Supporting Success in the Youngest Children
Capitol Forum
Washington, D.C.

December 6, 2018
Supporting Success in the Youngest Children

Session Agenda:

- Opening Remarks
- Healthy Development Prenatally and in First Years of Life
- NCSL PN-3 Legislative Advisory Group and Framework
Supporting Success in the Youngest Children

NCSL President

Senator Toi Hutchinson

Illinois
Supporting Success in the Youngest Children

Dr. Michael Lu
Milken Institute School of Public Health
George Washington University
I do not mistrust the future. I do not fear what is ahead. For our problems are large, but our heart is larger. Our challenges are great, but our will is greater.

George H.W. Bush, 1989
The Science of Prenatal to Three

Michael C. Lu, MD, MS, MPH
Professor and Senior Associate Dean
Milken Institute School of Public Health
George Washington University

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Why invest in prenatal to three?
The brain’s ability to change in response to experiences

The amount of effort such change requires

AGE

SOURCE: LEVITT (2009)
EARLY CHILDHOOD DEVELOPMENT IS A SMART INVESTMENT

The earlier the investment, the greater the return

- Prenatal programs
- Programs targeted toward the earliest years
- Preschool programs
- Schooling
- Job Training

Source: James Heckman, Nobel Laureate in Economics

https://heckmanequation.org/resource/the-heckman-curve
第四届反贫困与儿童发展国际研讨会
暨亚太儿童早期发展2015年会

阳光起点—为了每个孩子
A BRIGHT START FOR EVERY CHILD

主办单位
Hosts

中国发展研究基金会
China Development Research Foundation (CDRF)

亚太儿童早期发展网络
Asia-Pacific Network for Early Childhood (APNEC)

China Children’s Partnership

阳光起点—每个孩子
A BRIGHT START FOR EVERY CHILD

指导单位
Supervised by

中华人民共和国教育部
Ministry of Education of the People’s Republic of China

国家卫生与计划生育委员会
National Health and Family Planning Commission of the People’s Republic of China

中国社会科学院国家发展研究院
Development Research Center of the State Council of the People’s Republic of China
The Science of Prenatal to Three.
Fetal Programming
Barker Hypothesis

Birth Weight and Coronary Heart Disease

Barker Hypothesis
Birth Weight and Hypertension

Barker Hypothesis
Birth Weight and Insulin Resistance Syndrome

Childhood Obesity


Percent

25
20
15
10
5
0
1963–1965
1971–1974
1976–1980
1988–1994
2001–2002
2005–2006
2009–2010
2013–2014

6–11 years
12–19 years
2–5 years

All

NOTES: Obesity is defined as body mass index (BMI) greater than or equal to the 95th percentile from the sex-specific BMI-for-age 2000 CDC Growth Charts.

Prenatal Programming of Childhood Overweight & Obesity

Prenatal Programming of Childhood Obesity

Epigenetics

Gibbs WW. The Unseen Genome: Beyond DNA. Scientific American 2003
Epigenetics

*Same Genome, Different Epigenome*

The Science behind Prenatal to Three.
In the first 1000 Days, a child’s brain requires, most of all, **nurturing** from at least one stable, caring relationship with an adult.
Toxic Stress
Adverse Childhood Experiences

Adverse childhood experiences
Children age 0-17 years
Nationwide

www.childhealthdata.org
Adverse Childhood Experiences

Sources: Center on the Developing Child, Harvard University
http://developingchild.harvard.edu/resources/toxic-stress-derails-healthy-development/
A large portion of many health, safety and prosperity conditions is attributable to Adverse Childhood Experience. ACE reduction reliably predicts a decrease in all of these conditions simultaneously.

Source: Family Policy Council, 2012
Adverse Childhood Experiences

LIFE EXPECTANCY

People with six or more ACEs died nearly 20 years earlier on average than those without ACEs.

Source: Centers for Disease Control and Prevention
http://vetoviolence.cdc.gov/apps/phl/resource_center_infographic.html
Adverse Childhood Experiences

Source: Centers for Disease Control and Prevention
http://vetoviolence.cdc.gov/apps/phl/resource_center_infographic.html
HOW STRESS CHANGES A CHILD’S BRAIN

3-YEAR-OLD CHILDREN

- Prolonged exposure to trauma triggers physiological changes in the brain.
- Neural circuits are disrupted, causing changes in the hippocampus, the brain’s memory and emotional centre.
- This can cause brain shrinkage, problems with memory, learning and behaviour.
- A child does not learn to regulate emotions when living in state of constant stress.
- Associated with greater risk of chronic disease and mental health problems in adulthood.
NCSL PN-3 Framework

Healthy Beginnings

Family Supports

Early Care, Development, & Learning
LEGISLATORS & LEGISLATIVE STAFF

DEFENDING OUR CHILDREN’S FUTURE
I do not mistrust the future. I do not fear what is ahead. For our problems are large, but our heart is larger. Our challenges are great, but our will is greater.

George H.W. Bush, 1989
NCSL gratefully acknowledges the Pritzker Children’s Initiative (PCI) for its support.
NCSL’s PN-3 Legislative Advisory Group
NCSL’s PN-3 Legislative Advisory Group Objectives

- Provide a neutral, bipartisan forum for dialogue around prenatal-to-three policy issues.
- Enhance the leadership capabilities of participating state legislators by increasing their knowledge of prenatal-to-three policy issues.
- Inform a broader legislative audience on prenatal-to-three policy issues through a legislative framework.
NCSL’s PN-3 Policy Framework

- **Healthy Beginnings**
  - Access to Prenatal Care
  - Public Awareness of Prenatal Care
  - Breastfeeding Initiatives and Supports

- **Supporting School Readiness in Infants and Toddlers**

- **Family Supports**
  - Parent Training and Education
  - Family Economic Supports
  - Streamlined Services and Resources

- **Early Learning, Development, and Care**
  - High-Quality Early Care and Learning System
  - Eliminate Child Care and Education Professionalization
  - Developmental Screenings and Identifying Interventions
Executive Summary

Brain development research shows babies develop a million new neural connections every second. They are born learning, and what they learn and how they learn it lays the foundation for the rest of their life.

As a result, the science of early brain development is being used to inform policy decisions at all levels of government and state legislatures. Policymakers are looking for ways to help parents and caregivers provide their young children with the best possible start in life by ensuring every child receives the supports and services they need.

To support state legislators, NCSL’s Prenatal-to-Three (PN-3) Legislative Advisory Group developed the PN-3 Policy Framework. The framework outlines potential policy options, strategies, and actions for state legislators to consider. It is designed to help state policymakers identify entry points for expanding infant and toddler policy in their states.

Many early childhood educators are considering prenatal-to-three policy options because healthy physical, social and emotional, language, and cognitive development lays the foundation for school readiness and success in life. The premise of positive returns on public investments in early childhood programs is also a selling point to many legislators. A 2017 RAND Corporation study found a return on investment of 7 to 14 for every dollar spent on certain rigorously evaluated early childhood programs. felice laureano bailey miller, an economist at the university of chicago, found a return on investment of up to 13 percent for every dollar invested in high-quality early care and health programs.
Supporting Success in the Youngest Children

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