



Interdisciplinary
Center for Community
Health & Wellness



College of
Medicine



*COLLABORATING FOR
BETTER HEALTH AND WELLNESS*

**Addressing ACEs & Building Resilient Communities
Great Lakes Bay Region & Michigan**

What are ACEs?

From 1995 to 1997, a [landmark study](#) by the CDC and Kaiser Permanente uncovered the profound connection between Adverse Childhood Experiences (ACEs) - experiences of abuse, neglect and household dysfunction in childhood - and adults' physical, emotional and social health outcomes.

The ACE Study identified ten unique types of trauma, each of which counts as one point in an individual's ACE score.



Image Source: HuffPost 10/08/2012



Image Source: Robert Anda, MD

Michigan is Part of a National Movement: Call to Action to Put the Science of ACEs/Trauma into Practice



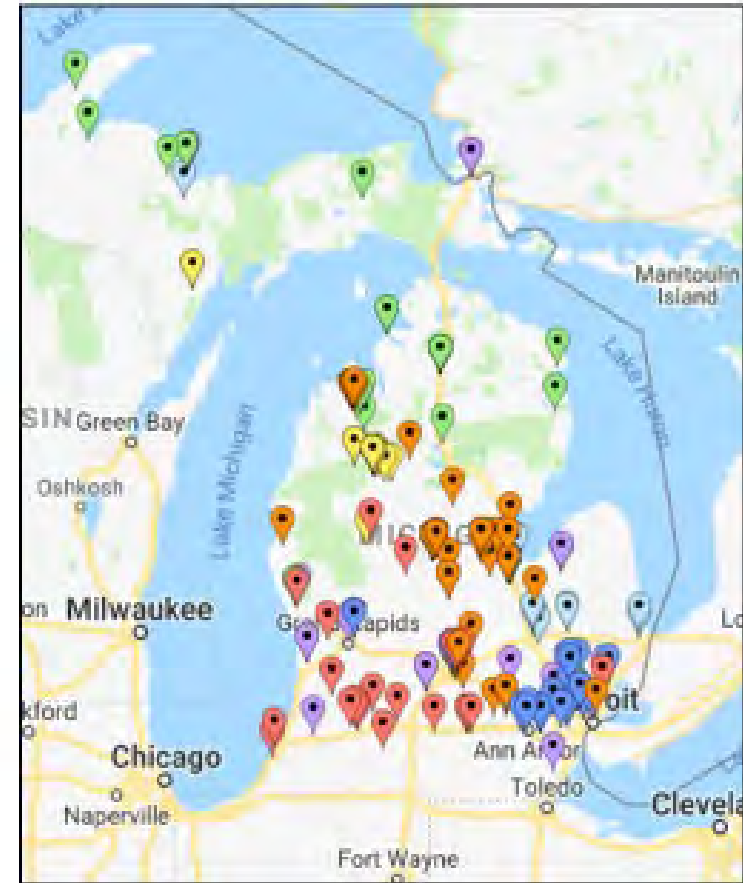
- Michigan ACE Initiative (MI ACE) is managed by the Michigan Association of Health Plans Foundation (MAHP Foundation)
- Funding by Michigan Health Endowment Fund
- Focus:
 - Toward creating statewide awareness of **Adverse Childhood Experiences (ACE's)**
 - Developing recommendations of appropriate interventions and state policy
 - Development and Implementation of the new State Medicaid policy that enables the use of the ACE screening tool as Children receive health screenings and services.



ace

Michigan ACE Initiative

For more information, visit www.miace.org



Many States are Collecting ACEs Data



Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System Survey/ACE Data, 2009-2018.
Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2019.

Michigan's ACEs Exploration (2016)

In 2016, the Michigan BRFSS once again included the Adverse Childhood Experiences (ACE) Module as state added questions, asked of one split of the total sample.

There were also ten additional questions added that asked about:

death of a parent

neighborhood violence

poverty

discrimination

and social support (adapted from the [2015 Wisconsin BRFSS](#))

adapted from the

[National Survey of Children's Health](#)



Prevalence of Individual ACEs (2016)

2.1M

Michiganders (29%) lived with someone with substance abuse

1.9M

Michiganders (27%) reported having parents who were separated or divorced

1.4M

Michiganders (20%) lived with someone with mental illness

Data Source: Michigan Behavioral Risk Factor Surveillance System, 2016

1.14 million people were sexually abused one or more times as a child

That's enough people to fill nearly **11 U of M** football stadiums.



Data Source: Michigan Department of Health and Human Services (MDHHS), Michigan Behavioral Risk Factor Surveillance System Survey Data, Lansing, MI: Michigan Department of Health and Human Services, Lifecourse Epidemiology and Demographics Division, 2018

CMU Engaged Statewide Leading Educational Outreach

Interdisciplinary Center Director and Michigan ACEs Master Trainer, Dr. Alison Arnold talks about building healing communities and building resilience in a newly released Michigan ACEs video.

[Building Resilience: Healing Communities](#)



Building Resilience, Healing Communities - Michigan ACE Initiative 2019



CMU Interdisciplinary Center for Community Health & Wellness

ACEs/Trauma and Resilience Capacity Building

- There is an urgent need to integrate the science of ACEs, neurobiology, and resilience into upstream public health, medical education, and across disciplines of medicine, education, social work, law, and public health.
- To more effectively treat patients, support healthy growth and development, physicians, educators and health care providers are gaining new strategies and understandings about how to treat and support children and families who may be experiences symptoms of ACEs-related trauma and toxic stress.
- The Center Provides:
 - Support for communities regionally and statewide in partnership with the Michigan ACE Initiative.
 - Technical assistance for coalition building, professional development and public awareness education to address the significant health impacts of Adverse Childhood Experiences or ACEs.

CMU Interdisciplinary Center Highlights Programs and Collaborations

- Adverse Childhood Experiences (ACEs) Trauma-Informed Initiatives
 - Michigan ACEs Initiative Engagement: Master Training & Community Champion Training
 - 100+ Michigan ACEs Community Champions Trained
 - CMED Hosted Michigan ACEs Master Training in September 2019
 - 800+ Consult / Professional Development: Schools, Healthcare, Community-based
 - Michigan Association of School Board Annual Leadership Conference – Trauma-Informed Schools
 - Michigan Academy of Physicians Assistants – State Conference and 2019 HRSA Grant for PD
 - Michigan School Health Coordinators Association – State ISD's
 - Cross-Sector Collaborations: Connecting Resources for Research ACEs, CME
 - CME Offerings for CMED Statewide Community Educators on ACEs / Trauma
- Collaboration with MiHIA Grant from Michigan Health Fund to Develop a Regional Backbone for ACEs/Trauma-Informed Initiatives
 - Strategy Map of Interventions and Professional Development



Regional Engagement and Public Health Education Outreach

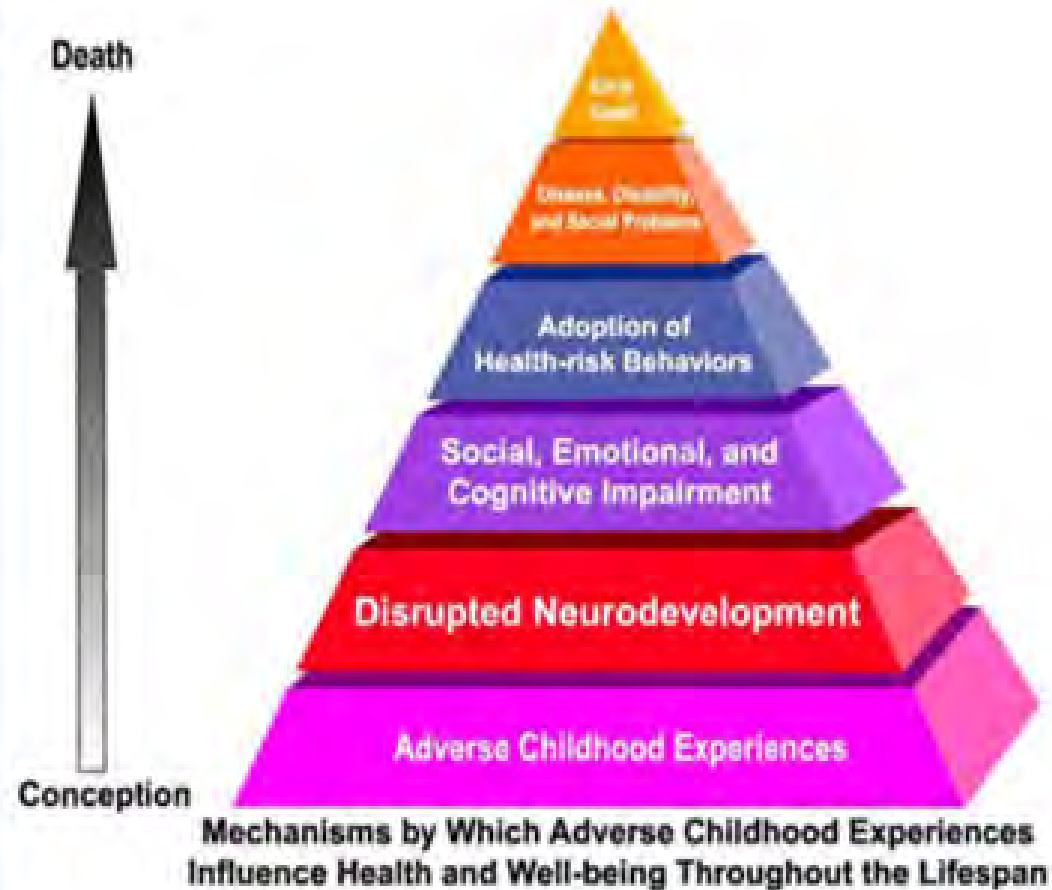


**BUILDING A
RESILIENT
COMMUNITY**

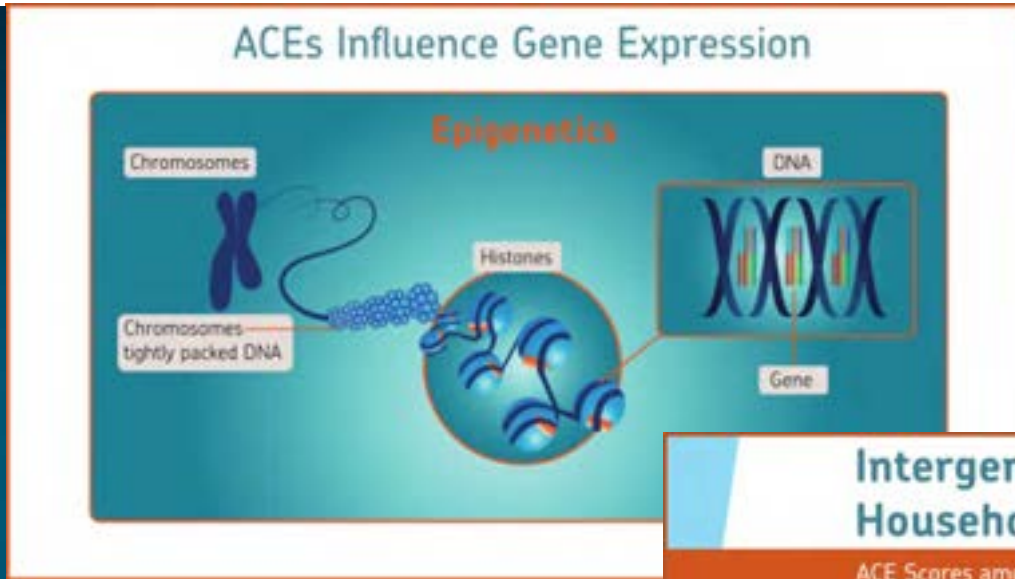
Impact of Trauma over the Life Span

Effects of childhood adverse experiences

- neurological
- biological
- psychological
- social



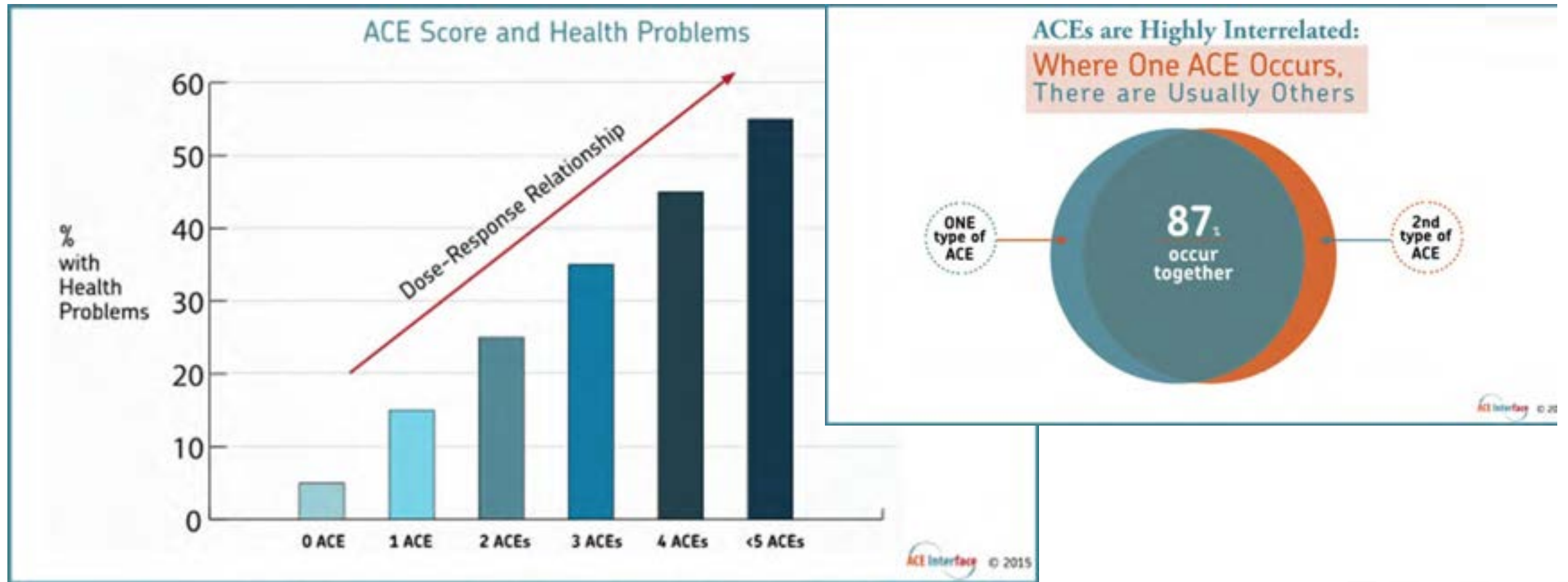
Responses to Stress May Pass from One Generation to the Next



- Biologically predisposed to more physiologic stress
- Brain structures that modulate this stress mature later
- Young children need safe, stable, and nurturing relationships to assist them in regulating their stress



ACEs are Highly Interrelated and More ACEs Predict More Health Problems



ACEs CAN HAVE LASTING EFFECTS ON BEHAVIOR & HEALTH

HOW ACEs AFFECT OUR LIVES



BEHAVIORS

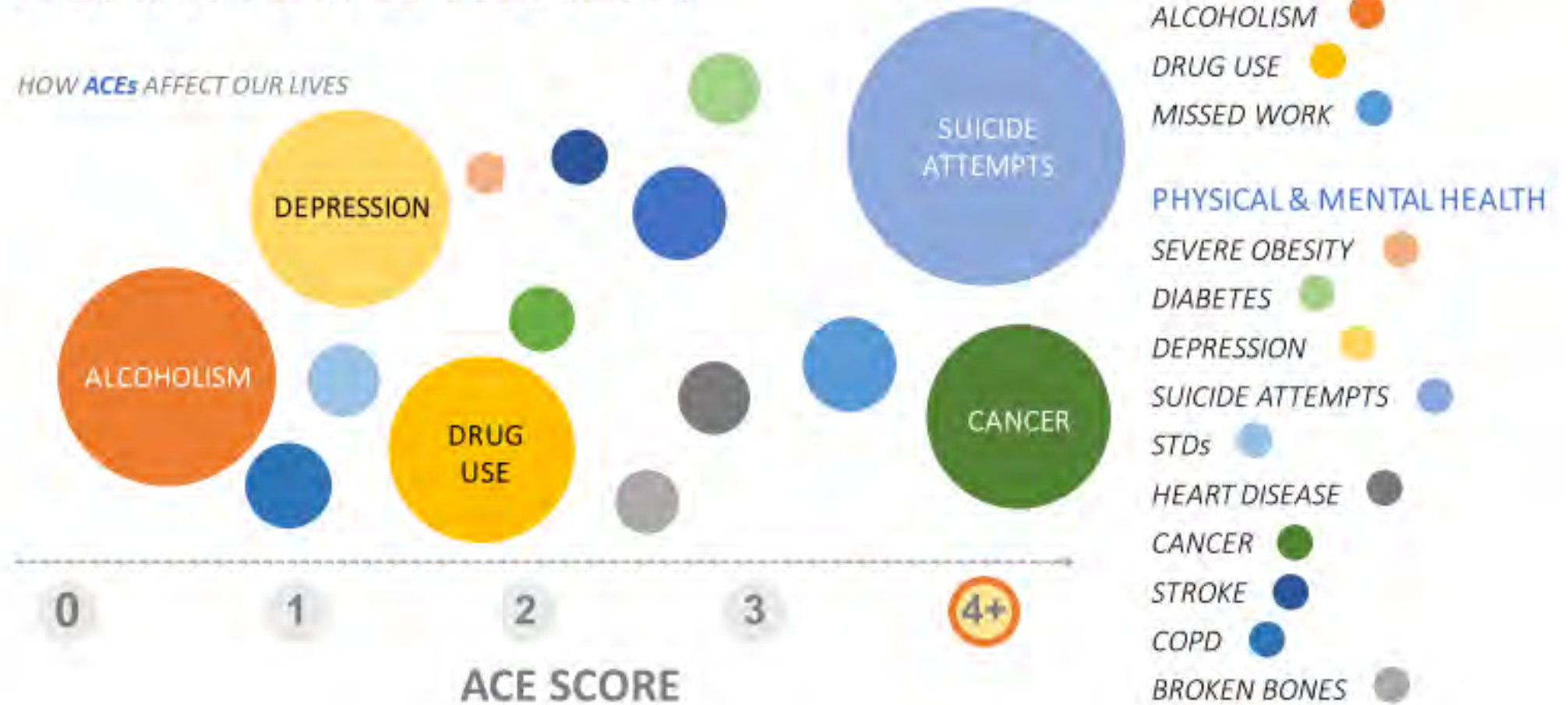
- LACK OF PHYSICAL ACTIVITY
- SMOKING
- ALCOHOLISM
- DRUG USE
- MISSED WORK

PHYSICAL & MENTAL HEALTH

- SEVERE OBESITY
- DIABETES
- DEPRESSION
- SUICIDE ATTEMPTS
- STDs
- HEART DISEASE
- CANCER
- STROKE
- COPD
- BROKEN BONES

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ACEs IMPACT ON SOCIETY



7 of the 10 leading causes of death correlate to high ACE scores



A child with an ACE score of 4 or more is 32 times more likely to have issues at school



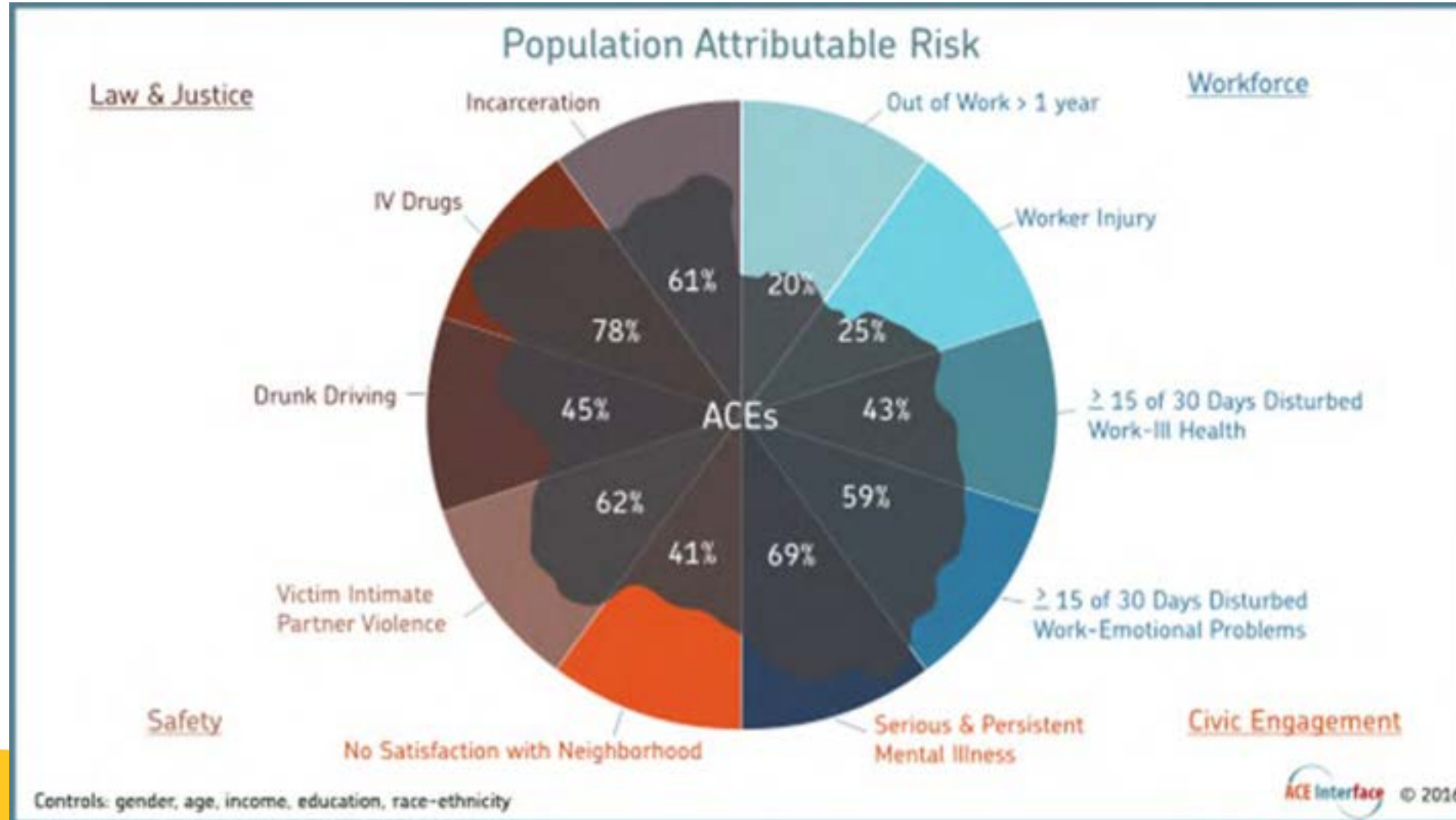
With a score of 6 or more, victims have a 3 times higher risk of heart disease and lung cancer and a 20 years difference in life expectancy

LIFETIME COSTS OF ACEs:

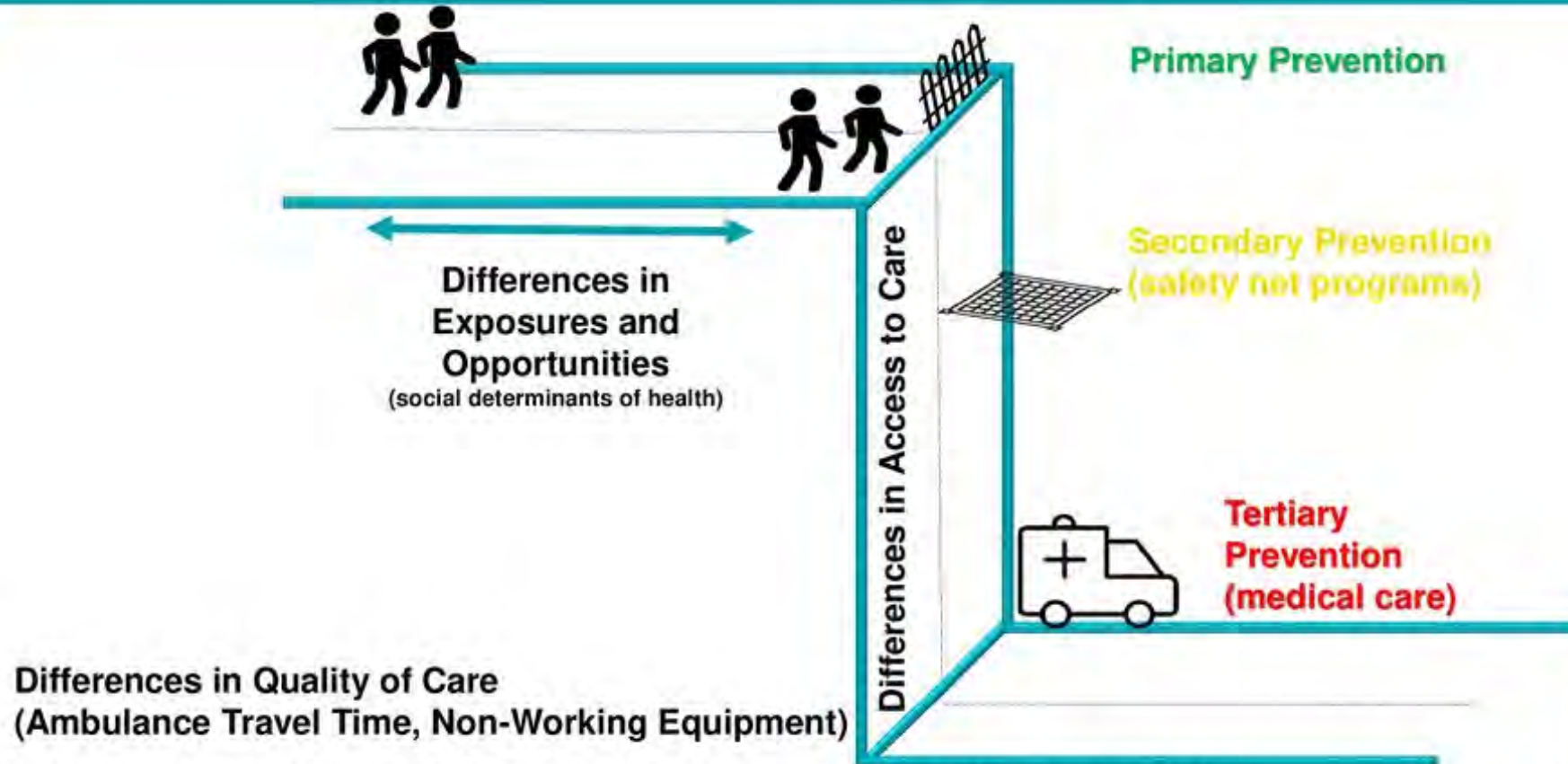
The CDC estimates that the lifetime cost associated with child maltreatment is:



ACEs Impacts on Communities



Trauma-Informed and Responsive Communities



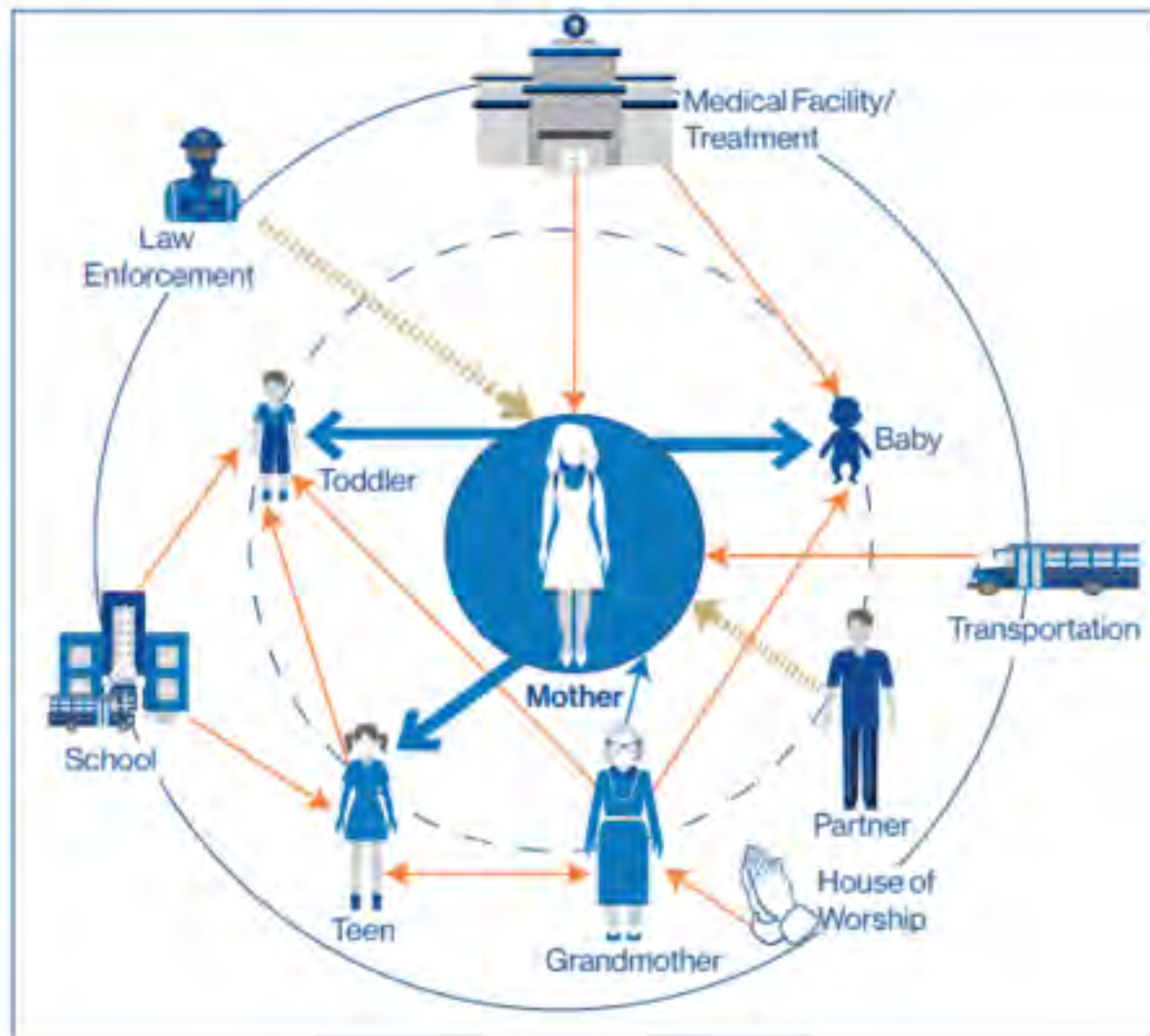
Jones, C. P. & Jones, C. Y. & Perry, G. S. & Barclay, G. & Jones, C. A. (2009). Addressing the Social Determinants of Children's Health: A Cliff Analogy. *Journal of Health Care for the Poor and Underserved* 20(4), 1-12. The Johns Hopkins University Press. Retrieved March 8, 2017, from Project MUSE database.



Ripple Effect of Opioid Epidemic ACEs and Trauma

- Magnitude of ripple effect of this epidemic on children, families, communities and society is devastating:
- 8 million children live in a household where at least one parent has a substance use disorder
- 49 percent of all US opioids overdose deaths in 2015 were young adults from the ages of 25-44 in the prime of adulthood (parents / workers).
- Triple the rate of babies born with Neo-Abstinence-System

Source: United Hospital Fund



A Comparison of Trauma Profiles

Among Individuals with Prescription Opioid, Nicotine or Cocaine Dependence

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3681508/>

	Nicotine	Cocaine	Rx Opiates
Experienced Trauma	95%	96%	100%
Childhood Trauma	71%	60%	90%
Sexual Trauma	16%	22%	34%
Age of First Trauma	13.3	16.4	9.5
# of Traumatic Events	5.5	6.6	7.73

SAMHSA'S 6 PRINCIPLES

of a

TRAUMA-INFORMED APPROACH



SAFETY

Prevents violence across the lifespan and creates safe physical environments.

TRUSTWORTHINESS

Fosters positive relationships among residents, City Hall, police, schools and others.

EMPOWERMENT

Ensures opportunities for growth are available for all.

COLLABORATION

Promotes involvement of residents and partnership among agencies.

PEER SUPPORT

Engages residents to work together on issues of common concern.

HISTORY, GENDER, CULTURE

Values and supports history, culture and diversity.



Building Resilience to Take down the Pair of ACEs

- Adverse *Childhood* Experiences
- Adverse *Community* Environments

“The 4th Vital Sign”



- 1) Respiration
- 2) Heart Rate
- 3) Blood pressure
- 4) Relationships**



Spanning Boundaries – Cross-Cutting Collaborations

Building Self-Healing Communities

❖ Community and State ACEs & Resilience Initiatives

- School districts – TSS, Handle With Care
- Community-based Service Providers
- Hospitals, Community Health Outreach
- Behavioral Health / Treatment, Counseling
- Public Health, Child Welfare, Courts
- **Higher Education**

❖ Opportunities to Catalyze Cross-systems Collaboration

- Community Medicine
- Integrated Practice & Education SEL Models
- Workforce Development

