

# ADDRESSING TOXIC STRESS: TOGETHER WE CAN IMPROVE CHILD HEALTH

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“Just as germs lead to infection,  
stress leads to mental health, physical  
and behavior problems”

-Anonymous-

# Objectives

- Understand why is it important to consider toxic stress/trauma and health?
- Describe the New Pediatrics: Population Health Management and Trauma-Informed Care
- Identify the mission of the Partnership for Resilience and next steps for the Health Committee

# Disparities in Child Mortality by SES

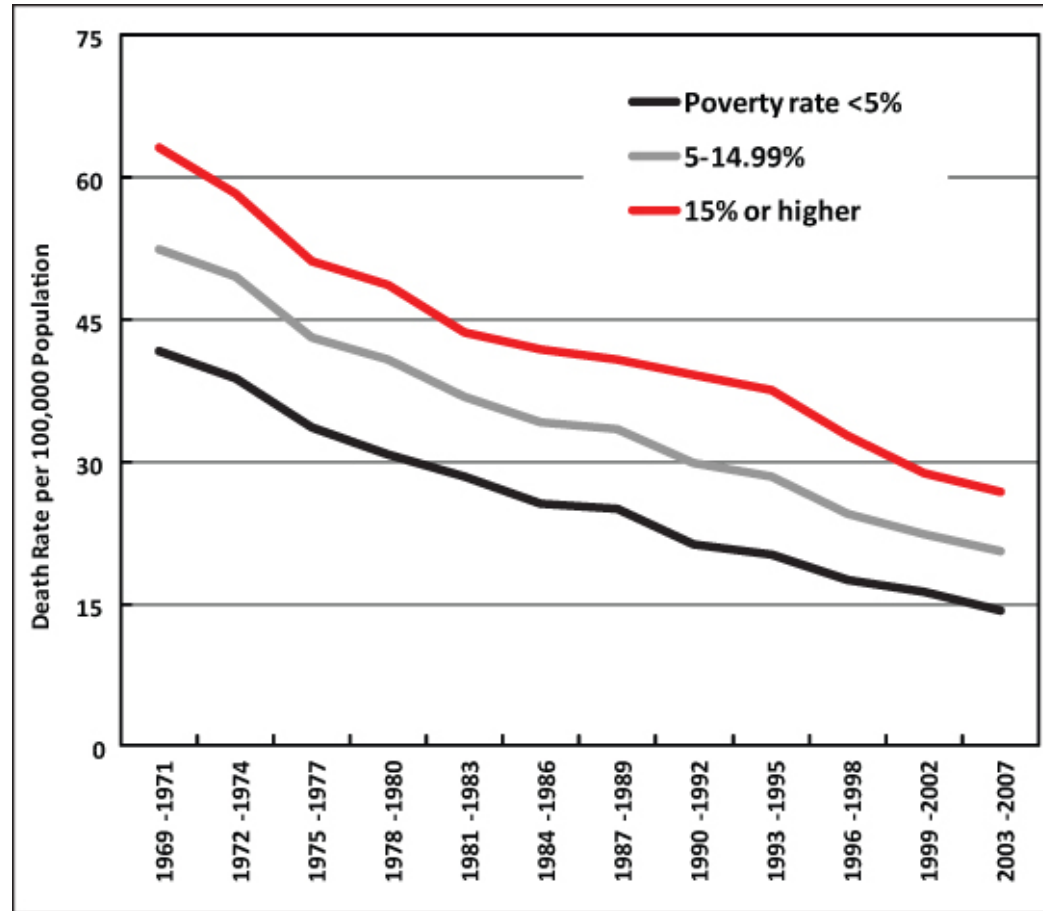
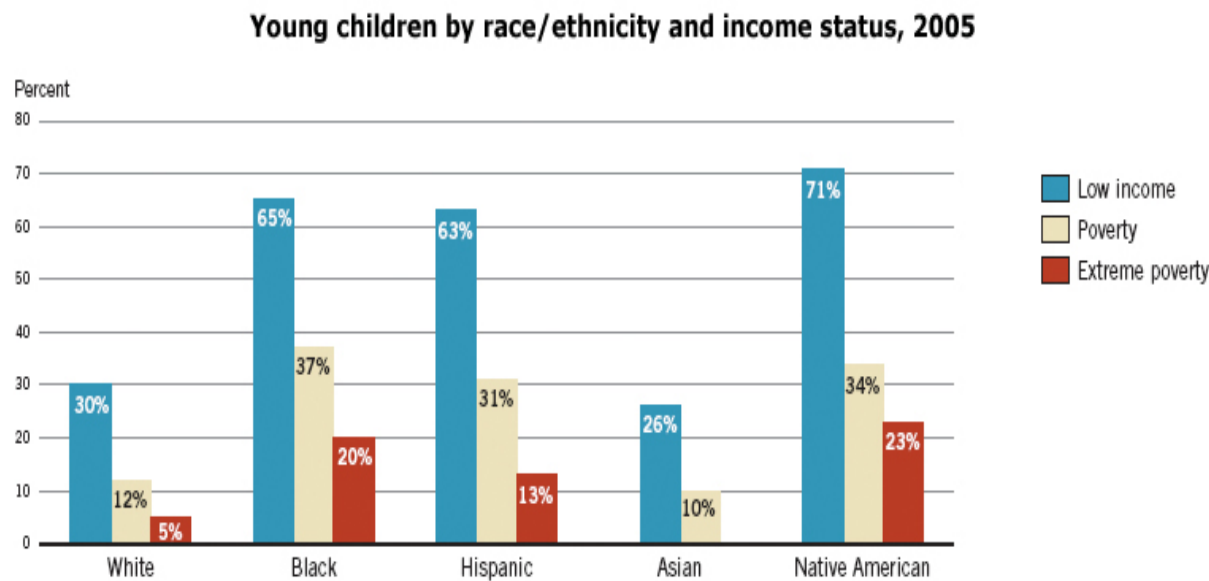


Figure 7: All-Cause Mortality Among Children Aged 1-14 Years by County-Level Family Poverty Rate, United States, 1969-2007

HRSA 2010

# Children in poverty In the US

- Poverty in the US- 25% of kids  
13.4 million
- Extreme Poverty-12% of kids
  - < 50% of poverty
- Low Income – 47% of kids  
under 3 yrs
  - < 200% of poverty line



Note: These data come from two NCCP publications: Douglas-Hall, A.; Chau, M.; & Koball, H. (2006). *Basic facts about low-income children: Birth to age 3* <[www.nccp.org/publications/show.php?id=679](http://www.nccp.org/publications/show.php?id=679)>, and *Basic facts about low-income children: Birth to age 6* <[www.nccp.org/publications/pub\\_680.html](http://www.nccp.org/publications/pub_680.html)> and from analysis of the U.S. Current Population Survey, Annual Social and Economic Supplement, March 2006. Estimates include children living in households with at least one parent and most children living apart from both parents (for example, children being raised by grandparents).

# Stress

## **Positive Stress-** good, teaches to be resilient

- Brief, infrequent, mild to moderate intensity
- Most normative childhood stress
  - Beginning school or daycare , Trying out for the school sports team
- **Social-emotional buffers: allow a return to baseline**

## **Tolerable Stress-** possibly destructive

- Non-normative experiences/stress, time limited
  - Serious illness or injury
  - Divorce, homelessness
- **Social-emotional buffers: decrease risk of excessive stress response**

# Toxic Stress- Trauma

- **Long lasting, frequent, or strong intensity**
  - More **extreme triggers** of childhood stress
    - Physical, sexual, emotional abuse
    - Physical, emotional neglect
    - Household dysfunction
    - Poverty and social unmet needs
- **Insufficient social-emotional buffering**  
(Deficient levels of emotion coaching, reprocessing, reassurance and support)
- **Strong, frequent, and/or prolonged activation of the body's stress-response systems**
- Establish relatively **lower thresholds for responsiveness that persist throughout life, increase stress related disease and cognitive and behavioral impairment**

# Sources of Stress

- Adverse Child Experiences
- Unmet Social Needs



# Adverse Childhood Experiences (ACE) Study

## Abuse and Neglect

### Abuse

- Emotional
- Physical
- Sexual

### Neglect

- Emotional
- Physical

Felitti, Am J Prev Med 1998

## Household Dysfunction

- Mother treated violently
- Household substance abuse
- Household mental illness
- Parental separation or divorce
- Incarcerated household member

Did not include other violence, poverty, bullying, loss of a parent

# ACES Scores

## ACEs Score Trauma “Dose”

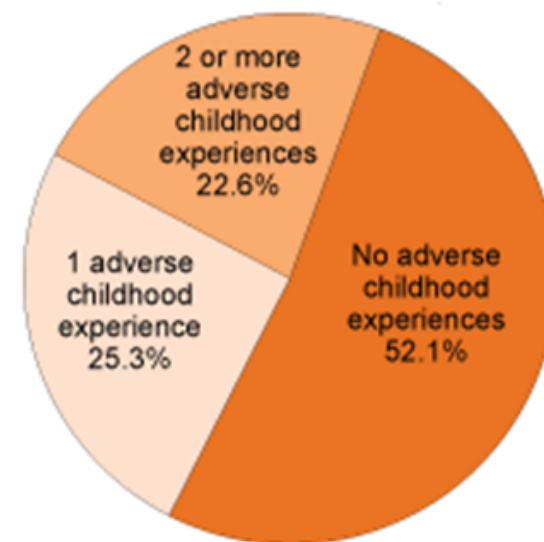
ACEs were common AND tended to be grouped together

<u>ACE score</u>	<u>Prevalence</u>
0	33%
1	26%
2	16%
3	10%
4 or more	16%



- 2011-2012

Adverse Childhood Experiences



- HHS, HRSA, MCHB NSCH data

**66%** of kids in an urban pediatric clinic had experienced 1 ACE and **12%** had 4 or more

# Unmet Needs - Social Determinants of Health

- Potential unmet needs include:
  - Parental employment
  - Food sufficiency
  - Ability to pay utilities
  - Housing
  - Childcare
  - Legal Aid
  - Parental education
- In one study, 90% of families reported >1 unmet need, 68% reported >2, and 39% reported >3<sup>1</sup>
- Example: Food Insecurity
  - 1/3 African American children live in food-insecure households
  - 1/4 Latino children live in food-insecure households<sup>2</sup>

# Red Flags of Childhood Trauma We ALL See

## In the Medical Home

- In the waiting room
  - Yelling Parents
  - Lack of control
- Rooming Parents
  - Lack of cooperation-social withdrawal
  - Disengaged parents
  - Psychosomatic complaints- stomach aches, headaches
- In the exam room
  - Irritability/mood swings
  - ADHD
  - Developmental delays
  - School under-achievement, truancy
  - Risk taking behavior
  - Asthma , Obesity

## In the Schools

- Students
  - Irritability/mood swings
  - ADHD
  - Developmental delays
  - School under-achievement, truancy
  - Risk taking behavior
  - Asthma Obesity
  - Lack of cooperation-social withdrawal
  - Psychosomatic complaints- stomach aches, headaches
  - Lack of control
- Parents
  - Yelling Parents
  - Disengaged parents
  - Lack of control
  - Lack of cooperation-social withdrawal

# The Impact of ACEs and Unmet Needs

An ACE score of **6** or more  
results in a  
**20** year decrease in life expectancy.

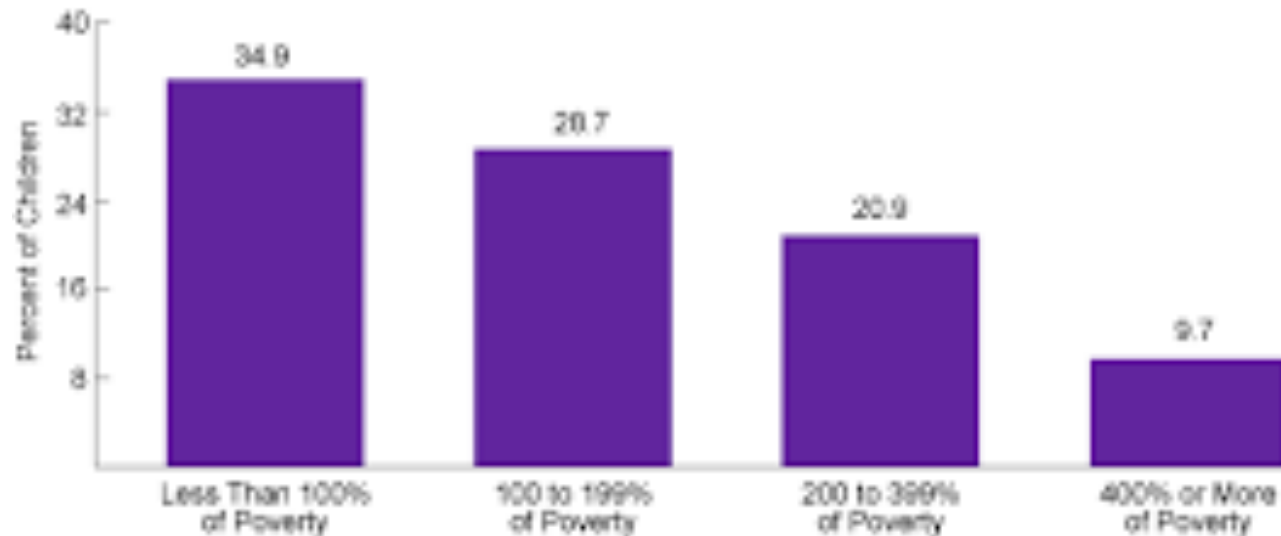
Children with **4** or more ACE  
have **4.5X** increased Risk of Asthma.

Homeless children, 4-7 years  
had **3X the rate of asthma**

**51%** of children with an ACE score of 4 or more have learning or behavior problems  
compared to **ONLY 3%** of children with an ACE score of 0

# Who Is At Risk? ACEs and Poverty

**Figure 2. Children Aged 0–17 Years Experiencing Two or More ACEs, by Poverty Status,\* 2011–2012**

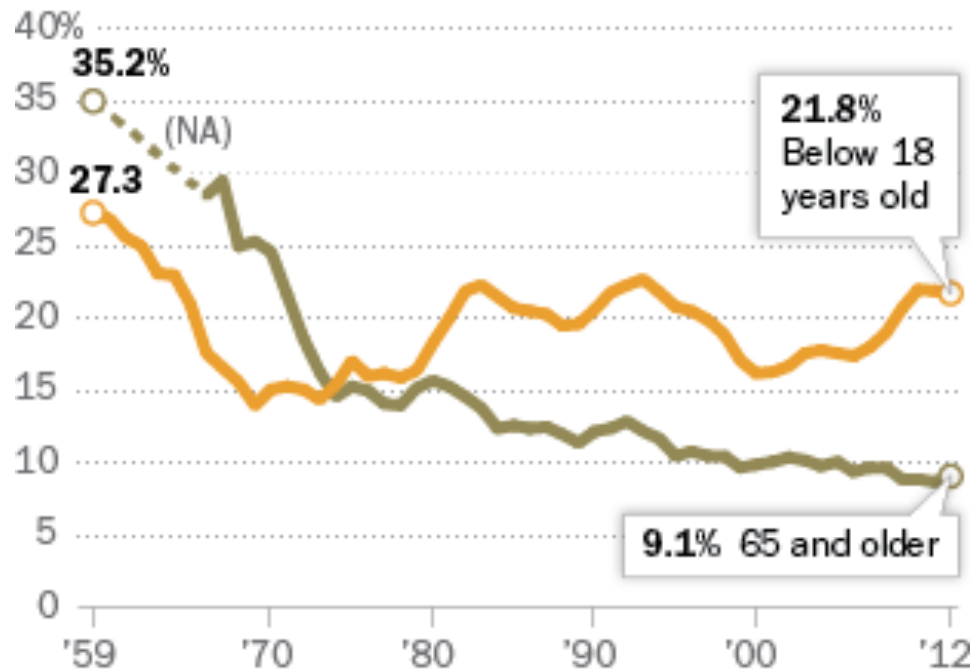


\*Based on the U.S. Department of Health and Human Services poverty guidelines, poverty was \$23,050 for a family of four in 2012.

Source: Health Resources and Services Administration, Maternal and Child Health Bureau; and Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of Children's Health. Analyzed by the Health Resources and Services Administration's Maternal and Child Health Bureau.

# Poverty Trends in America

## Poverty Rates for Children and Elderly

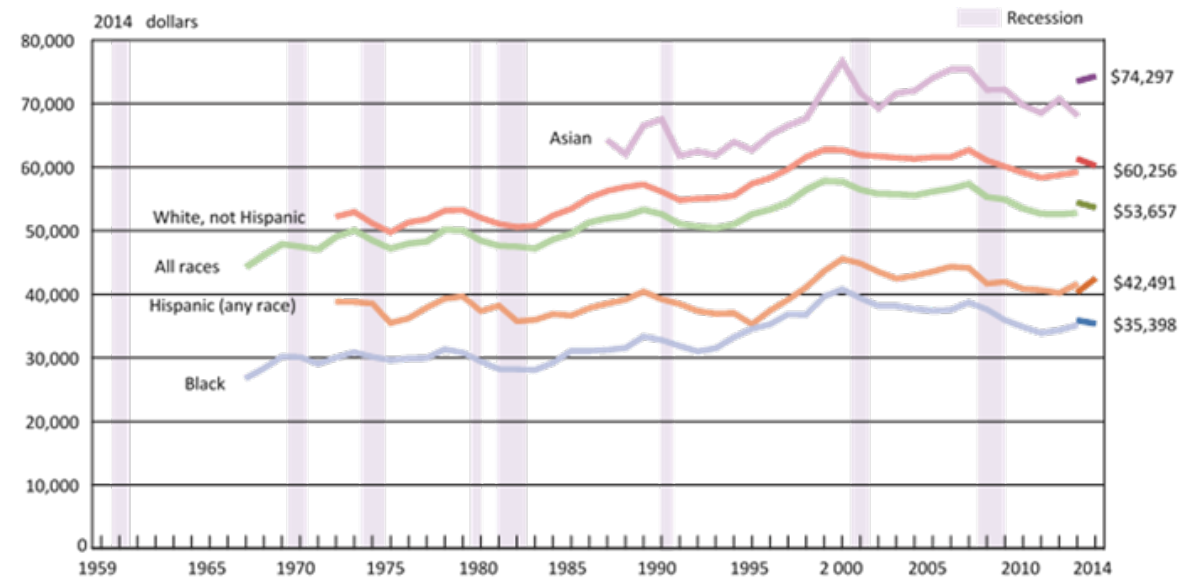


Source: Census Bureau

PEW RESEARCH CENTER

- Poverty Hispanics and Blacks

Figure 1.  
Real Median Household Income by Race and Hispanic Origin: 1967 to 2014

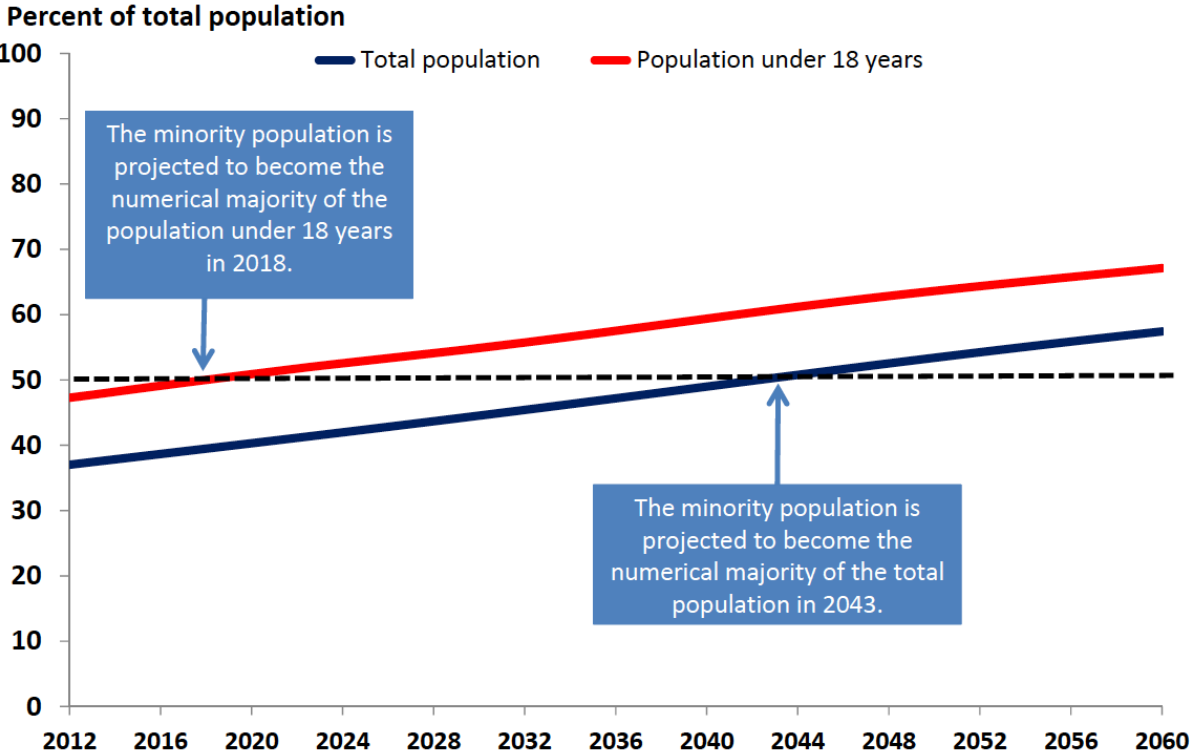


Note: The 2013 data reflect the implementation of the redesigned income questions. See Appendix D for more information. Median household income data are not available prior to 1967. For more information on recessions, see Appendix A. For more information on confidentiality protection, sampling error, nonsampling error, and definitions, see <a href="http://ftp2.census.gov/programs-surveys/cps/techdocs/cpsmar15.pdf">http://ftp2.census.gov/programs-surveys/cps/techdocs/cpsmar15.pdf</a>.

Source: U.S. Census Bureau, Current Population Survey, 1968 to 2015 Annual Social and Economic Supplements.

# Future Look of America

Projections of the Percent Minority: 2012 to 2060



The minority population is projected to become the numerical majority of the population under 18 years in 2018.

The minority population is projected to become the numerical majority of the total population in 2043.



# Elgin Demographics-

## Race/Ethnicity 2010

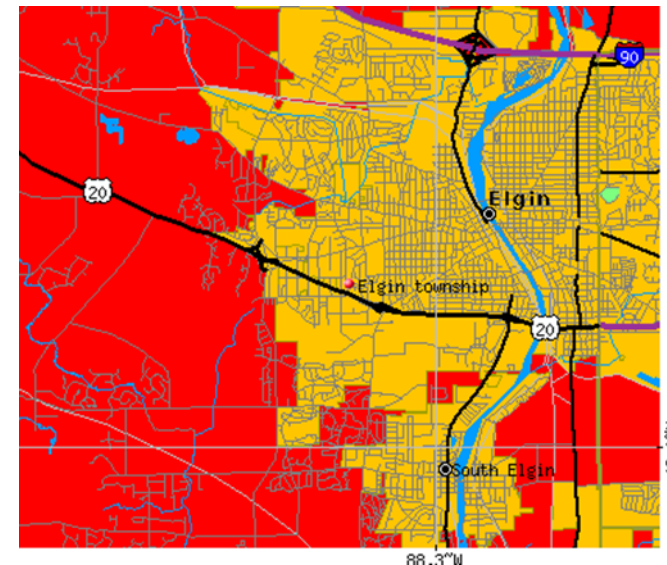
- 66% White
- 7% Black
- 5% Asian
- 1% Native American
- 16% Other
- But 44% Hispanic (any race)  
increased 45% from 2000-2011

35% of household had children < 18 years

US Census Bureau 2013

## Poverty 2010

- 12% of children lived below the poverty line
- 5% of elderly

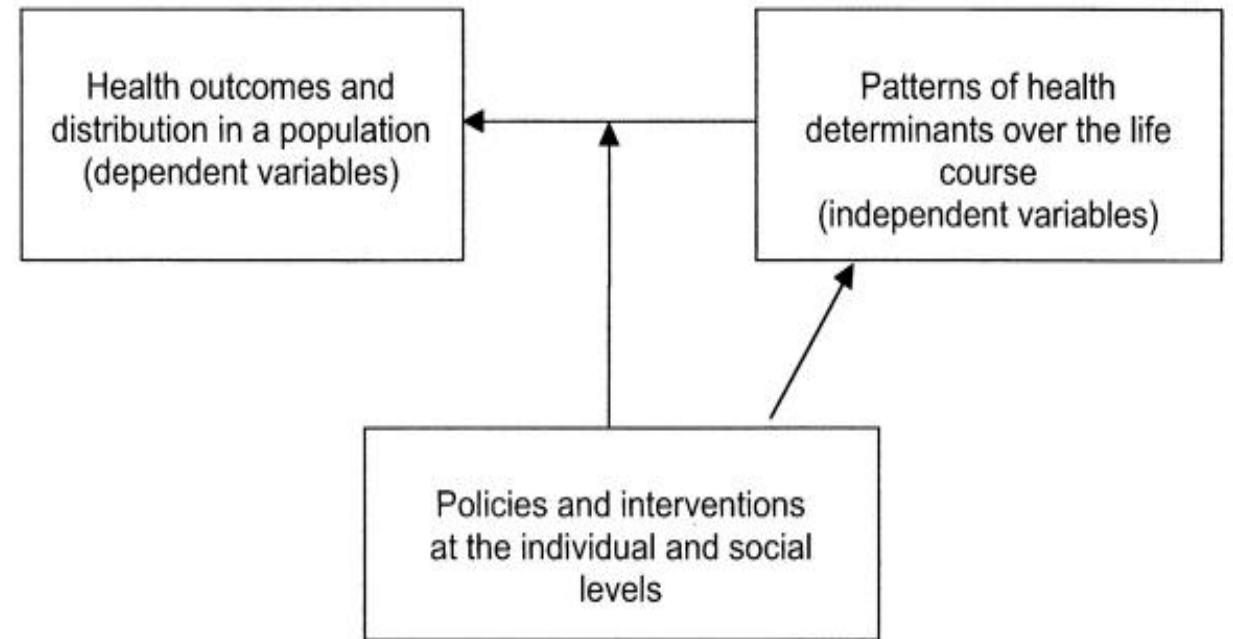


# Objectives

- Understand why is it important to consider toxic stress and health?
- Describe the New Pediatrics: Population Health and Trauma-Informed Care
- Identify the mission of the Partnership for Resilience and share work that has been done to date and next steps

# Population Health- Improving Health Outcomes

- Population health is defined as **the health outcomes of a group of individuals, including the distribution of such outcomes within the group.**

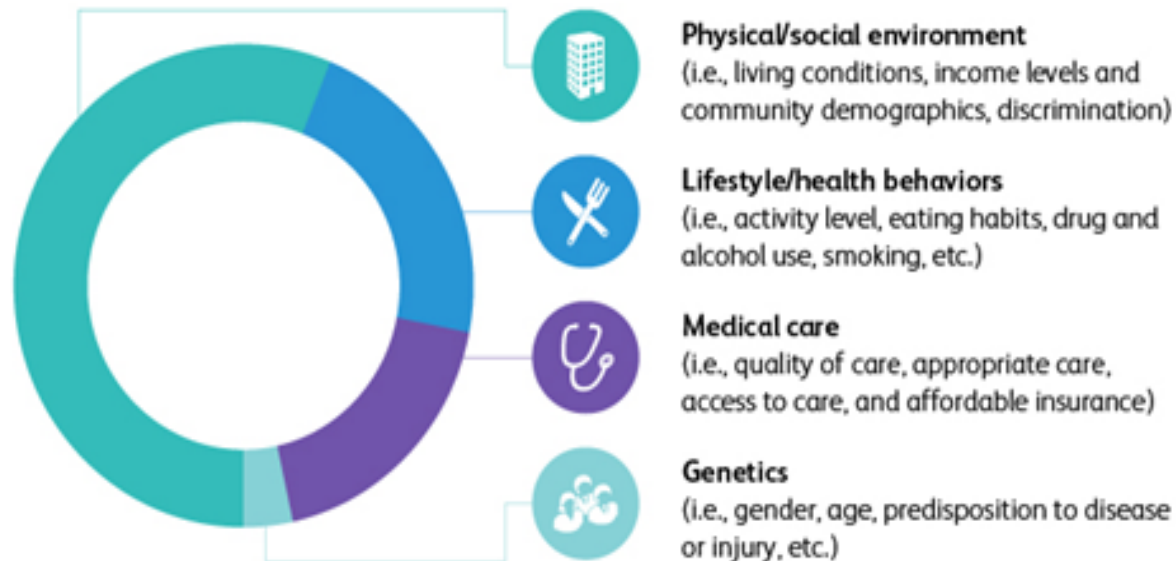


A schematic definition of the field of population health

# Population Health- Social Determinants

## Determinants of Population Health

The path to good health no longer leads just to the doctor's office. The healthcare industry is recognizing that societal and non-medical factors play a much larger role than once envisioned. These are the leading factors based information from the Centers for Disease Control.<sup>1</sup>



<sup>1</sup><http://www.cdc.gov/socialdeterminants/FAQ.html>

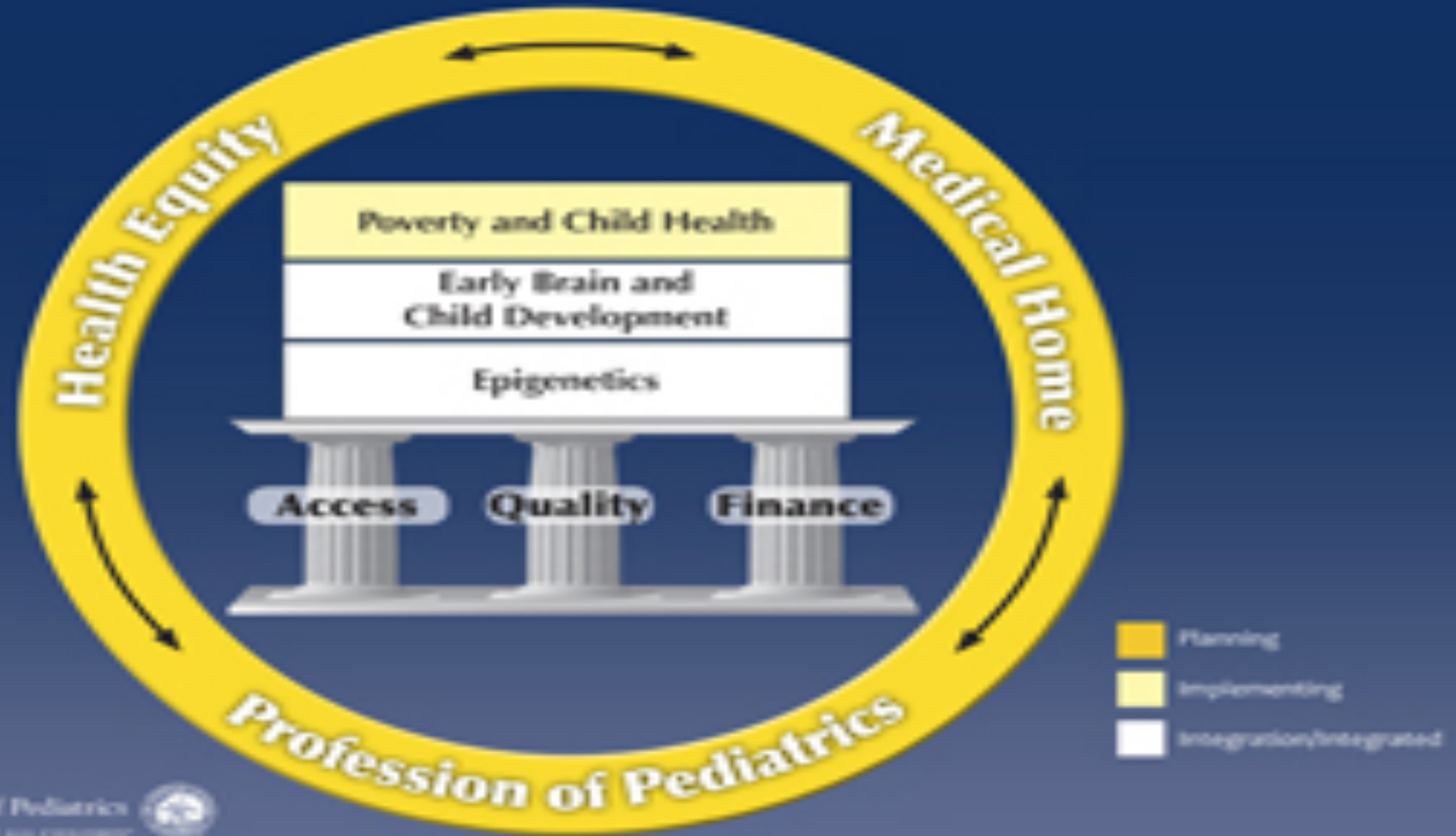
## • The “Causes of the Causes”?

Rose 1991

- Economic  
Employment, Income, Food Security, Housing
- Geographic  
Climate, Pollution, urban/rural, neighborhood resources
- Social  
Education, Health Literacy, Family composition, gender, neighborhood social characteristics of violence/isolation
- Cultural  
Race/Ethnicity, immigration status, health/food/parenting beliefs

# AAP Agenda for Children 2015-2016

DEDICATED TO THE HEALTH OF ALL CHILDREN™



American Academy of Pediatrics



Barbara Bayldon, MD, President Illinois Chapter of the American Academy of Pediatrics

# Becoming Trauma-Informed- Assessing Social Key Questions for Health: The **ASK** Questions For Health Study

A collaboration between:



# ASK Questions for Health Survey:

## ASK Survey – Front (Social Needs)

**ASK Questions for HEALTH**

We want to make sure that you are connected with all the community services that you need. Most of these services are free. We ask **all of our families** to answer the following questions. Only members of our care team will be reviewing the answers to help connect you to the right services.

- Do you have a high school degree or GED?  
 YES  
 NO *Would you like help with this?* No  Yes, but not today.  Yes, **today**.
- Do you need a job?  
 YES *Would you like help with this?* No  Yes, but not today.  Yes, **today**.
- Do you need childcare for your child? (e.g. daycare, afterschool care, etc.)?  
 YES *Would you like help with this?* No  Yes, but not today.  Yes, **today**.
- Do you always have enough food for your family?  
 YES  
 NO *Would you like help with this?* No  Yes, but not today.  Yes, **today**.
- In the last 12 months, have you been behind on your electricity, heating, or housing bill?  
 YES *Would you like help with this?* No  Yes, but not today.  Yes, **today**.
- Do you need legal advice to help with any problems?  
 YES *Would you like help with this?* No  Yes, but not today.  Yes, **today**.

**Turn page over**

Adapted from WE CARE survey (Garg et al. 2007) Last updated 04.14.2016

**FOR PROVIDER USE ONLY:**

Person responding to survey (check all that apply):  
 Mother  Father  Foster parent  Legal Guardian  Patient

Primary Language:  
 English  Spanish  Other:

## ASK Survey – Back (ACE)

Stress in childhood can harm our health. There are ways to stop stress from being so harmful. Our clinic can connect you to services that can help you and your child. You do not have to answer all the questions. **When complete, please hand this questionnaire to your child's doctor.**

- Has your child ever lost an important caregiver? (e.g. due to death, divorce, incarceration, deportation, abandonment, etc.)  
 YES *Would you like help with this?* No  Yes, but not today.  Yes, **today**.
- Have you or anyone in your child's home ever felt sad most days or depressed, had mental illness (including drug and alcohol abuse), or attempted suicide?  
 YES *Would you like help with this?* No  Yes, but not today.  Yes, **today**.
- Has your child ever been bullied or bullied someone?  
 YES *Would you like help with this?* No  Yes, but not today.  Yes, **today**.
- Has your child ever seen someone in their home or neighborhood beaten up, shot at, or killed?  
 YES *Would you like help with this?* No  Yes, but not today.  Yes, **today**.
- Do you worry that your child may have been physically abused?  
 YES  NO
- Do you worry that your child may have been sexually abused?  
 YES  NO
- Is there someone who can make your child feel better when they are feeling sad?  
 YES  NO

**PARENT**  
Please check box if this happened to you as a child

**FOR PROVIDER USE ONLY:** Last updated 04.16.2016

Please check box for each question for which resources/referrals were given

1	2	3	4	5	6	7	8	9	10	11	12	13
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Were symptoms of toxic stress/adverse childhood experiences assessed in this child? [ ] Yes [ ] No

# Becoming Trauma-informed: Listen, Know Community Resources, Refer, Collaborate

## •Listen

•Social Work - consider referral for abuse, neglect, depression, suicidality, DCFS

•School-based services

•Community Resources

Information Sheets ---->

**Barr-Harris Children's Grief Center** provides a safe, non-judgmental place where Chicago-area children who are facing the loss of a loved one could turn to for immediate and ongoing support, counseling and therapy. The center's services are available for children 2-17 and families who have suffered a profound loss from death, divorce, abandonment, or other traumatic loss.

Barr Harris Children's Grief Center  
The Chicago Institute for Psychoanalysis  
122 S. Michigan Ave., Suite 1300  
Chicago, IL 60603  
(312) 922-7474, Ext: 310  
info@barharris.org

**Buddy's Place** is **Pillars'** bereavement/grief program, which offers family-based support groups to grieving children and teens ages 4-18 and their families who are grieving the death of an adult or child. Buddy's Place is committed to providing a safe, accepting, and supportive environment where each family can come and express their grief and connect with others in a group setting. There is no charge to attend the programs offered by Buddy's Place.

Pillars  
1023 Burlington Ave  
Western Springs, IL 60558  
(708) 745-5277

**Center for Grief Recovery & Therapeutic Services** - The Center's grief counseling service is grounded in a deep understanding of the grief and mourning processes. Grief counseling provides a needed framework to cope with the disorientation of loss, while at the same time helps individuals begin to regain their balance and search for new ways of being and creating personal meaning in the world. Individual counseling and Support Groups are available.

Center for Grief Recovery & Therapeutic Services  
Institute for Creativity & Development  
1263 W. Loyola Ave.  
Chicago, IL 60626  
(773)274-4600  
Griefrecovery@griefcounselor.org

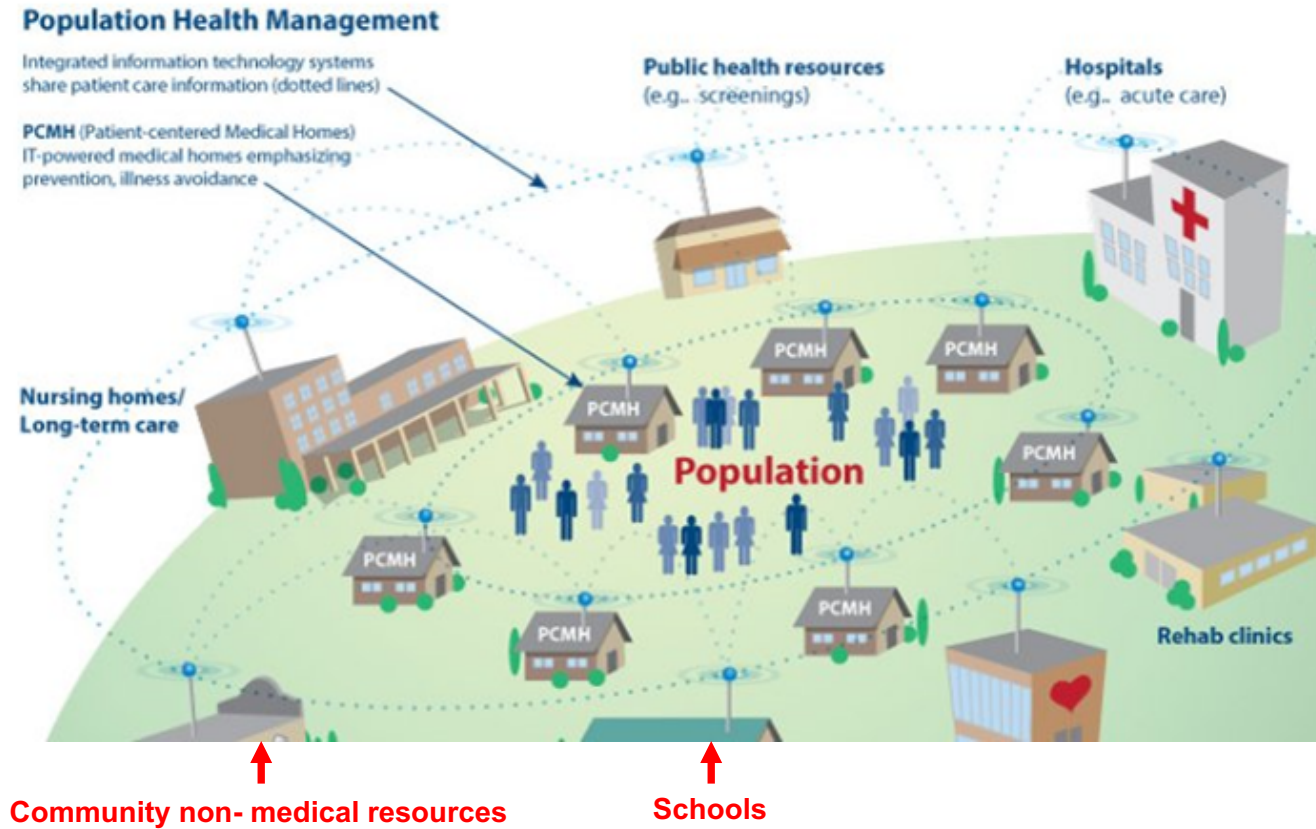
**The Heartlight Program** offers support for families coping with illness and loss. The mission of Heartlight is to provide a safe place for families coping with the serious illness or death of a child to find hope, strength and healing. Heartlight is non-denominational and is open to all families in the community.  
Ann & Robert H. Lurie Children's Hospital of Chicago  
225 East Chicago Ave, Box 274, Chicago, IL 60611-2605  
312.227.3930  
heartlight@luriechildrens.org



# Population Health- Health Outcomes

- Health Outcomes
  - Define
  - Measure
  - Address Inequity
- CMMI/PCORI- National entities funding research to look at interventions that improve health outcomes

# Health Care Delivery Transformation



# Health Care Delivery Transformation- Access

- Nationally

- The Patient Protection and Affordable Care Act(ACA)-2010/2014
  - The law expands access to health insurance and created a requirement to have coverage by January 2014
  - Employers of  $\geq 50$  employees were mandated to cover them at a cost of  $\leq 9.5\%$  of income and cover 60% of costs by Jan 2015
  - No pre-existing illness denial, exclusion or increased charge
  - Children covered until 26 years old
  - Medicaid could be expanded to 133% of FPL- **Illinois did expand**
  - Health Insurance Marketplace for 100-400% of FPL, tax credits available

# Health Care Delivery Transformation- Illinois

Public Act 96-501 for Medicaid- January 2011

- Goal was to create integrated delivery systems that provide quality care and result in better health outcomes for clients
- 50% in Managed Care by Jan 2015
- Centerpiece is care coordination -- aligned with Illinois Medicaid reform law and federal Affordable Care Act
  - Multidisciplinary team focused on the client's holistic needs: health, behavioral health, social needs
  - Care coordinator assigned to help navigate a fragmented system
  - Risk Stratification
- Data analytics to measure performance and client health outcomes

# Health Care Delivery Transformation- Illinois

Year 2016

Managed Care Organizations (MCOs) – Medicaid HMOs

\* Currently 8 + 1 ACE

- Health Maintenance Organizations (HMOs) Commercially owned/operated managed care plans
- Managed Care Community Networks (MCCN) – Healthcare provider owned and operated HMO-type Medicaid managed care plans

Medicaid Clients in MCOs

- Currently 64% overall, 100% in Chicagoland except carve outs

# Challenges

## Families

- Have to select one managed care entity from among 2 or more entities
- If no choice, automatic assignment
- Have to use providers within a network
- Locked-in with the entity for one year
- Have utilization controls under SMART Act and imposed by entity

## Providers

- multiple managed care entities in every region
- learn multiple utilization control rules
- delayed payments due to unclear billing practices

# Objectives

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- Describe the New Pediatrics: Population Health and Trauma-Informed Care
- Identify the mission of the Partnership for Resilience and the next steps for the Health Committee

# Partnership for Resilience

## **Mission**

**To transform and integrate education, health care and community organizations to create a trauma-informed, family-focused system that measurably improves academic, health, and social outcomes for children.**



# Partnership for Resilience- Health Committee

## Three key areas of focus:

- On-site School-based Services to meet identified needs while promoting that connection to the medical home
- Medical Home Needs- to become more trauma-informed
- Integration of the Medical Homes with the School and Community Partners
  - Using metrics to demonstrate improved outcomes

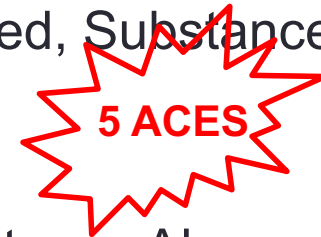
# Partnership for Resilience- Health Committee

## Next Steps

- Identifying and meeting with key MCOs serving the communities
  - Which MCO's have penetrance in the community?
  - What are provider needs regarding trauma-informed care?
  - What are their needs for support of school-PCMH collaboration?
- Identifying processes and needs to increase access of students to Medical Home
  - HIPAA and FERPA information challenges
  - Identifying asks and potential wins for MCOs
- Direct School-Based Services- including Asthma, Dental, Vision
  - Gain Trust of schools?
  - What are their needs to support connection with medical homes?
  - Identify school capacity to ensure seamless integration of services

# Toxic Stress: A Story of Trauma - Informed Care and Collaboration

- AJ 10 yrs old
  - Asthma
  - ADHD and anger management issues
- AJ's mother
  - As Adult- Poverty, Emotionally abusive, Incarcerated, Substance Abuse, Depressed
  - Raped 2 times when a pre-teen and teen
  - Her Home- Poverty, Maternal Mental Health, Substance Abuse, Removed from Home
- Plan Changed
  - Asthma management, ADHD behavioral accommodations
  - Counseling and BAM- Becoming a Man
- Outcome: His Asthma is under control, and his grades have improved (his teachers report improved behavior!)



“It is quite clear that what influences health the most is not medical care, once a certain basic level has been achieved, but such things as education, recreation, housing, the personal health practices”

Robert J. Haggarty, 1974