GETTING READY FOR SCHOOL

Starts at Birth

STATE OF INDIANA’S INFANTS AND TODDLERS

In Indiana, this is an exciting time of policy innovation. More attention is being focused on the earliest years of life than ever before in the state. This policy brief is intended to push further focus and investment on the first three years of life.

The first three years of a child’s life are a time of great opportunity and great vulnerability. A child’s early experiences shape the brain’s architecture to either support a strong or fragile foundation for learning, health, and success in the workplace. Strong, positive relationships with parents and other caregivers are the building blocks for healthy development. All domains of child development - social emotional, physical, cognitive, communication and adaptive - are intertwined during the early years.

Indiana’s ability to assure children are ready for school, can read at grade level by third grade, graduate from high school, pursue a post secondary education and contribute to the economy is influenced by the healthy development of our youngest children. All children in Indiana need strong families, good health and positive early learning experiences to foster healthy brain development and realize their full potential.

Everyone has a role in supporting the positive development of young children!

Programs and intervention targeted towards the earliest years (ages 0-3) have the highest rate of return to investment in human capital (Heckman, 2007).
Young children develop in the context of their families, where supportive relationships nurture their growth. During these early years, several factors like family stress, multiple moves, negative environmental effects, and abuse and neglect can impair the development of infants and toddlers.

In the U.S., **infants and toddlers are the age group most likely to live in poverty** with 25% living below the federal poverty level (FPL) in 2013 ($18,751 for a family of three). In Indiana, a significant percentage of infants and toddlers live in low-income families, leaving them particularly vulnerable. Research shows that poverty at an early age can be especially harmful, affecting later achievement and employment.

Living in poverty during infancy and the early childhood years is especially harmful. Children with risk factors, such as living in low-income households, abuse or neglect, and substance abuse have a higher incidence of developmental delays and disabilities than the general population. More than half of infants and toddlers in poverty have had at least 1 negative experience that could undermine their development.

Prolonged “toxic” stress, such as that produced by poverty, neglect, or exposure to violence or abuse, can negatively affect a child’s social, emotional, and cognitive development and impact brain development. Disparities can emerge as early as 9 months and widen by 24 months old.

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*Indiana’s heroin epidemic is now having a major effect on children as the number of kids removed from homes of addicts has reached a crisis level. In March 2015, Marion County saw 419 new cases of child abuse or neglect. Most of them, according to children advocates, were related to heroin. Marion County Juvenile Court Judge Marilyn Moores called the heroin epidemic a tsunami, and said that, “Indiana’s children are drowning in the waves.”*
In Indiana, we know that good health is the foundation from which young children grow. Poor health in a young child can lead to developmental problems in other areas. Good health and school readiness begin long before a child enters a classroom, even before a child is born. Young children who are healthy and safe are more prepared to succeed in school and life.

Unfortunately, too many Hoosier mothers are not making healthy lifestyle choices and are not receiving early prenatal care, which increases the chance of prematurity and low birth weight, and a host of chronic conditions throughout life. Indiana ranks 7th in the country for the number of babies who die during the first year of life. There is a significant disparity between white and black infant mortality rates. Black infants are over 2 times more likely to die than white infants in their first year of life.xvi

Developmental delays are another key indicator of child health. More children in Indiana have a developmental delay than nationally (IN 4.9% vs. US 3.6%). In Indiana fewer children ages 10 months to 5 years old receive developmental screening than national rates (IN 24% vs. US 31%).xvii For autism spectrum disorders, the recommended age of diagnosis is under 3 years of age. The portion of children in Indiana diagnosed under 3 years of age is half the national average.

As a result, children who may need early intervention services are not being screened and referred until a much older age, and timely early intervention services can positively affect the healthy development of infants and toddlers.
POSITIVE EARLY LEARNING EXPERIENCES

For infants and toddlers, learning unfolds in many settings, including the home, early learning programs and services. Learning gaps between children of different income levels appear early and widen long before a child enters school. Caregiver relationships that are sensitive, responsive, and that stimulate children’s language and learning are critical as the brain forms the complex web of visual, language, motor, and social-emotional connections essential for later learning. The timeliness, affordability and availability of high quality early learning experiences impact the development of young children.

In 2014, 23,810 Hoosier children were referred to First Steps. Of those children, 9,795 went through the intake and assessment processes, were found eligible and in need of services, and had an Individualized Family Service Plans (IFSP) written.

Unfortunately, too few infants and toddlers in Indiana have access to high-quality early care and education while their parents work. Child care is the second largest expense, behind housing, for families. Nearly two thirds of young Hoosier children (334,372 children ages 0-5) likely need care, because they live in families where all parents are in the labor force (65.7%). Yet the high cost of child care puts quality care out of reach for many families.

### EARLY LEARNING EXPERIENCES FOR INDIANA’S YOUNG FAMILIES

- 53% Parents or family members who read to their 0-5 child every day
- 4% Infants and toddlers who receive Part C Early Intervention Services
- 27% Children receiving federal child support under age 3
- 38% Cost of infant child care as percentage of income for single mothers

### NUMBER OF CHILDREN REFERRED AND ELIGIBLE FOR FIRST STEPS 2000 - 2014

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### AVERAGE ANNUAL COST OF HIGH QUALITY INFANT & TODDLER CARE BY PROGRAM TYPE, 2015

<table>
<thead>
<tr>
<th>PROGRAM TYPE</th>
<th>COST PER CHILD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensed Child Care Center (infant care)</td>
<td>$11,749</td>
</tr>
<tr>
<td>Licensed Child Care Center (toddler care)</td>
<td>$10,354</td>
</tr>
<tr>
<td>Registered Ministry (infant care)</td>
<td>$10,044</td>
</tr>
<tr>
<td>Registered Ministry (toddler care)</td>
<td>$9,349</td>
</tr>
<tr>
<td>Family Child Care (infant care)</td>
<td>$7,125</td>
</tr>
<tr>
<td>Family Child Care (toddler care)</td>
<td>$6,841</td>
</tr>
</tbody>
</table>

1 For a married-couple family, this means that both parents are in the labor force. For a single-parent family or subfamily, this means the resident parent is in the labor force.

Indiana Infant Toddler Issue Brief 4
1. PROMOTE FAMILY WELL-BEING AND SUPPORT FAMILIES AS THEIR CHILD’S FIRST TEACHER.

Because children don’t arrive with instruction manuals, all parents can use support and especially those who lack the extended family support, experience, and knowledge of basic parenting skills that are critical to success during pregnancy and through the first few years of a child’s life. Children in at-risk families who participate in high-quality, evidence-based family home visiting programs have improved language, cognitive, and social-emotional development and are less likely to experience child abuse and neglect. Families who participate are more likely to become economically secure through education and employment. xxviixxviiixxix

In Indiana, federal and state funding supports the implementation of three evidence-based models: Healthy Families Indiana, Nurse-Family Partnership, and Early Head Start. As of August 2015, **13,250 families** with infants and toddlers were enrolled in one of these programs with the majority of families served by Healthy Families.

With half of Hoosier families living in poverty, approximately 127,729 children could be eligible to participate in one of the home visiting programs. Of the eligible families, **only 11% are participating** in one of these evidence-based home visiting programs.

**SOLUTIONS**

**WHAT CAN INDIANA DO DIFFERENTLY FOR OUR YOUNGEST HOOSIERS?**

Indiana must build the capabilities of adult caregivers in order to achieve significant outcomes for infants and toddlers.

**11% Receiving Home Visiting Services**

**89% Eligible but NOT Receiving Services**

Of the 13,250 families receiving Home Visiting, the majority (81%) are enrolled in Healthy Families Indiana.
Several local communities also invest in a fourth evidence-based program, Parents As Teachers, through private funding but the number of families served is unknown. There are potentially more evidence-based models that are funded on a smaller scale. For example, Play and Learning Strategies (PALS) is being implemented in West Terre Haute by Hamilton Center.

**EASY WIN**

✔ Identify the families that are served through Parents As Teachers across the state.

✔ Identify the communities with the greatest need for high quality infant and toddler care based on the number of at risk families and the labor force.

**LONG-TERM STRATEGY**

1. Improve transition of care between the children served in one of the four evidence-based home visiting programs and high quality early learning programs.

2. Target the expansion of evidence-based home visiting programs in the communities with the greatest need.

**2. RAISE AWARENESS ABOUT TOXIC STRESS.**

By one year of age, the head circumference, which reflects brain growth, has doubled in size. By three years of age, the child’s brain is 85% of the adult size brain. During the first 3 years, 700 new neural connections are created every second.

What happens when that foundation is shaky because a child doesn’t have access to the stable, nurturing relationships and stimulating environments that build their brains?

Young children who lack at least one loving and consistent caregiver in the earliest years may suffer severe and long-lasting development problems. A series of landmark studies of early brain development (reviewed by Thompson, 2014) show that environmental stress, even among infants and toddlers, can interfere with the proper development of neural connections inside the brain essential to a child’s proper social and emotional development. xxx

In this context, “stress” doesn’t refer to a worried or anxious state of mind, but rather to the body’s physical responses to negative circumstances. High levels of early stress have been linked to impaired behavioral and emotional development as well as numerous health consequences later in life, including high blood pressure, cardiovascular disease, obesity and diabetes.
When positive relationships are fostered between parents and children in a healthy environment, children thrive and families are strengthened. However, in the absence of these critical building blocks, children’s growth and development is limited, and even hindered at times, leading to developmental delays, lack of being ready for kindergarten, falling behind in academic milestones, limiting graduation rates and having a successful workforce. The implications are tremendous.

**EASY WIN**

- Prioritize children with exposure to multiple risk factors for participation in evidence-based home visiting and high quality early childhood education programs.
- Promote full implementation of the Infant Mental Health Endorsement® throughout Indiana across early childhood providers in collaboration with the Indiana Association for Infant and Toddler Mental Health.

**LONG-TERM STRATEGY**

1. Implement screening for social and emotional difficulties that could be early signs of toxic stress in well child visits.
2. Develop a two-generation approach to enhance the executive function of not just young children but their parents too across infant toddler programs.

**3. PROMOTE AWARENESS ABOUT THE WORD GAP.**

How parents and caregivers speak to their children significantly affects intelligence, literacy, and academic success later in life, according to University of Kansas child psychologists Betty Hart and Todd Risley. In a landmark study, Hart and Risley, found that the number of words and encouragements and the breadth of vocabulary heard by a child during the first three years of life can dramatically affect language development and I.Q. From their study, the researchers estimated children in professional families hear approximately 11 million words per year, while children in working class families hear approximately 6 million, and children in families receiving public assistance hear approximately 3 million words annually. xxxi

**CUMULATIVE LANGUAGE EXPERIENCES**
Children from high-income families are exposed to 30 million more words than children from families on welfare.

**EASY WIN**

- Promote local efforts to provide free books to young children and their families in collaboration with local libraries and benefactors.
- Create a social media campaign, mimicking the "Read Aloud" campaign for parents.
- Support parents in conversing more with their infants and toddlers during everyday routines.

**LONG-TERM STRATEGY**

1. Integrate family literacy in high quality early childhood education programs.
2. Improve partnerships between libraries, early childhood education and home visiting to promote early language acquisition to decrease the word gap.

**4. ENSURE AFFORDABLE, ACCESSIBLE, HIGH QUALITY EARLY CHILDHOOD EDUCATION FOR INFANTS AND TODDLERS.**

When ECE is high quality it can also provide the early learning experiences needed to help prepare children for school and have lasting effects into adulthood, particularly for children who are at risk for starting school behind their peers. Children who attend high-quality programs score higher on tests of language and cognitive skills and demonstrate stronger social and emotional development than children who attend low-quality programs.

Our most vulnerable children spend the years most critical to their brain development without access to the high-quality care that could most dramatically impact their lives. As previously stated, there are over 250,000 infants and toddlers in Indiana. Of those, 65% are in families where they require care outside of the home, because they live in families where all parents are in the labor force. However, there are only 24,551 high quality slots available for infants and toddlers, which is just enough for 15%. In addition, approximately 44% of infants and toddlers in need of care are receiving care via a friend, family or neighbor (FFN) where the level of quality is unknown.

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>250,449</td>
<td>Number of infants and toddlers</td>
</tr>
<tr>
<td>162,500</td>
<td>Infants and toddlers in need of child care because families are in the labor force</td>
</tr>
<tr>
<td>90,206</td>
<td>Number of “known” ECE slots</td>
</tr>
<tr>
<td>24,551</td>
<td>Number of high quality infant toddler slots</td>
</tr>
</tbody>
</table>
**SOLUTIONS**

**EASY WIN**

- Identify the communities with the greatest need for high quality infant and toddler care based on the number of at-risk families and the labor force in order to target the expansion of high quality infant and toddler slots in the communities with the greatest need.

**LONG-TERM STRATEGY**

1. Increase the availability of high quality, affordable infant and toddler slots to 100,000.
2. Identify opportunities to support quality improvement efforts for FFN care.

**5. IDENTIFY DEVELOPMENT DELAYS EARLIER AND ENSURE CAPACITY TO RECEIVE AND PROCESS REFERRALS.**

Healthy child development occurs over a continuum. Children reach “milestones” across the continuum but within accepted timeframes. If milestones are not met within the expected timeframe, concerns arise about developmental delays that may contribute to a problem with a child’s growth and learning.

In Indiana more children have developmental delay than national averages but fewer young children receive developmental screening. Furthermore, there is marked variation in children receiving a screening based on a child’s zip code. Marion County has the highest majority of primary care professionals providing screenings. Whereas, most rural areas primary care professionals are not providing developmental screening.

The basic architecture of the brain is constructed early in life and continues into adulthood. Plasticity, or the ability for the brain to adapt, is greatest in the first years of life and decreases with age. This period of brain “plasticity” is the greatest period for early intervention services.

Nearly all families participating in First Steps reported that early intervention services have helped the family effectively communicate their children's needs and help their children develop and learn.

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**AVAILABILITY OF KNOWN INFANT AND TODDLER SLOTS**

<table>
<thead>
<tr>
<th>Non-High Quality Slots</th>
<th>High Quality Slots</th>
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<tbody>
<tr>
<td>66%</td>
<td>34%</td>
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-72,294 unknown care via friend and family
A public and private partnership of Indiana State Department of Health Children’s Special Health Care Services, Riley Children’s Foundation, Indiana University School of Medicine Department of Pediatrics, and hospitals is working to increase the identification of developmental delays through the establishment of regional “Early Evaluation Hubs.” The Early Evaluation Hubs perform diagnostic assessments, medical work up, appropriate testing and process referrals for intervention services. The Early Evaluation Hubs also disseminate screening materials, provide trainings on early brain development and help pediatric offices establish procedures to collect screening data. Through all of these efforts, the Early Evaluation Hubs are greatly improving the number of children who are being screened at an earlier age and identified with a developmental delay for early intervention services.

**EASY WIN**

- ✓ Identify the various initiatives and partners working to ensure every child receives a formal standardized screening and intervention services.
- ✓ Develop a policy for early childhood education programs to carry out developmental screening.
- ✓ Promote the “Learn the Signs. Act Early.” campaign among families and early childhood education programs.

**LONG-TERM STRATEGY**

1. Explore the implementation of the national model, Help Me Grow.
2. Expand the Early Evaluation Hub model statewide.

**6. IMPROVE COORDINATION AND COLLABORATION BETWEEN ALL SYSTEMS TOUCHING CHILDREN AGED BIRTH TO 3 AND THEIR FAMILIES.**

When families with very young children are in need of support, one of the greatest challenges is navigating the array of services and the differing processes that each service entails. At the state level, there are three key state agencies or five state offices that administer early learning programs:

- Indiana FSSA, Office of Early Childhood and Out of School Learning
- Indiana FSSA, Division of Mental Health and Addiction
- Indiana FSSA, First Steps
- Indiana Department of Child Services
- Indiana State Department of Health, Maternal and Child Health
Solutions

At the local level, early learning organizations and professionals are patching together various programs and funding sources to serve infants, toddlers, and their families. Indiana can increase families’ access to and use of appropriate services by improving coordination and communication across state and local agencies. The Early Learning Advisory Committee could take a leadership role in helping improve the coordination and collaboration.

Easy Win

- Include an infant–toddler focus in the structure of ELAC.

Long-term strategy

1. Maximize existing funding and create new financing mechanisms to sustain and expand services for infants, toddlers, and their families.
2. Include measures of infant–toddler health, development, and well-being in ELAC’s dashboard and monitor key indicators. Provide cross-sector professional development and competency based qualifications for the early childhood workforce.

7. PROVIDE CROSS-SECTOR PROFESSIONAL DEVELOPMENT AND COMPETENCY BASED QUALIFICATIONS FOR THE EARLY CHILDHOOD WORKFORCE.

Professionals working with infants, toddlers and their families need the skills to effectively support children’s development and learning. Indiana’s training opportunities lack coordination across child care, home visiting programs, and other early learning professionals.

Easy Win

- ELAC’s Workforce and Professional Development workgroup should have a priority in 2016 to identify opportunities for cross-sector professional development for the early childhood education (ECE) workforce, specifically those that work with infants and toddlers.
- Provide training for all ECE professionals -- medical, developmental, early childhood education -- on the Adverse Childhood Experiences (ACE) Study and Toxic Stress.

Long-term strategy

1. Adopt three recommendations (#1, #9, and #11) from the Institute of Medicine’s report on Transforming the workforce for children birth through age 8: A unifying foundation: xxxvi
2. Revise the Indiana Core Knowledge and Competency framework to include a focus on the development of executive function knowledge and skills for the ECE workforce.
CONCLUSION

In the past three years Indiana has made tremendous progress in moving forward its investment and focus on our youngest children and their families. The creation of the Early Learning Advisory Committee and the implementation of the first state-funded pre-kindergarten program are positive investments for our future. However, to foster the fullest potential of our youngest Hoosiers and to ensure an even greater return on our investment, policy and decision makers and communities need to invest even earlier with our infants and toddlers.

Indiana must build the capabilities of adult caregivers in order to achieve significant outcomes for infants and toddlers. A young child's well-being is directly tied to the quality of relationships and the skills and emotional well-being of the people who care for him or her. Effective interventions for young children should focus on the people caring for the child.

RECOMMENDATIONS

1. Promote family well-being and support families as their child’s first teacher.
2. Raise awareness about toxic stress.
3. Promote awareness about the word gap.
4. Ensure affordable, accessible, high quality early childhood education for infants and toddlers.
5. Identify development delays earlier and ensure capacity to receive and process referrals.
6. Improve coordination and collaboration between all systems touching children aged birth to 3 and their families.
7. Provide cross-sector professional development and competency-based qualifications for the early childhood workforce.

ABOUT US

The Indiana Happy Babies Brain Trust workgroup was formed in 2014 with the generous support of the W.K. Kellogg Foundation and Zero to Three to raise awareness of infants and toddlers in Indiana.

Members of the workgroup include Christina Commons, FSSA Division of Mental Health and Addiction; Kirsten Eamon-Shine, Early Learning Indiana; Jim Elicker, Purdue University; Christine Garza, Early Learning Indiana Early Head Start; Lisa Henley, Indiana Association for Child Care Resource and Referral; Stacy Herald, Indiana Department of Child Services; Cassondra Kinderman, Indiana State Department of Health, Maternal and Child Health; Maggie McCall, FSSA First Steps; Indiana State Department of Health; Hanan Osman, Indiana Association for the Education of Young Children; Pamala A. Richard, Transition Resources Corporation Early Head Start; Meghan Smith, FSSA Office of Early Childhood and Out of School Learning; Stephan Viehweg, Riley Child Development Center, Department of Pediatrics, Indiana University School of Medicine; Kresha Warnock, Ball State University; and Mary Ann West, Indiana State Department of Health, Maternal and Child Health.

Author: Amanda Lopez, President, Transform Consulting Group
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2. Ibid.


4. U.S. Census Bureau, “Women 16 To 50 Years Who Had a Birth In The Past 12 Months By Marital Status And Labor Force Status: Table B13012.” American Community Survey. U.S. Census Bureau, 2013, www.census.gov. Mothers with young infants returning to or entering the labor force indicate the level of need for high quality child care that meets the needs of infants and toddlers.


6. 2009-2013 American Community Survey 5-Year Estimates, Tables B17022 & B17010


10. Ibid.


14. Ibid.


