Child Health &
Early Learning:
Exploring Shared
Interests while
Addressing
Inequities

Sherri Killins, Carey McCann, and Lonias Gilmore

2016 National Smart Start Conference
Introductions

Sherri Killins

Carey McCann

Lonias Gilmore
Today's Focus:

- Overview of BUILD Health Equity Efforts
- A Framework: Health Equity and Obesity
- A State Example
- Participants’ Health Efforts
1. What sector do you primarily represent?

- Health (primary care, maternal & child health, public health)
- Mental Health
- Early Learning (early education, child care)
- Home Visiting
- Family Support
- Part C & Special Education
- Libraries & Museums
Healthy Brain Development

Human Brain Development
Synapse Formation Dependent on Early Experiences
(700 per second in the early years)

- Sensory Pathways (Vision, Hearing)
- Language
- Higher Cognitive Function

Today’s Intersection

Health Care

- Immunizations
- Medications
- Medical illness
- Injury
- Developmental screening

Early Care
Early Childhood System

- Infant Mortality
- Behavioral
- Early Intervention
- Injury Prevention
- Nutrition
- Physical Activity
The Family

Part C

"big-boned"

Neither has seen a doctor in 2 years.
BUILD & the Child and Family Policy Center launched the Learning Collaborative on Health Equity and Young Children

Funding from the Robert Wood Johnson Foundation
Overview

- Children of color and their families are more likely than white children and their families to experience social and structural discrimination, exclusion, marginalization and poverty.

- Race influences the social networks available to individuals, and networks have a major effect on opportunities.

- Disparities are detrimental to healthy child development and learning.
Goals

The Learning Collaborative has three primary goals:

1. Raise understanding and awareness
2. Advance knowledge
3. Develop and support leaders

The Learning Collaborative facilitates learning to:

- Integrate the assets of the health and early learning systems
Health and Health Equity Defined

**Child health** is a state of physical, mental, intellectual, social and emotional well-being and not merely the absence of disease or infirmity. Healthy children live in families, environments, and communities that provide them with the opportunity to reach their fullest developmental potential.

– World Health Organization

**Health equity** is achieving the highest level of health for all people. Health equity entails focused societal efforts to address avoidable inequalities by equalizing the
State Interviews:
Young Children’s Urgent Health Needs

• Early identification and the capacity to connect families to needed services
• Medical home/access to well-child visits
• Obesity/Nutrition/Physical Activity
• Infant Mortality
• Social-Emotional
• Oral Health
Elevated Blood Lead Levels in Children Associated With the Flint Drinking Water Crisis: A Spatial Analysis of Risk and Public Health Response

Mona Hanna-Attisha, MD, MPH, Jenny LaChance, MS, Richard Casey Sadler, PhD, and Allison Champney Schnepp, MD

**Objectives.** We analyzed differences in pediatric elevated blood lead level incidence before and after Flint, Michigan, introduced a more corrosive water source into an aging water system without adequate corrosion control.

**Methods.** We reviewed blood lead levels for children younger than 5 years before (2013) and after (2015) water source change in Greater Flint, Michigan. We assessed the percentage of elevated blood lead levels in both time periods, and identified geographical locations through spatial analysis.

**Results.** Incidence of elevated blood lead levels increased from 2.4% to 4.9% ($P < .05$) after water source change, and neighborhoods with the highest water lead levels experienced a 6.6% increase. No significant change was seen outside the city. Geospatial analysis identified disadvantaged neighborhoods as having the greatest elevated blood lead level increases and informed response prioritization during the now-declared public health emergency.

**Conclusions.** The percentage of children with elevated blood lead levels increased after water source change, particularly in socioeconomically disadvantaged neighborhoods. Water is a growing source of childhood lead exposure because of aging infrastructure. (Am J Public Health. Published online ahead of print December 21, 2015: e1–e8. doi:10.2105/AJPH.2015.303003)
Why do we care about lead?

• NO safe blood lead level
• Disproportionately impacts low income and minority children
• Primary prevention is most important
## Shifting Dominant Point of View

<table>
<thead>
<tr>
<th>Current</th>
<th>Emerging</th>
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<tbody>
<tr>
<td>Focus on illness</td>
<td>Focus on creating a “culture of health”</td>
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<tr>
<td>Take action disparity by disparity</td>
<td>Impact multiple disparities at once</td>
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<tr>
<td>Operate in silos</td>
<td>Bring systems together under shared goals</td>
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<tr>
<td>Attend to individuals</td>
<td>Attend to families and communities</td>
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Obesity and Young Children in the News
May 12, 2015: According to a NYU Langone Medical Center study, 94.9 percent of parents who have overweight children ages 2 to 5 do not consider their children to be overweight. In response to this survey’s results, Dr. Natalie Azar remarked, “Parents have this idea that children are going to outgrow obesity and I think that’s why they are more reluctant to acknowledge it. We know really importantly that these habits that children learn start very young.”
January 29, 2014: Published in the *New England Journal of Medicine*, a report shows that 5-year-old children who are overweight, defined as having a body mass index within the 85th percentile, are likely to remain so as they grow older. The research suggests that education about food and health for families with young children must start earlier.
14.7% Overall

ADVERSITY AND OBESITY
Obesity in the Context of Socio Demographics

• Disparities by income and race/ethnicity
• Early emergence
• Gender differences
• Increasing prevalence at all income levels
• Regional differences
Ecological Model of Child Weight

Davison and Birsch, 2001
Adverse Childhood Experiences
THE TRUTH ABOUT ACES

WHAT ARE THEY?

ACEs are ADVERSE CHILDHOOD EXPERIENCES

HOW PREVALENT ARE ACES?

WHAT IMPACT DO ACES HAVE?

The ACE study revealed the following estimates:

<table>
<thead>
<tr>
<th>Category</th>
<th>0 ACEs</th>
<th>1 ACE</th>
<th>2 ACEs</th>
<th>3 ACEs</th>
<th>4+ ACEs</th>
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<tbody>
<tr>
<td><strong>ABUSE</strong></td>
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<td>Physical Abuse</td>
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<td>Sexual Abuse</td>
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<td>Emotional Abuse</td>
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<td><strong>NEGLECT</strong></td>
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<td>Emotional Neglect</td>
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<td>Physical Neglect</td>
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<td><strong>HOUSEHOLD DYSFUNCTION</strong></td>
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<tr>
<td>Marital or Domestic Abuse</td>
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<tr>
<td>Financial Stress</td>
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<tr>
<td>Witnessed Domestic Abuse</td>
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<td>Witnessed Sexual Abuse</td>
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<td>Witnessed Violence</td>
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<tr>
<td>Witnessed Drug Use</td>
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<tr>
<td>Witnessed Mental Health</td>
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<tr>
<td>Bereavement</td>
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As the number of ACES increases, so does the risk for negative health outcomes:

- Behavior:
  - Lack of confidence
  - Drug use
  - Mood swings
  - Suicide

- Physical & Mental Health:
  - Diabetes
  - Depression
  - Substance use
  - Heart disease

rwjf.org/vulnerablepopulations
WHAT IMPACT DO ACEs HAVE?

As the number of ACEs increases, so does the risk for negative health outcomes.

Possible Risk Outcomes:

**BEHAVIOR**
- 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

RWFJ infographic
Early Life Adversity and Health

Lifecycle
Image courtesy of The Life Cycle of a Human

- Depression
- Adult obesity
- Early mortality
- Obesity
- BMI trajectory
- Eating behaviors
- Prenatal smoking
- Low birth weight
- Preterm birth
- Obesity
- Type 2 diabetes
- Gestational diabetes
- Smoking
- Hypertension
- Substance abuse
- Suicide
- BMI trajectory
- Eating behaviors
Genetic potential

Phenotypic Plasticity

Behavioral Response

Activities, Lifestyles

Psychological Response

Mental Health

Physiological Response

Physical Health

Childhood Adversities

Affective Regulation

Socio-Emotional Development

Neurobiology Hormones

Health Well-being
Potential implications for practice

Goal: Develop strategies to reduce disease risk after ACEs

Adverse Childhood Experiences (ACEs) → Obesity → Pregnancy-related diabetes → Type 2 diabetes → Cardiovascular disease

High risk → Low risk

From S. M. Mason
Change YOUR question
Paradigm Shift

To improve obesity prevention, we have to consider the impact of adverse social experiences on the risks for obesity.
LONIAS GILMORE, MPH
Lead Public Health Consultant
Child Care Initiatives
Michigan Department of Health and Human Services
Objectives

- Present the case for
  - childhood obesity prevention strategies
  - prioritizing early learning and child care settings for early childhood obesity prevention
- Discuss the spectrum of opportunities to improve nutrition, increase physical activity and promote healthy weight in early learning and child care.
- Present Michigan’s approach to early childhood obesity prevention in early 2016 National Smart Start Conference
Even when overweight and obesity don’t manifest themselves in early childhood, the health of children exposed to risk factors is still in jeopardy.
The Case for Prevention

Primary prevention is a systematic process that promotes healthy environments and behaviors BEFORE the onset of symptoms.

- Early childhood is a critical time for developing habits such as healthy eating and being physically active.
- Establishing healthy habits early makes children better prepared for learning and increases the chances that they will lead healthy lifestyles throughout their lives.
- Prevention can have a positive effect on current and future health care costs.
Social Determinants of Health
75%

The national percentage of children under age 6 who need child care services
The Case for Obesity Prevention in Child Care

- Interventions in child care settings are strongly recommended and endorsed by childhood experts in the field.
- Children are estimated to receive between 50% and 75% of their daily calories at the child care facility.
- Good nutrition and age-appropriate physical activity are associated with school attendance and cognitive performance (e.g., memory), as well as classroom behaviors and attitudes.
Spectrum of Opportunities for State Action in Early Care and Education (Ages 0-5 years)

Source: CDC Expert Panel, Sept. 2010
Michigan NAP SACC

• The goal of the Nutrition and Physical Activity Self-Assessment for Child Care (NAP SACC) is to assist child care centers and homes in improving their nutrition and physical activity environments, policies and practices to promote healthy weight in young children.

• This is accomplished through self-assessment, goal setting, training and targeted technical support from trained NAP SACC consultants.

Target Population
Licensed child care centers and homes serving
• English learners
• Children from migrant families
• Children who live on "Indian lands"
• Children from low-income families
Targeted technical support is provided by:

- Local health departments
- School districts
- Other community-based organizations
How Are We Doing?

296 licensed child care centers and homes completed NAP SACC online.

194 are making changes related to nutrition, including staff training and guidelines for families who bring food from home.

226 are making changes related to physical activity such as limiting screen time and building active transitions into the daily schedule.

48 are improving breastfeeding support and many are doing so through policy.
Potential Impact on Racial Health Disparities in Michigan

- The highest rates of obesity and overweight are found among Latino and Native children 2-<5 from low-income families.
- Less than 20% of Black mothers report that they continued to breastfeed after three months compared to nearly 35% of White mothers.
- Black and Latino youth are more likely than their White counterparts to develop poor nutrition habits.
- Black and Latino youth are less likely to get adequate, age-appropriate amounts of physical activity.
Other Promising Initiatives

**Systems Level**
- Improving the QRIS quality indicators to promote improved nutrition, increased physical activity and better breastfeeding support
- Coming up: Licensing changes to meet CCDF requirements

**Institutional Level**
- Screening for ACES
- Providing trauma-informed services and healthcare

**Interpersonal and Individual Levels**
- Nutrition education opportunities for child care providers, children
NETWORKS OF OPPORTUNITY FOR CHILD WELLBEING
Project NOW Networks of Opportunity for Child Wellbeing

• To design a robust infrastructure to support the development of networks of opportunity across prenatal though early childhood systems for optimal wellbeing.

• Toolkit to cultivate community settings to optimally support child wellbeing from prenatal through age 5 using infrastructure developed to support cross-sector collaborations across early childhood systems of care.
WHAT ARE THE BRIGHT SPOTS?
Bright Spots

- Communities
- Organizations
- Resources
- Processes
- Groups of people

Definition of bright spots to capture a broader range of innovation efforts which benefit children birth to 5.
Bright Spot Desired Characteristics

• Community engagement  
  – Co-design model

• Collective strategy  
  – Alignment, cross-sector, collaborative

• Innovative tools and strategies  
  – Shared metrics, braided funding

• Address equity

• Plan with sustainability in mind  
  – Enhance existing efforts
Bright Spots: Areas of Inquiry

As you think about the brightest and most promising efforts and innovations you’ve come across, please note whether they addressed any of the following areas:

– Early intervention: improving identification and intervention at an earlier time
– Data: use of existing data to track, identify, or solve issues and measure improvement
– Funding: creative ways to blend funding
– Training: increasing the quality and capability of staff, parents, community members, etc.
Discussion: Health and Early Learning

Where are Bright Spots Happening?

– What are they doing differently?
– Who are the people involved in this effort?
– What do you think is the key ingredient making it work?
– What role has policy played?
– What role has collaboration played?

Name Bright Spots
Discussion: Health and Early Learning

Policy Barriers and Opportunities

– What policy barriers undermine the ability to address healthy growth and development at the earliest stages?

– What policy barriers exist to address the impact of stress and adversity on early learning, development and health?

– How could we change or improve policies to better address the needs?

Name Top Three Priorities
Questions, Reflections, Comments?
Strategies

The Learning Collaborative strategies for achieving these goals include:

• Information exchange with peers
  – cross-state webinars
  – learning tables
  – online discussions &
  – in-person meetings

• Targeted state/community support
  – move a data point

• Create and support a group of health champions and innovators in a CoIN.
Sharing What We Learned

BUILD and CFPC want to partner with others. We bring a learning community approach to the development and diffusion of ideas and strategies. CFPC and BUILD have teamed up to create a Learning Collaborative on Health Equity and Young Children.

For more information:
www.buildinitiative.org
www.cfpciowa.org
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