

Excerpt from the 2020 Prenatal-to-3 State Policy Roadmap



# NURTURING AND RESPONSIVE CHILD CARE IN SAFE <u>SETTINGS</u>

When children are not with their parents, they are in high-quality, nurturing, and safe environments.



## WHY IS NURTURING AND RESPONSIVE CHILD CARE IN SAFE SETTINGS AN IMPORTANT PRENATAL-TO-3 GOAL?

The developing brain of a young child depends on secure attachments with caregivers. Serve-and-return interactions—in which adults respond consistently and appropriately to a child's cries, babbles, and other bids for connection—provide vitally important positive stimulation and protect the developmental process from disruption due to stress.¹ These interactions, so fundamental to shaping brain architecture, are just as important when children are in child care as when they are at home with their parents. But just as parents need support so that they can focus on connecting with children, so do caregivers in child care settings. Education and training, financial security, food security, health and wellbeing—all of these factors can affect caregivers' interactions with children.<sup>2,3,4</sup> But research shows that child care workers commonly earn wages insufficient for meeting basic needs and that they experience high rates of food insecurity, as well as poor mental wellbeing.<sup>5</sup> Those caregivers who work with infants and toddlers typically earn even lower wages than their peers who work with children ages 3 to 5.<sup>6</sup>

Nearly 7 million children are enrolled in child care centers in the United States, and approximately 60% of those children are 3 years old or younger. The science makes clear that financial hardship, poor health, and threats to emotional wellbeing diminish the quality of caregivers' interactions with young children. However, it remains unclear how best to leverage components of child care—such as subsidy rates, workforce qualifications and compensation guidelines, or class sizes and child-caregiver ratios—to improve these interactions. Observational tools, such as the Classroom Assessment Scoring System (CLASS) and Environment Rating Scales (ERS), can be used to track and assess classroom safety and quality, but "process" quality in particular (the richness of classroom interactions and learning experiences) can be difficult to identify and measure, and implementing the tools can be costly. These tools are evolving and improving to accommodate the growing awareness of young children's unique developmental needs, but in the meantime working parents still must make decisions about how best to ensure quality care for their children.

Data show that only 24% of infants and toddlers are placed in child care considered to be high quality by established standards.<sup>10</sup> Affordability and proximity of care each play a critical role in determining families' child care options. Child care typically accounts for a substantial portion of a family's budget, approximating—and often eclipsing—the cost of housing.<sup>11</sup> Families who live in low-income neighborhoods typically have fewer child care options than families in other neighborhoods, a factor that limits access to affordable, quality child care—especially for those children for whom quality care is particularly important—and perpetuates existing racial and socioeconomic disparities.<sup>12,13,14</sup>

## MEASURING STATE PROGRESS TOWARD ACHIEVING THIS PN-3 GOAL IS DIFFICULT

It is critical that young children receive quality care and that their caregivers have the resources they need to provide that care—and yet currently no outcome measured nationally provides sufficient insight into states' most effective means of achieving this goal. There is an unacceptable lack of rigorous research that establishes causal links between states' policy efforts and child care quality and children's outcomes. Rigorous research that focuses specifically on infants and toddlers is even more sparse. Another challenge is that states and researchers rely on definitions of "quality," using tools such as CLASS and ERS, that have been slow to accommodate child-caregiver interactions as a central component, and seldom link directly to improvements in children's outcomes. It is imperative that these tools continue to improve and that the evidence base grows to fill in these gaps.

To help eliminate barriers to quality care and disparities in access, a state can use a quality improvement and rating system (QRIS) to systematically assess and provide public information about child care quality. These systems have the potential to be a valuable source of information for families and a means of offering providers incentives for, and assistance with, improvement. States can tie this mechanism to licensing procedures and use it both to set requirements and to promote recommended practices among participating providers. A QRIS allows a state to target areas of specific concern, such as the components of child care settings that affect child-caregiver interactions, and to encourage the adoption of models of care like Early Head Start (EHS). According to our comprehensive review of rigorous research, EHS can be an effective strategy for improving outcomes for young children and families. Many of the elements that contribute to this program's success—such as standards for parent engagement, child care coaching, workforce compensation and qualifications, and class sizes and ratios—can be found in QRIS standards as well. (See page 6 for details.)

Given the potential of QRIS to inform families about the quality of child care available and to encourage providers to improve their quality, states should monitor the proportion of providers that participate in their QRIS. Additionally, given that EHS provides high quality and nurturing care to infants and toddlers, states should track the percentage of income-eligible children who participate in EHS. The following sections provide an overview of these and other strategies.

## EARLY HEAD START IS AN EFFECTIVE STRATEGY TO IMPACT NURTURING AND RESPONSIVE CHILD CARE IN SAFE SETTINGS

Comprehensive reviews of the rigorous research that has been conducted to date identified one effective strategy that states can implement to increase nurturing and responsive child care for infants and toddlers. Early Head Start is a federally funded program that provides "intensive, comprehensive child development and family support services" for families with low incomes. EHS programming has several goals: to promote the healthy social, emotional, cognitive, and physical development of young children; to assist parents in developing positive parenting skills and moving toward their self-sufficiency goals; and to bring together community partners and resources to provide children and families with comprehensive services and support. 17

States currently support EHS by providing supplemental funding, leveraging federal funding, or employing other mechanisms within early childhood systems. However, the current evidence base—which draws primarily from the Early Head Start Research and Evaluation Project—provides neither clear guidance on the optimal level of state investment necessary to ensure effectiveness, nor clear insight into other methods states could employ to support EHS. The table below provides examples of the impact of EHS on nurturing and responsive child care. More detailed information on EHS is available in the Policy Profile section of this report as well as in the Prenatal-to-3 Policy Clearinghouse at pn3policy.org.



Access to EHS

## **Examples of Impact**

Effective state strategy to impact Nurturing and Responsive Child Care in Safe Settings

### **EFFECTIVE STRATEGIES**

Early Head Start

- The share of children participating in good-quality center-based care was 3 times greater among children in FHS (K)
- In center-based care, caregiver-child interactions were better among EHS participants than among nonparticipants (K)

Note: The letters in parentheses in the table above correspond to the findings from strong causal studies included in the comprehensive evidence reviews of the policies and strategies. Each strong causal study reviewed has been assigned a letter. A complete list of causal studies can be found in the Prenatal-to-3 Clearinghouse at <a href="mailto:pn3policy.org">pn3policy.org</a>. Comprehensive evidence reviews of each policy and strategy, as well as more details about our standards of evidence and review method, can also be found at <a href="pn3policy.org">pn3policy.org</a>.

## **OUTCOME**

## Children With Access to EHS

Estimated % of income-eligible children under age 3 with access to Early Head Start

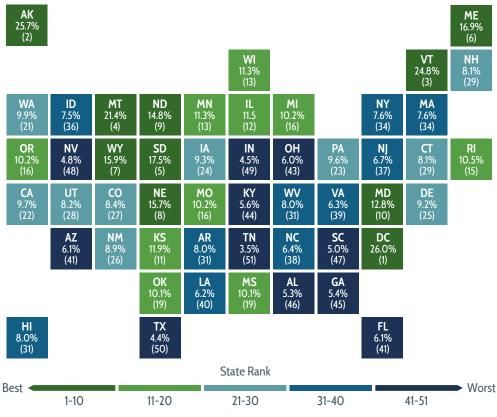
## In Most States, Few Income-Eligible Children Are Served by Early Head Start

Due to limited federal funding and supplemental state investments, few income-eligible children are able to participate in EHS. Currently, the percentage of eligible children who receive EHS services ranges from 3.5% in the worst state (Tennessee) to 26.0% in the best state (the District of Columbia), with the median state serving 8.9% of infants and toddlers. The percentages refer to children with access to funded slots for Early Head Start. More children may actually be served by Early Head Start, but state funding influences the slots available.

#### **5 BEST STATES**

#### **5 WORST STATES**

Rank	State	% Children <3 With Access to EHS	Rank	State	% Children <3 With Acces to EHS
1	DC	26.0%	51	TN	3.5%
2	AK	25.7%	50	TX	4.4%
3	VT	24.8%	48	IN	4.5%
4	MT	21.4%	48	NV	4.8%
5	SD	17.5%	47	SC	5.0%



(Value in parentheses indicates state rank.)

## Few States Supplement Federal Early Head Start Funding

Nine states supplement federal EHS funding with state dollars. In two of those states (Connecticut and Massachusetts), the estimated percentage of income-eligible children with access to EHS is below the median state value of 8.9%.

#### ΑK ME WI VT NH MN WA ID MT ND IL MI NY MA OR NVWY IA IN ОН PA CT RI SD NJ CA UT CO NE MO KY WV VA MD DE $\mathsf{AZ}$ NM KS AR TN NC SC DC OK LA MS $\mathsf{AL}$ GA Ш TX FL Yes No

## Nine States Use State Dollars to Implement EHS

Sources: National Head Start Association report and confirmation emails and phone calls from state EHS experts, as of 2020. For additional information, please refer to the Methods and Sources section of pn3policy.org.

More extensive information on the details and impacts of Early Head Start, and states' progress toward implementing it, can be found in the Prenatal-to-3 Policy Clearinghouse at <a href="mailto:pn3policy.org">pn3policy.org</a>.

## WHAT OTHER SOLUTIONS ARE STATES PURSUING THAT CAN HELP BUILD THE EVIDENCE BASE?

The research is clear that children need high-quality child care environments that foster nurturing relationships between the caregiver and child, and that lead to better child outcomes. However, currently, there is an unacceptable dearth of rigorous evidence in this field, especially for infants and toddlers. The early childhood field should prioritize learning which policies and strategies effectively promote child care quality and better child outcomes.

Building the evidence base is somewhat difficult, because of wide variation in state approaches and inconsistent data collection across states, but more can be done. One of the limitations of the evidence base is that it investigates each policy or strategy in isolation, and evidence from Early Head Start suggests that it is a combination of elements that creates a system of early care and education that cares for caregivers, strengthens families, and promotes child wellbeing. Next is an overview of what states are pursuing and what is known to date with regard to policies that support nurturing and responsive child care.

## Quality Rating and Improvement Systems (QRIS)

Child care settings play a critical role in young children's healthy development, and parents need information to help them identify quality care and evaluate their child care options. A QRIS has the potential to allow a state to facilitate access to this information and demonstrate providers' compliance with established standards of care. State QRIS structure, standards, and incentives vary considerably, and the current evidence base does not make clear which elements of a QRIS lead to more nurturing care and better child outcomes.

Even so, provider participation is key. If providers do not participate in the state QRIS, the state lacks a mechanism for holding providers accountable and for improving child care quality. Additionally, parents cannot evaluate the quality of providers for whom information is not available due to lack of participation in the QRIS. For these reasons, QRIS participation is an important indicator of providers' compliance with state guidelines and an important measure for states to monitor.

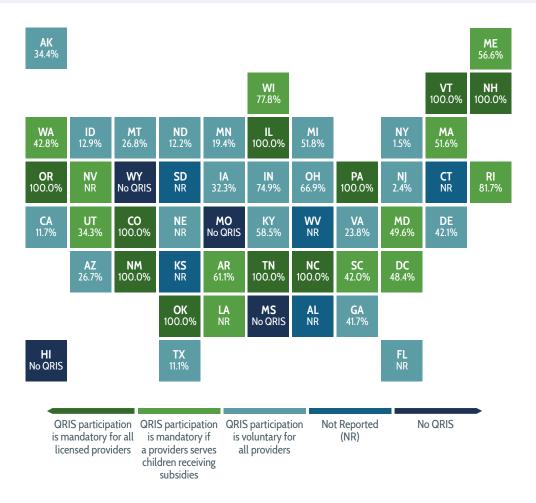


Providers' participation in QRIS may be voluntary, compulsory (e.g., tied to a state's licensing requirements), or some combination thereof. Participation in QRIS varies substantially across states (see map below). In 10 states, every licensed center-based and family child care (FCC) provider is part of the QRIS program (Colorado, Illinois, New Hampshire, New Mexico, North Carolina, Oklahoma, Oregon, Pennsylvania, Tennessee, and Vermont), and in an additional 12 states, providers that serve children who receive subsidies are required to participate in the state's QRIS (Arkansas, the District of Columbia, Louisiana, Maine, Maryland, Massachusetts, Nevada, Rhode Island, South Carolina, Utah, Washington, and Wisconsin). Four states do not have a QRIS (Hawaii, Mississippi, Missouri, and Wyoming). Nine states that have a QRIS do not report participation rate data (Alabama, Connecticut, Florida, Kansas, Louisiana, Nebraska, Nevada, South Dakota, and West Virginia). New Jersey (2.4%) and New York (1.5%) have the lowest reported participation rates among states that have a QRIS.

### **OUTCOME**

## Providers Participating in the State QRIS

% of licensed providers that participate in the state child care quality rating and improvement system



Source: The Build Initiative & Child Trends' Quality Compendium data system, as of December 31, 2019. For additional information, please refer to the Methods and Sources section of <a href="mailto:pn3policy.org">pn3policy.org</a>.

States use a number of different mechanisms to strengthen the quality of their child care systems. Below, we provide information on some that states commonly employ and how their efforts vary. States may employ these mechanisms through licensing requirements or QRIS standards (or both). Currently research is unclear as to which of these strategies, or which combination of strategies, is the most effective for improving the quality of interactions between child care providers and infants and toddlers.

## Child care coaching

Coaching (also referred to as mentoring or consultation) is a means of professional development that connects caregivers with child care experts who help them improve their skills through an ongoing, collaborative process. States can promote coaching, as a means of improving classroom quality, through child care resource and referral (CCR&R) agencies, state licensing requirements, or QRIS standards. Some states have guidelines for coach competencies and credentialing systems. Child care coaching is also a required part of Early Head Start.

A common method for providing this professional development to caregivers is through the technical assistance component of a state's QRIS. Forty-one states include coaching as a type of technical assistance in their QRIS. Of those states that have a fully implemented QRIS and report these data, only Utah does not include coaching as technical assistance within it. States vary substantially in the extent to which coaching is incorporated into existing child care structures and systems, how coaching is funded, the coaching models used, who provides coaching, and the types of coach competency guidelines or credentialing systems provided.

Support for coaching as a quality-improvement mechanism stems in part from the expectation that the approach improves child wellbeing through the enhanced quality of caregivers' interactions with young children. However, the current body of research is characterized by limitations—including small sample sizes, high attrition, and other study design challenges—that hamper efforts to understand which coaching practices or models might work best. Although coaching has proven effective in improving teacher language and literacy, the research to date has yet to find any causal effect on child-caregiver interactions specifically. These limitations caution against drawing strong conclusions about the overall effectiveness of child care coaching. See our comprehensive review of the evidence base at pn3policy.org.

#### Child care ratios

States may use ratio requirements—which govern the number of children allowed per caregiver in a room—as a mechanism for promoting child care quality and safety. A ratio of fewer children per teacher is expected not only to facilitate better classroom supervision, thereby improving safety, but also to allow sufficient opportunity for the enriching, one-on-one interactions on which young children's developing brains rely.<sup>24</sup> The research to date on the link between ratios and child care quality remains insufficient for drawing causal conclusions within the birth-to-3 context. Lack of research on children under age 3 frustrates this important effort, as do challenges faced by researchers, both in designing studies sufficiently rigorous for making causal inference and in accurately identifying and measuring indicators of quality in child care settings.

The National Association for the Education of Young Children (NAEYC), as well as the American Academy of Pediatrics (AAP) and the American Public Health Association (APHA), provide guidance on recommended ratios for infants and toddlers; however, not all states' licensing requirements for ratios meet these standards. In total, 35 states meet NAEYC's recommendation of a 4:1 child-to-caregiver ratio for infants; for toddlers, 16 states meet NAEYC's recommended 6:1 ratio. Additionally, 29 states include ratio standards for at least one type of child care setting as a measure of provider quality in their QRIS; nine states either do not report these data or do not have a QRIS.

The table on the next page shows each state's licensing requirements related to ratio and group size for center-based care. Additional information on state child-caregiver ratios in family child care is available at pn3policy.org.

## State Ratio and Group Size Licensing Requirements for Center-Based Child Care

State	Maximum Number of Infants Allowed for One Staff Member to Supervise in Center-Based Care (Child-Staff Ratio)	Maximum Group Size for Infants in Center-Based Care	Maximum Number of Toddlers Allowed for One Staff Member to Supervise in Center-Based Care (Child- Staff Ratio)	Maximum Group Size for Toddlers in Center-Based Care
	NAEYC Standard is 4:1	NAEYC Standard is 8	NAEYC Standard is 6:1	NAEYC Standard is 12
Alabama	5:1	Group size not regulated	8:1	Group size not regulated
Alaska	5:1	10	6:1	12
Arizona	5:1	Group size not regulated	8:1	Group size not regulated
Arkansas	6:1	12	9:1	18
California	4:1	Group size not regulated	6:1	12
Colorado	5:1	10	7:1	14
Connecticut	4:1	8	4:1	8
Delaware	4:1	8	8:1	16
District of Columbia	4:1	8	4:1	8
Florida	4:1	Group size not regulated	11:1	Group size not regulated
Georgia	6:1	12	10:1	20
Hawaii	4:1	8	8:1	Group size not regulated
Idaho	Ratios determined by point system	Group size not regulated	Ratios determined by point system	Group size not regulated
Illinois	4:1	12	8:1	16
Indiana	4:1	8	7:1	14
lowa	4:1	Group size not regulated	6:1	Group size not regulated
Kansas	3:1	9	7:1	14
Kentucky	5:1	10	10:1	20
Louisiana	6:1	Group size not regulated	12:1	Group size not regulated
Maine	4:1	8	5:1	10
Maryland	3:1	6	6:1	12
Massachusetts	3:1	7	10:1	20
Michigan	4:1	12	8:1	16
Minnesota	4:1	8	7:1	14
Mississippi	5:1	10	12:1	14

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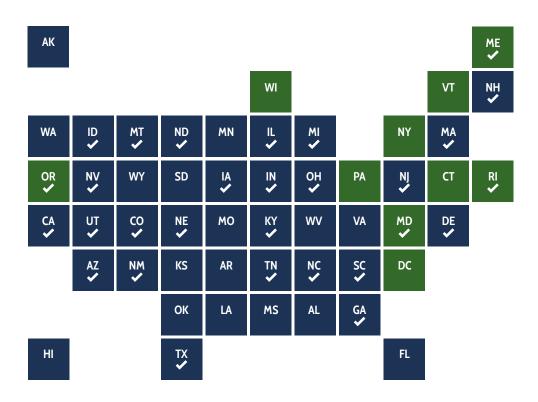
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State	Maximum Number of Infants Allowed for One Staff Member to Supervise in Center-Based Care (Child-Staff Ratio)	Maximum Group Size for Infants in Center-Based Care	Maximum Number of Toddlers Allowed for One Staff Member to Supervise in Center-Based Care (Child- Staff Ratio)	Maximum Group Size for Toddlers in Center-Based Care
	NAEYC Standard is 4:1	NAEYC Standard is 8	NAEYC Standard is 6:1	NAEYC Standard is 12
Missouri	4:1	8	8:1	16
Montana	4:1	Group size not regulated	8:1	Group size not regulated
Nebraska	4:1	12	6:1	Group size not regulated
Nevada	6:1	Group size not regulated	10:1	Group size not regulated
New Hampshire	4:1	12	6:1	18
New Jersey	4:1	12	10:1	20
New Mexico	6:1	Group size not regulated	10:1	Group size not regulated
New York	4:1	8	5:1	12
North Carolina	5:1	10	10:1	20
North Dakota	4:1	10	7:1	20
Ohio	5:1	10	7:1	14
Oklahoma	4:1	8	8:1	16
Oregon	4:1	8	5:1	10
Pennsylvania	4:1	8	6:1	12
Rhode Island	4:1	8	6:1	12
South Carolina	5:1	Group size not regulated	9:1	Group size not regulated
South Dakota	5:1	20	5:1	20
Tennessee	4:1	8	7:1	14
Texas	4:1	10	11:1	22
Utah	4:1	8	7:1	14
Vermont	4:1	8	5:1	10
Virginia	4:1	Group size not regulated	10:1	Group size not regulated
Washington	4:1	8	7:1	14
West Virginia	4:1	8	8:1	16
Wisconsin	4:1	8	6:1	12
Wyoming	4:1	10	8:1	10

Source: As of 2014. National Center on Child Care Quality Improvement, U.S. Department of Health and Human Services.

The map below illustrates the states that meet all four of the NAEYC recommended standards for child-caregiver ratios and maximum group sizes for infants and toddlers in center-based care. The 29 states that include ratio standards in their QRIS are noted with a check mark.

## State Ratio Standards in Licensing Requirements and QRIS Quality Standards



- State licensing requirements meet all four NAEYC standards
- State licensing requirements do NOT meet all four NAEYC standards
- ✓ QRIS includes ratio standards

#### Sources and notes:

Meets All NAEYC Standards: National Association for the Education of Young Children, as of 2018. QRIS Includes Ratio Standards: The Build Initiative & Child Trends' Quality Compendium data system, as of December 31, 2019.

For additional information, please refer to the Methods and Sources section of  $\,$  pn3policy.org.

## Child care workforce qualifications

Many states promote child care workforce quality through licensing requirements and QRIS standards for the education or training of child care staff. In determining the level of education to promote, states can follow the lead of national organizations such as Early Head Start, NAEYC, and the Institute of Medicine and National Research Council. For lead teachers in both center and family child care (FCC) settings, national standards encourage the use of a bachelor's degree as the minimum education requirement.<sup>25</sup> Currently no states meet this standard in either setting. In two states (the District of Columbia and Hawaii), licensing requirements for assistant teacher qualifications in both center-based and FCC settings align with national standards. The licensing requirements of an additional two states, Minnesota and Vermont, align with these recommendations for assistant teachers only in center-based settings. Further study is needed to understand how standards for education and training, when promoted through a QRIS or through licensing requirements, affect child care quality. See our comprehensive review of the evidence base at pn3policy.org.

## Child care workforce compensation

Teachers and caregivers in the child care field, particularly those serving infants and toddlers, commonly earn low wages. Recognizing the importance of fair compensation, states have begun to include workforce compensation guidelines in licensing requirements and QRIS standards. Many states also provide direct financial relief to child care workers through tax credits, bonuses, and stipends. Improving workforce compensation is thought to be important in recruiting and retaining a highly skilled workforce, ultimately improving classroom quality and outcomes for children.<sup>26</sup>

Evidence on the impact of child care workforce compensation is largely observational, and does not identify an optimal strategy for states to pursue. To date, no strong causal study has been conducted on the impact of state-funded child care workforce scholarship programs. Evidence on the impacts of such programs will provide more context for determining how states can use workforce compensation standards to improve outcomes for young children and families.

Only Vermont and the District of Columbia had child care workforce compensation guidelines in place as of 2018, but 12 states had plans in place to establish guidelines in the future. Additionally, as of 2019, 15 states included either a salary scale or standards for benefits as a component in their QRIS for center-based providers. States also can improve child care workforce compensation through financial relief programs to supplement child care worker earnings. As of 2018, 14 states had statewide programs in place for stipends (cash awards given annually or biannually based on education level and retention) or tax credits (like annual stipends, but paid through a refundable tax credit) to provide financial relief for child care workers. Thirty-three states had bonus programs, awarded in recognition of a specific achievement, not on a regular basis. State-funded scholarships, which support child care educators in attaining higher education, are also fairly ubiquitous across the country, with 44 states offering early educator scholarship programs.

The table on the next page shows state variation in several of the mechanisms states use to support workforce compensation. A handful of states—Delaware, the District of Columbia, Minnesota, Nebraska, North Carolina, and Pennsylvania—employ all of the strategies for compensation and financial support of their child care workforce.

## State Child Care Workforce Compensation and Assistance

State	State Has Established Guidelines or a Plan for Recommended Early Educator Payment/Benefit Guidelines	State Has a Policy to Provide a Tax Credit or Stipend to Supplement Early Educator Pay	State Has a Policy Providing a Bonus to Supplement Early Educator Pay	State Funds a Scholarship Program that Supports Higher Educational Attainment for Early Educators
Alabama	No	No	Yes	Yes
Alaska	No	No	No	Yes
Arizona	No	No	Yes	Yes
Arkansas	No	No	No	No
California	No	No	No	Yes
Colorado	Yes	No	Yes	Yes
Connecticut	No	No	Yes	Yes
Delaware	Yes	Yes	Yes	Yes
District of Columbia	Yes	Yes	Yes	Yes
Florida	No	No	Yes	Yes
Georgia	No	Yes	Yes	Yes
Hawaii	No	No	No	Yes
Idaho	No	No	Yes	Yes
Illinois	No	Yes	No	Yes
Indiana	Yes	No	Yes	Yes
lowa	No	No	Yes	Yes
Kansas	No	Yes	Yes	Yes
Kentucky	No	No	Yes	Yes
Louisiana	No	Yes	No	Yes
Maine	No	No	No	No
Maryland	No	Yes	No	Yes
Massachusetts	No	No	No	Yes
Michigan	No	No	Yes	Yes
Minnesota	Yes	Yes	Yes	Yes
Mississippi	No	No	No	No
Missouri	No	No	Yes	Yes

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State	State Has Established Guidelines or a Plan for Recommended Early Educator Payment/Benefit Guidelines	State Has a Policy to Provide a Tax Credit or Stipend to Supplement Early Educator Pay	State Has a Policy Providing a Bonus to Supplement Early Educator Pay	State Funds a Scholarship Program that Supports Higher Educational Attainment for Early Educators
Montana	Yes	No	Yes	No
Nebraska	Yes	Yes	Yes	Yes
Nevada	No	No	Yes	Yes
New Hampshire	Yes	No	No	No
New Jersey	No	No	Yes	Yes
New Mexico	No	Yes	Yes	Yes
New York	Yes	No	No	Yes
North Carolina	Yes	Yes	Yes	Yes
North Dakota	No	No	No	Yes
Ohio	No	No	Yes	Yes
Oklahoma	No	No	No	Yes
Oregon	Yes	No	Yes	No
Pennsylvania	Yes	Yes	Yes	Yes
Rhode Island	No	No	Yes	Yes
South Carolina	No	No	Yes	Yes
South Dakota	No	No	No	No
Tennessee	No	No	No	Yes
Texas	No	No	Yes	Yes
Utah	No	Yes	Yes	Yes
Vermont	Yes	No	Yes	Yes
Virginia	No	No	No	Yes
Washington	Yes	No	Yes	Yes
West Virginia	No	No	Yes	Yes
Wisconsin	No	Yes	Yes	Yes
Wyoming	No	No	No	Yes

Source: As of 2018, Whitebook, et al. Early Childhood Workforce Index - 2018. For additional information, please refer to the Methods and Sources section of pn3policy.org.

## GOAL: NURTURING AND RESPONSIVE CHILD CARE IN SAFE SETTINGS

The strategies outlined in this section hold promise for supporting nurturing and responsive child care in safe settings, but they have yet to accumulate enough rigorous evidence of effectiveness. Given states' considerable interest in ensuring that families' have child care options that accommodate the unique developmental needs of young children, continued research on these strategies and other innovative approaches that states are pursuing is imperative.

For more detailed information on each of these strategies to improve child care quality and children's outcomes, see the Prenatal-to-3 Policy Clearinghouse at pn3policy.org.



## References:

- ¹ Center on the Developing Child. (n.d.). Serve and return. https://developingchild.harvard.edu/science/key-concepts/serve-and-return/#:~:text=Serve%20and%20return%20interactions%20shape,of%20communication%20and%20social%20skills
- <sup>2</sup> National Scientific Council on the Developing Child. (2012). *The science of neglect: The persistent absence of responsive care disrupts the developing brain: working paper 12.* https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2012/05/The-Science-of-Neglect-The-Persistent-Absence-of-Responsive-Care-Disrupts-the-Developing-Brain.pdf
- <sup>3</sup> National Research Council. (2012). The early childhood care and education workforce: Challenges and opportunities: A workshop report. National Academies Press. https://www.nap.edu/catalog/13238/the-early-childhood-care-and-education-workforce-challenges-and-opportunities
- <sup>4</sup> Shonkoff, J. (2014). A healthy start before and after birth: Applying the biology of adversity to build the capabilities of caregivers. In K. McCartney, H. Yoshikawa, & L. B. Forcier (Eds.), *Improving the Odds for America's Children* (pp. 28-39).
- <sup>5</sup> Otten, J. J., Bradford, V. A., Stover, B., Hill, H. D., Osborne, C., Getts, K., & Seixas, N. (2019). The culture of health in early care and education: Workers' wages, health, and job characteristics. *Health Affairs*, 38(5), 709-720. https://pubmed.ncbi.nlm.nih.gov/31059354/
- <sup>6</sup> Whitebook, M., McLean, C., Austin, L. J. E., & Edwards, B. (2018). *Early childhood workforce index* 2018. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. http://cscce.berkeley.edu/topic/early-childhood-workforce-index/2018/
- <sup>7</sup> National Survey of Early Care and Education Project Team. (2014, November). Characteristics of center-based early care and education programs: Initial findings from the National Survey of Early Care and Education (NSECE) (OPRE Report #2014-73a). Washington DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. https://www.acf.hhs.gov/sites/default/files/opre/characteristics\_of\_cb\_ece\_programs\_111014.pdf
- <sup>8</sup> Burchinal, M. (2010). *Differentiating among measures of quality: Key characteristics and their coverage in existing measures*, OPRE Research-to-Policy, Research-to-Practice Brief OPRE 2011-10b. Office of Planning, Research and Evaluation, Administration for Children and Families, US Department of Health and Human Services. https://www.acf.hhs.gov/sites/default/files/opre/differ\_measures.pdf
- <sup>9</sup> Gordan, R. A., Fujimoto, K., Kaestener, R., Korenman, S., & Abner, K. (2013). An assessment of the validity of the ECERS-R with implications for measures of child care quality and relations to child development. *Developmental Psychology*, 49(1), 146-160. https://doi. org/10.1037/a0027899.
- <sup>10</sup> Mulligan, G., & Flanagan, K. (2006). Findings from the 2-year-old follow-up of the Early Childhood Longitudinal Study, birth cohort (ECLS-B). Washington, DC: National Center for Educational Statistics (NCES 2006-043). https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2006043
- <sup>11</sup> Child Care Aware of America. (2019). The US and the high price of child care: An examination of a broken system. https://cdn2. hubspot.net/hubfs/3957809/2019%20Price%20of%20Care%20State%20Sheets/Final-TheUSandtheHighPriceofChildCare-AnExaminationofaBrokenSystem.pdf?utm\_referrer=https%3A%2F%2Fwww.childcareaware.org%2Four-issues%2Fresearch%2Fthe-us-and-the-high-price-of-child-care-2019%2F
- <sup>12</sup> Fuller B., Kagan, S. L., Caspary, G. L., & Gauthier, C. A. (2002). Welfare reform and child care options for low-income families. *Future Child*, *12*(1):96-119.
- <sup>13</sup> Brooks-Gunn, J. (2003). Do you believe in magic? What we can expect from early childhood intervention programs. *Social Policy Report*, 17(1), 3-15. doi:10.1002/j.2379-3988.2003.tb00020.x
- <sup>14</sup> Wright, T. S. (2011). Countering the politics of class, race, gender, and geography in early childhood education. *Education Policy*, 25(1), 240-261. doi:10.1177/0895904810387414
- <sup>15</sup> First Five Years Fund. (n.d.). Head Start & Early Head Start. First Five Years Fund. Retrieved January 22, 2020, from https://www.ffyf.org/issues/head-start-early-head-start/
- <sup>16</sup> Head Start Early Childhood Learning & Knowledge Center. (2018, July 12). Early Head Start programs. https://eclkc.ohs.acf.hhs.gov/programs/article/early-head-start-programs
- <sup>17</sup> Early Childhood Learning & Knowledge Center, Office of Head Start. (n.d.). About the Early Head Start Program. Retrieved January 23, 2020, from https://eclkc.ohs.acf.hhs.gov/programs/article/about-early-head-start-program
- <sup>18</sup> Isner, T., Tout, K., Zaslow, M., Soli, M., Quinn, K., Rothenberg, L., & Burkhauser, M. (2011). *Coaching in early care and education programs and Quality Rating and Improvement Systems (QRIS): Identifying promising features.* Child Trends. https://www.childtrends.org/wp-content/uploads/2013/05/2011-35CoachingQualityImprovement.pdf
- <sup>19</sup> National Association for the Education of Young Children & National Association of Child Care Resource & Referral Agencies. (2011). Early childhood education professional development: Training and technical assistance glossary. https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/our-work/public-policyadvocacy/glossarytraining\_ta.pdf

#### GOAL: NURTURING AND RESPONSIVE CHILD CARE IN SAFE SETTINGS

- <sup>20</sup> O'Keefe, B. (2017). *Primetime for coaching: Improving instructional coaching in early childhood education.* Bellwether Education Partners. https://bellwethereducation.org/publication/primetime-coaching-improving-instructional-coaching-earlychildhood-education
- <sup>21</sup> National Center on Early Childhood Development, Teaching and Learning. (2018). *Early care and education coaching: A closer look at coaching models in child care and Head Start*. Office of Head Start, Early Childhood Learning & Knowledge Center. https://eclkc.ohs.acf. hhs.gov/sites/default/files/pdf/early-care-education-coaching.pdf
- <sup>22</sup> Zaslow, M., Tout, K., & Halle, T. (2012). *On-site approaches to quality improvement in Quality Rating and Improvement Systems: Building on the research on coaching.* Child Trends. https://www.childtrends.org/publications/on-site-approaches-to-qualityimprovement-in-quality-rating-and-improvement-systems-building-on-the-research-on-coaching
- <sup>23</sup> Head Start Program Performance Standards, 45 C.F.R. Chapter XIII, Subchapter B §§ 1302.91 (2016). https://eclkc.ohs.acf.hhs.gov/policy/45-cfr-chap-xiii/1302-91-staff-qualifications-competency-requirements
- <sup>24</sup> Crowley, A., Jeon, S., & Rosenthal, M. (2013). Health and safety of child care centers: An analysis of licensing specialists' reports of routine, unannounced inspections. *American Journal of Public Health*, 103(10), 52–58. https://dx.doi.org/10.2105%2FAJPH.2013.301298
- <sup>25</sup> Institute of Medicine and National Research Council. (2015). *Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation*. The National Academies Press. https://doi.org/10.17226/19401
- <sup>26</sup> Bridges, M., Fuller, B., Huang, D. S., & Hamre, B. K. (2011). Strengthening the early childhood workforce: How wage incentives may boost training and job stability. *Early Education and Development* 22(6), 1009-1029. doi: 0.1080/10409289.2010.514537



