Integrating and Advancing State Prenatal to Age Three Policies

November 14, 2019



Welcome and Overview



Dr. Beth Caron

Director, NGA Education NGA Solutions: The Center for Best Practices



Hot Off the Press!!

Governor's Pocket Guide to Early Literacy



Available on our website: https://www.nga.org/center/ publications/education/govpocket-guide-to-earlyliteracy/





Overview of the Prenatal to Three Policy Impact Center



Dr. Cynthia Osborne

Director, Prenatal-to-Three Policy Impact Center University of Texas, Austin





National Governor's Association Prenatal - Age 3 Cross-State Convening | November 14, 2019

PRENATAL-TO-3 POLICY IMPACT CENTER

Strengthening the Earliest Years through Research and Collaboration

DR. CYNTHIA OSBORNE

Associate Dean for Academic Strategies, The University of Texas at Austin





Agenda

- Prenatal-to-Three Policy Impact Center overview
- Prenatal-to-three policy reviews
- Questions and feedback

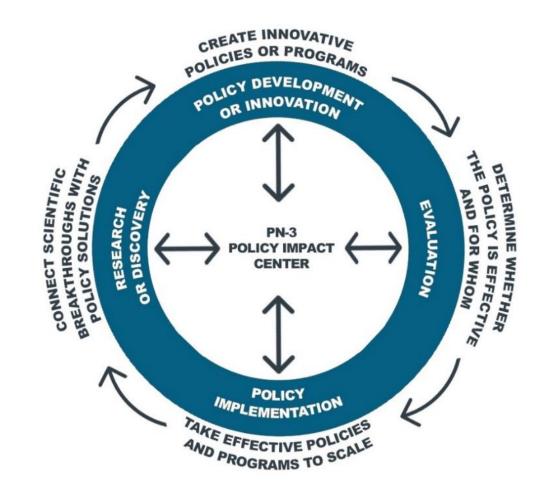
OVERVIEW PRENATAL-TO-3 POLICY IMPACT CENTER





Goals

- Bring the science of the developing brain to life through policy
- Be a trusted resource for states as they develop and implement policies to strengthen the PN-3 period
- Be an authoritative source of information for PN-3 experts on the evidence of what we know and what we do not know about effective PN-3 policies
- Foster the exchange of information between policy, research, and practice





Focus



To ensure children are on track for healthy development by age three, it is essential that programs and policies start early so that:

- Infants are born healthy and continue to thrive,
- Parents have what they need to support their child's healthy development, and
- Families have access to affordable, high-quality child care options.



Approach

- Conduct comprehensive reviews of state-level PN-3 policies
- Build strong relationships with state PN-3 leaders and other stakeholders
- Develop a Roadmap to provide direction to states on how to build effective PN-3 systems of care
- Identify and fill gaps in the evidence base
- Facilitate the exchange of information between researchers, policy makers, and practitioners through convenings, website, and personal connections



The State Policy Roadmap

- A State Policy Roadmap identifies a discrete list of policies that have a strong evidence base for promoting healthy beginnings, strengthening families, and providing quality care environments for children.
- Includes an annual report to assess states' progress on implementing evidence-informed policies
- Designed to inform policy efforts, and will be accompanied by engagement efforts with academics, advocates, and policymakers
 - Intentional in working with states to get their input prior to release, confirm their data, and to build long-term buy-in
- Monitor and track policy proposals, how they are implemented, and their impact on child and family wellbeing



National Advisory Council

- Comprised of recognized experts in the PN-3 field broadly, but many will also have targeted influence (e.g., in ECE or maternal health)
- Serve as advisors and validators for the Impact Center and Roadmap
- Will help build connections across the field and will identify ways the Impact Center can boost their efforts and others
- Will review Roadmap policy evidence, indicators, and rankings
- Members should have standing and expertise in the field and represent diverse opinions and populations
- May also create subcommittees for each policy or policy area, after policies are selected



NAC Members

Christina Altmayer – First 5 LA

Joia Adele Crear-Perry, MD – National Birth Equity Collaboration

Libby Doggett, PhD – former U.S. Department of Education

Greg Duncan, PhD – University of California at Irvine

Janet Froetscher – J.B. and M.K. Pritzker Family Foundation

Janis Gonzales, MD - New Mexico Department of Health

A.J. Griffin - former Oklahoma State Senator

Iheoma Iruka, PhD – HighScope Educational Research Foundation

Brenda Jones Harden, PhD – University of Maryland
Ruth Kagi – former Washington State Representative
John B. King, JD, PhD – The Education Trust

David Lakey, MD – The University of Texas System Joan Lombardi, PhD – former U.S. Department of Health and Human Services **Michael Lu, MD** – UC Berkeley School of Public Health Tammy Mann, PhD – The Campagna Center **Ron Mincy, PhD** – Columbia University **Geoff Nagle, PhD** – Erikson Institute Jessie Rasmussen – Buffett Early Childhood Fund Jack Shonkoff, MD – Center on the Developing Child at Harvard University Margaret Spellings - Texas 2036 **Jim Spurlino** – Spurlino Materials **David Willis, MD** – Center for the Study of Social Policy



UT Austin Scholars Group

- Comprised of a diverse and multidisciplinary group of UT scholars
- Demonstrates that the Impact Center is part of a larger whole it brings the power of UT to the efforts
- Will serve as peer editors of policy review briefs
- Meet regularly to provide advice on research to review and scholars to connect with, and to provide feedback on ideas for policy-research links
- Will largely support the research arm of the Impact Center and the connection between research and policy



What makes this unique?

- Evidence from a trusted, objective source of information
- Focus is on state policy and systems-level change not programs
- Provides detailed analysis of policy implementation and a roadmap for action
- Close relationships with state leaders for up-to-date information on state efforts
- Data will largely be collected directly from states
- Implementation realities will inform research
- Driven by evidence, not advocacy

OVERVIEW OF PROCESS AND GOALS **PRENATAL-TO-THREE POLICY REVIEWS**





Working draft of policies for review:

- Purpose?
- Policy goals v. policies?
- How do policies get added to the queue for review?
- What if a policy is not in the queue



Examples of policies for review

Healthy Beginnings

- Medicaid expansion
- Maternal mortality
 review committees
- Developmental screenings
- Breastfeeding
 supports

Family Supports

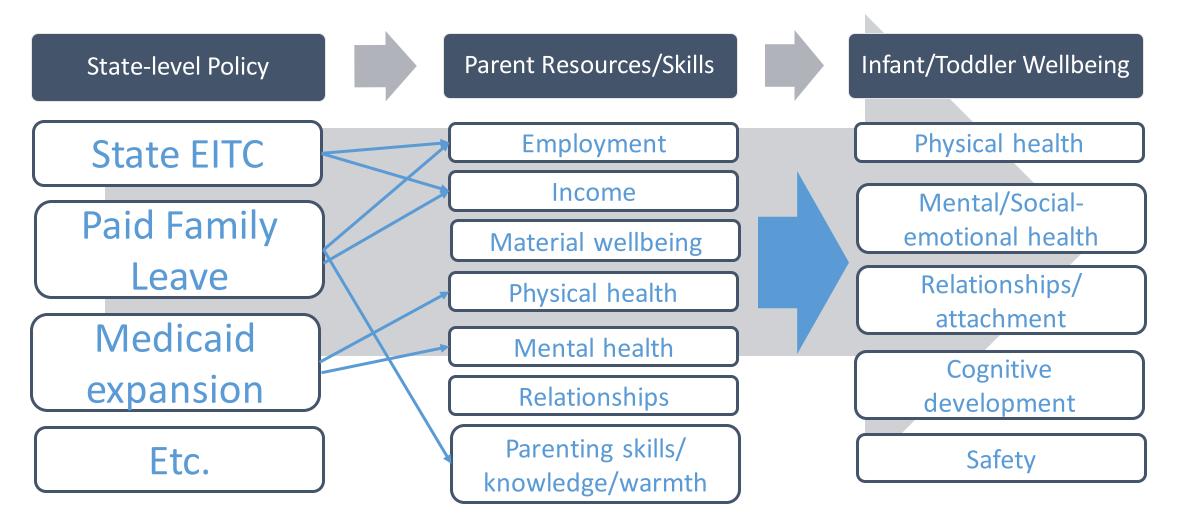
- Paid Family Leave
- State EITC
- Fair work week
- SNAP participation
- Evidence-based parenting programs

Early Care and Learning

- Child care ratios and group sizes
- Quality Rating and Improvement Standards
- Increase child care
 provider pay
- Increase child care
 subsidies



Logic model





Review process

- Clear description of the policy and how it varies by state or, if federal, states must have leverage
- Full understanding of the theory of change using a logic model to demonstrate pathways between policy and outcomes related to infants, toddlers, and their parents
- Overview of which states have implemented the policy, and documented state-level variation
- Broad literature search of all peer-reviewed and gray matter research related to policy
- Summaries of each article reviewed
- In-depth review and critique of all literature that aims to make causal link between policy and PN-3 outcomes



Review process (cont.)

- Team discussion about strength of evidence and direction and level of any impact
- Brief written summary of conclusion based on evidence review shared with UT Scholars
- A longer sophisticated critique of the policy evidence to support our conclusions
- Additional analyses of the policy evidence on:
 - Amount of evidence
 - Size and reach of policy impact
 - Closes gaps
 - Impacts on fathers
 - Return on investment
 - Theory of change
 - Ease of implementation



Policy considerations

Support for Policy Effectiveness

Does it work?

Equity and Inclusion

Does it close gaps in disparities? Does it include fathers? Financial Feasibility

Do the benefits outweigh the costs?

Implementation Feasibility

Can we implement it with relative ease?



The ask

- How can the Impact Center be helpful to you?
- What policies are you considering that you would like more evidence on?
- Do you have any insights/updates on what is happening in the field at the state level
- What are your goals and challenges?



QUESTIONS AND FEEDBACK



Contact

- Contact us at pn3policy@austin.utexas.edu with questions.
- Follow <u>@pn3policy</u> and **#pn3policy** on Twitter.
- Sign up for our mailing list: https://mailchi.mp/austin.utexas.edu/pn3

Making State Connections





David Mandell

Oregon Early Learning Division Department of Education Gena Berger Deputy Secretary of Health and Human Resources Commonwealth of Virginia



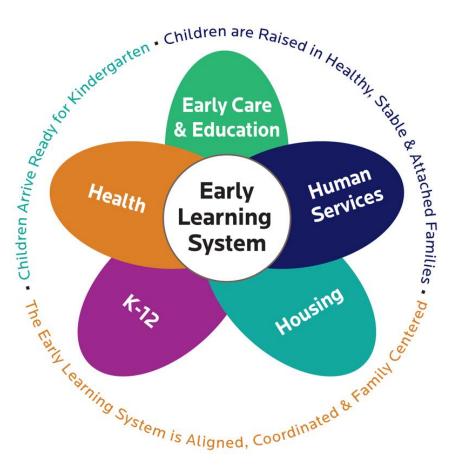


Oregon's Prenatal to Three Agenda

David Mandell, Prenatal to Three Systems Fellow NGA: Integrating and Advancing State Prenatal to Three Policies November 13, 2019



The Raise Up Oregon Vision



- 1. Children arrive at kindergarten ready to succeed.
- 2. Children are raised in healthy, stable and attached families.
- 3. The Early Learning System is coordinated, aligned and family-centered.

Raise Up Oregon



DEVELOPING RAISE UP OREGON: A STATEWIDE EARLY LEARNING SYSTEM PLAN

including state agency representatives. program administrators and providers, families, and all four Early Learning Council committees engaged in the development of Raise Up Oregon.





EARLY LEARNING HUB Governance Board Meetings



Early Learning Hub Governance Boards discussed the strengths and barriers within each Hub community, provided input on cross-sector strategic planning themes, and explored the potential role for Hubs.

EARLY LEARNING COUNCIL COMMITTEES All four Council committees-Best Beginnings,

SURVEY VIA

Hartners representing Child Care Resource & Referral entities, Early Learning Hubs, Early Learning Division staff, local

Public Health offices, and members of the nine federally recognized tribes of Oregon provided feedback on the objectives and strategies most related to their work.





Meetings with top state AGENCY LEADERSHIP

The Department of Human Services, Oregon Department of Education, Oregon Health Authority, and Oregon Housing and Community Services met with the Early Learning Council chair and the Early Learning System Director.





PLAN STRUCTURE

Grouped by three system goals

RAISE UP OREGON AT-A-GLANCE

SYSTEM GOAL 1: CHILDREN ARRIVE READY FOR KINDERGARTEN

OBJECTIVE 1: Families are supported and engaged as their child's first teachers.

Strategy 1.1 Expand parenting education and family supports.

Strategy 1.2 Scale culturally responsive home visiting.

OBJECTIVE 2: Families have access to high-quality (culturally responsive, inclusive, developmentally appropriate) affordable early care and education that meets their needs.

Strategy 2.1 Expand access to, and build the supply of, high-quality (culturally responsive, inclusive, developmentally appropriate) affordable infant-toddler early care and education that meets the needs of families.

Strategy 2.2 Expand access to, and build the supply of, high-quality (culturally responsive, inclusive, developmentally appropriate) affordable preschool that meets the needs of families.

 OBJECTIVE 4: Early childhood physical and social-emotional health promotion and prevention is increased.

Strategy 4.1 Ensure prenatal-to-age-five health care services are comprehensive, accessible, high quality, and culturally and linguistically responsive.

Strategy 4.2 Increase capacity to provide culturally responsive social-emotional supports for young children and their families.

Strategy 4.3 Increase and improve equitable access to early childhood oral health.

Strategy 4.4 Strengthen coordination among early care and education, health, and housing to promote health and safety for young children.

 OBJECTIVE 5: Young children with social-emotional, developmental, and health care needs are identified early and supported to reach their full potential.

Each system goal contains objectives

Each objective contains strategies

Governor's Children's Cabinet

Cabinet Membership

- Governor Kate Brown attends & facilitates all meetings
- Staffed by Deputy Chief of Staff Berri Leslie
- Includes directors of Early Learning Division, Health Authority, Department of Education, Human Services and Housing & Community Services
- Governor's policy advisors with the portfolios of the agencies listed above also attend
- Early Learning Council Chair

Alignment of Governor's Requested Budget with *Raise Up Oregon*

• 2018 Summer Workgroups:

- Early Care & Education Chair: Mary Louise McClintock (Oregon Community Foundation)
- Preschool & Early Learning Workforce Development – Chair: Sue Miller (Early Learning Council chair)
- Healthy Families Chair: Senator Steiner Hayward
- Housing Stabilization Chair: Margaret Salazar (Director of Oregon Housing & Community Services)



2019 Legislative Prenatal to Three Wins!

HB 2005 – Paid Family Leave benefit program

SB 526 – Universally-Offered Home Visiting

HB 2257 – Addiction & Recovery Services for Pregnant Women through Project Nurture

HB 3427 & HB 5047 – Student Success Act

- Early Childhood Equity Fund
- Healthy Families Oregon
- Early Head Start

HB 2024 – Baby Promise



The EARLY LEARNING ACCOUNT of the



HEAD START

□ HB 3047

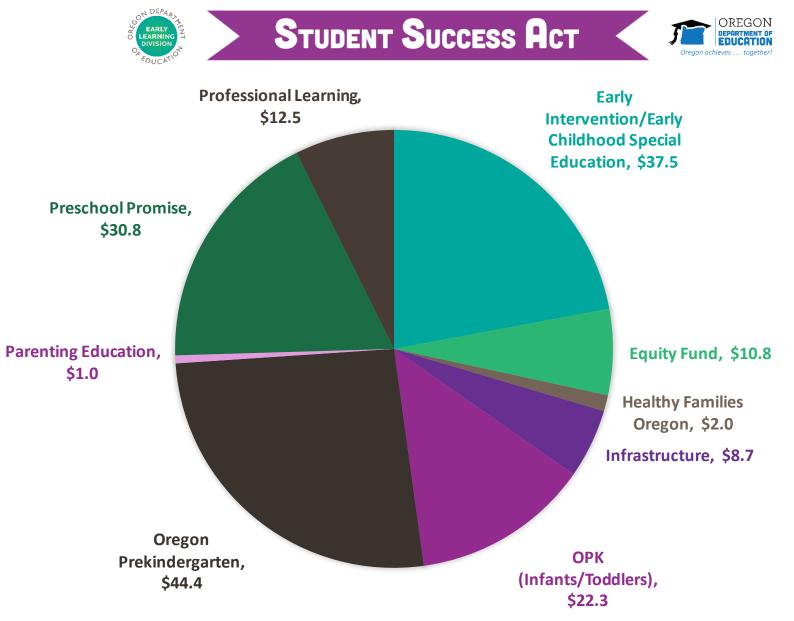
- Raises \$1 billion per year through new gross receipts tax
- At least 20% of funds directed to a dedicated Early Learning Account







The EARLY LEARNING ACCOUNT of the







Equity Fund



Parenting Education



Healthy Families Oregon





Relief Nurseries



Early Head Start



EI/ECSE



HB 2024: Baby Promise

Contracted Slots for infant and toddler care that require higher standards, are accompanied by more robust training and supports, and higher rates of funding to support teacher pay and quality.

Baby Promise pilot funding: CCDF funding for Baby Promise approved at September 2018 E-Board

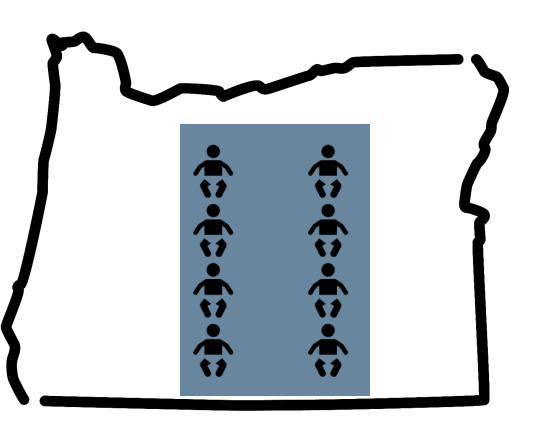
- \$3.3 million in child care assistance
- \$700K in quality supports

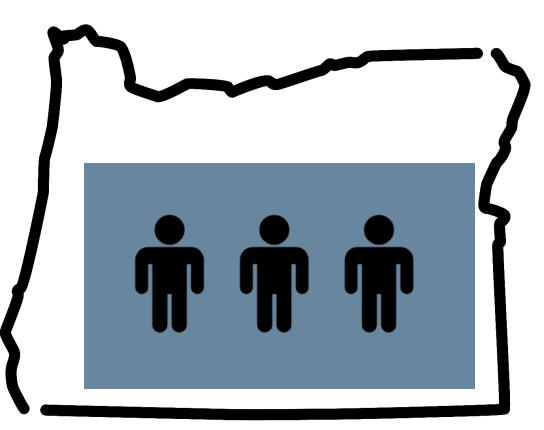




Crisis in supply more extreme for infants & toddler

8 Infants & toddlers for single child care slot

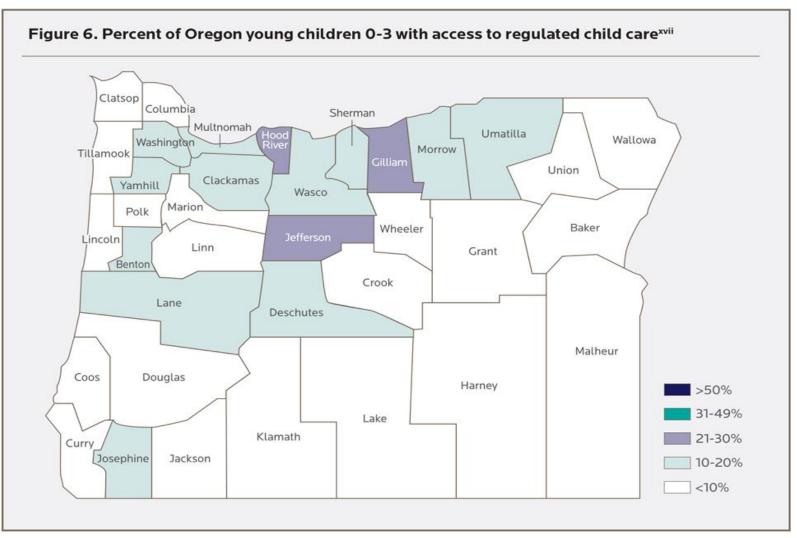




3 preschool-age children for single child care slot



Oregon's Infant-toddler care deserts





The Baby Promise Concept

✓ Regional Early Learning Hubs develop community plans that identify populations and areas with greatest unmet need for quality infant & toddler care

✓ Child Care Resource & Referral Agencies recruit diverse array of providers (e.g., family-based, center-based, Early Head Start) that are most able to meet needs identified in community plans

✓ Contract with providers for the true cost of quality care, including fair compensation

✓Contracts are tied to participation in quality supports & meeting quality standards

✓ Contracted providers offer subsidized care to eligible families



The Way Ahead: Virginia's Whole Family Approach to Prenatal to Age Three Policy

November 14, 2019 Gena Berger, Deputy Secretary of Health and Human Resources, Virginia

Overview

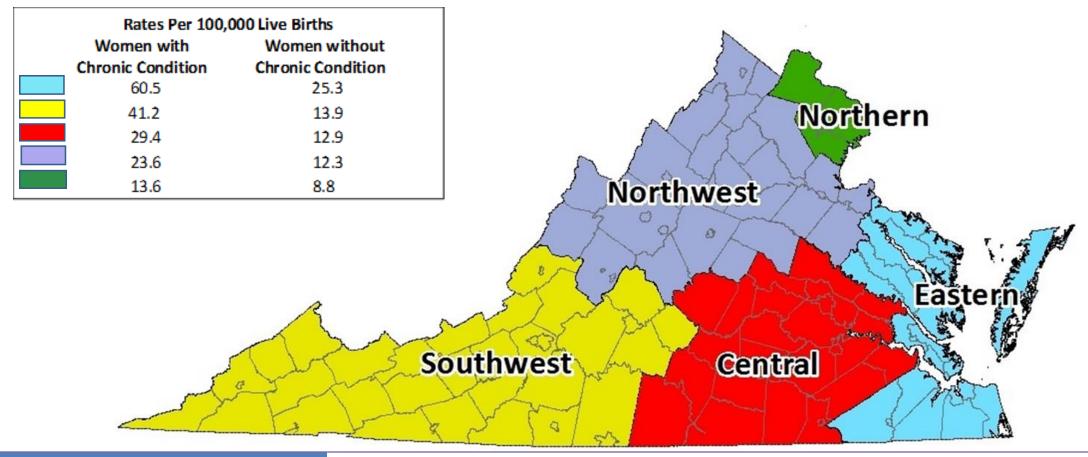
Virginia continues to strengthen its zero to age 3 policies through a whole family approach. The goal is to design policies that align three major areas:

- Improving maternal health and eliminating racial inequities in maternal/infant mortality
- Implementing a cohesive plan for home visiting;
- Increasing access, affordability, and quality in the early childhood care and education system

Maternal Health

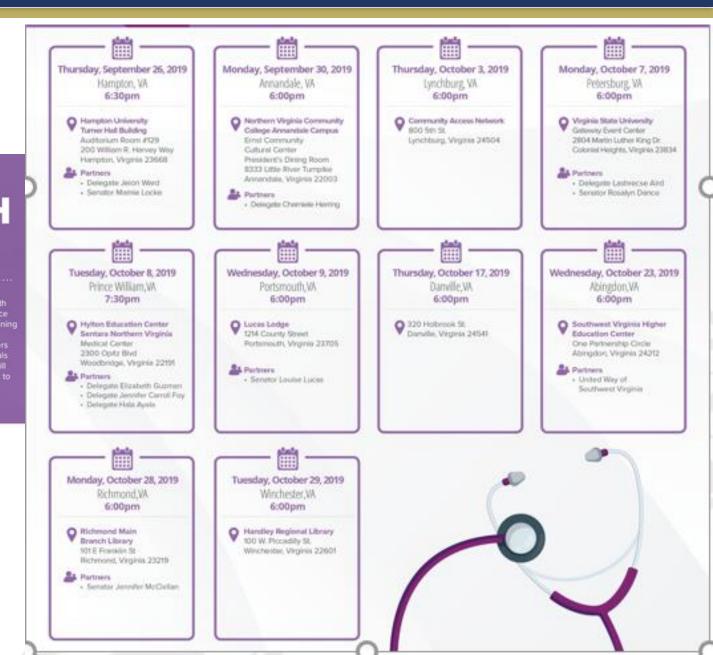
- Maternal mortality rate is increasing in U.S. and Virginia
- Significant racial inequities in the rates, causes of deaths, manners of deaths and contributors to maternal mortality
- Maternal mortality rate for Black women is over two times as high as White women in Virginia
- Maternal Mortality Review Team established in 2002; multi-disciplinary team reviews pregnancy-related deaths to develop recommendations to reduce preventable deaths
- Governor announced goal of eliminating racial inequities in maternal mortality rate by 2025

Map of Maternal Mortality Rates by Health Planning Region, 1999-2012



Virginia Department of Health, Office of the Chief Medical Examiner AUGUST, 2019





Listening Session Themes

- Individual, system, structural bias is impacting ability to access high quality care prior to, during, and after pregnancy
- Need to invest in collaborative care models---This gives women and families more choices in providers/place of birth, and provides care coordination
- Need for greater emphasis on mental health trauma screenings in prenatal and postpartum period
- More focus on care and services in the postpartum period
- Policies and practices are causing women to be fearful of seeking prenatal and postpartum care (esp due to immigration status, SUD, or domestic violence)
- · Healthy pregnancies start with healthy individuals prior to pregnancy
- All solutions must be community-driven and community-specific

Initial Focus Areas for Maternal Health

- Care Environment
 - Implicit bias training for health care providers and staff
 - Neonatal/Perinatal Collaborative to focus on quality improvement at targeted hospitals
 - Collaborative care models
- Coverage
 - Medicaid expansion
 - Expedite Medicaid enrollment for pregnant and postpartum women
 - Extend postpartum coverage to 12 months for 139-205% FPL
 - Eliminate barriers to coverage for immigrant community
 - Expand existing and explore new benefits for covered populations
- Community-Based Services
 - Home visiting, community doulas, midwives, community health workers, group prenatal and postpartum classes, care navigation

Home Visiting Plan

The Early Impact Leadership Council, which includes representatives from multiple agencies, is currently defining the Key Elements for Virginia's Plan for Home Visiting, including:

- Adopting Uniform Indicators for Statewide Reporting and Accountability
- Defining provider qualifications and exploring certification strategies; and
- Establishing a sustainable financing model, including a Medicaid reimbursement model.

Early Childhood Care and Education

Virginia continues to make progress in strengthening its early childhood care and education system in order to prepare all children for kindergarten. Specifically we are focused on:

- Implementing a cohesive plan for home visiting;
- · Producing a statewide needs assessment;
- Supporting communities to strengthen local systems;
- Recognizing educators; focus on workforce needs
- Producing recommendations for the Governor; and
- · Pursuing additional resources for early childhood in Virginia.

Preschool Development Grant Birth to Five (PDG B-5)

In January 2019, Virginia received and began to implement a \$9.9m PDG B-5 grant, focused on 3 key activities:

1.A statewide vision, needs assessment, and strategic plan Process and materials will be catalyst for strengthening the early childhood care and education system to improve outcomes including school readiness.

2.Community models ready to scale

Eleven early adopter communities, representing Virginia's diversity, will demonstrate proof of concept with \$6 million in funding and support from state, including \$4 million in recognition grants for teachers.

3.A stronger foundation at the state level

The Commonwealth will be well positioned to scale the efforts statewide, having built the necessary capacity and infrastructure.

PDG B-5: Accomplishments

Since receiving a \$9.9 million Preschool Development Grant Birth to Five, we have:

- Completed a needs assessment and final draft of a strategic plan
- Recruited new partners and built new relationships in all 11 pilots
- Registered more than 575 sites and 2,500 teachers across family day home, child care, Head Start and schools in 27 jurisdictions
- Collected more than 2,000 survey responses from teachers
- Conducted self-assessments in all pilots to determine how families learn about, apply and enroll in early childhood programs
- Distributed more than \$684,000 in funds via 1,140 checks to teachers and 228 checks to sites
- Collaborated to design, build and launch a new data portal (LinkB5)

On the Horizon: New PDG B-5 Funding Opportunity

Announced in September 2019, the PDG B-5 Renewal Grant is a funding opportunity to build and expand upon the previous grant work.

Recipients will be able to apply for up to three years of funding to:

- 1. Update needs assessment and strategic plan.
- 2. Implement collaboration, coordination, and quality improvement activities as detailed in strategic plans.
- Develop recommendations to better use existing resources to improve overall participation of children, particularly vulnerable, underserved or unserved children and children with, or at risk for, disabilities in mixed delivery settings.
- 4. Expand access to existing programs and develop new programs to address the needs of children and families eligible for, but not served by, existing early childhood education programs.
- 5. Pursue innovative approaches to coordinating enrollment, better serving infants and toddlers, and/or supporting transitions from early childhood to early grades.

Executive Directive #4

On July 27, the Governor signed Executive Directive #4 to establish an Executive Leadership Team to develop a set of recommendations.

Specifically it directed a cross-agency team to:

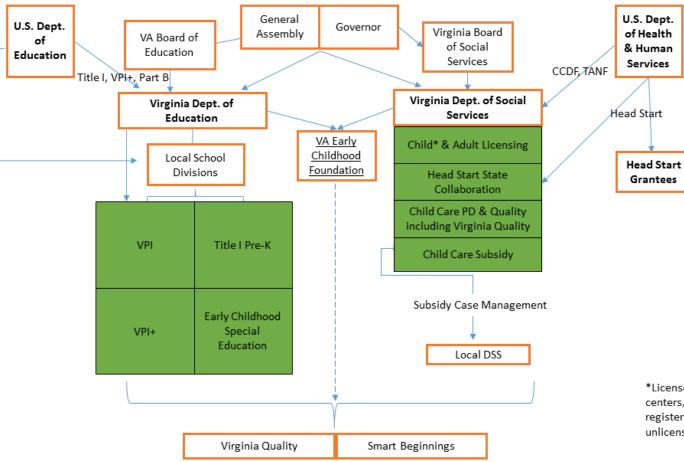
- Conduct a series of stakeholder listening sessions on how to improve school readiness.
- Make recommendations on how to maximize access for underserved children and families, including offering an option to every underserved three-year-old and four-year-old by 2025 without jeopardizing access for infants and toddlers.
- Build, pilot, and scale a uniform quality measurement and improvement system for all early childhood care and education programs that accept public funds to serve children five and under outside of their homes.
- Develop recommendations to most effectively consolidate state oversight and administration for all early care and education programs.

Responding to Executive Directive #4

More than 300 individuals participated in listening sessions and more than 30 state employees involved in planning process.

- Partners were: Smart Beginnings, schools, social services, Head Start and child care programs
- Listening sessions in Norfolk, Annandale, Salem, and Chesterfield.
- More than 300 attendees representing 200+ organizations:
 - State, local, municipal government, elected officials
 - Head Start, Community Action agencies
 - Child care centers and family day home providers
 - Higher education and PreK-12 school systems
 - Non-profit organizations
 - Healthcare, consultants, media
 - Businesses

Governance



VIRGINIA EARLY CHILDHOOOD GOVERNANCE DIAGRAM

*Licensed & religious exempt centers, licensed and voluntary registered family day homes, unlicensed subsidy providers

END USERS: CHILDREN, FAMILIES, COMMUNITIES

Questions?

Gena Boyle Berger, MPA Deputy Secretary of Health and Human Resources Virginia, Office of the Governor gena.berger@governor.virginia.gov





Special Presentation



Update from Pritzker



Brandy Jones Lawrence

State Program Manager Pritzker Children's Initiative



State Team Time



Affinity Groups Lunch





Hot Topics Presentations

Early Intervention



Child Welfare



Home Visiting



Ron Benham Retired Massachusetts Department of Public Health

Elizabeth Jordan Director of Policy Communications and Outreach Child Trends

Dr. Monique Fountain Hanna Chief Medical Officer/CQI and Innovation Advisor U.S. Public Health Service



NGA Prenatal to Age 3 (PN3) Policy Academy

Early Intervention as a Collaborative Partner

Charleston, South Carolina

November 13-15, 2019

Ron's brief story

> 35 year career at Massachusetts Department of Public Health

- Retired end of state fiscal year 2018
- Twenty five years as Early Intervention (EI) Director and ten years as concurrent Title V Maternal and Child Health Director
- During final ten years had management responsibilities of Early Intervention, Title V Maternal and Child Health, Women Infants and Children nutrition program, federal Home Visiting program and a range of other young children and their families programs

Collaborative Opportunities

- Building a comprehensive system of care for very young children and their families
- Embedding importance of maternal health and well being into all system models
- Interfacing with state's child welfare system
- Potential to broaden of program eligibility

Opportunities continued...

Potential incentives for meeting program system change milestones

Engaging a broader coalition of influence and engagement for political support

Shared training across served population

Collaborative Challenges

Building a sustainable system of care across multiple program platforms

Successful on-going collaboration is hard

Trusting shared leadership

Turnover of leadership champions (Governor Office, Legislator, Advocates)

Challenges continued...

- Categorical funding/ Disparate programmatic eligibility
- Evidence based service models vs best/promising practices
- Building effective political advocacy network
- Workforce requirements

Concluding Thoughts

- Relationships are critically important
- Encouraging/incentivizing program's leadership to stay in their positions
- No individual program has all the answers
- There are plenty of children in need of services to go around to all players
- Funding is key
- Think like a community organizer/bring people together
- Don't kick sand in the sandbox



Family First Act

New opportunities to support young children and their families





Today's conversation

- Snapshot of the purpose of the child welfare system
- 2. Data on young children involved in the child welfare system
- 3. Overview of the Family First Act

4. Strategies for leveraging Family First to support young children

The goal of child welfare is to promote the well-being, permanency, and safety of children and families by helping families care for their children successfully or, when that is not possible, helping children find permanency with kin or adoptive families. Among children who enter foster care, most will return safely to the care of their own families or go to live with relatives or an adoptive family.



Source: How the Child Welfare System Works, Children's Bureau

Young children are disproportionally represented in the child welfare system

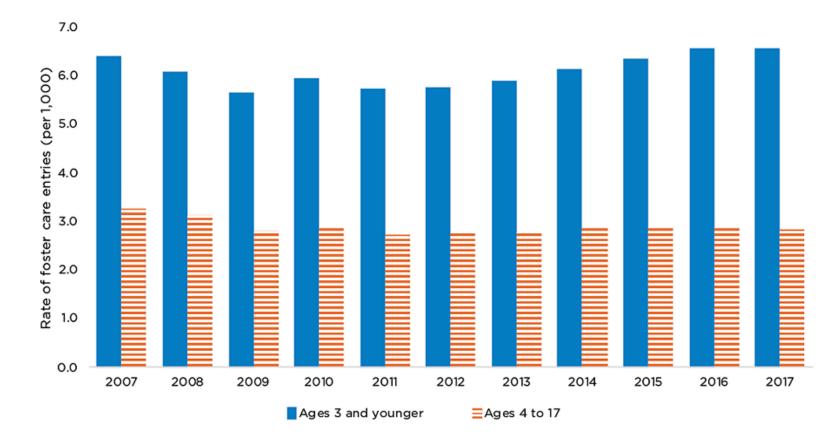
Nationally 35% of maltreated children are ages 0-3							
Alabama	Colorado	Kentucky	Louisiana	Maryland	Missouri		
36%	34%	35%	42%	25%	27%		



Young children in foster care

The rate of children ages 3 and younger entering foster care in 2017 was double that of older children and youth

Rate per 1,000 children entering foster care in Fiscal Year 2017, by age group and all children



Foster care entry rates per 1,000 in the general child population (ages 17 and under) are calculated using the federal Adoption and Foster Care Analysis and Reporting System (AFCARS) and data from the U.S. Census Bureau. AFCARS data pertain to the FY 2017 reporting period (October 1, 2016 – September 30, 2017). Data from the U.S. Census Bureau are from 2017 and are publicly available at the Kids Count Data Center.



Key provisions of the Family First Prevention Services Act



Prioritizes placement with family and in family-like settings



Broadens existing major federal funding stream to include services that prevent entry to foster care



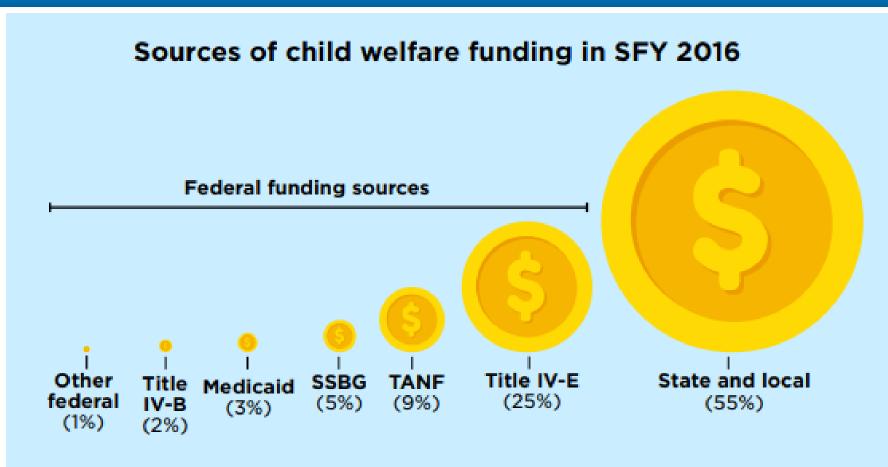
Promotes use of evidence-based programs that prevent entry to foster care



Provides additional supports to kinship caregivers



Child welfare funding sources





Note: Each state reported data based on its SFY 2016, which for most states is July 1, 2015, to June 30, 2016. Of the 50 participating states, only six (AL, DC, MI, NY, TX, and WY) reported a different SFY calendar.

Opportunities for supporting young children and their families in Family First





- Formal state planning process
- Existing knowledge base on young children and their needs
- Evidence-based programs
- Pregnant and parenting youth in foster care

Thank you!

Elizabeth Jordan

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The Maternal Infant and Early Childhood Home Visiting Program (MIECHV)

National Governor's Association: Integrating and Advancing State Prenatal to Age Three Policies November 14, 2019

Monique Fountain Hanna, M.D., M.P.H., M.B.A.

Chief Medical Officer/CQI & Innovation Advisor, Division of Home Visiting and Early Childhood Systems (DHVECS) Maternal and Child Health Bureau (MCHB)

Vision: Healthy Communities, Healthy People



We envision an America where all children and families are healthy and thriving, where every child and family have a fair shot at reaching their fullest potential.







Science of Early Development

• Early experiences are essential for building brain connections that underlie biobehavioral health, and current understanding of whole-child development relies on an interplay of organ systems with each other and the environment.



- Early adversity can change the timing of critical periods of brain development, impacting the "plasticity" of developmental processes that are driven by experiences in the life of the young child and the family.
- Both institutional racism and interpersonal experiences of discrimination can influence the health and well-being of both children and adults in multiple ways, including reducing access to material resources and services that promote longterm health and development and acting as a psychosocial stressor that can lead to worse outcomes over time.



National Academies of Sciences, Engineering, and Medicine. 2019. Vibrant and Healthy Kids: Aligning Science, Practice and Policy To Advance Health Equity. Washington, DC: The National Academies Press. The National Academies of SCIENCES • ENGINEERING • MEDICINE



Lessons from the Science of Early Development

• Healthy development of the child begins in the preconception period and is dependent upon a strong foundation built prenatally.



- Among all the factors that may serve to buffer negative outcomes produced by toxic stress, supportive relationships between the child and the adults in life are essential.
- Based on the abundant science, the influence of access to basic resources prenatally, particularly nutritional, psychosocial, and health care components, is powerful. Resources to help families to limit chronic stress may reduce risk for disrupted fetal development and help close disparities based on race, ethnicity, and socioeconomic status (SES).



National Academies of Sciences, Engineering, and Medicine. 2019. Vibrant and Healthy Kids: Aligning Science, Practice and Policy To Advance Health Equity. Washington, DC: The National Academies Press. The National Academies of SCIENCES • ENGINEERING • MEDICINE



National Academy: Opportunities

- <u>Intervene early.</u> In most cases, early intervention programs are easier to implement, more effective, and less costly.
- <u>Support caregivers</u>. This includes both primary caregivers and caregivers in systems who frequently interact with children and their families.



Vibrant and Healthy Kids ALIGNING SCIENCE, PRACTICE, AND POLICY TO ADVANCE HEALTH EQUITY

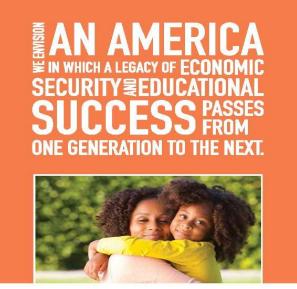
- <u>Reform health care system</u> services to promote healthy development. Redesign the content of preconception, prenatal, postpartum, and pediatric care while ensuring ongoing access, quality, and coordination.
- Create supportive and stable early living conditions:
 - Reduce child poverty and address economic and food security,
 - Provide stable and safe housing, and
 - Eliminate exposure to environmental toxicants.
- <u>Maximize the potential of early care and education</u> to promote health outcomes.
- <u>Implement initiatives across systems</u> to support children, families, other caregivers, and communities. Ensure trauma-informed systems, build a diverse and supported workforce, and align strategies that work across sectors.
- <u>Integrate and coordinate resources</u> across the education, social services, and health care systems, and make them available to translate science to action.



National Academies of Sciences, Engineering, and Medicine. 2019. Vibrant and Healthy Kids: Aligning Science, Practice and Policy To Advance Health Equity. Washington, DC: The National Academies Press. The National Academies of SCIENCES • ENGINEERING • MEDICINE



Design Principles for Improving Outcomes



TWO-GENERATION PLAYBOOK

 Support responsive relationships for children and adults.

- Strengthen core life skills
- Reduce sources of stress in the lives of children and families



AND THINKIN SERVICES. LIST



What is Home Visiting?

Home visiting is a voluntary, evidence–based service to pregnant women and parents with young children from birth to kindergarten entry that is designed to improve maternal and child health outcomes via relationship between a professionally trained home visitor and parent.



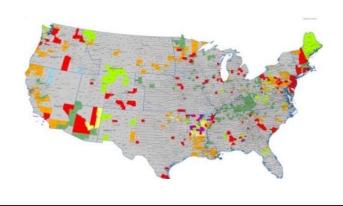




Maternal, Infant and Early Childhood Home Visiting (MIECHV)

- \$400 million appropriation annually for 2018-2022
- Formula Awards to states and territories for implementation of evidence-based home visiting (administered by HRSA)
 - Programs are in all 50 states, D.C. and five territories
 - Competitive innovation awards
- 3% set-aside for grants to Tribal entities (administered by ACF)
- 3% set-aside for research, evaluation, and corrective action technical assistance (HRSA in collaboration with ACF)





Legislative Changes Highlights

The Bipartisan Budget Act of 2018 included:

- Requirement to update the statewide needs assessment by October 1, 2020
- Pay for Outcomes authority
- Data exchange standards to promote interoperability
- Continuation of requirement for awardees to provide information demonstrating improvement in 4 out of 6 benchmark areas





MIECHV Program Goals

MIECHV gives pregnant women and families, particularly those considered at-risk, necessary resources and skills to raise children who are physically, socially, and emotionally healthy and ready to learn.

Program Goals:

- Improve maternal and child health
- Prevent child abuse and neglect
- Encourage positive parenting
- Promote child development and school readiness
- Promote family economic self-sufficiency
- Support referrals for and provision of other community resources





MIECHV Program Characteristics

- Evidence-based
- Place based systems strategy: locally designed and run
- Home visiting services are provided by trained professionals, such as social workers, nurses, and parent educators
- Meet regularly with at-risk expectant parents or families with young children in their homes, building strong, positive relationships with families
- Establish positive parenting practices and parent—child relationships while also addressing individual family needs
- Supports Families
- Voluntary





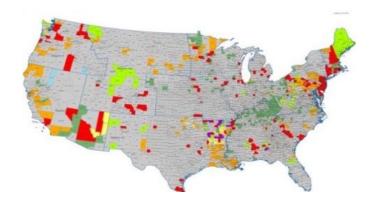
MIECHV 101

- Funding
 - Majority of MIECHV funding allocated via formula awards with 5% allocated to 14 innovation awards
- Supports Families
 - Statewide needs assessments identify at-risk communities; states select home visiting models that best meet state and local needs
 - Partnership between parents and home visitors
- Evidence-based
 - Built on four decades of rigorous research and evaluation
 - Program models meet HHS criteria for evidence of effectiveness as well as criteria identified in statute for implementation under MIECHV
 - Includes a national random assignment impact study and local evaluations
 - Awardees can spend up to 25% of award implementing Promising Approaches



MIECHV Implementation

- Programs are in all 50 states, D.C. and five territories and 896 counties (FY 2018)
- In FY 2018, states reported serving more than 150,000 parents and children.
- In FY 2018, states and territories provided over 930,000 home visits, and have provided 5.2 million home visits over the past seven years.







MIECHV Families

MIECHV Priority Populations

- Low-income families
- Pregnant women under age 21
- Families with a history of child abuse or neglect
- Families with a history of substance abuse
- Families that have users of tobacco in the home
- Families with children w/low student achievement
- Families with children w/ DD or disabilities
- Families with individuals who are serving or have served in the Armed Forces, including those with multiple deployments

Populations Served in 2018

- 71% of families < 100% federal poverty
- 42% of families < 50% federal poverty
- 65% did not go to college
- 76% of participating adults and children relied on Medicaid or CHIP
- 13% of enrolled households included pregnant teens
- 19% of enrolled households had a history of child abuse and neglect
- 13% of enrolled households had a history of substance abuse



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Performance Measures

Benchmark Areas	Performance Measures					
I. Maternal and	Preterm Birth; Breastfeeding; Depression Screening; Well-Child					
Newborn Health	Visit; Postpartum Care; Tobacco Cessation Referrals					
II. Child Injuries, Maltreatment, and Reduction of ED Visits	Safe Sleep; Child Injury; Child Maltreatment					
III. School Readiness and	Parent-Child Interaction; Early Language and Literacy Activities;					
Achievement	Developmental Screening; Behavioral Concerns					
IV. Crime or Domestic Violence	IPV Screening					
V. Family Economic Self- Sufficiency	Primary Caregiver Education; Continuity of Insurance Coverage					
VI. Coordination	Completed Depression Referrals; Completed Developmental					
and Referrals	Referrals; IPV Referrals					





MIECHV Program Performance Measures

Home visiting services are making a meaningful difference in the lives of vulnerable children and families. Some examples include:

- **Depression Screening:** In FY 2018, 78% of MIECHV caregivers were screened for depression within 3 months of enrollment or 3 months of delivery.
- School Readiness: In FY 2018, 70% of children enrolled in MIECHV had a family member who read, told stories, and/or sang with them on a daily basis.
- **Developmental Screening:** In FY 2018, 74% of children enrolled in MIECHV had a timely screening for developmental delays.
- Intimate Partner Violence (IPV) Screening: In FY 2018, 82% of MIECHV caregivers were screened for IPV within 6 months of enrollment.





FY17/FY18 Child Health Performance Data Summaries: AL, CO, KT, LA, MD, MO

Trends by Measures															
Early Language + Literacy Activities	1) 4/6 stat	1) 4/6 states improved in the Early Languages and Literacy Activites Performance Measure between 2017 and 2018													
De velop mental Screenings	2) 5/6 Stat	2) 5/6 States performed higher than the national average in the Developmental Screenings Measure for 2018, 3/6 demonstrated improvement between 2017 and 2018													
Be haviora l Concern	3) 5/6 stat	3) 5/6 states improved in the Behavioral Concern performance measure between 2017 and 2018, 4/6 performed higher than the national average in this measure for 2018.													
Preterm Birth (a decrease means improvement)	4) 5/6 Stat	tes improv	ed in the P	reterm Bir	th Perform	ance Meas	sure, 3/6 p	erformed h	nigher than	thenatio	nal a verag	e in this m	neasure for 2018		
Well Child Care Visit	5) 3/6 States performed higher than the national average for the Well Child Care Visit for 2018, 3/6 states improved in the Well Child Visit Measure between 2017 and 2018														
Child Maltreatment (a decrease means improvement)	6) 3/6 States performed higher than the national average for the Child Maltreatment Measure for 2018, 3/6 states improved in the Child Maltreatment Measure between 2017-														

Nationally, all of the 6 performance measures improved between 2017 and 2018. The measures showing the greatest amount of change on a national level, in regards to percent change, were well child visit (+11.8% change), early language and literacy activites (+14.3% change)





MIECHV Improves Child and Family Outcomes

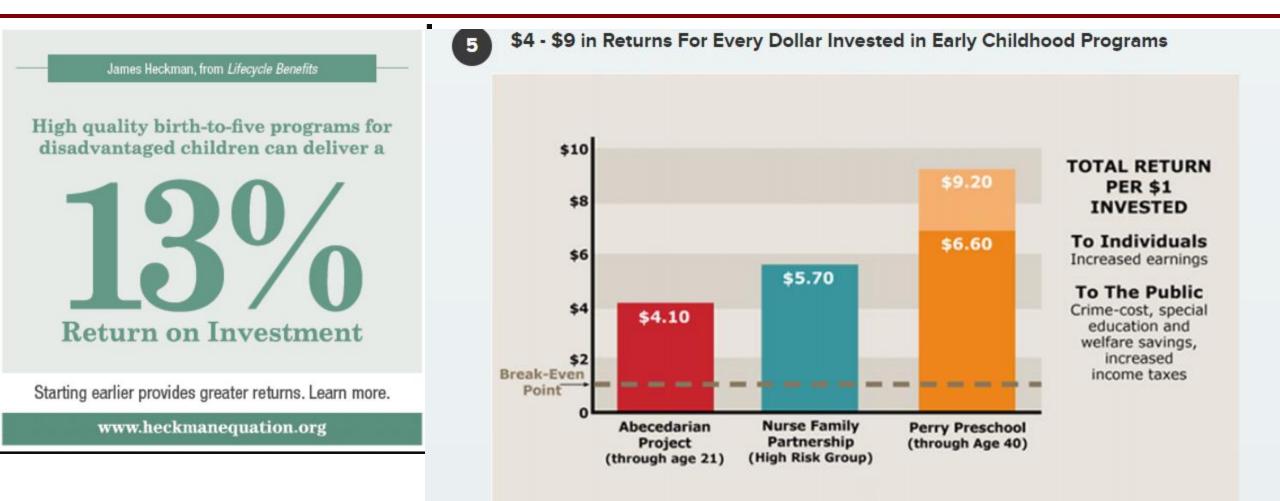
- Prevents child abuse and neglect
- Encourages positive parenting
- Promotes child development and school readiness
- Maternal depression
- Reduction of school drop out, substance use, teen pregnancy and crime
- Improved economic self-sufficiency
- On-going evaluations





Return on Investment

MAN SERVICE.



Sources: Masse, L. and Barnett, W.S., A Benefit Cost Analysis of the Abecedarian Early Childhood Intervention (2002); Karoly et al., Early Childhood Interventions: Proven Results, Future Promise

National Home Visiting Resource Center

https://www.nhvrc.org/yearbook/



2018 Home Visiting Yearbook

The 2018 Home Visiting Yearbook uses 2017 data to present the most up-to-date look at home visiting on the national and state levels. It features data from evidence-based home visiting models and awardees of the Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV). There is also a new section highlighting data from nine emerging models



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Summary of Prior Research – Outcomes of Home Visiting

Domain	# of Models that Achieved Positive Impacts in Prior Research*	Examples of Outcomes Achieved
Child Health	10 Models	Evaluation research shows that the Family Connects model has been effective in reducing the number of emergency medical care episodes, and hospital stays among children who participate in the program.
Maternal Health	11 Models	Evaluations of the HANDS models show that participation in the program reducing maternal complications during delivery, improves maternal weight gain during pregnancy, and helps to ensure that mothers obtain adequate prenatal care.
Child Development and School Readiness	12 Models	Evaluation research shows that young children who participated in HIPPY performed better on vocabulary tests and were less likely to delay entry into school than their peers who were not in the program.
Reductions in Child Maltreatment	8 Models	One evaluation of the HFA program in New York found that participating mothers were one -fourth as likely to report engaging in serious abuse or neglect than mothers not participating in the program (5% compared to 19%.
Reductions in Juvenile Delinquency, Family Violence, and Crime	2 Models	A long-term follow-up evaluation of NFP found that children who participated in the program were less likely to have been arrested (21% compared to 37%) or convicted (12% compared to 28%) of a crime by the time they were 19 years old than their peers who did not participate in the program.
Positive Parenting Practices	14 Models	An evaluation of Family Spirit found that At 12 months postpartum, mothers participating in the program had significantly greater parenting knowledge, parenting self-efficacy, and home safety attitudes than mothers in the control group.
Family Economic Self-Sufficiency	6 Models	One evaluation of EHS-HV found that two years after completing the EHS-HV program, families that participated earned an average of \$300 more per month than families in a control group.
Linkages and Referrals	5 Models	An evaluation of the Child First model found that intervention families were successfully connected with 91% of desired community-based services and resources, compared to only 33% for Usual Care families.



* Prior research refers to research and evaluations that have been reviewed by HomVEE, and meet the criteria to be considered high quality



Home Visiting: Part of the Solution

Optimal Early Learning and Long-Term Academic Achievement

Because the early years of life are critical to brain development, parent-child activities like reading together are linked to future academic achievement. Nationally, many children do not get the start they need to launch a positive academic trajectory:

 Sixty-five percent of fourth graders failed to meet standards for reading proficiency in 2017.xxxx

Self-Sufficient Parents

Many people do not have the education and job opportunities they need to successfully navigate the transition to parenting and adulthood:

- For 14 percent of children under 18, the head of household had less than a high school diploma.
- For another 44 percent of children under 18, the head of household had only a high school diploma.xxxxiii
- Approximately 3 in 10 children under age 18 lived in families where no parent had regular, full-time employment.^{xxxix}

Home Visiting as Part of the Solution

Home visitors offer parents timely information about child development, helping them recognize the value of reading and other activities for children's learning. This guidance translates to improvements in children's early language and cognitive development, as well as academic achievement in grades 1 through 3.^{xxxvi,xxxvii}

Home Visiting as Part of the Solution

Home visitors help parents set goals to promote their financial self-sufficiency. This support translates to better education and employment outcomes. Compared with their counterparts, parents enrolled in home visiting have higher monthly incomes, are more likely to be enrolled in school, and are more likely to be employed.^{xL,xli,xlii}.



National Home Visiting Resource Center. (2018). Home Visiting Primer. Arlington, VA: James Bell Associates and the Urban Institute.



Home Visiting: Part of the Solution

Healthy Babies

Access to prenatal care prevents birth complications for both infants and mothers and reduces health care costs.^{xxv} Unfortunately, national data reveal that not all babies get a healthy start:⁵

- Six percent of expectant mothers had delayed or no prenatal care.xxvi
- Ten percent of infants were born prematurely.^{xxvii}
- Approximately 6 percent of infants died before age 1.xxviii

Home Visiting as Part of the Solution

Home visitors work with expectant and new mothers to ensure optimal care in pregnancy and infancy. Indeed, pregnant home visiting participants are more likely to access prenatal care and carry their babies to term.^{xxix} Home visiting also promotes infant caregiving practices like breastfeeding, which has been associated with positive long-term outcomes related to cognitive development and child health.^{xxx}

Safe Homes and Nurturing Relationships

Preventable injuries and abuse happen all too frequently to children in the United States:

- Twenty-five percent of children aged 0-5 visited the emergency room because of accident or injury between 2010 and 2013.^{sodi}
- Unintentional injuries were a leading cause of death and disability among children aged 1–4.^{xoxii}
- The rate of substantiated child abuse was 9 per 1,000 children under 18, with the majority of victims under age 1.xxxiii

Home Visiting as Part of the Solution

Home visitors provide parents with knowledge and training to make their homes safer. For example, educating parents about how to "baby proof" their home can reduce unintentional injuries. Home visitors also teach parents how to engage with their children in positive, nurturing, and responsive ways, thus reducing child maltreatment.^{xxxix}

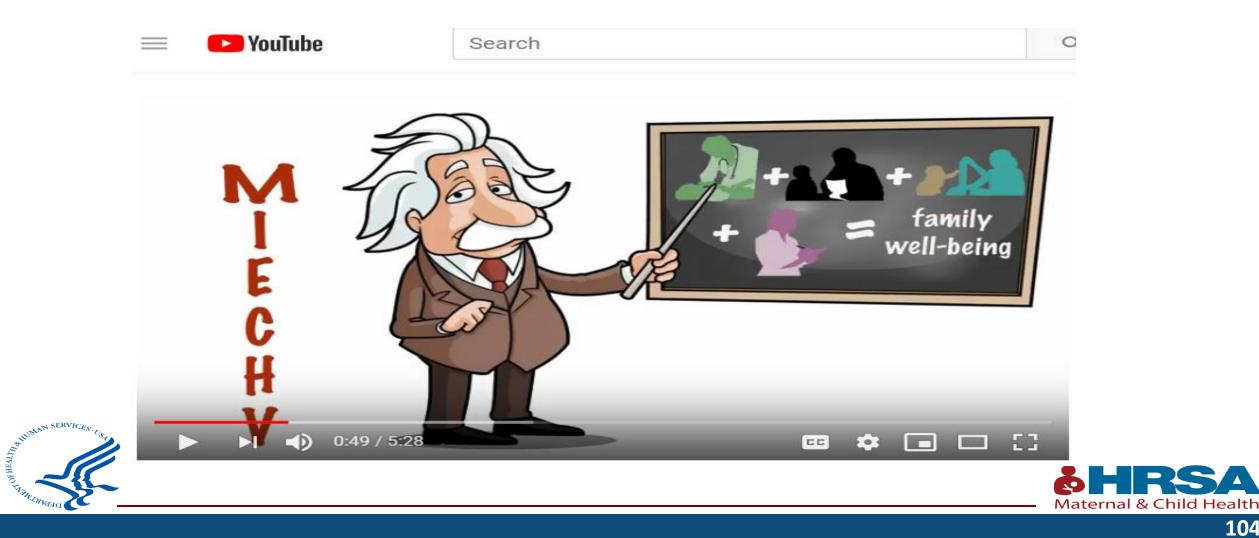


National Home Visiting Resource Center. (2018). Home Visiting Primer. Arlington, VA: James Bell Associates and the Urban Institute.





https://www.youtube.com/watch?v=ePS41tV8w-8&feature=youtu.be





"The economic benefits of investing in children have been extensively documented. Investing fully in children today will ensure the well-being and productivity of future generations for decades to come. By contrast, the physical, emotional and intellectual impairment that poverty inflicts on children can mean a lifetime of suffering and want – and a legacy of poverty for the next generation... "

-- <u>Carol Bellamy</u>, Former Executive Director of Unicef







Contact Information

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To learn more about our agency, visit www.HRSA.gov







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Deep Dives with Hot Topic Experts

Early Intervention



Child Welfare



Home Visiting



Ron Benham Retired Massachusetts Department of Public Health

Elizabeth Jordan Director of Policy Communications and Outreach Child Trends

Dr. Monique Fountain Hanna Chief Medical Officer/CQI and Innovation Advisor U.S. Public Health Service







Understanding the Science of Serving Children and Families



Dr. Stacy Drury

Chief Research Officer, Children's Hospital New Orleans; Remigio Gonzalez, MD, Professor of Child Psychiatry; Associate Director, Tulane Brain Institute; Director, Behavioral and Neurodevelopmental Genetics Laboratory, Tulane University









THE SCIENCE OF EARLY CHILDHOOD INTERVENTIONS

STACY DRURY, MD PHD CHIEF RESEARCH OFFICER, CHILDREN'S HOSPITAL REMIGIO GONZALEZ MD PROFESSOR OF CHILD PSYCHIATRY ASSOCIATE DIRECTOR, TULANE BRAIN INSTITUTE





DISCLOSURES OF POTENTIAL CONFLICTS

- Research funding:
 - NIH
 - SMASHA
 - NSF
 - NARSAD
 - Russel Sage Foundation
 - Tulane
 - Bill and Melinda Gates Foundation
- I will mention medication use to illustrate neuroscience concepts, however I do not have any ties to the pharmaceutical industry and will mention generic classes of medications





KEY POINTS

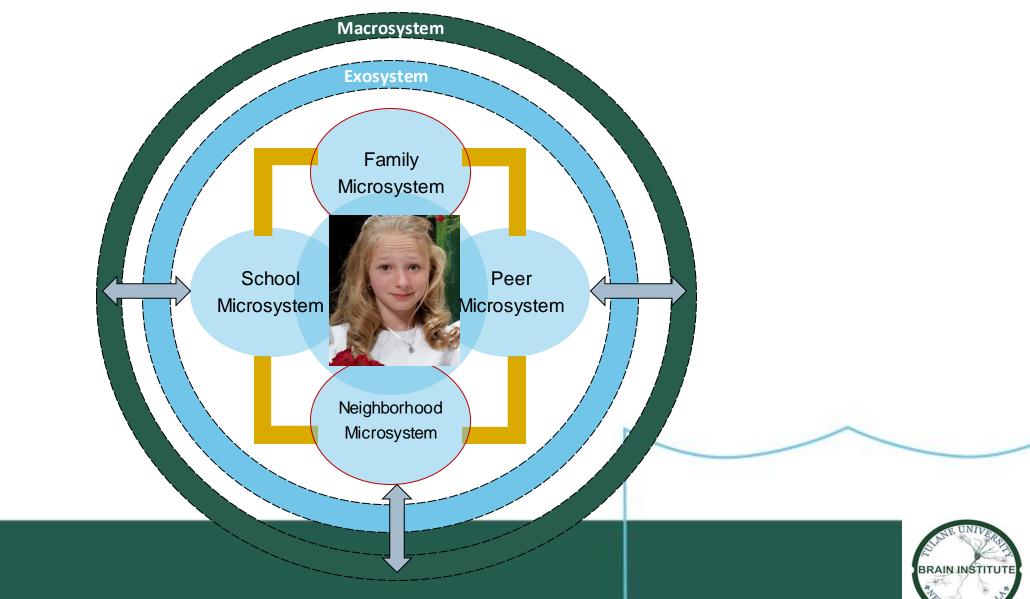
- Kids are different that adults
- What kids need changes
- Parents are important
- Trauma is bad

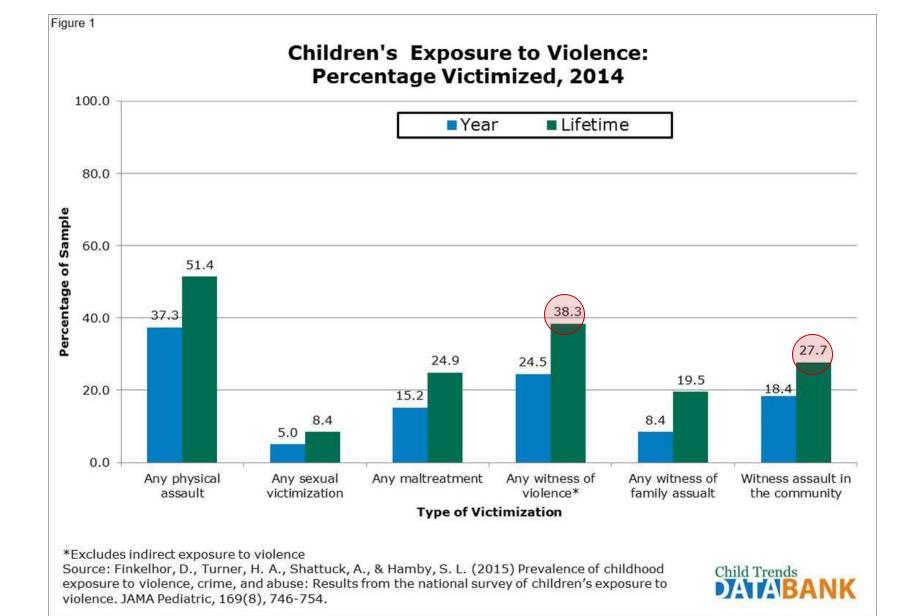




Bronfenbrenner's Ecological Theory

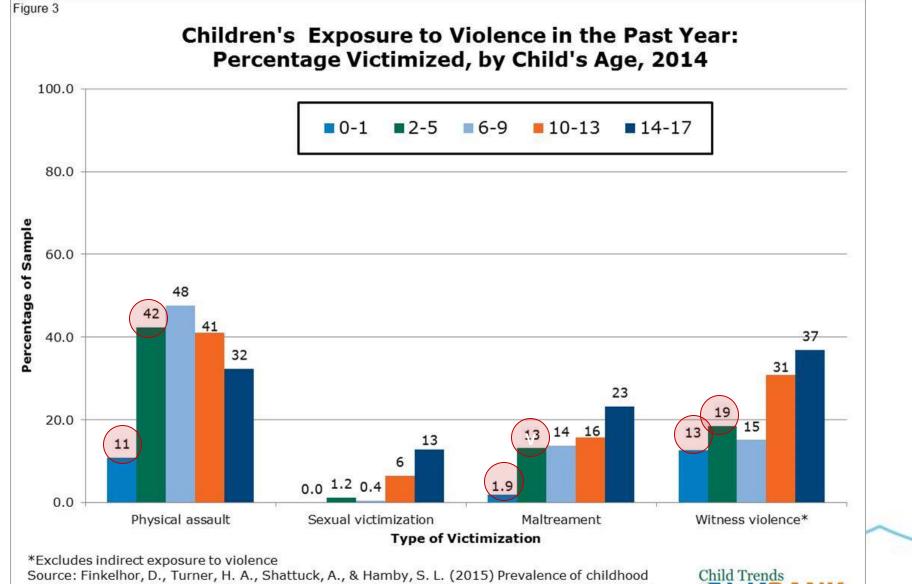
Tulane





Tulane





Source: Finkelhor, D., Turner, H. A., Shattuck, A., & Hamby, S. L. (2015) Prevalence of childhood exposure to violence, crime, and abuse: Results from the national survey of children's exposure to violence. JAMA Pediatric, 169(8), 746-754.





WHAT AGE CHILDREN ARE AT GREATEST RISK OF MALTREATMENT?







BRAIN DEVELOPMENT

- From conception through adult
- Areas of the brain develop at different rates
- Experience expectant and experience dependent

Experiences, both positive and negative, have a differential impact depending on when in development they occur

Areas of the brain that are most rapidly developing at the time of exposure are the areas most impacted

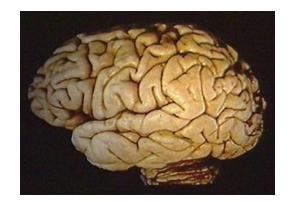
The age at which trauma occurs matters







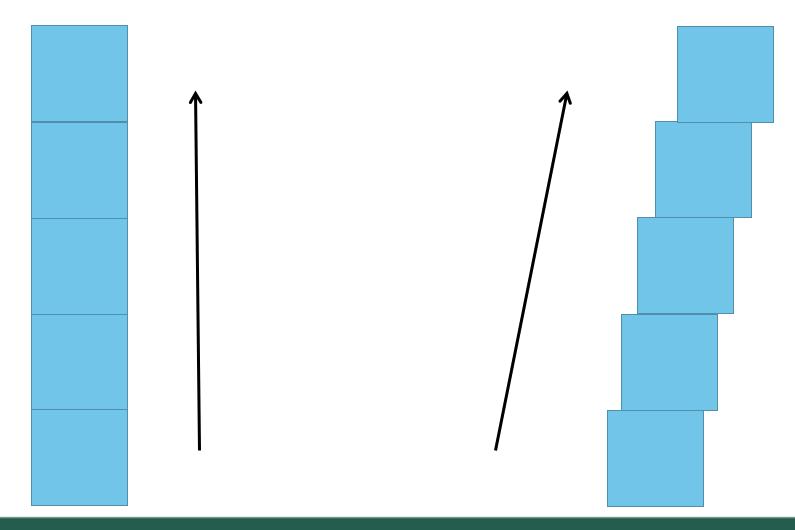




http://medstat.med.utah.edu

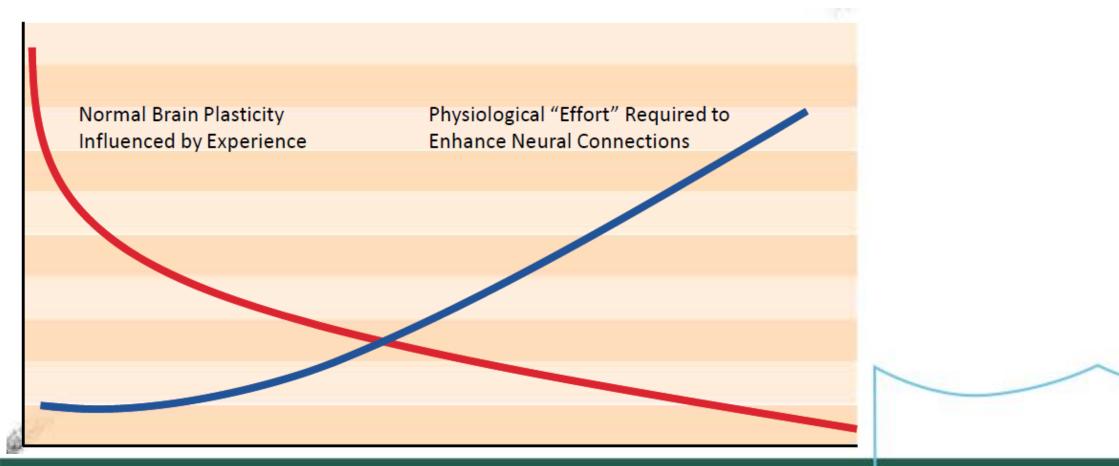


The building blocks of the brain



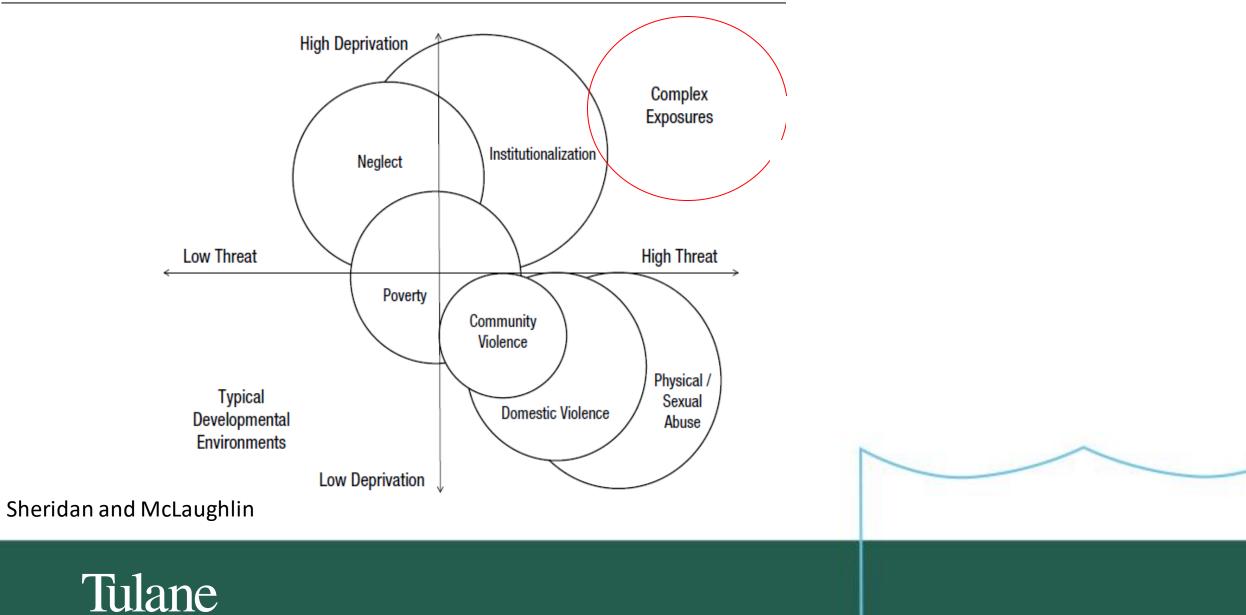


THE ADAPTABILITY OF THE BRAIN CHANGES ACROSS DEVELOPMENT

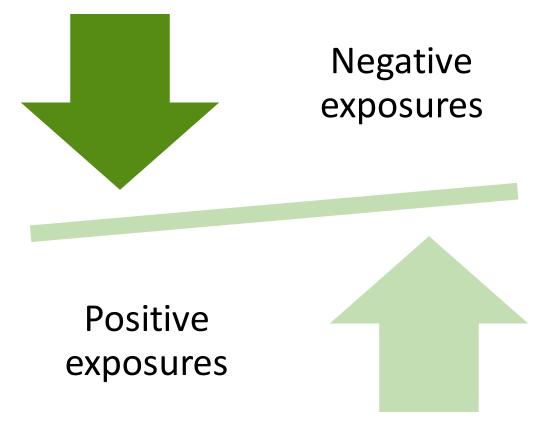


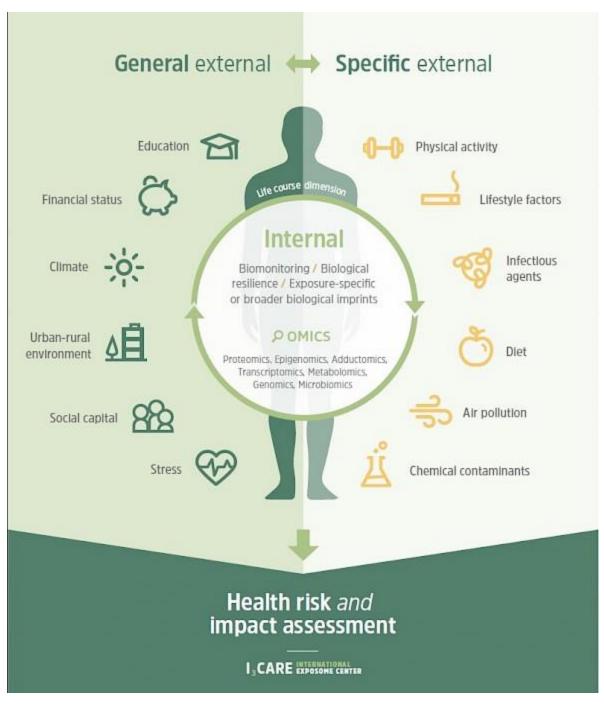


A Dimensional Approach to Childhood Adversity

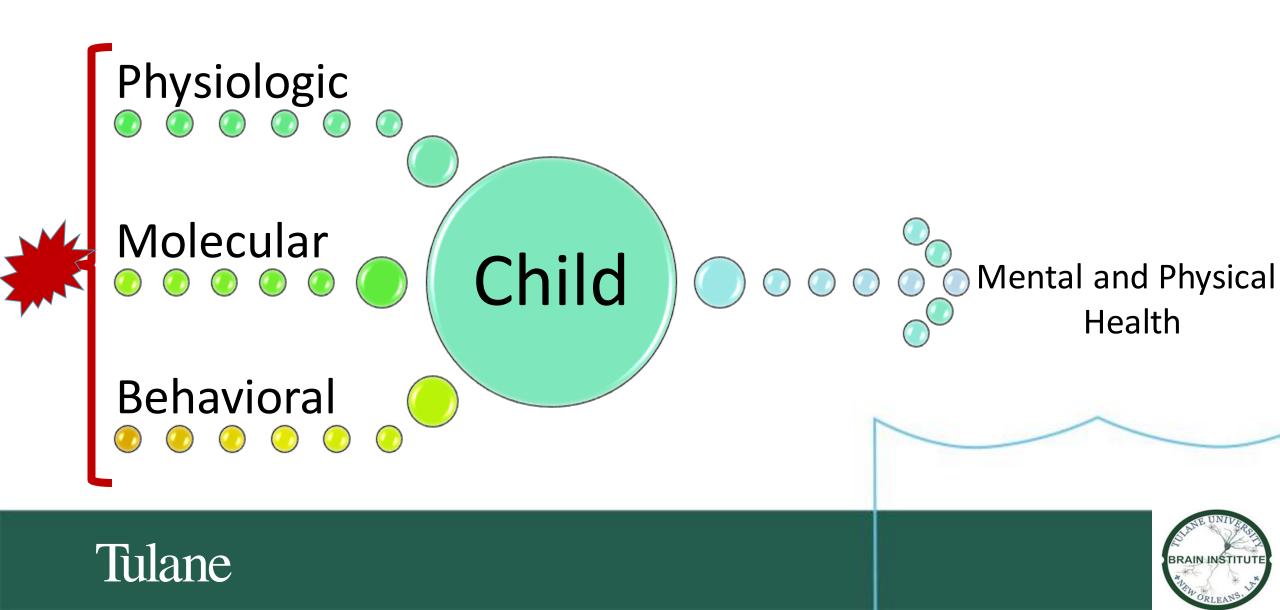


Exposome





IMPACT OF ADVERSITY



PHYSIOLOGIC STRESS RESPONSE SYSTEMS

- Autonomic nervous system
- Hypothalamic Pituitary Adrenal Axis
- Hypothalamic pituitary Gonadal Axis
- Cellular stress

Tulane

• Immune system



MYTH BUSTER #1

Cortisol is THE stress hormone and all stress is bad



CORTISOL

- Fight or flight hormone
- Attention and awareness of the environment-key to learning
- Designed to alert individual to change in the environment
- Diurnal and reactive (social evaluative stress) patterns
- Early trauma can influence EITHER/ BOTH diurnal or reactivity
- Potentially "always on" or alternatively "never raises"





• Joey's Story





- PTSD
 - Criteria A: exposure
 - Criteria B: re-experiencing
 - Criteria C: avoidance
 - Criteria D: hyper-arousal

Restricted range of emotions	Marked diminished interest	
	Irritability or outbursts	
difficulty concentrati	Exaggerated startle	
Tulane		





MYTH BUSTER #2

• Attention, impulsivity and oppositional behavioral problems in children are ADHD and should be treated with medication







Sleep problems

Hunger

Anxiety

Attention problems ≠ ADHD

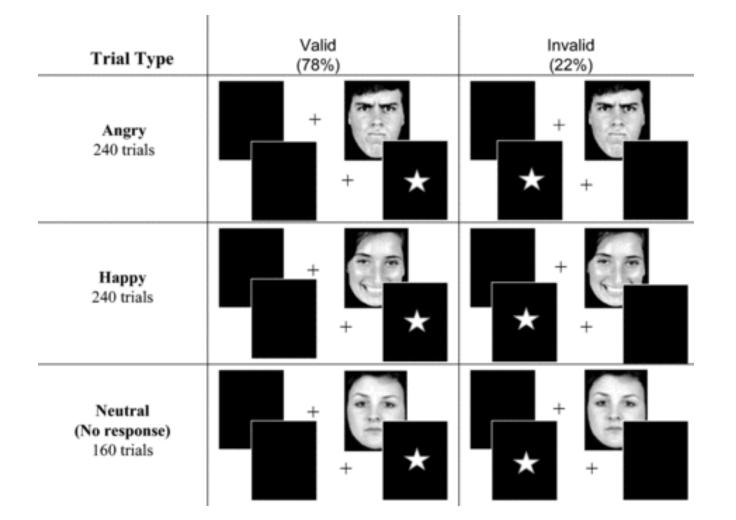
PTSD

Interpersonal violence

Hearing/learning disability



Attention Bias to Threat







Pollack et al DOI: 10.1037/0021-843X.112.3.323

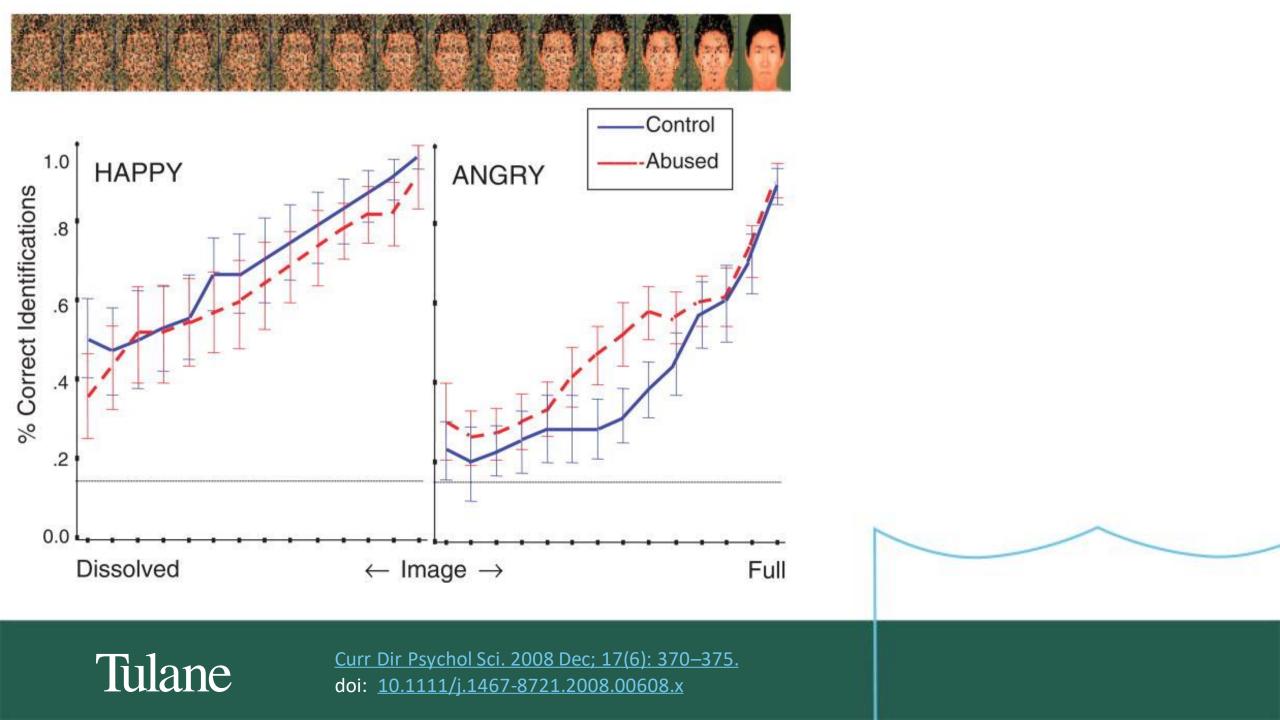




MYTH BUSTER #3

Just because kids say that they are not scared, doesn't mean their body isn't processing threat





MYTH BUSTER #4

All oppositional and aggressive behavior is because kids are stubborn











META ANALYTIC/SIGNIFICANT REPLICATION: TELOMERES, HEALTH, & EXPOSURES

Obesity

Cardiovascular disease

Gender

Race

Child Abuse

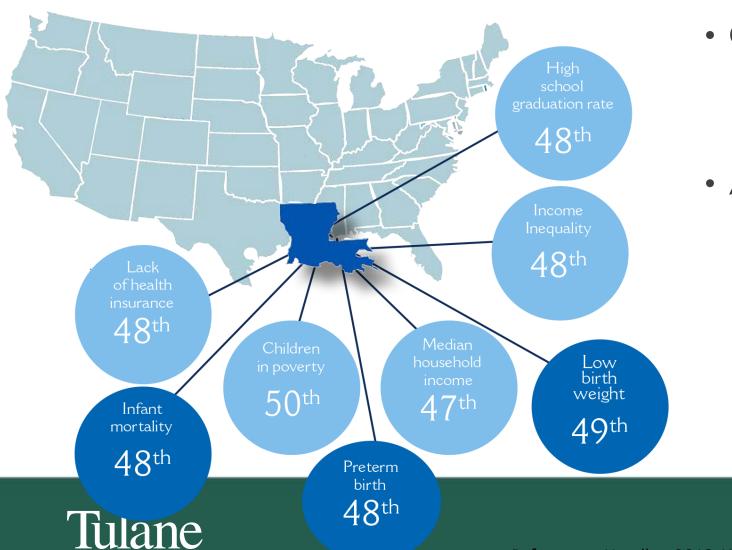
Early adversity







NEW ORLEANS CONTEXT



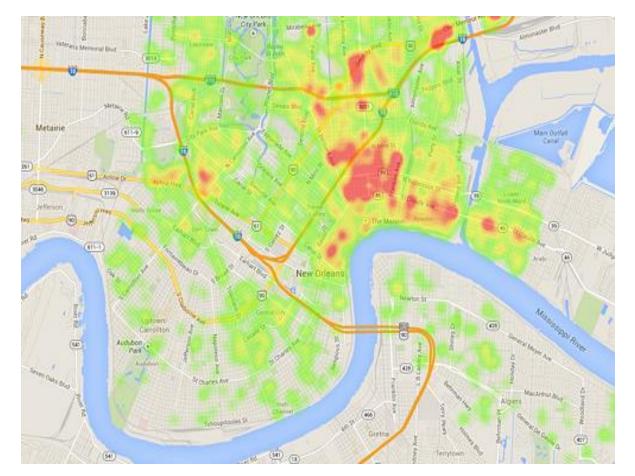
- One of the most violent states
 - Based on homicide, violent crime, high availability of firearms

• Also...

 2nd in the country in the rate of women murdered by men (majority are partners)

References: Handley, 2012; Wellford et al., 2011; Center, 2016; Annie E. Casey Foundation, 2012

Neighborhoods and health



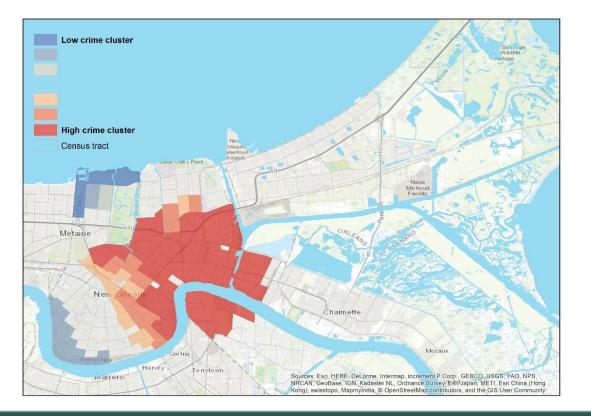
http://crime-heatmap.herokuapp.com/

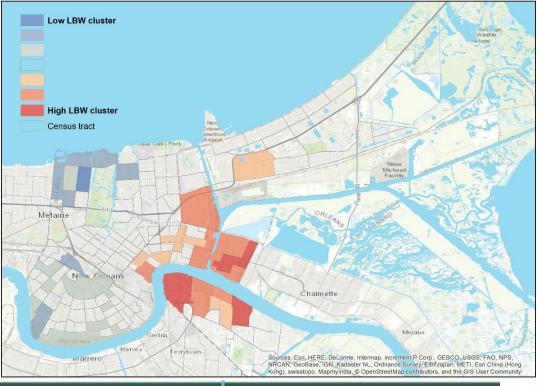


The overlap between early childhood predictors and neighborhood factors

Heat map of crime

Heat map of low birth weight



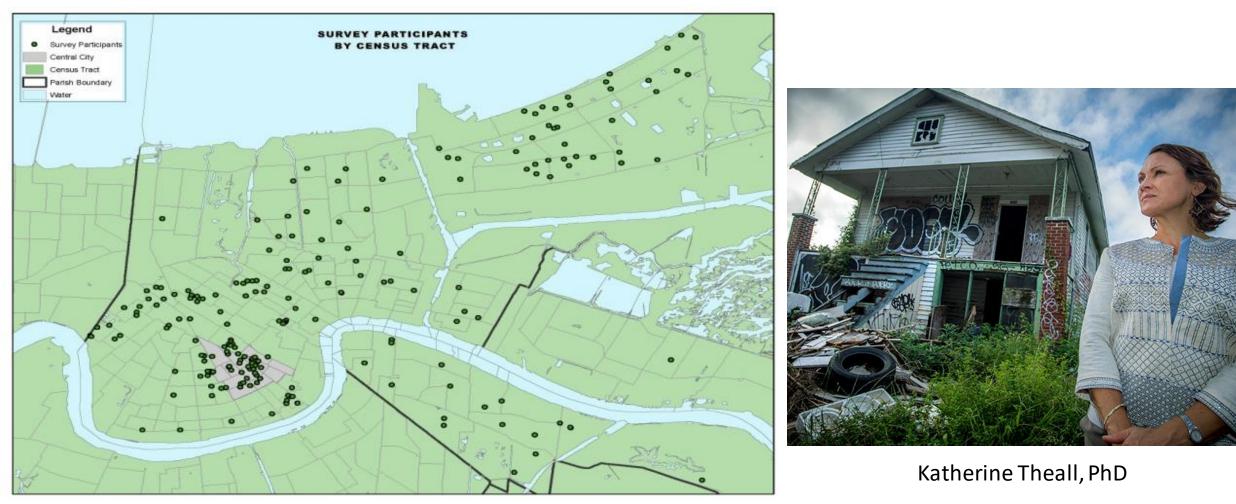






New Orleans Stress Physiology and Children Study

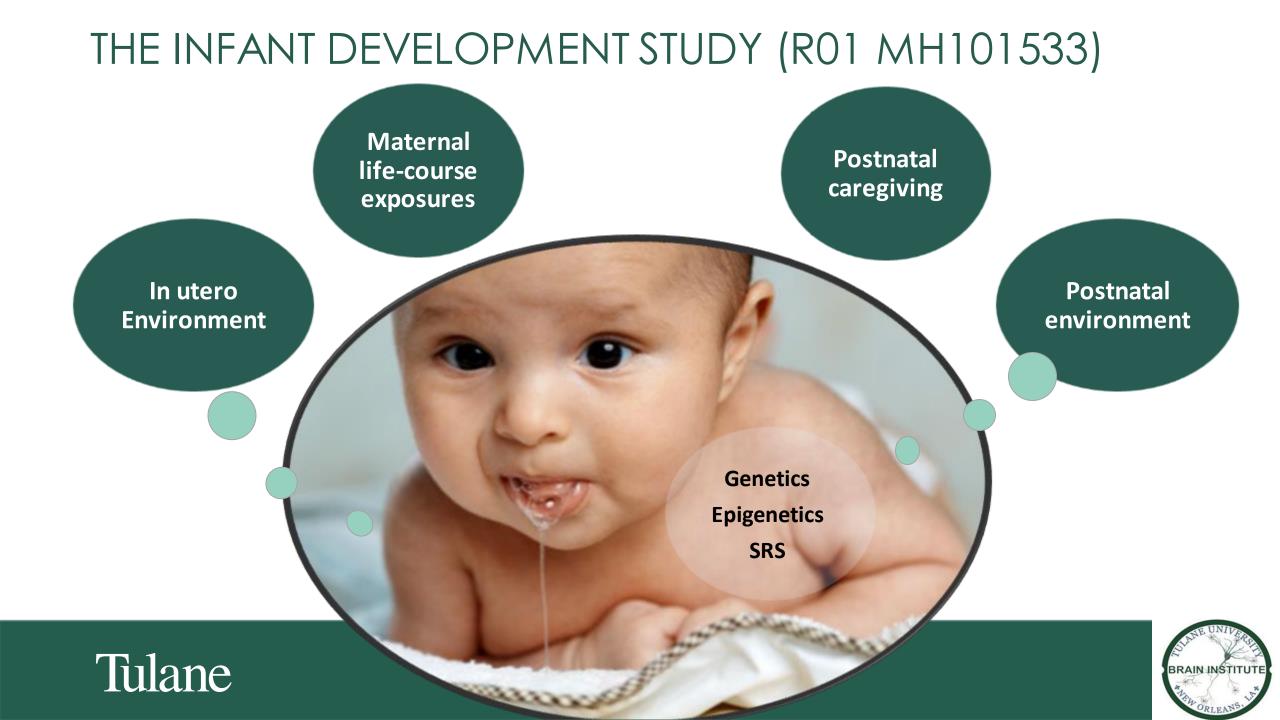
Community recruited African American children: age 4-16
 Examine the effect of multiple stressors on telomere length







	Beta coefficient (β)	Standard Error (SE)	p-value	
Model 2. Direct Effect of Neighborhood Do	mestic Violence		145	
Intercept	1.46	0.014	< 0.001	
Domestic violence calls within 1 mile	-0.007	0.001	< 0.001	
Child sex (female vs. male)	0.081	0.004	< 0.001	
Maternal age (years)	0.0003	0.001	0.50	
Maternal education (ordinal)	-0.002	0.002	0.37	
Prenatal smoke exposure (yes)	-0.005	0.006	0.36	
Current smoking in child's home (yes)	-0.007	0.006	0.26	
Child witnessed neighborhood violence	-0.025	0.004	0.53	
R-square	6.7%			
Model 3. Direct Effect of Neighborhood Vio	lent Crime			
Model 3. Direct Effect of Neighborhood Vio		0.014	< 0.001	
Intercept	1.45	0.014	< 0.001	
Intercept Violent crimes within 1 mile	1.45 - 0.006	0.002	0.0002	
Intercept Violent crimes within 1 mile Child sex (female vs. male)	1.45 -0.006 0.082	0.002 0.003	0.0002 < 0.001	
Intercept Violent crimes within 1 mile Child sex (female vs. male) Maternal age (years)	1.45 -0.006 0.082 0.0004	0.002 0.003 0.001	0.0002 < 0.001 0.43	
Intercept Violent crimes within 1 mile Child sex (female vs. male) Maternal age (years) Maternal education (ordinal)	1.45 -0.006 0.082 0.0004 -0.002	0.002 0.003 0.001 0.002	0.0002 < 0.001 0.43 0.48	
Intercept Violent crimes within 1 mile Child sex (female vs. male) Maternal age (years) Maternal education (ordinal) Prenatal smoke exposure (yes)	1.45 - 0.006 0.082 0.0004 -0.002 -0.002	0.002 0.003 0.001 0.002 0.005	0.0002 < 0.001 0.43 0.48 0.73	
Intercept Violent crimes within 1 mile Child sex (female vs. male) Maternal age (years) Maternal education (ordinal)	1.45 -0.006 0.082 0.0004 -0.002	0.002 0.003 0.001 0.002	0.0002 < 0.001 0.43 0.48	
Intercept Violent crimes within 1 mile Child sex (female vs. male) Maternal age (years) Maternal education (ordinal) Prenatal smoke exposure (yes) Current smoking in child's home (yes)	1.45 -0.006 0.082 0.0004 -0.002 -0.002 -0.006	0.002 0.003 0.001 0.002 0.005 0.005	0.0002 < 0.001 0.43 0.48 0.73 0.28	
ntercept Violent crimes within 1 mile Child sex (female vs. male) Maternal age (years) Maternal education (ordinal) Prenatal smoke exposure (yes) Current smoking in child's home (yes) Child witnessed neighborhood violence	1.45 -0.006 0.082 0.0004 -0.002 -0.002 -0.006 -0.003	0.002 0.003 0.001 0.002 0.005 0.005	0.0002 < 0.001 0.43 0.48 0.73 0.28	



Neighborhood Effects: newborns

	Total Crime per 1000	Domestic Violence Calls per 1000
TELOMERE LENGTH NEWBORN	-0.05(0.02); p=0.028	-0.04(0.04); p=0.38
TELOMERE LENGTH 4 MONTHS	-0.53(0.16); <mark>p=0.002</mark>	-0.01(0.006); p=0.05
TELOMERE LENGTH 12 MONTHS	-0.19(0.05);	-0.17(0.14); p=0.24
CORTISOL REACTIVITY 12 MONTHS	-0.15(0.05);	0.01(0.02); p=0.53
CORTISOL RECOVERY 12 MONTHS	-0.05(0.02 <mark>); p=0.02</mark>	-0.04(0.02);p=0.08



BLIGHTED PROPERTIES AND FAMILY VIOLENCE IN LOCAL COHORTS

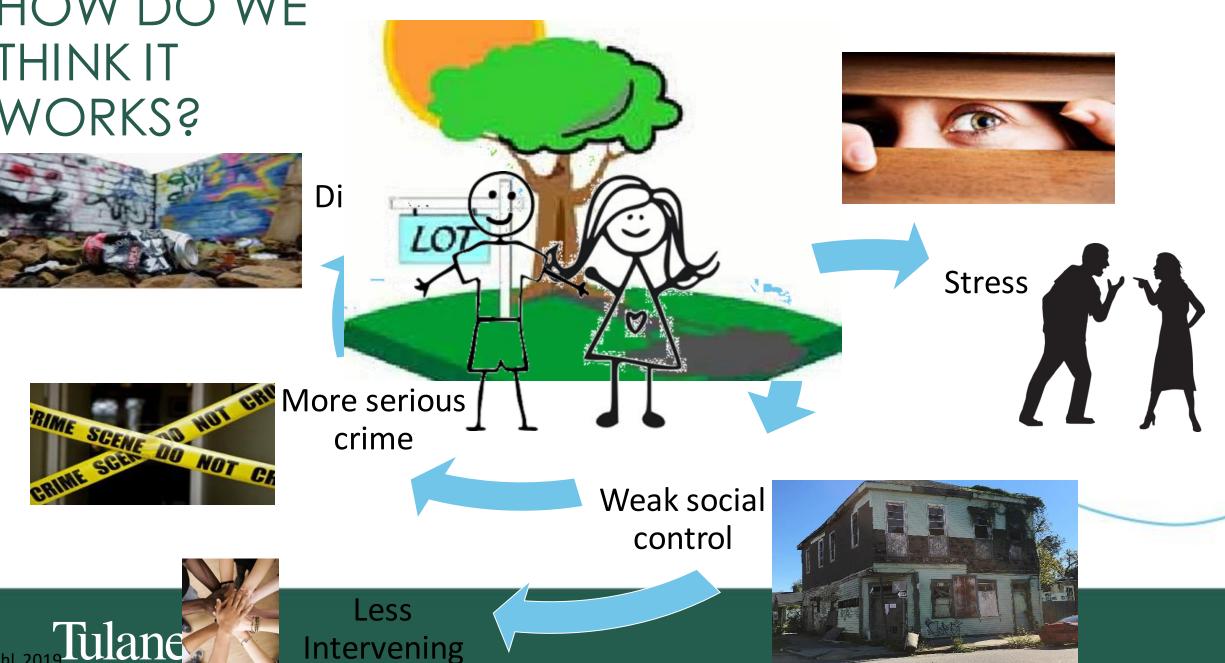
- Longitudinal cohort of mothers and children (N=500)
 - Experiencing physical or psychological maltreatment, or neglect at 18-months of age > 2x's as high for children living in neighborhoods with a high blighted property rate (OR=2.12, 95% CI=1.08, 4.59)
 - Likelihood of experiencing maltreatment
 increased by 2% for each unit increase in the rate
 of blighted property

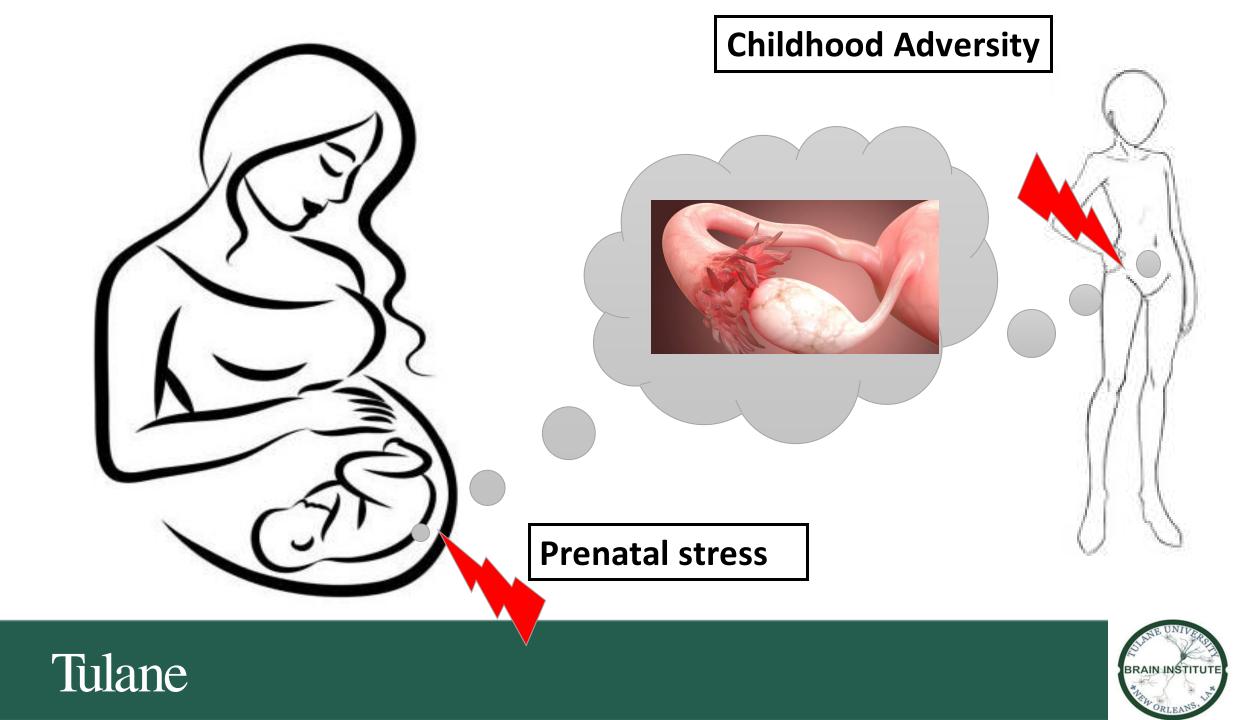


HOW DO WE THINK IT WORKS?

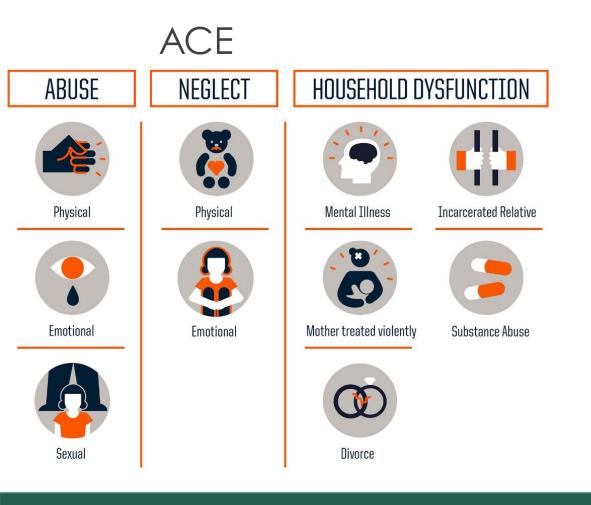


Hohl, 2019 Tulane





Maternal Stress



Prenatal Stress

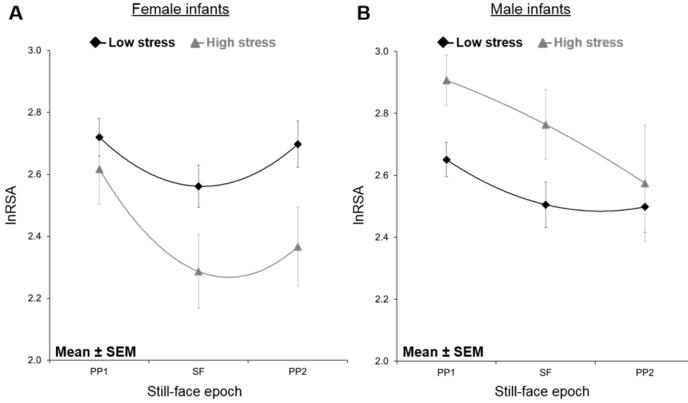
- Five measures- factor analyses
 - Depression (EDS)
 - Prenatal life events
 - Chronic Strain
 - Perceived stress
 - RINI anxiety
 - 17% of mothers reported as High Prenatal stress





Tulane

Maternal stress and INFANT RSA at 4 Months



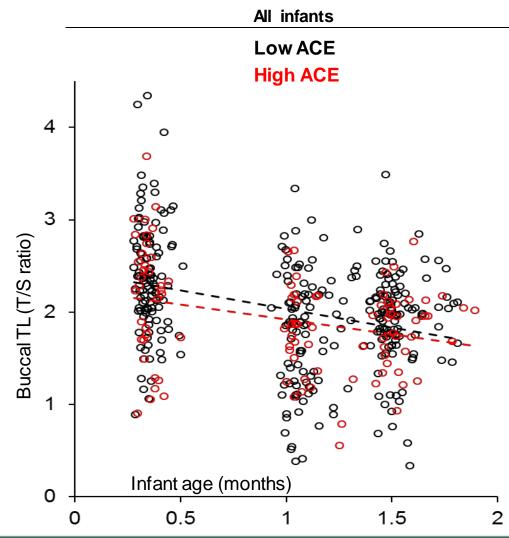
Gray S et al. (2017). Thinking across generations (JAACAP)

Infant RSA	B (SE)	p Value
Intercept	3.22 (0.89)	<.001
Time	-0.48 (0.13)	<.001
Time ²	0.07 (0.03)	.05
Sex	0.03 (0.09)	.75
Race	0.09 (0.02)	.26
Prenatal stress	0.75 (0.04)	.05
ACEs	-0.20 (0.09)	.04
Gestational age	-0.00 (0.02)	.84
Maternal education	-0.02 (0.03)	.55
Prenatal stress×time ²	-0.02 (0.01)	.05
Prenatal stress×sex	-0.43 (0.18)	.02
Time ² ×sex	0.02 (0.01)	.02





Maternal ACE and infant TL trajectory



		1: Main ects	Model 2: Adjusted model	
Sample size	155 (4	28 obs.)	155 (428 obs.)	
	β	P-value	β	P-value
Age	-1.757	<0.0001	-1.145	<0.0001
Age ²	0.744	<0.0001	0.005	<0.0001
ACE score	-0.031	0.033	-0.038	0.024
PNMS score			0.027	0.30
Sex			-0.050	0.41
Maternal depression			0.003	0.97
SES			-0.013	0.51
Race			-0.036	0.49
Maternal age			-0.002	0.79
Gestational age			-0.009	0.66

Tulane



The moderation of maternal ACE exposure and infant externalizing by infant TL attrition.

	EXT				
	Mair	n effects		tion by TL rition	4.18
Sample size		136		136	
	β	P-value	β	P-value	ioi or ioi
Intercept	3.798	<0.0001	3.845	<0.0001	3.90
ACE score	0.029	0.005	0.014	0.17	de la
TL attrition			-0.105	0.024	
ACE x TL attrition			0.031	0.027	Externalizing
PNMS score	-0.014	0.41	-0.010	0.53	9 <u>4</u> <u>3.35</u>
Sex	-0.027	0.48	-0.035	0.35	
Race	-0.004	0.91	-0.006	0.84	
SES	0.008	0.46	0.013	0.25	3.07 3.0 1.5 ACE score
Maternal depression	0.118	0.034	0.111	0.044	0.0 -1.5
					Telomere attrition

Esteves, K et al. (in press) American Journal of Psychiatry

Caregivers as Biological bubble wrap?



Interventions that get at Biology: ABC



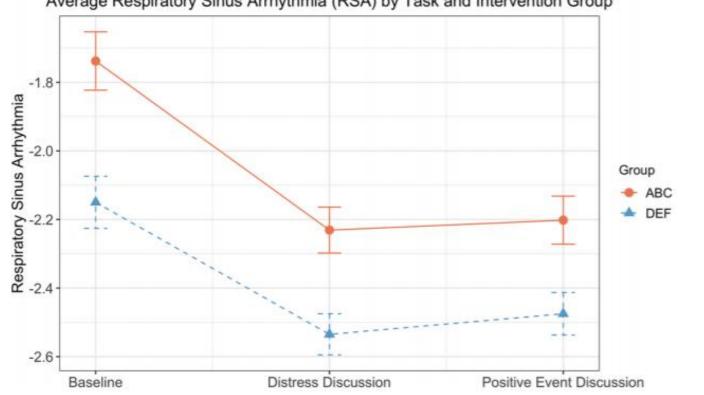


Attachment & Biobehavioral Catch-up



IMPACT OF ABC ON ANS- AGE 9

A.R. Tabachnick, et al.

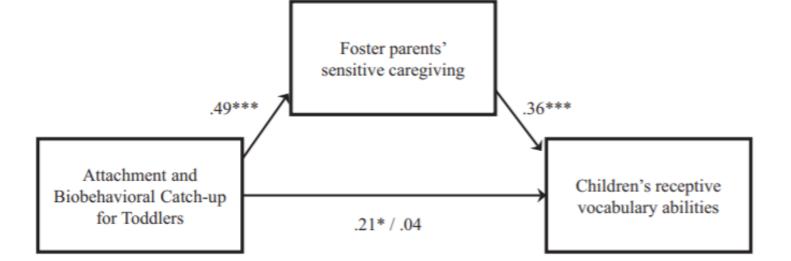


Average Respiratory Sinus Arrhythmia (RSA) by Task and Intervention Group



IMPACT OF ABC ON LANGUAGE DEVELOPMENT

FIGURE 2 The positive effect of the Attachment and Biobehavioral Catch-up for Toddlers intervention on the receptive vocabulary abilities of toddlers in foster care through improvements in foster parents' sensitive caregiving. Values represent standardized regression coefficients (N = 88, *p < 0.05, ***p < 0.001)



DOI: 10.1111/desc.12753



Impact of ABC on Executive function

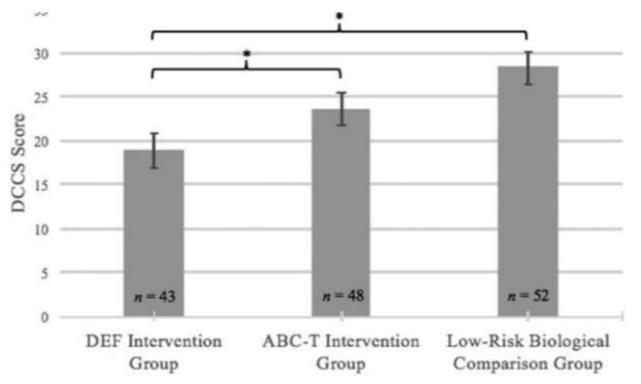


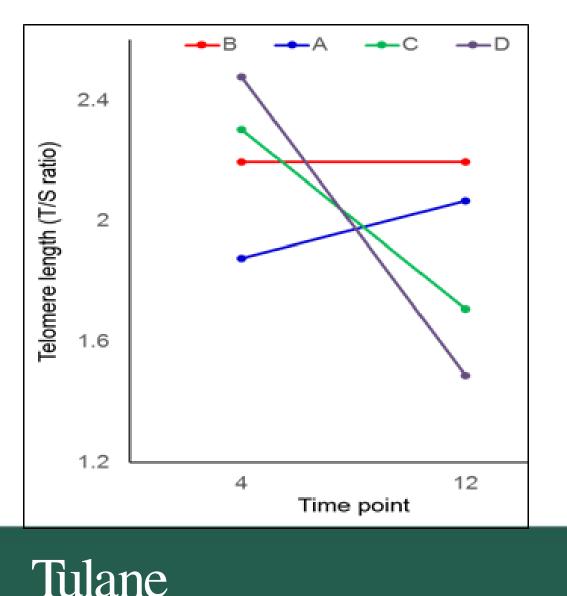
Figure 2.

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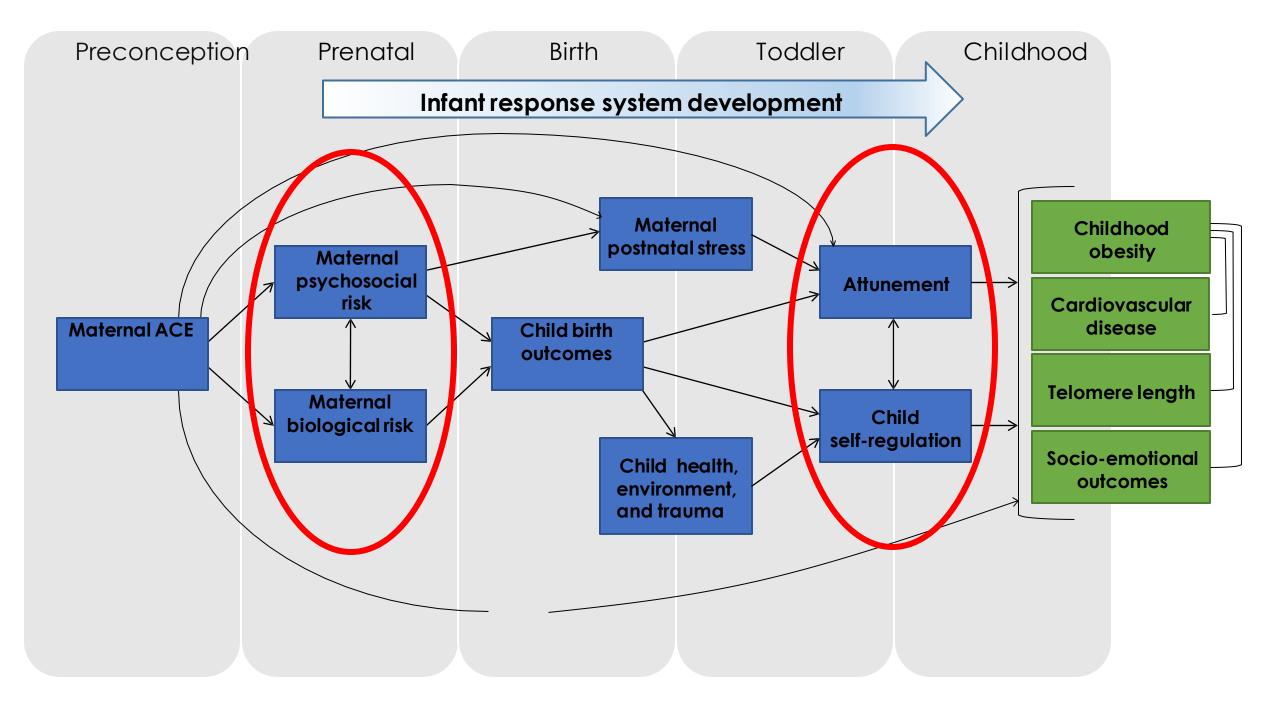
Children's cognitive flexibility as measured by performance on the Dimensional Change Card Sort Task (DCCS). ABC-T, Attachment and Biobehavioral Catch-up for Toddlers; DEF, Developmental Education for Families. *p < .05.

Dev Psychopathol. 2017 May ; 29(2): 575–586. doi:10.1017/S0954579417000190.

BUFFERING IMPACT OF ATTACHMENT



- Attachment
 - Develops between 7-9 months
 - Parents are "goto" person
 - Parents also "safe base"
 - Classifications
 - Secure
 - Avoidant
 - Resistant
 - Disorganized



TAKE HOME POINTS

- Adversity and trauma effect the cells and connections in the brain
- Adversity, within and across generations, may influence developmental tempo
- Caregiving may be the ultimate bubble wrap



"UNLESS SOMEONE LIKE YOU Cares a whole awful lot, Nothing is going to get better. It's not."

-THE LORAX





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- Andrew Dismukes
- Livia Merrill
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National Institute of Mental Health





Questions?







Leveraging your Advocacy and State Partners

Presenters

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- Pamela Harris, President and CEO, Mile High Early Learning

