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.
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.

A National Agenda to Address Adverse Childhood Experiences

What are ACEs and Why Do They Matter?

In 2016, nearly half of U.S. children – 34 million kids – had at least one Adverse Childhood Experience (ACE) and more than 20 percent experienced two or more. The new brain science and research of human development shows how.

Developing a National Agenda

Over a four-year period, the Child and Adolescent Health Measurement Initiative (CAHMI) and Academy Health engaged more than 500 people across multiple sectors in a dynamic process to establish a national agenda on children.
Many States are Collecting ACEs Data

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
adapted from the National Survey of Children’s Health
and social support (adapted from the 2015 Wisconsin BRFSS)
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

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.

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

ACEs - Trauma Informed Strategies

TEDx Traverse City

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
ACEs CAN HAVE LASTING EFFECTS ON BEHAVIOR & HEALTH

HOW ACEs AFFECT OUR LIVES

- DEPRESSION
- ALCOHOLISM
- DRUG USE

SUICIDE ATTEMPTS

Cancer

0 1 2 3 4+

ACE SCORE

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

PHYSICAL & MENTAL HEALTH
- SEVERE OBESITY
- DIABETES
- DEPRESSION
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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:

$124 BILLION

- $3.9 BILLION CRIMINAL JUSTICE
- $4.4 BILLION CHILD WELFARE
- $4.6 BILLION SPECIAL EDUCATION
- $25 BILLION HEALTH CARE
- $83.5 BILLION PRODUCTIVITY LOSS
ACEs Impacts on Communities

Population Attributable Risk

- Law & Justice
  - Incarceration: 61%
  - IV Drugs: 78%
  - Drunk Driving: 45%
  - Victim Intimate Partner Violence: 41%

- Workforce
  - Out of Work > 1 year: 20%
  - Worker Injury: 62%
  - ≥ 15 of 30 Days Disturbed Work-III Health: 69%
  - ≥ 15 of 30 Days Disturbed Work-Emotional Problems: 43%

- Safety
  - No Satisfaction with Neighborhood: 59%
  - Serious & Persistent Mental Illness: 41%

Civic Engagement: © 2016

Controls: gender, age, income, education, race-ethnicity
Trauma-Informed and Responsive Communities

Differences in Exposures and Opportunities
(social determinants of health)

Primary Prevention

Secondary Prevention
(safety net programs)

Tertiary Prevention
(medical care)

Differences in Quality of Care
(Ambulance Travel Time, Non-Working Equipment)

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/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3681508/)

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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.

SAMHSA
Substance Abuse and Mental Health Services Administration
www.samhsa.gov • 1-877-SAMHSA-7 (1-877-726-4727)
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

Having two or more people who give concrete help when needed
Spanning Boundaries – Cross-Cutting Collaborations

- 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