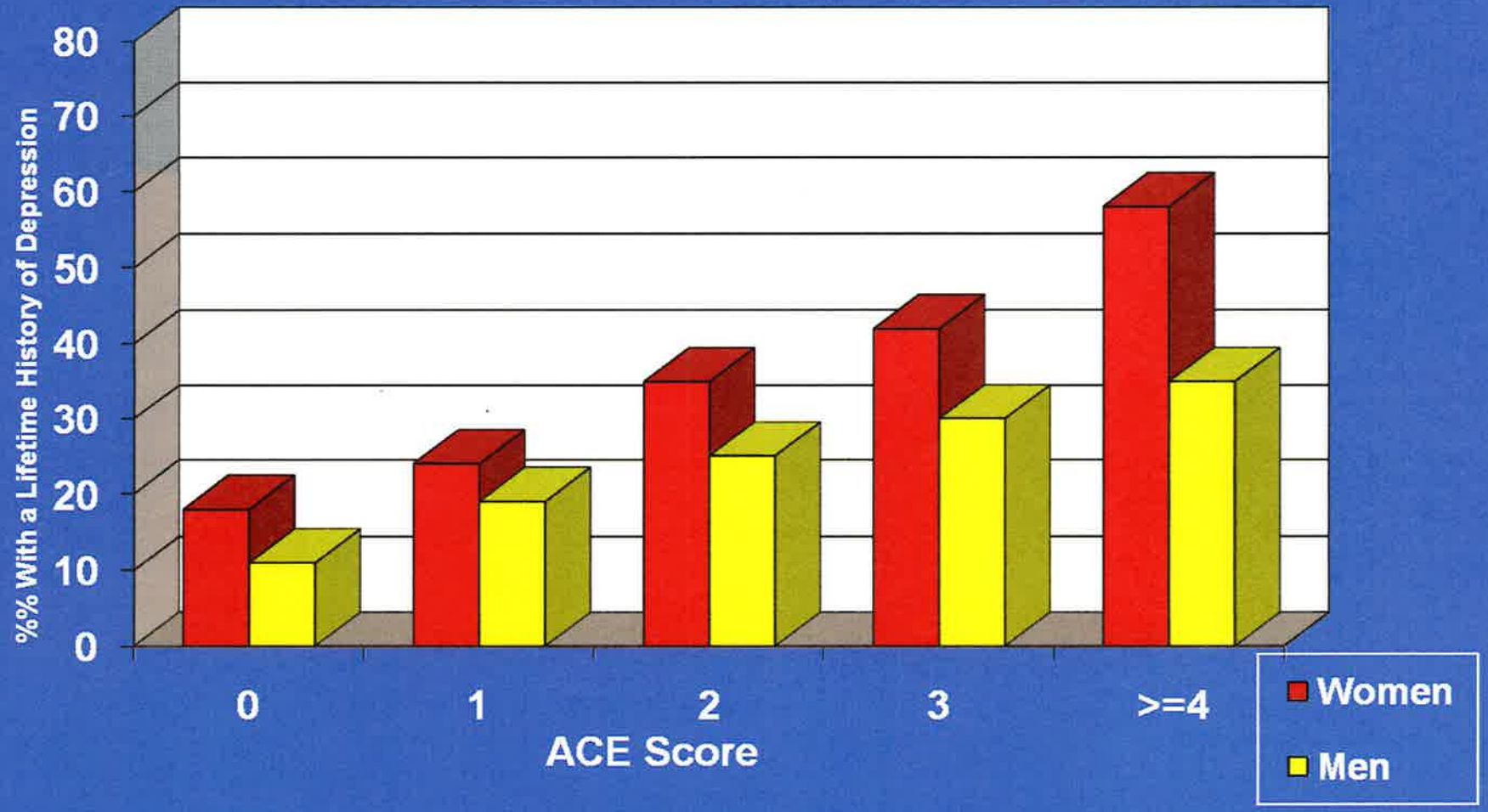
Adverse Childhood Experiences and Current Smoking

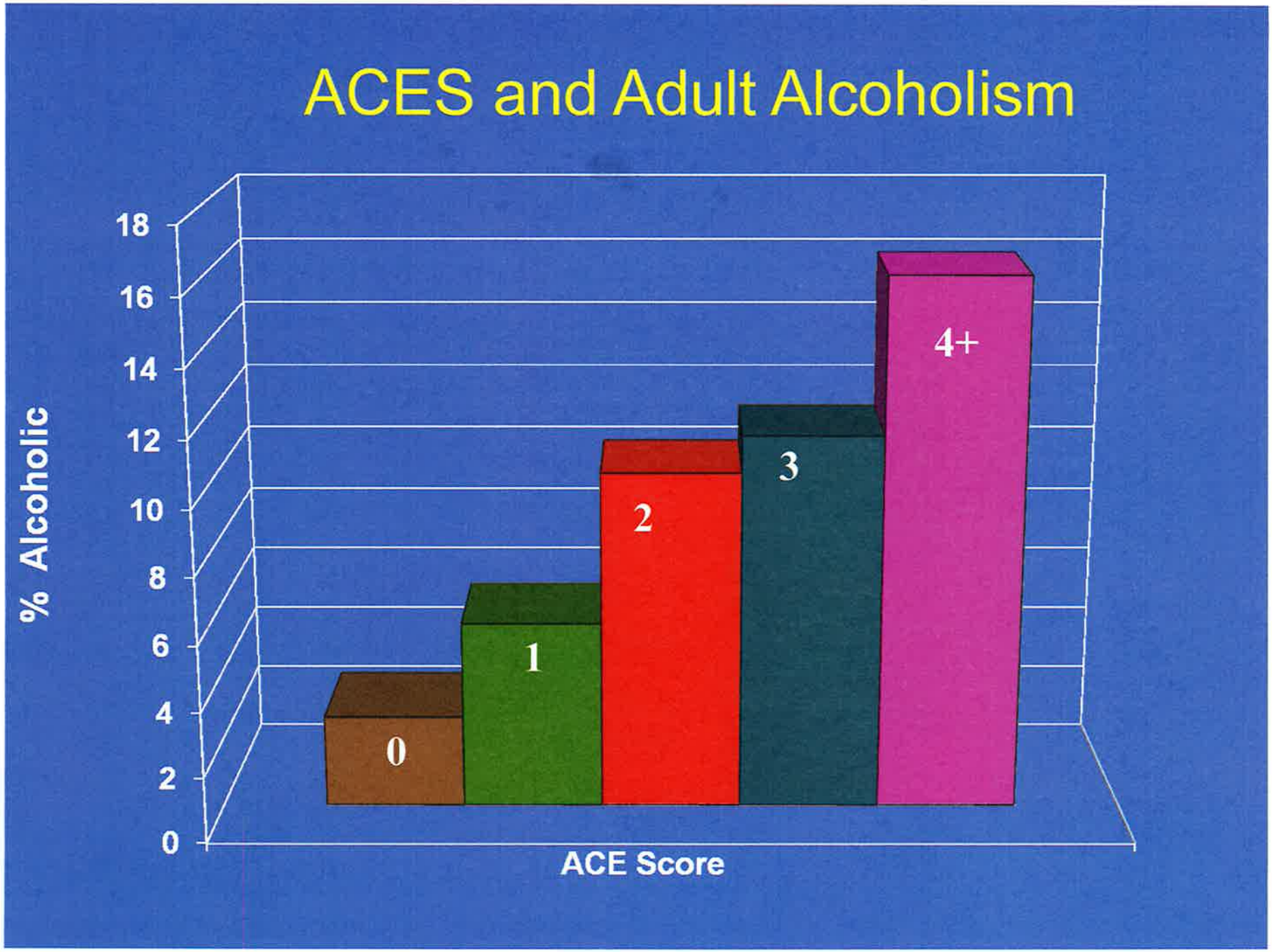


Adverse Childhood Experiences and History of STD

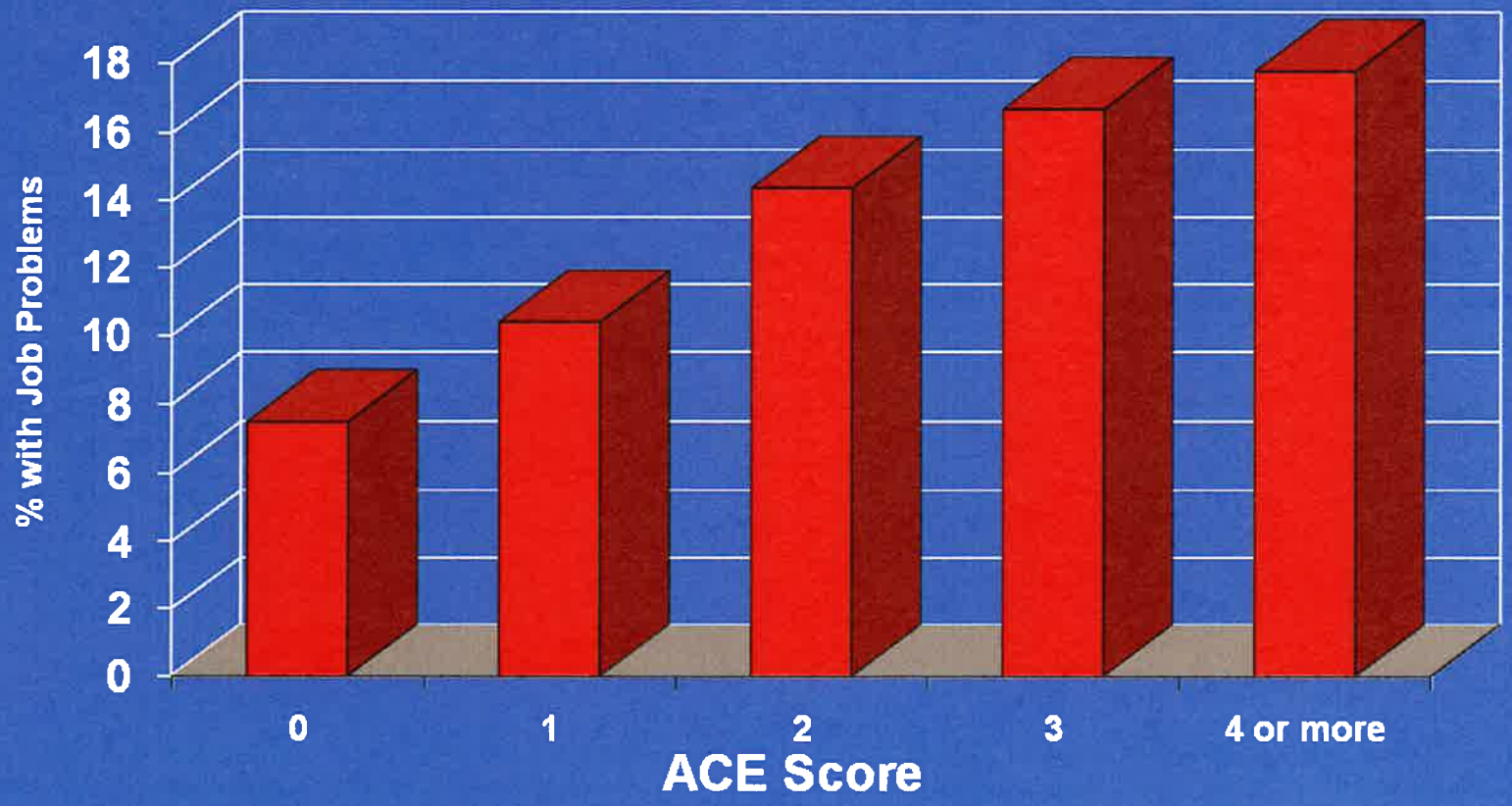


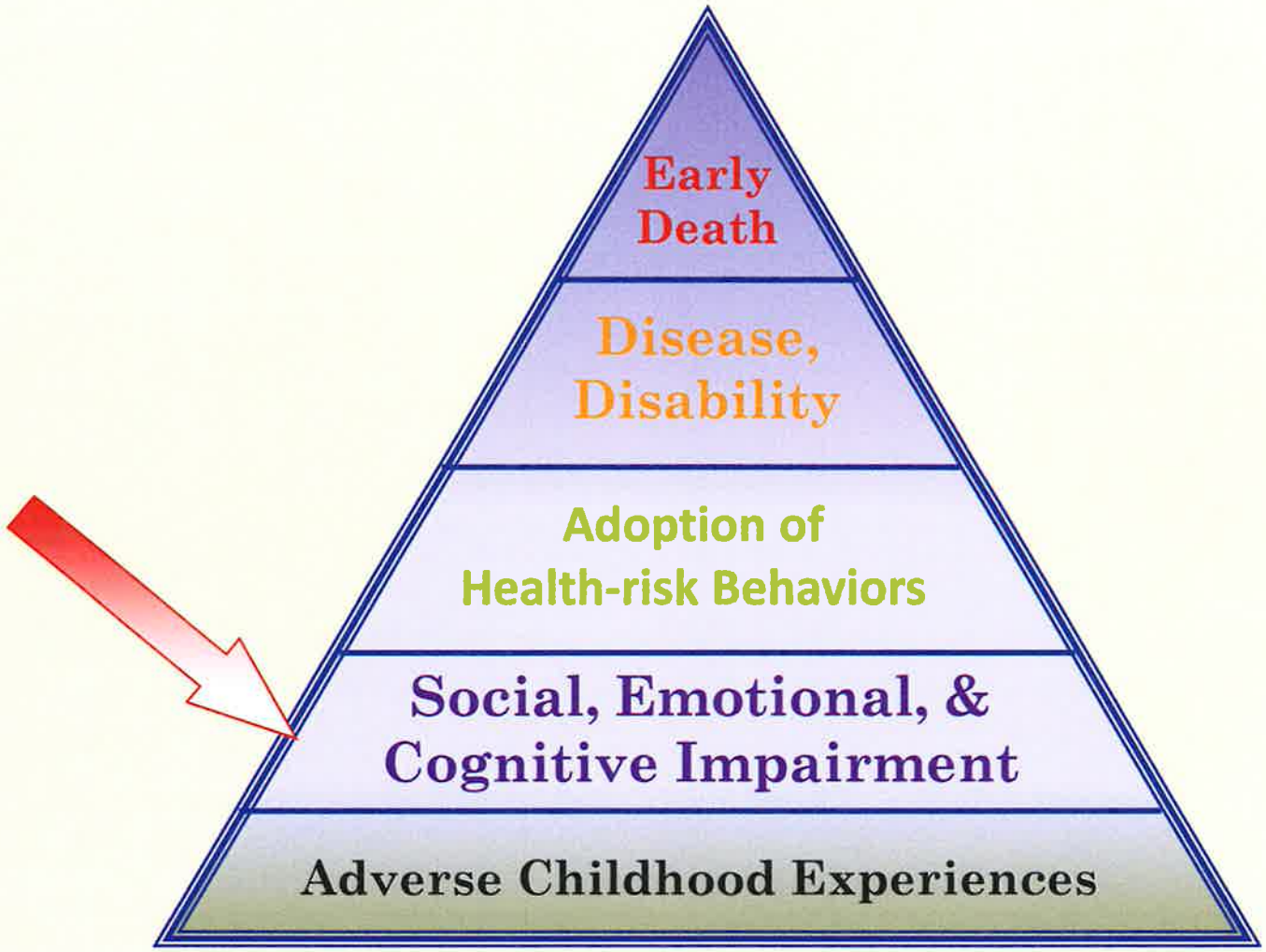
Childhood Experiences Underlie Chronic Depression




ACES and Adult Alcoholism
% Alcoholic
18
16
14
12
10
8
6
4
2
0
0
1
2
3
4+
ACE Score

ACE Score vs. Serious Job Problems





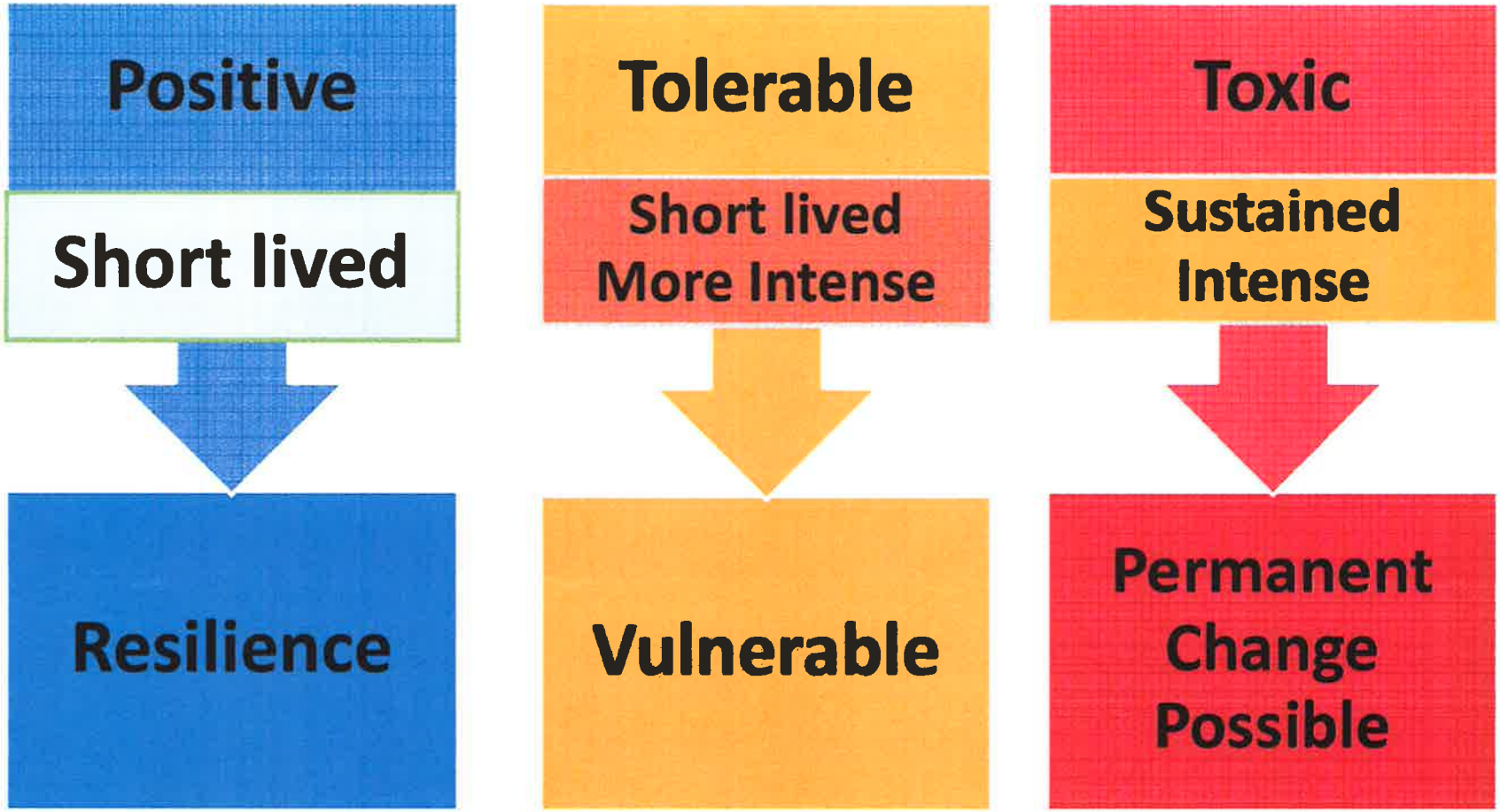
(Felitti, 2003)

The Impact of Trauma on Brain Development

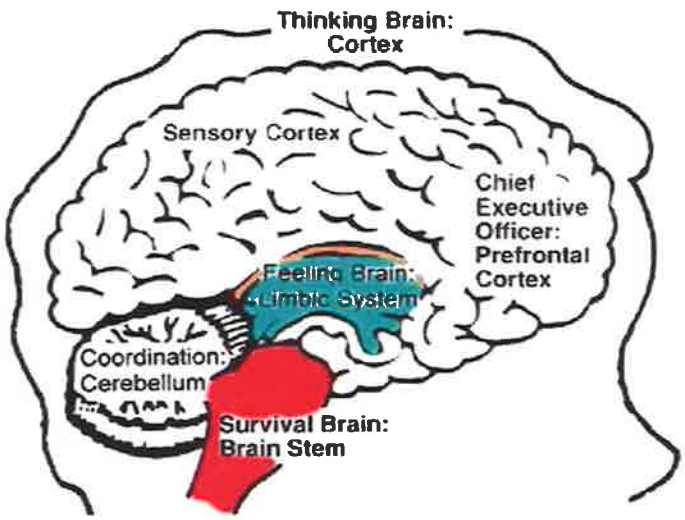
- Dr. Mike: Saving Brains
  https://www.youtube.com/watch?v=vw0TkwjjpZU
- First Impressions Video
- https://www.youtube.com/watch?v=O4zP50tEad0
- Harvard Center on the Developing Child Videos
  http://developingchild.harvard.edu/resources/multimedia/videos/three_core_concepts/toxic_stress/
- Amazing Brain Brochures

TYPES OF STRESS

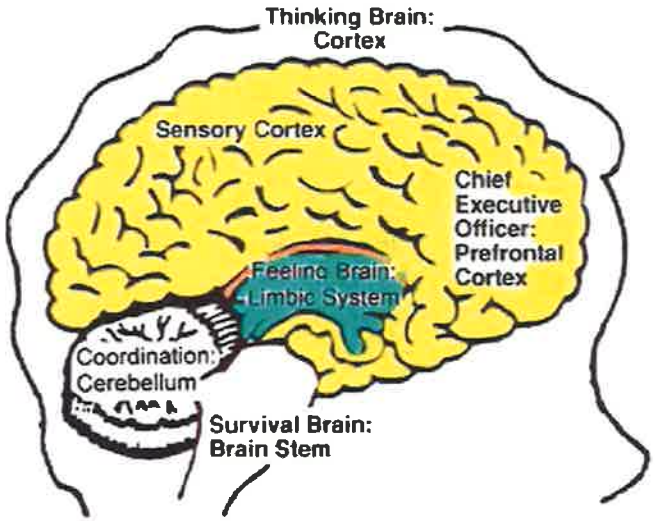
(after Middlebrooks, JS, Audage, NC (2008); Perry, B (2005)



The Brain on Trauma



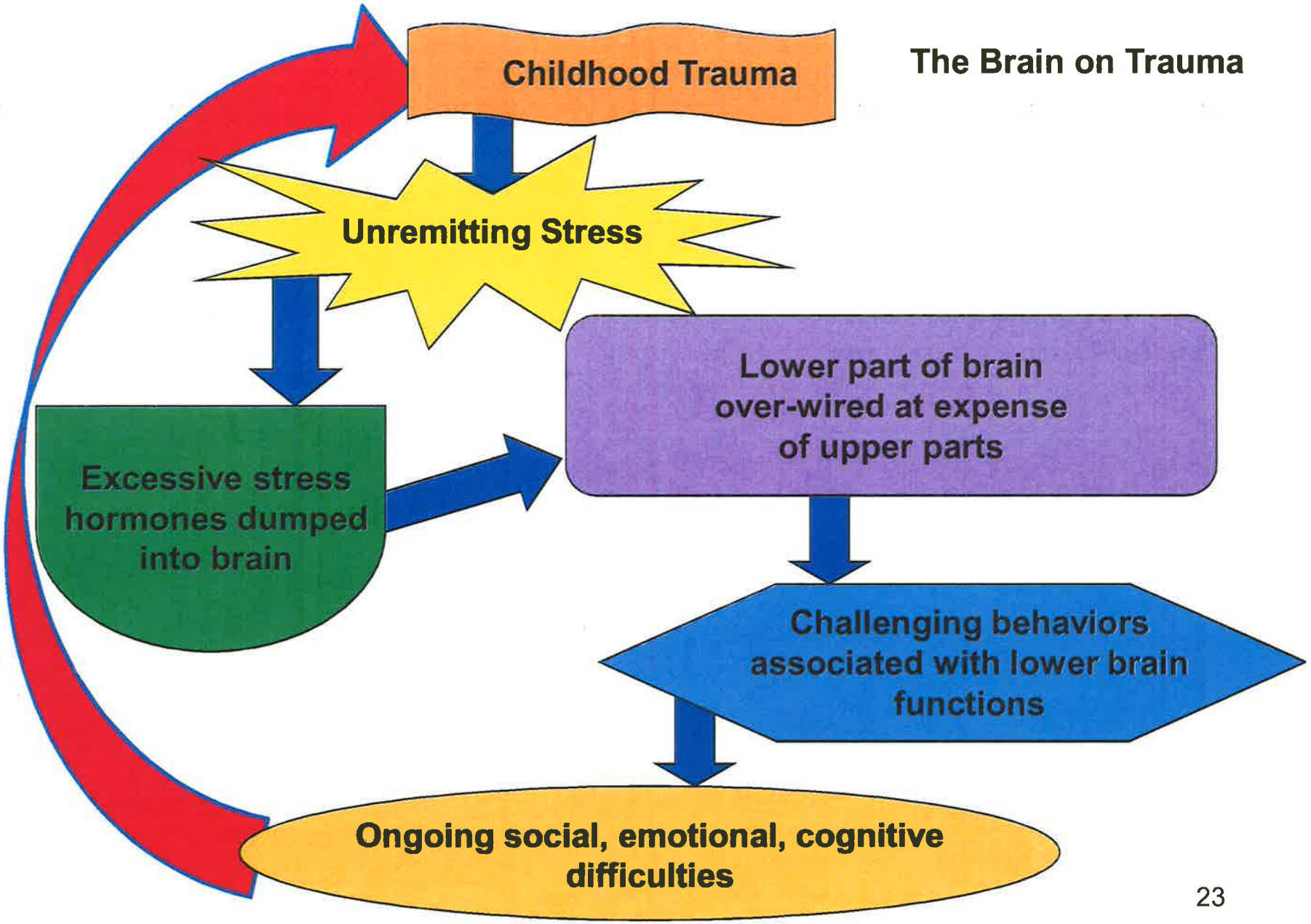
Stressed Brain



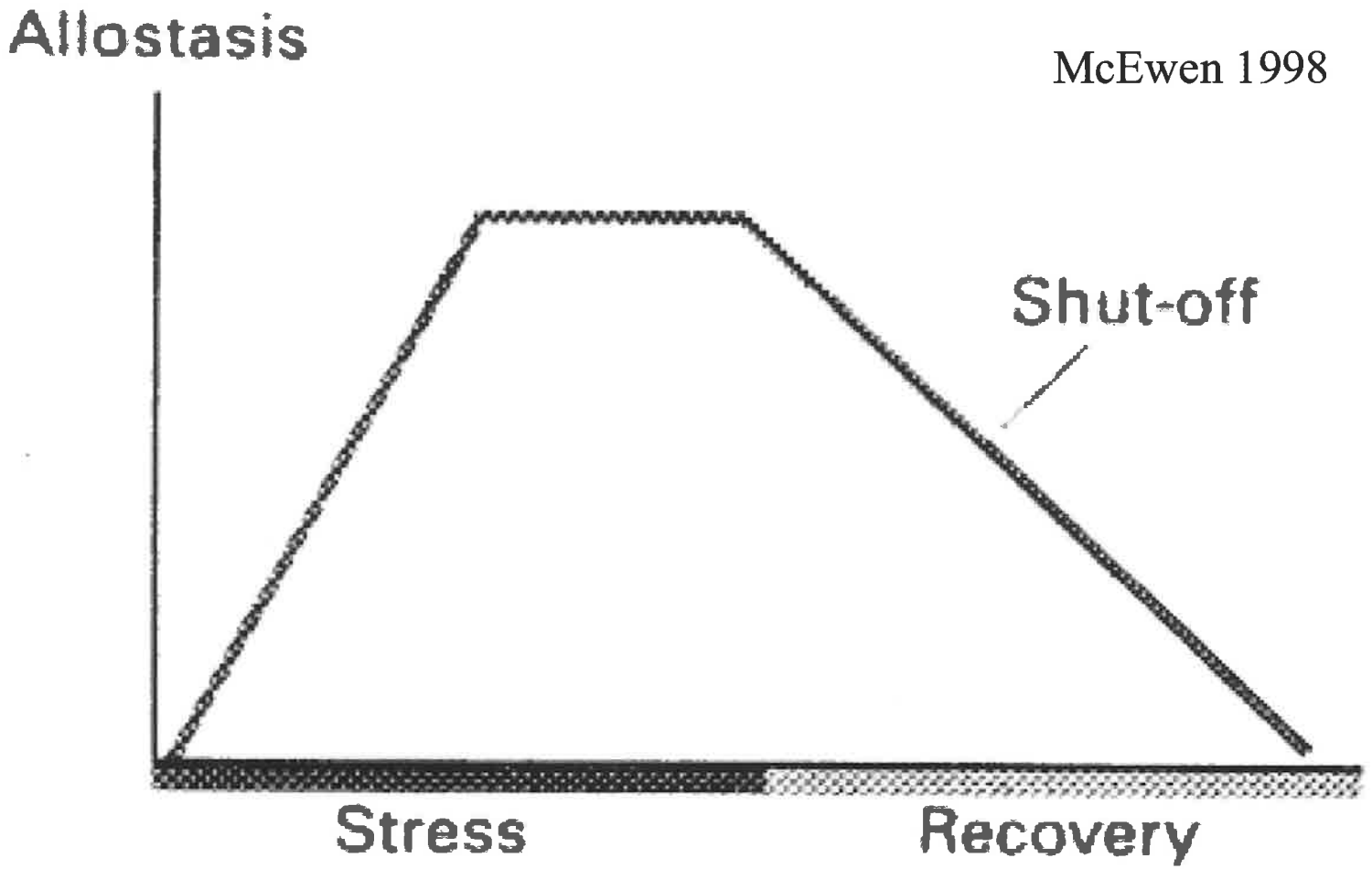
Calm Brain

(Tennant 2007)

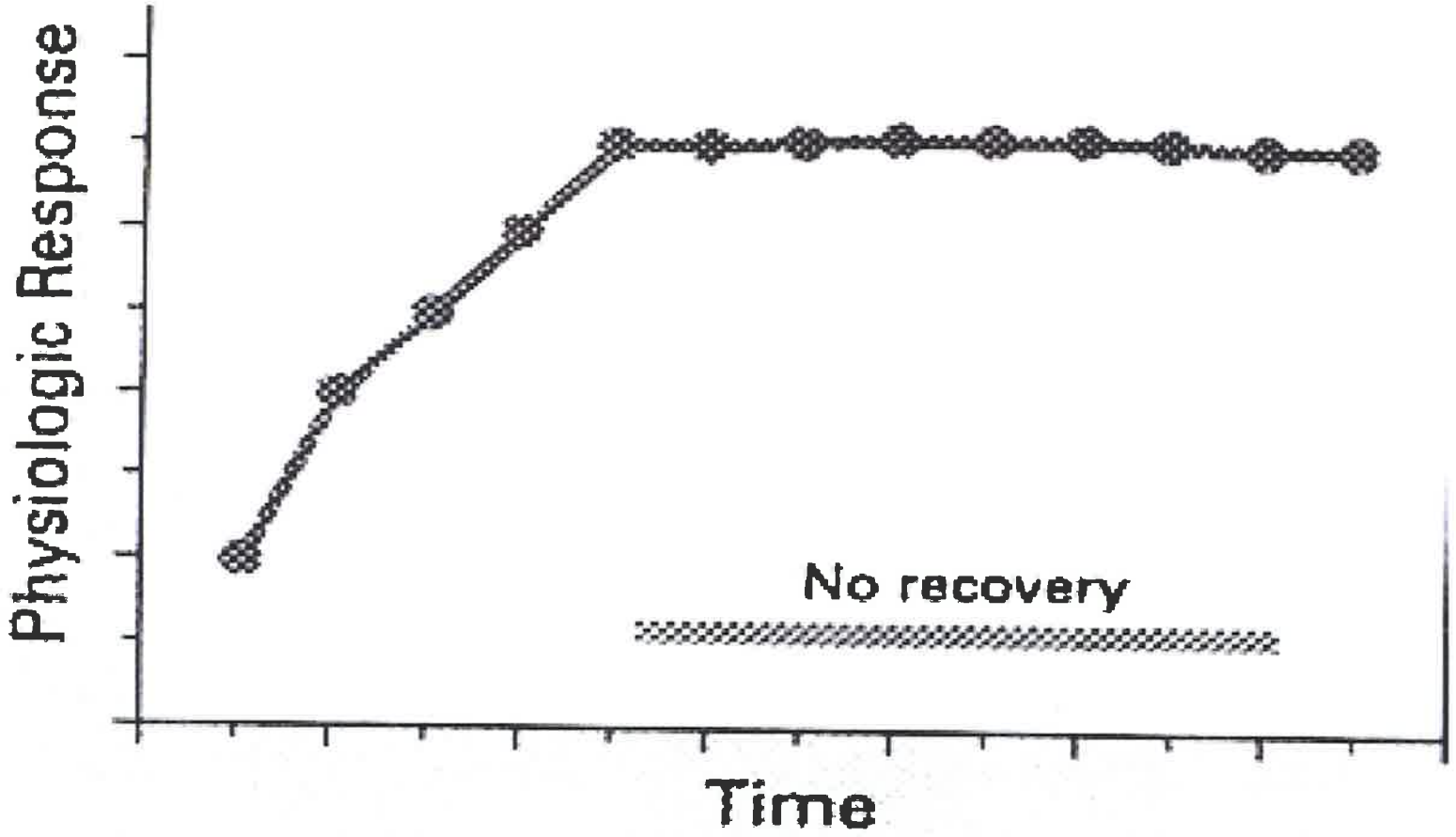
The Brain on Trauma



Allostasis



Allostastic Load



McEwen BS. Protective and damaging effects of stress mediators. N Eng J Med. 1998;338:171-9.

Stressed vs. Stressed Out

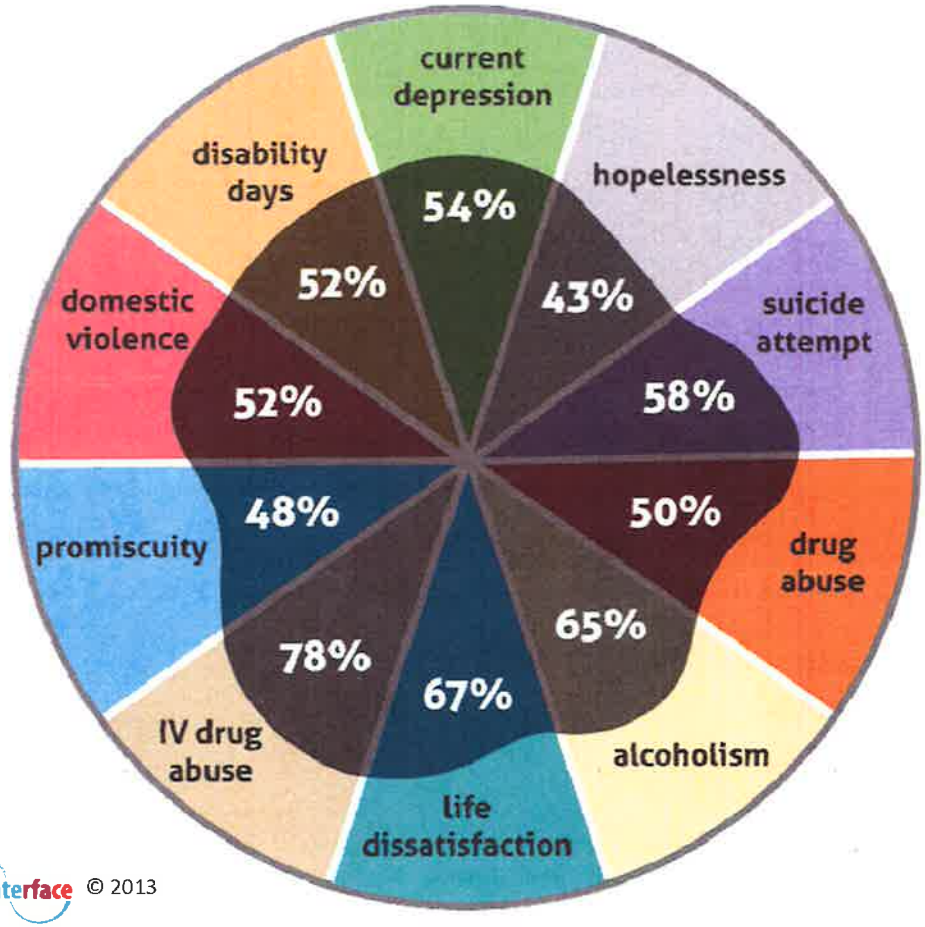
- Stressed
  - Increased cardiac output
  - Increased available glucose for fuel
  - Enhanced immune functions
  - Growth of neurons in hippocampus & prefrontal cortex

- Stressed Out
  - Hypertension & cardiovascular diseases
  - Glucose intolerance & insulin resistance
  - Infection & inflammation
  - Atrophy & death of neurons in hippocampus & prefrontal cortex

The Amazing Brain

Plasticity and Neurogenesis

ACEs and Population Attributable Risks



ACE Interface © 2013

Multiplying Connections

Positive development for all children

Focus

Zero to Five

Prevention

Public Service System

Strategy

BUILD CAPACITY

Key activities

Professional Development

Policies/ Protocols

Evaluation

Products and Outcomes

- Core Competencies
- Cross System Foundational Course
- CAPPD Framework
- Website
- Provider and Caregiver Materials

BTI Part II Content

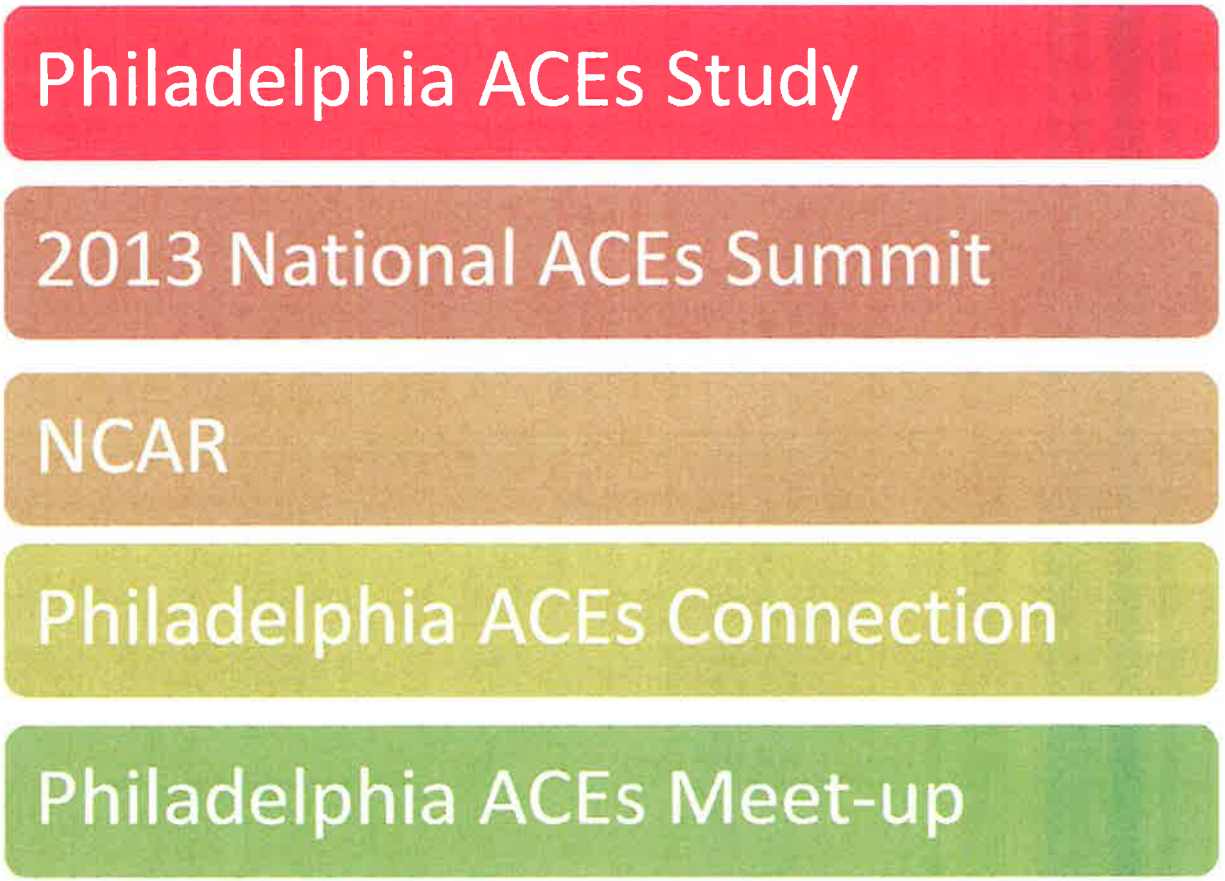
C	• Calm
A	• Attuned
P	• Present
P	• Predictable
D	• Do not Escalate

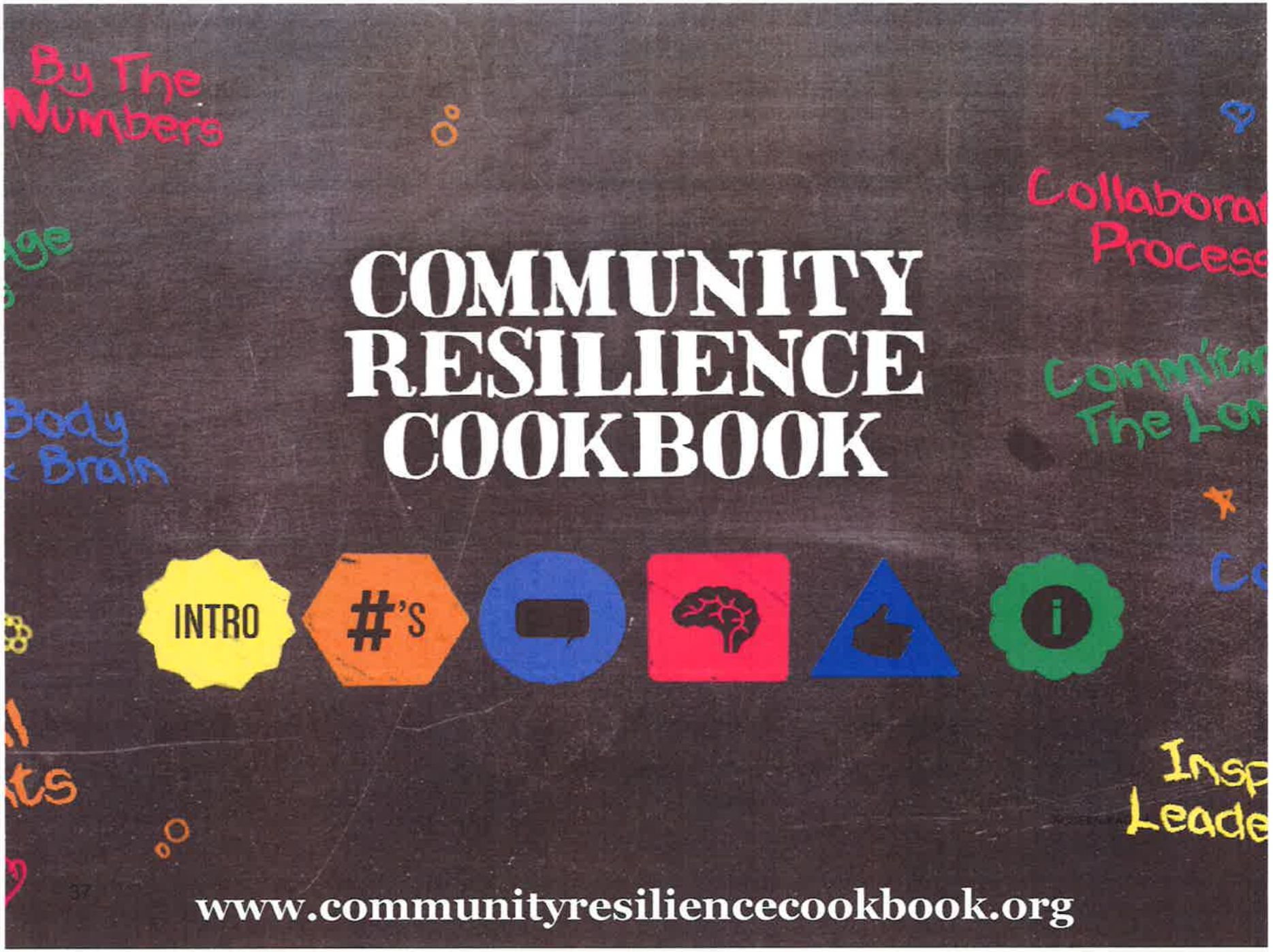
THE PHILADELPHIA

PROJECT

The National Summit on Adverse Childhood Experiences

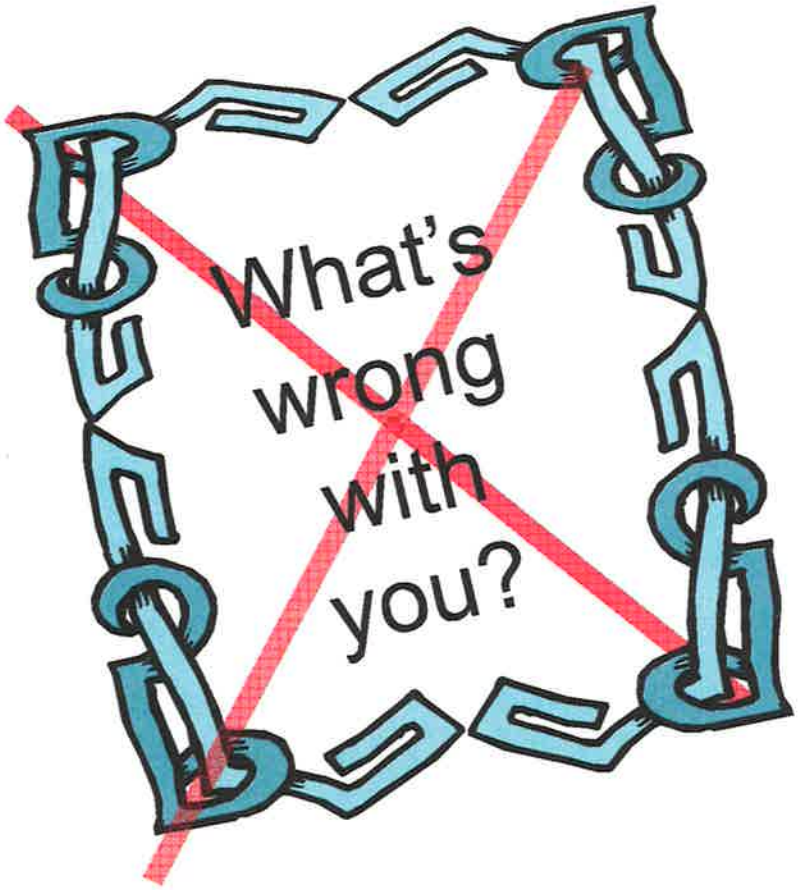
Products and Outcomes





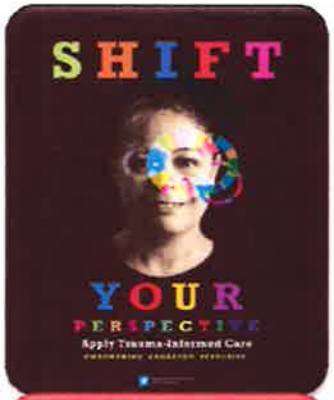
COMMUNITY RESILIENCE COOKBOOK

Re-Framing the Key Question

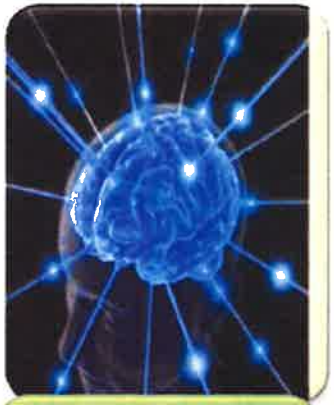


What happened to you?

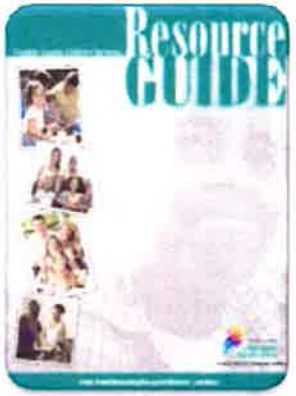
What You Can Do



Reframe

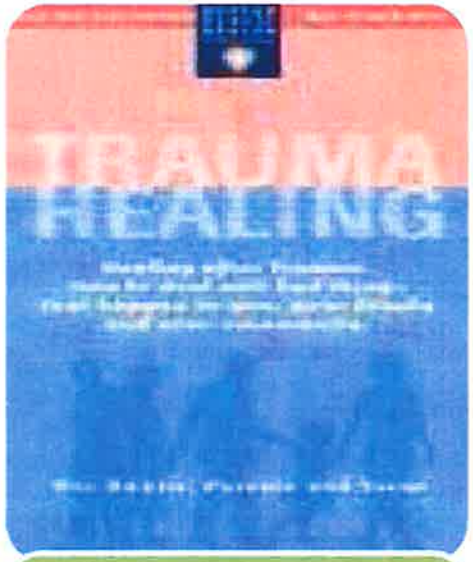


Learn about trauma



Know local resources

What You Can Do



Have Materials Available

Promote calming activities

What You Can Do

Become a TIC Champion in your organization

Thank You!

Multiplying Connections

Resources

- National Center for Trauma Informed Care
- **http://mentalhealth.samhsa.gov/nctic/**
- Community Connections – Roger Fallot, PhD
- **http://www.communityconnectionsdc.org**
- Sanctuary Model/Community Works – Sandra Bloom, MD
- **http://www.sanctuaryweb.com/**
- Sidran Foundation for Traumatic Stress - **www.sidran.org**
- PTSD Alliance - **www.ptsdalliance.org**
- International Society of Traumatic Stress - **http://www.istss.org/**

Resources

- ACE Study. The Centers for Disease Control and Prevention reports on the Adverse Childhood Experiences (ACE) Study - one of the largest investigations ever conducted on the links between childhood maltreatment and later-life health and well-being. www.cdc.gov/nccdphp/ace
- National Center for Posttraumatic Stress Disorder, http://www.ncptsd.org
- National Child Traumatic Stress Network, http://www.nctsn.org
- The National Working Group on Evidence-Based Health Care. www.evidencebasedhealthcare.org.
- Linda Weinreb, M.D., Vice Chair and Professor Dept. of Family Medicine and Community Health University of Massachusetts Medical School/UMass Memorial Health Care, weinrebl@ummhc.org. Dr.

Resources for Consumers

- Gift from Within. A site for survivors of trauma and victimization. www.giftfromwithin.org
- Healing Self Injury provides information about self-inflicted violence and a newsletter for people living with SIV– The Cutting Edge. www.healingselfinjury.org
- National Center for Posttraumatic Stress Disorder, http://www.ncptsd.org
- National Child Traumatic Stress Network, http://www.nctsn.org
- Sidran Institute. For Survivors and Loved Ones – printable handouts. http://www.sidran.org/index.cfm
- WCADV. Works to prevent and eliminate domestic violence. http://www.wcadv.org
- WCASA. Works to ensure that every sexual assault victim in Wisconsin gets the support and care they need. http://www.wcasa.org