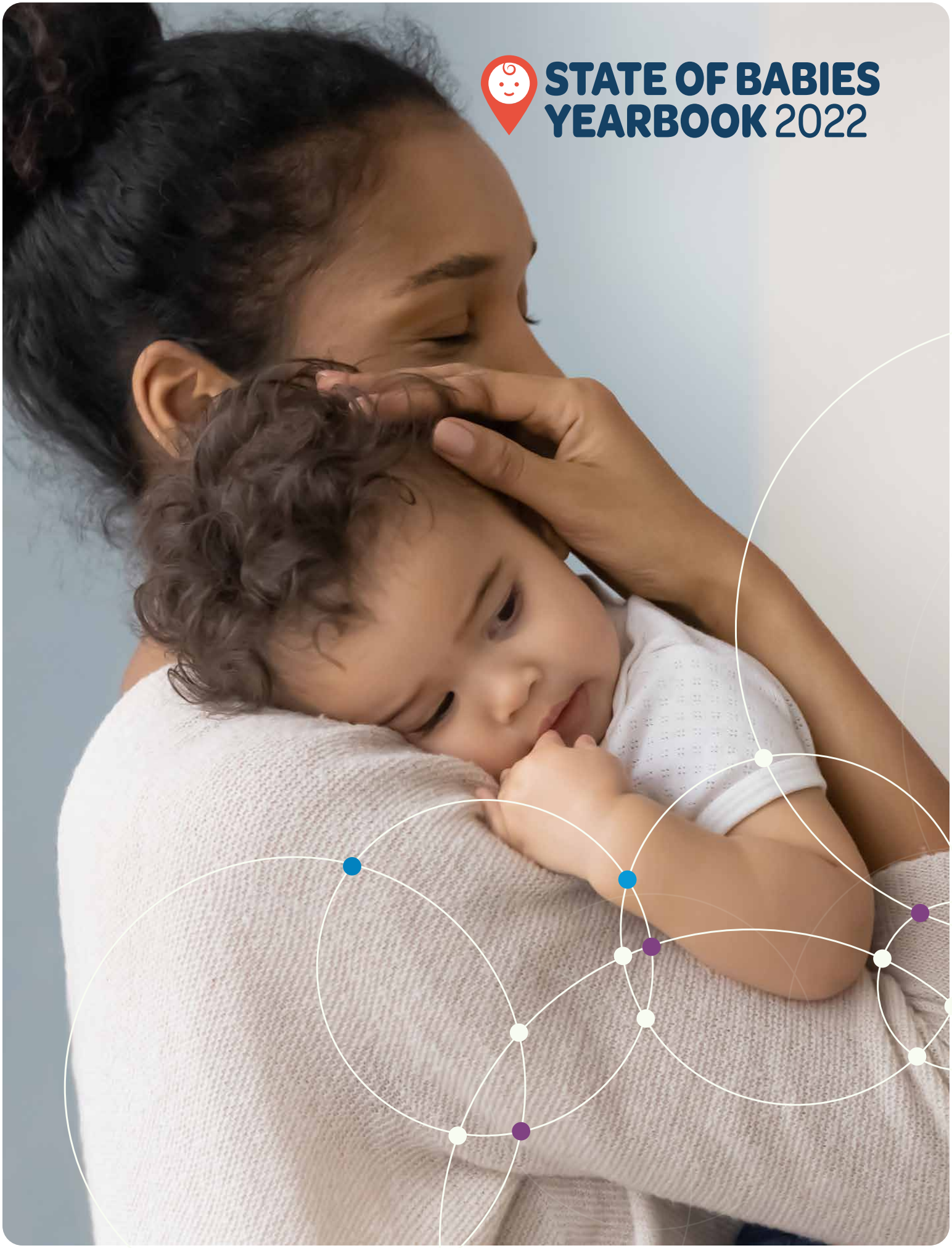

STATE OF BABIES YEARBOOK 2022

The *State of Babies Yearbook: 2022* is part of ZERO TO THREE's *Think Babies*™. ZERO TO THREE created *Think Babies* to make the potential of every baby a national priority. When we *Think Babies* and invest in infants, toddlers, and their families, we ensure a strong future for us all. Learn more at thinkbabies.org.

ZERO TO THREE works to ensure all infants and toddlers benefit from the family and community connections critical to their well-being and development. Since 1977, the organization has advanced the proven power of nurturing relationships by transforming the science of early childhood into helpful resources, practical tools and responsive policies for millions of parents, professionals, and policymakers.

The data and indicator analysis in the *Yearbook* are powered by Child Trends, the nation's leading nonprofit research organization focused exclusively on improving the lives and prospects of children, youth, and their families. For 40 years, decision makers have relied on the organization's rigorous research, unbiased analyses, and clear communications to improve public policies and interventions that serve children and families.

ZERO TO THREE
Early connections last a lifetime

Author Credit: Kim Keating and Sarah Heinemeier, with contributions from Patricia Cole, Jim Bialik, Daniel Hains, and Mollyrose Schaffner; ZERO TO THREE (Yearbook)

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Table of Contents

Table of Contents...continued

Table of Contents...continued

Introduction

The state in which a baby is born and lives in their first 3 years can make a difference in whether they have a strong start in life. But even more critical than the apparent geographic differences are the disparate experiences among babies of different races, ethnicities, and income levels, with inequities starting even before birth. Often driven by systemic racism, these disparities persist even in states where babies overall are doing better than in other states. A nation that tolerates grave disparities and does not prize equity cannot be strong in the long term. There are many issues in our nation about which there is agreement on investing in fundamental public goods that benefit society as a whole (e.g., public education, food standards, and transportation safety). However, we have yet to place similar value on a strong national agenda for a foundational prenatal to 3 period and, as a result, support for this period is uneven and inequitable both in national policy and across states.

Telling the story of babies is thus more important than ever. The data included in the *State of Babies Yearbook: 2022* help policymakers understand the indications that too many babies face risks that can undermine development and therefore their ability to reach their potential—in other words, what to pay attention to. The data also can help policymakers think strategically about progress—the actions that can be taken to create meaningful and sustainable change for all families with young children.

Each day, more than 10,000 babies are born in America, with many entering a world in which they and their families face immediate challenges. **In the absence of a national agenda that equitably prioritizes health, development, and basic economic security, there is tremendous variation across states in how and the extent to which babies and families are prioritized.** Most notably, national and state data on maternal mortality, infant mortality and other birth outcomes, food insecurity, and material hardship all suggest that many of our nation's babies are at risk of being left behind. As this *Yearbook* will highlight, we as a nation need to improve our approach to early life policies and prioritize them as prudent investments that benefit our nation as a whole.

Grounded in the science of early childhood development, the *State of Babies Yearbook* bridges the gap between science and policy by providing national and state-by-state views of how America's babies and their families are faring, according to more than 60 indicators in ZERO TO THREE's policy framework of Good Health, Strong Families, and Positive Early Learning Experiences. Indicators in each domain examine child and family well-being, status and reach of programs and services, and the presence or absence of key policies that are essential for healthy development. Data provided in the *Yearbook* can be used by policymakers, advocates, and all stakeholders in the lives of babies to identify and promote comprehensive policies that ensure all babies have a strong start and the opportunity to reach their full potential.


14.4%
The preterm birth rate for Black women is 41% higher than the national average.

The 2022 Yearbook in Context

The release of the *2022 Yearbook* occurs at a time when the nation is grappling for the third year with the health, economic, social, and emotional impacts of the COVID-19 pandemic. As reported in our 2021 edition, while pre-pandemic data clearly showed the disparities and gaps in child and family well-being, the pandemic itself revealed the fragility and insufficiency of the many systems that should ensure stability among the nation's families, particularly those with young children during their critical first 3 years. The immediate effects of the pandemic—shutting down critical social structures, such as child care, school systems, and key segments of the economy—disrupted the lives of all families, but particularly those with young children. In the period since the pandemic's onset, families have continued to struggle to adapt to the unpredictability of new variants of the virus, waves of increased infection rates, and the associated fluctuations in stay-at-home orders, work patterns, and protocols for safely interacting in communal settings.

Analyses of the pre-COVID-19 data presented in the *Yearbook* and the findings of the multidisciplinary body of research being conducted amid the ongoing pandemic, together with the voices of families themselves, make clear the urgency of this moment for babies and families. This moment provides incredible impetus to finally create the comprehensive family policy our nation has lacked. Due in great part to nationwide efforts to address the pandemic's effects, this *Yearbook's* release occurs at a time when an unprecedented culmination of events requires meaningful and lasting change to our nation's systems—if we can muster the political will to carry these efforts to fruition. This is a potentially transformational time in which the long-standing gaps in investments for all babies and families can be reassessed and addressed with policies, programs, and practices that value and address their needs.

For all of these reasons, the *State of Babies Yearbook: 2022* places new emphasis on preparing policymakers, advocates, and other key stakeholders to effectively review and apply the data. This edition of the *Yearbook* contains new sections with specific guidance or suggestions for using the data. This edition also tackles the need and strategies for building new advocates, advisors, and strategists. While the indicators themselves may be familiar, what creates urgency is our context—our nation's long neglect of the policies that build strong families and ensure healthy development, the condition of our nation in recovering from COVID-19, and our nation's long-term strategy for health, economic security, and quality of life in an interconnected and changing world. We hope the presentation of these sections within the *Yearbook* helps jump-start or continue conversations on how to make change.

COVID-19 has exposed or created stress fractures for families. A prominent example that has been discussed in national media is the use of child care by working parents. COVID closures and stay-at-home requirements revealed how challenging it can be for families to balance work and family requirements. At the same time, COVID created challenges for our professional child care system. Increased turnover and challenges in recruiting new staff have contributed to a lack of high-quality and affordable child care for families with infants and toddlers. This lack of availability forces families to consider whether or not a parent can remain in the workforce or how to access high-quality care for their young children.

Making the Case

Meaningful investments in support of the first 3 years of life, a time of babies' rapid foundational brain development and social-emotional connections, pay dividends in addressing the immediate needs of families, the reduction of the downstream use of safety net services, and the generational change these policies can bring. Amounts invested early grow and can generate wealth and security later. Strategic investments have the power to generate jobs and security for many, with a ripple effect that brings value to both direct and indirect beneficiaries. The strategy is to start with something small and watch it grow and flourish. The same is true for our babies.

The science is clear: Our brains grow faster in the first few years than any later point in life, forming more than one million new neural connections every second.[i] When babies have nurturing relationships, positive early learning experiences, and good health and nutrition, those neural connections are stimulated and strengthened, laying a strong foundation for the rest of their lives. When babies don't get what their growing brains need to thrive because of a lack of resources or opportunities, they don't develop as they should. This leads to lifelong developmental, educational, social, and health challenges. Nurturing an investment generates strength and security but requires long-term vision and commitment. Let's be straightforward: We have enough science and research in place to know what works and how to invest. The issue is not that we don't know how to support babies and families—the issue is that we, as a society, are not yet willing to make a sufficient investment.

In this *Yearbook* the data on the well-being of babies and families make a powerful case for a stronger and more equitable national agenda around the first 3 years, which is very much a case for ensuring well-being and stability for *all* babies. This case is grounded in **five principles.**

PRINCIPLE 1: The first 3 years are everyone's issue. Think: babies!

PRINCIPLE 2: All families want to provide their babies the strongest start.

PRINCIPLE 3: Every family has needed, needs, or will need help.

PRINCIPLE 4: Diversity becomes strength.

PRINCIPLE 5: Equity is a public good.

PRINCIPLE 1: This is everyone's issue.
The data presented in this *Yearbook* highlight areas in which young children and their families are struggling. We can use these data to communicate why infants and toddlers are everyone's concern. This issue will become increasingly acute as, more and more, families that have been overlooked struggle in our polarized political and economic climate. Therefore, we must be proactive and specific in using data to clearly communicate how early childhood is a prudent investment, across any time frame. Namely:

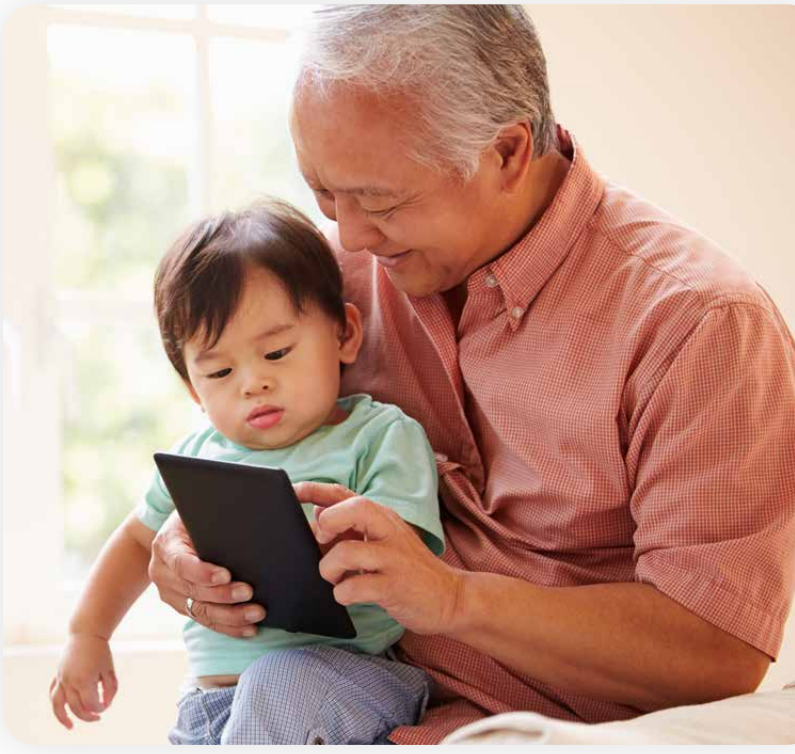
- **Thriving is a communal act.** The more we nurture our neighbors and neighborhoods, the more we allow everyone in and across our communities to prosper. Peace and prosperity for all starts when we ensure we are meeting everyone's basic needs and allow everyone's hopes and aspirations to flourish.

- **Family support is economic development.** Family supports include a range of services that are responsive to individual family needs. Affordable housing and medical care, family-friendly work policies, high-quality child care, tools for economic stability, and other supports are critical for ensuring parents can develop resilience or the ability to "bounce back" or weather crises such as the pandemic. Stable and resilient families contribute to stable and resilient communities, which are attractive to employers.

- **Healthy communities start with healthy babies.** A baby's well-being is rooted in the health and wellness of the whole family and caregiving community. Babies and families who live in safe neighborhoods with access to quality health care, early intervention services, and mental health supports, and who are less exposed to social-emotional stressors, may experience improved long-term health outcomes.

- **Early care and learning generates long-term benefits.** When we help our youngest experience a strong start in life, beginning with enriching early care and learning opportunities, we are working to ensure they can take full advantage of public education and future advancement opportunities. When we subsidize high-quality child care for eligible families, we help more parents to participate in the workforce and support the early education workforce in our communities.

PRINCIPLE 2: All families want to provide their babies the strongest start.
Our discussion is firmly grounded in the belief that all families are doing the best that they can for their babies. Parents are working with the tools available to them to provide the strongest start in life for their babies. However, inequities in the barriers or challenges experienced by families may impact parents' ability to give their babies all the opportunities they need to reach their potential. These inequities stem from multiple factors, and some families have numerous challenges to address. Of particular concern are barriers that are caused or fortified by systemic inequity (e.g., endemic racism), especially when coupled with differential access to opportunities and power. And, as a society, we are increasingly attuned to the fact that "opportunity" must exist not only with regard to employment, career, or income but also with regard to health, hope, optimism, and life-enriching experiences. We have to value these last as necessities, not luxuries.



There is no singular way to provide a strong start for our babies. The diversity of family cultures, lifestyles, and approaches in our nation is a resource to draw from in helping families realize the intentional parenting that nurtures babies and ensures they have the opportunity to grow into their full potential. As a society, we must become more adept at partnering with parents to fully support their efforts to promote their young children's development. This support requires much more than encouragement. True partnership requires shared learning and respecting the voices and diverse lived experiences of parents, and honoring their best intentions for their children, especially those who traditionally have been marginalized.

PRINCIPLE 3: Every family has had, does have, or will have a need for help.
All families need help at some point, such as assistance caring for a sick child or other family member, help making ends meet, emotional or mental support for the stresses of parenting and family life, or "just-in-time" support when schedules or plans run amok. COVID-19 has both exacerbated and exposed challenges families face, and we do not yet know the full extent of the pandemic's impact on our individual and community health and welfare. Some of the challenges reflect a family's ability to connect to an available service for reasons of eligibility or availability. In these instances, a family or child may need a service that is not available to them in their community. Alternately, a family or child may not afford a service or qualify for free or subsidized service. Some challenges reflect a family's inability to engage with and benefit from services—lack of translation services or reliable transportation, inability to get time off from one's employer during service hours, need for nontraditional service days or hours, need for caregiving for other family members while receiving service, implicit or explicit racism, or general insensitivity to needs are examples.

PRINCIPLE 4: Finding strength from diversity.
Diversity is the core of America's strength as a nation as it is the wellspring that feeds innovation and creativity. As the *Yearbook* shows, diversity is the hallmark of America's babies today. We have many diverse traits and experiences to draw from within our communities that can assist families in deepening their resilience and adaptability. When we accept and welcome the fact that there is no one right way to parent, give birth, provide care and nurturing for children, or respond to an individual child's needs, we foster dialogue about policies, strategies, and approaches that help parents adapt and respond to the challenges of being parents. When we value different developmental pathways for children and families, we create a richer environment for all children and incubate empathy, compassion, and a willingness to accept something outside the bounds of our own personal experience. Our communities can be strong because they are diverse—not despite it.

PRINCIPLE 5: Equity matters.
Despite the importance of the first 3 years, opportunities to grow and flourish are not shared equally by all infants, toddlers, and families, reflecting past and present systemic racism and barriers to critical resources. Even before the COVID-19 pandemic, 2 in 5 babies lived in families without enough income to make ends meet. Among babies of color, American Indian/Alaska Native, Hispanic, and Black babies were

disproportionately more likely to live in poverty. As the *Yearbook* data show, challenges created by COVID-19 disproportionately affected these same families.

If our nation is to thrive, our policies must directly address and promote equity. We must ensure that policies remove barriers to health, well-being, and success (based on family income, race and ethnicity, or geography, for example) so that families and individuals who disproportionately experience these barriers can focus on the work of health, well-being, and success. All families, everywhere and regardless of demographics, want to be healthy and successful. To truly address equity means meeting families where they are and listening to their voices in securing the supports they need. The *Yearbook* presents indicators that speak to not only the issues faced by babies and families on a daily basis, but also the broader impact of persistent challenges, experienced inequitably across families.

Making Meaningful Change Through Strategic Use of Data

This *Yearbook* focuses attention on indicators of child and family well-being and policies across each of the nation's states, the District of Columbia, and, now, Puerto Rico.[1] These data allow states to review the latest publicly available data for each indicator and assess relative performance against other states. For each indicator, states can be ranked from best-performing to worst-performing. The national profile, as well as disparate policies and indicators of well-being and access to services across states, leads to a national policy discussion to ensure equity for babies across the nation.

The data included in this *Yearbook* help position policymakers, advocates, and other stakeholders to understand not only what to pay attention to with regard to support for babies and their families but how to think strategically about progress—the actions that can be taken in a specific sequence and at specific times to create meaningful and sustainable conditions for all families with young children that truly enable young children to thrive. This is very much a conversation about equity, starting not with what we are willing to give but with what individuals need.

We don't want you to just read this report. We want the data to help you develop a strategy for change.

But not every substantive change is a headline. In fact, we can influence meaningful change by understanding the change process and identifying opportunities for improvements both large and small in scale.

[1] For simplicity, the 50 states, District of Columbia, and Puerto Rico will be referred to as "states" throughout the *Yearbook*.

These opportunities include:

- **Making change through legislation and policy.** The existence of programs is subject to approval and funding from elected representatives. Therefore, all stakeholders in the lives of babies and families can advocate for laws and policies that direct the funding of necessary services.

- **Making change through improvements in practice.** They also can examine how improving working conditions and support for service professionals can nurture and sustain those who are on the front lines of services.

- **Making change through strong engagement.** Engagement and full utilization of services by parents and children is influenced by outreach, accessibility, and appeal. Program administrators can ponder how improvements in community education, secondary support systems, and professional training might affect a parent's willingness to use and respond to services.

The implementation of programs is subject to administrative policy, or the statutes and regulations that guide practice. Policymakers, advocates, and community members can identify gaps and opportunities to improve statutes to ensure ongoing improvement in service delivery.

Making change through legislation and policy

ZERO TO THREE's Policy Agenda lays out priority issues to ensure all babies have Good Health, Strong Families, and Positive Early Learning Experiences. As a complement to the Policy Agenda, the data in this *Yearbook* fuel a review of how well we as a nation and individual states are faring with regard to this commitment. The data in the *Yearbook* clearly show our nation's commitment to families with young children has been inadequate. Now is the time to push federal and state policymakers to initiate broad and far-reaching structural changes in how we fund, regulate, and operate services that work to support families and communities.

FEDERAL

ZERO TO THREE's Federal Policy Agenda, Recovery Begins With Babies and Families, was provided to the new Administration and the 117th Congress as well as other policymakers and advocates. At the time of this *Yearbook,* there have been unprecedented efforts at the federal level through President Biden's Build Back Better Act, proposal and the House-passed reconciliation bill incorporating much of that plan to address many of the challenges reported in the *Yearbook's* pre-pandemic findings on indicators in our Good Health, Strong Families, and Positive Early Learning Experiences policy framework domains.

Together, *Yearbook* data and the supplemental real-time findings during the pandemic of the RAPID Survey Project[ii] point to the need for these and other bold policy actions. For example, proposed legislation would directly address persistent racial and ethnic disparities in maternal mortality and negative birth outcomes that the *Yearbook* shows disproportionately affect Black and American Indian/Alaska Native families. *Yearbook* indicators point to economic insecurity and inability to meet basic needs affecting many babies and families. Pending legislation would expand and strengthen economic and family supports for the growing number of families with young children who struggle to meet basic needs (e.g., food security and housing stability). Finally, *Yearbook* data show few families receiving child care assistance and low floors for quality in many states. Proposed legislation would invest in transforming the nation's disjointed child care system—a vital component of our infrastructure—into a comprehensive system while increasing the quality and availability of child care for babies and toddlers in families of all income levels, including those living in poverty or with low income for whom quality care has been out of reach. These and other aspects of pending legislation will be of immediate and long-term benefit to babies and families nationwide.

As this report is published, the fate of these proposals remains uncertain. But their existence shows that the lack of a comprehensive family policy in the United States is a failure of will, not a failure of imagination.

Now more than ever, we must have multiple arrows in our quiver for facilitating change. Thus, if one door closes, other options for forward motion remain open. A more detailed description of each of these approaches can be found in Appendix E.

STATE

Individual states also are creating or enhancing policies that reinforce state priorities for families and babies. Examples are provided below.

Good Health

The *Yearbook* highlights disparities in early adverse experiences as well as in birth outcomes, particularly for Black and American Indian/Alaska Native infants. States are working to improve the health of young children. California's SB 428 would require commercial health plans to include coverage for adverse childhood experience (ACE) screenings as early as 2022. In Maryland, there is action to use Medicaid to reimburse doula costs at childbirth. New Jersey is considering policies that address health care for low-income families and support doula services. New Jersey also is addressing equity in health outcomes through training and other professional support activities.

Nevada is considering initiatives that would use Medicaid funds to cover certain prenatal costs and costs related to breastfeeding.

Strong Families:

The *Yearbook* shows the gaps in meeting basic needs and the need for supports such as home visitation. Some states are working to expand these supports. Alabama realized an increase in its First Teacher program while Connecticut is implementing a Universal Home Visitation pilot project. Minnesota is working to increase funding and program flexibility in home visitation while New Jersey's universal home visitation law would allow for at least one home visit after childbirth. In Pennsylvania, new legislation would use Medicaid funding to support home visitation (and doula) services. States also are addressing one of the largest economic expenses for families: housing. California's Bringing Families Home program would address family homelessness, and Oregon is considering legislation that would fund affordable housing for families.

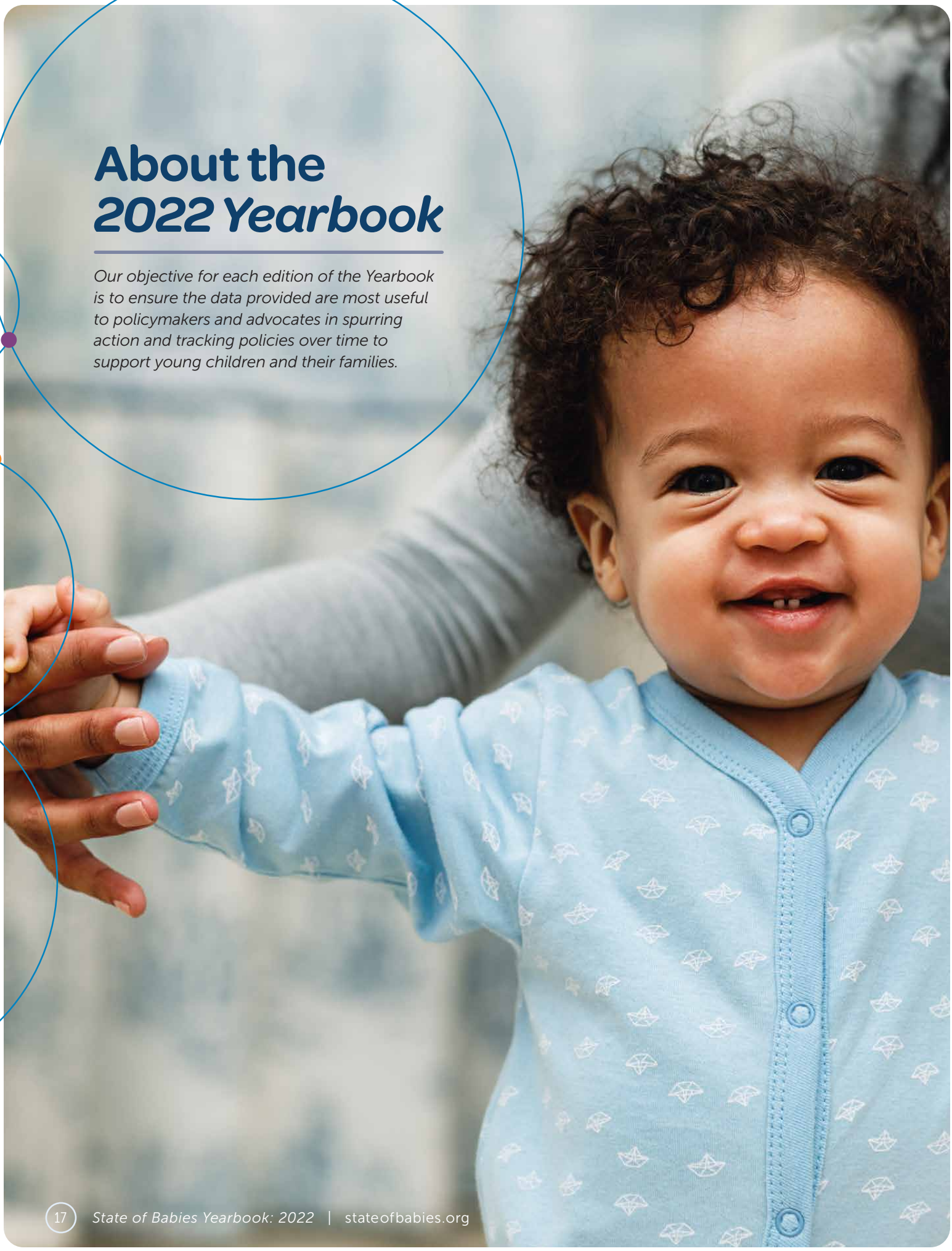
Positive Early Learning Experiences:

The *Yearbook* looks at the need for supporting babies' language development. Most notably, the *Yearbook* data continue to show low rates of daily reading aloud to babies, which fosters a larger vocabulary; higher levels of phonological, letter name, and sound awareness; and better success at decoding words.[iii] Several states are developing investments in early literacy. Examples include, Alabama's Feed Me Words initiative, which provides the adults in young children's lives with access to and awareness of early language and literacy resources, and North Carolina's and Ohio's investments in Dolly Parton's Imagination Library which gets books into the hands of young children.

There are strengths and gaps in every state, so there are opportunities for the nation, state, and community to take stock of current positions and develop strategies to grow. One way to respond to the data presented in the *Yearbook* is to advocate for or contribute to legislation and policies that directly address the causes and symptoms of issues affecting the health and welfare of babies and their families.

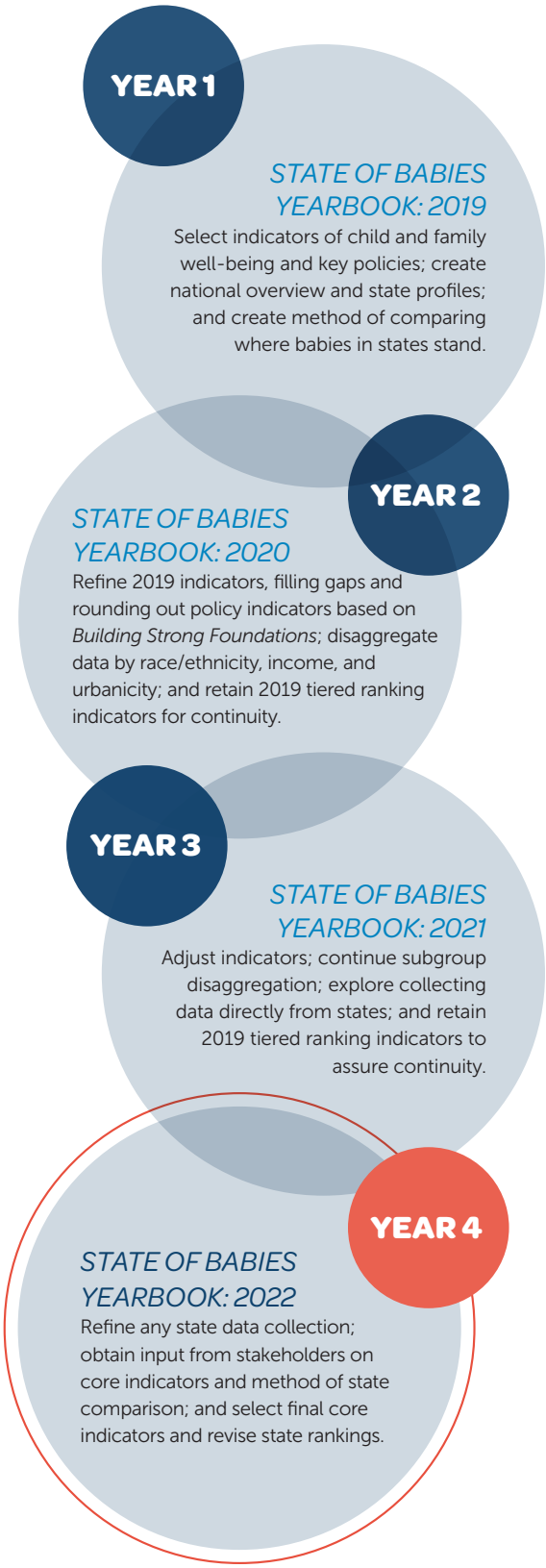
About the *2022 Yearbook*

Our objective for each edition of the Yearbook is to ensure the data provided are most useful to policymakers and advocates in spurring action and tracking policies over time to support young children and their families.



For the *2022 Yearbook,* we continued to explore using available data to provide the most comprehensive view of babies and their families, and we have made further enhancements to achieve that goal. Most important, as detailed in the *State of Babies Yearbook Milestones* (Figure 1), in this fourth year we have acted on our plan to achieve a more stable set of indicators by assessing the performance of the indicators (individually and collectively) in the past 3 years and refining the state ranking process. Additional enhancements have also been made to the *State of Babies* website to expand the information available to visitors to the site and provide the broader context for the data presented there.

STATE OF BABIES YEARBOOK MILESTONES Figure 1.



Revisiting the Indicators and State Ranking Methodology

Refinement of indicators included in ranking

For the 2022 report, we reviewed and modified the indicators included in the ranking of states with the assistance of our technical expert panel. These modifications were made in follow-up to our expansion and refinement of indicators since the *Yearbook's* initial release in 2019. During the project's first 3 years, indicators contributing to states' overall and domain-level rankings were limited to those ranked in the 2019 report. Refinement of the ranked indicators for this edition included (a) incorporating into the ranking indicators that have been added since the initial report and (b) realigning indicators within the various subdomains to ensure optimal distribution of the influence that individual indicators have on state rankings. Finally, for additional clarity, some subdomain names were modified to better describe the focus of the indicators being addressed. The resulting realignment of indicators within each domain and designation of which indicators are used to determine states' rank are presented in Table 1.

STATE OF BABIES YEARBOOK: 2022 DOMAINS, SUBDOMAINS, AND INDICATORS

Table 1.

Good Health		Included in ranking
Health Care Coverage and Affordability	Medicaid expansion state	✔
	Eligibility limit (% Federal Poverty Level [FPL]) for pregnant women in Medicaid	✔
	Children's Health Insurance Program (CHIP) Maternal Coverage for Unborn Child option	
	Postpartum extension of Medicaid coverage	
	Uninsured low-income infants and toddlers	✔
	Medical home	✔
Nutrition	Infants ever breastfed	
	Infants breastfed at 6 months	✔
	High weight-for-length	
	Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) coverage	✔
Maternal Health	Accommodations for pregnant workers, protection from job loss	✔
	Late or no prenatal care received	✔
	Maternal mortality (deaths per 100,000 live births)	
	Mothers reporting less than optimal mental health	✔
	State Medicaid policy for maternal depression screening in well-child visits	✔
Children's Health	Babies born preterm	✔
	Babies with low birthweight	✔
	Infant mortality rate (deaths per 1,000 live births)	✔
	Preventive medical care received	✔
	Preventive dental care received	✔
	Recommended vaccines received	✔
Children's Mental Health Services	Medicaid plan covers social-emotional screening for young children	✔
	Medicaid plan covers infant and early childhood mental health (IECMH) services at home	✔
	Medicaid plan covers IECMH services at pediatric/family medicine practices	✔
	Medicaid plan covers IECMH services at early childhood education programs	✔

Strong Families		Included in ranking
Basic Needs	Temporary Assistance for Needy Families (TANF) benefits receipt among families in poverty	✔
	Housing instability	✔
	Crowded housing	✔
	Unsafe neighborhoods	✔
	Low or very low food security	✔

Child Well-being and Resilience	Family resilience	✔
	1 adverse childhood experience (ACE)	
	2 or more ACEs	✔
	Infant/toddler maltreatment rate (per 1,000 children ages 0–2)	
	Removed from home	
	Time in out-of-home placement	
	Permanency: Adopted	
	Permanency: Guardian	
	Permanency: Relative	
	Permanency: Reunified	
	Potential home-visiting beneficiaries served	✔
Supportive Policies	Paid family leave	✔
	Paid sick time that covers care for child	✔
	TANF work exemption	✔
	State Child Tax Credit (CTC)	✔
	State Earned Income Tax Credit (EITC)	✔

Positive Early Learning Experiences		**Included in ranking**
Elements that Support Child Care Quality	Adult-child ratio	✔
	Teacher qualifications	✔
	Group size	✔
	Infant/toddler professional credential	
Activities that Support Early Learning	Parent reads to baby every day	✔
	Parent sings to baby every day	✔
Access to Early Learning Programs	% Income-eligible infants/toddlers with Early Head Start access	✔
	Families above 200% of FPL eligible for child care subsidy	✔
	Allocated Child Care and Development Block Grant (CCDBG) funds	✔
	State reimburses center-based child care	✔
	Low-/moderate-income infants/toddlers in Child Care and Development Fund (CCDF)-funded care	✔
	Cost of care, as % of income (married families)	
	Cost of care, as % of income (single parents)	
Early Intervention	Developmental screening received	✔
	At-risk children included in Part C eligibility definition	
	Percentage of infants/toddlers receiving Individuals With Disabilities Education Act (IDEA) Part C services	✔
	Timeliness of Part C services	✔

It is important to note that the transparent ranking process used to group states into one of four tiers was not modified. Depending on the state, changes may or not be seen in their ranking overall or within a domain. Where a shift in tier occurs, it may be the result of the ranking refinement, change in performance on individual indicators, or a combination of both. In addition, because of the nature of tiering itself, some states may shift even if their data has remained constant because other states have improved or gotten worse. We encourage states to review the rankings in their *2022 State Profile* with these factors in mind.

An in-depth description of the 2022 subdomain modifications and ranking methodology can be viewed in Appendix C: Methodology.

New and deleted indicators

The *2022 Yearbook* includes four new indicators that allow more in-depth analyses and understanding of babies' and families' experiences. The new indicators provide additional insights into the demographics of the families in which babies live and provide data on an additional avenue for providing medical coverage to babies in families with low income. Our restructuring of subdomains, as part of updating the ranking methodology, also included aligning all indicators associated with basic needs and material hardship in the same domain (i.e., moving food insecurity from Good Health to the Strong Families domain). Revisiting the ranking system also was an opportunity to remove two indicators that we noted were unstable in past editions—babies who exited foster care to permanency (previously included in the Strong Families domain) and infants/toddlers with a developmental delay (previously in the Positive Early Learning Experiences domain). Table 2 outlines all indicator modifications.

2022 INDICATOR MODIFICATIONS Table 2.

 **Demographics**	1. **NEW:** Infants and toddlers in families below 150% of State Median Income (SMI) 2. **NEW:** No working parents, among families in poverty 3. **NEW:** Additional views of intersections in babies' and families' demographics
 **Good Health**	4. **NEW:** CHIP Maternal Coverage for Unborn Child Option
 **Strong Families**	5. **MOVED:** Food insecurity is now reported in this domain as part of Basic Needs (moved from Good Health domain) 6. **DELETED:** Infants and toddlers exiting foster care to permanency
 **Positive Early Learning Experiences**	7. **DELETED:** Infants and toddlers with a developmental delay

Addition of a Puerto Rico profile

Just as states have room to grow, the *Yearbook* continues to expand to present a more complete picture of the experience of babies in America. The experiences of babies and families is broader than what is seen in our 50 states and the District of Columbia, and includes the very different experiences of families with young children living in the 16 U.S. territories.[2] With a population of more than 3 million residents, Puerto Rico is the largest territory, 10 times the size of all other territories combined.[iv] Although they are often underreported, immense events such as cataclysmic hurricanes and the pandemic bring to light the importance of knowing and addressing the needs of infants and toddlers in these areas. In this edition, we have taken the first step toward incorporating information on babies and families in U.S. territories by adding data for Puerto Rico where it is available for use by policymakers and advocates. Because many data sources do not include information on Puerto Rico, the available indicator data are reported in a unique profile and the territory is not included in the ranking process.

Similarly, unless otherwise specified, national totals represent the continental United States, Alaska, and Hawaii.

Enhancement of website and resources

In conjunction with the *2022 Yearbook* release, we have made several enhancements to the stateofbabies.org website. These enhancements include expanding the functionality of the website to make more *Yearbook* content available online, with highlights of key findings, charts, and infographics as well as direct access to chapters addressing each of our policy framework domains. The website continues to offer the voices of parents through family stories and videos, and it now provides access to recent publications and resources through a new Resource Library. Additional features include expansion of the Compare Indicators function to provide views of states' demographics and ready access to indicator definitions as visitors explore the site.

[2] In 2018, five U.S. territories had permanent residents: American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands.

Building on Previous Editions

Update of RAPID Survey Project data

The *Yearbook* presents findings on more than 60 indicators on the well-being of America's babies and their families as reported in key national data sets (e.g., U.S. Census Bureau population statistics, the American Community Survey, and the National Survey of Children's Health) as well as the policies in place to promote their success. Because the data reported in these sources are retrospective by one or more years, many of the findings do not yet reflect the negative consequences families have experienced since the onset of the COVID-19 pandemic in 2020. To provide perspective on the real-time effects of the ongoing pandemic on families with infants and toddlers, the 2022 *Yearbook* is supplemented again by national data collected through the University of Oregon's RAPID Survey Project.[v]

Initially launched on April 6, 2020, by the university's Center for Translational Neuroscience, the RAPID Survey Project began collecting online survey responses from a national sample of 11,914 families with children 5 years old or younger across the U.S. Responses were collected on a weekly basis through the first 17 weeks of the pandemic, and the survey has since continued on a biweekly basis. Since its inception, findings from the survey have shed light on the breadth of the pandemic's effects on the multiple systems that are central to families' livelihood and stability. The impacts have been far-reaching, in the form of increased food insecurity, caregiver and child emotional distress, and material and financial hardship, as well as declines in receipt of preventive health care and in access to child care and other early learning and developmental opportunities.

In this edition of the *Yearbook,* we provide an update on the RAPID Survey Project findings that directly relate to the experience of 3,869 families with babies (birth to 3 years old) from January through December 2021 within each policy framework area.[3] Responses received throughout 2021 have been vital to keeping the public informed about the unique experiences of infants, toddlers, and their families as a result of the pandemic—and they have been the basis for timely articles published during the year on the issues affecting families with young children, such as the challenges faced by families that did not receive Child Tax Credit (CTC) payments. Given the significant impact of the pandemic on child care availability and programs' delivery of care, in March 2021, the RAPID research team launched a parallel national survey of child care providers to capture how they were supporting early learning as child care programs reopened. Policymakers and advocates are encouraged to use the data to identify and advance policies that produce the near-term support and long-term stability babies and families need.

Renewed commitment to advancing equity through data

The profound and persistent influences of past and present systemic barriers to accessing critical resources, such as limited access to quality health care services, stable housing, reliable income and employment, and quality child care, remain evident in the many indicators for which we once again report deep disparities. Although national- and state-level findings presented in the *Yearbook* provide an overall view of how babies and families are faring, a more complete understanding of the state of America's babies can be gained only by examining the contexts that contribute to differences in the findings reported for key subgroups. Wherever the data are available, we continue to report the data by race/ethnicity,[4] income, and

[3] Analyses are based on responses collected from 3,869 caregivers who responded to at least one follow-up survey between the dates of January 1 and December 14, 2021. Proportions/percentages are calculated based on the item-level response rates, not out of the total sample size. The data for these analyses are not weighted.

[4] Throughout the *State of Babies Yearbook*, we use the term "Hispanic" or "Latinx" in presenting data, in keeping with the ethnicity classification used in the data source.

urbanicity (i.e., urban or rural setting); we describe contributing factors to disparities in the findings for babies and their families to the extent possible.

Ongoing call for better data collection and reporting

The need for comprehensive, comparable, and timely collection of national and state-level data has never been more important or urgently needed for informed decision making. Data reported in the annual *State of Babies Yearbook* are drawn from national data sets, such as the U.S. Census, the American Community Survey, the Adoption and Foster Care Analysis and Reporting System (AFCARS), and the National Survey of Children's Health, that track the health, well-being, and early learning experiences of babies and their families as reported by 50 states, the District of Columbia, and, depending on the source, some U.S. territories. However, the intermittent frequency and lack of consistency in key elements of some of these sources limits the extent to which more rigorous analyses (e.g., trend analysis) can be conducted. Importantly, the late release and experimental nature of the American Community Survey limited our ability to update those *Yearbook* indicators derived from this source for this edition. As in previous years, the *State of Babies* research team calls for additional allocation of funds to the agencies responsible for the data sets to ensure the availability of annual updates. Given our population's diversity and persistent inequities, it is equally important that the data are disaggregated by all races and ethnicity, socioeconomic level, and geographic location (i.e., urban or rural) categories at federal, state, and local levels. These enhancements are central to being able to identify, understand, and effectively address continued disparities, particularly among babies and families in populations affected by systemic racism as well as small, underreported, and otherwise marginalized populations that are typically missing from the data.[vi]

2022 *Yearbook* Findings

How States Compare

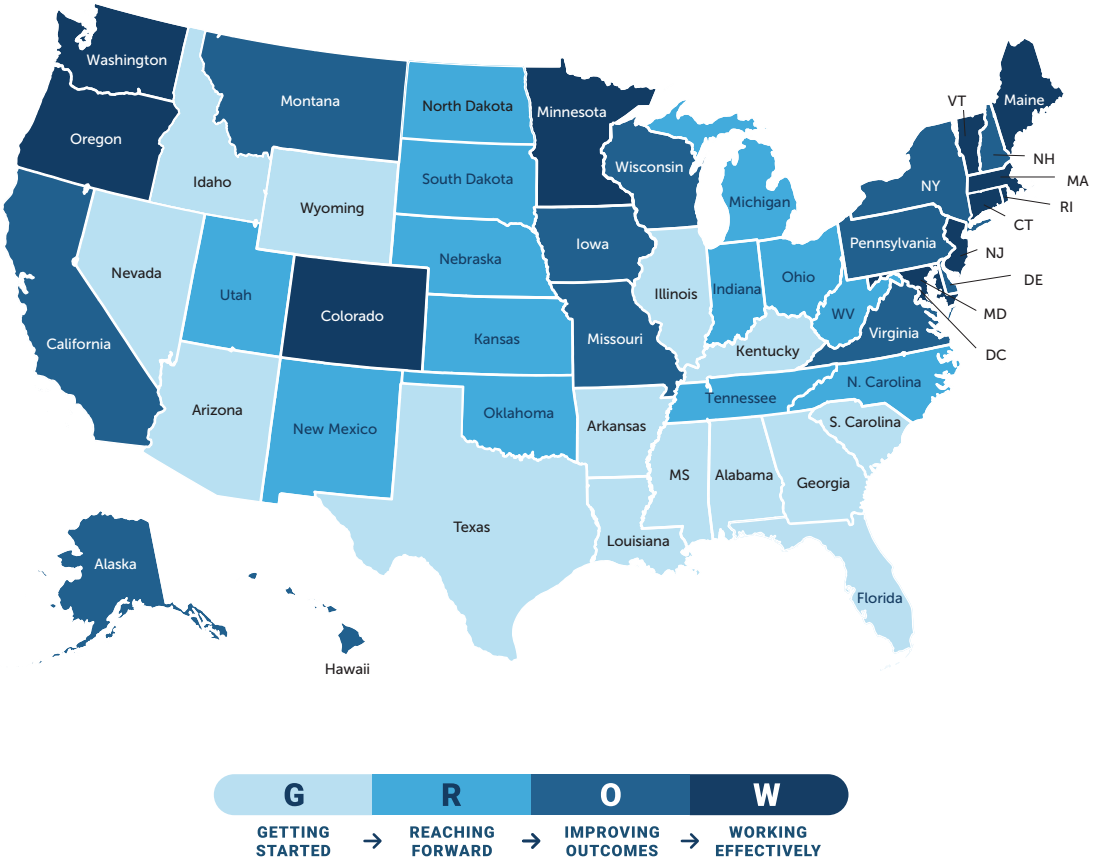
How do babies and families fare in different states? While patterns emerge when states are compared to each other using our GROW tiered rankings, every state has areas where it could improve overall and for babies of different races/ethnicities or income levels.

Regional patterns in 2022 were similar to those seen in previous years, with few exceptions. Specifically, states in the Northeast and Northwest were more likely to score in the top two tiers of states across all three domains, as compared to states in the Southwest, Midwest, and South. It is important, however, in interpreting a state's ranking, to bear in mind that the ranking is determined relative to all other states' performance, and not based on an identified benchmark. In fact, all states, including those in higher tiers, have indicators on which they can improve and all have room to grow.

A lower overall rank should not obscure the fact that a state may have promising indicators within one or more domains that can reflect initiatives the state has undertaken to improve babies' outcomes. And in all states, examination of the data by subgroups beneath the averages (i.e., applying an equity lens) reveals poorer outcomes on most indicators of well-being for babies and families, particularly among families of color and those with low income.

Figure 2 and Table 2 present a snapshot and list of how all 50 states and the District of Columbia compared to each other in 2022 using the GROW tiers. Since available indicators for Puerto Rico are limited, the territory is not included in the ranking.

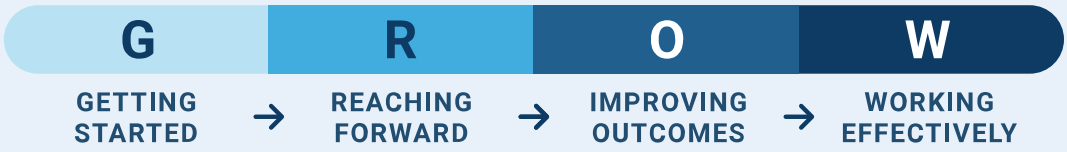
2022 OVERALL RANKING OF STATES Figure 2.



As in previous editions, the *State of Babies Yearbook: 2022* provides a profile of each state and the District of Columbia's[5] performance on key indicators in each of the three policy framework domains: Good Health, Strong Families, and Positive Early Learning Experiences. The interactive state profiles can be viewed on the website and downloaded in PDF form. A transparent ranking process, revised this year, is used to group states into one of four tiers to provide a quick snapshot of how states compare at both domain and indicator levels. The tiers represent four groupings of states that are approximately equal in size and ordered from highest to lowest performing. A detailed description of the ranking process is provided in Appendix C: Methodology.

[5] The 2022 *Yearbook* includes a unique profile for Puerto Rico. The territory's data is not included in national averages and counts, and the ranking process is not applied to its data.

The GROW symbols designate the tiers, from lowest to highest, referring to the different stages of growth in terms of well-being and policies. These symbols are used in the state profiles and throughout the *Yearbook* to designate a given state's placement on this GROW scale. Each indicator for a state also falls along the scale, visible in the state's profile.



Data provided in individual state profiles, in conjunction with the rankings, provide policymakers and advocates a resource to inform decision making and serve as a catalyst to make investments and implement strategic changes in areas of identified need. A comprehensive view of each state's profile data is available at stateofbabies.org.

STATE OF BABIES YEARBOOK 2022: OVERALL RANKINGS Table 2.

Working Effectively G R O W	Colorado	Maine	Minnesota	Rhode Island
	Connecticut	Maryland	New Jersey	Vermont
	District of Columbia	Massachusetts	Oregon	Washington
Improving Outcomes G R O W	Alaska	Illinois	Montana	Pennsylvania
	California	Iowa	New Hampshire	Virginia
	Delaware	Missouri	New York	Wisconsin
	Hawaii			
Reaching Forward G R O W	Indiana	New Mexico	Oklahoma	Tennessee
	Kansas	North Carolina	North Dakota	Utah
	Michigan	Ohio	South Dakota	West Virginia
	Nebraska			
Getting Started G R O W	Alabama	Georgia	Louisiana	South Carolina
	Arizona	Idaho	Mississippi	Texas
	Arkansas	Kentucky	Nevada	Wyoming
	Florida			

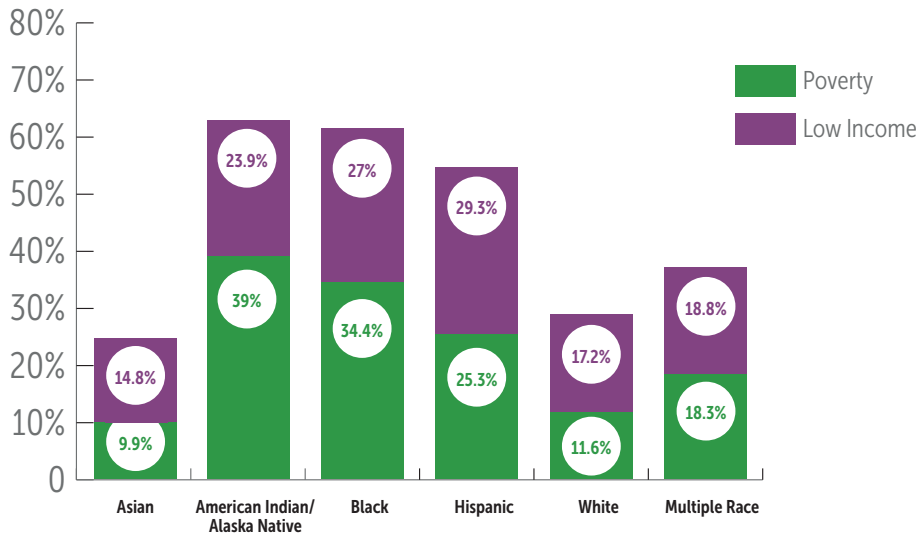
A Profile of America's Babies

The United States is home to 11.4 million babies who comprise 3.4 percent of the nation's population. This number reflects a continuation of the gradual decrease in infants and toddlers from 11.9 million reported in the 2019 *Yearbook* edition. America's babies and parents are more diverse than at any other point in our nation's history,[vii] reflecting the changing characteristics of our society overall. They differ by race and ethnicity, income level, and geographic location, and they live in families that vary in structure and work circumstances. Although each of these demographics can be viewed in isolation, several are interrelated. Together, they offer the broadest context for exploring the very different experiences of babies and families that are often masked behind national averages. (A complete demographic profile of babies nationally can be viewed in the National Profile on the *State of Babies* website.)

Most strikingly, as indicated in Figure 3, the intersectionality of race and ethnicity with income is stark due to the persistent effects of past and present discriminatory practices that have limited access to financial resources, educational opportunities, and fair job and wage structures for many families of color. The outcome of this systemic racism is most evident in the disproportional percentages of American Indian/Alaska Native (62.9 percent), Black (61.4 percent), and Hispanic (54.6 percent) families living in poverty or with low income. This context of economic insecurity provides a more complete picture of the influence of demographics on infants and toddlers and their families, and it underlies many of the disparities revealed in *Yearbook* indicators.

Applying an income lens to the findings throughout the *Yearbook* offers a more in-depth view of the many areas in which lack of economic security can create early barriers to the ability of babies in families with low income to thrive (e.g., limited access to quality health care services, stable housing, reliable income, and employment; higher rates of exposure to adverse experiences). Poverty at an early age can be especially harmful, affecting later achievement and employment. Yet babies are the age group most likely to live in families with low income and in poverty. Prior to the COVID-19 pandemic, 2 in 5 (40.3 percent) of the nation's infants and toddlers lived in families that earned less than 200 percent of the FPL ($51,500 a year for a family of four in 2019), meaning they did not have the financial resources to make ends meet. Equally troubling, RAPID findings in 2021 showed a growing number of families have experienced a decrease in household income as a result of the pandemic and report material hardship, as will be discussed in the Strong Families section.

INTERSECTIONALITY OF RACE/ETHNICITY AND INCOME Figure 3.



Demographics of Babies and Their Families Table 3

Subdomain	Indicator	Description	2019 *Yearbook*	2020 *Yearbook*	2021 *Yearbook*	2022 *Yearbook*
Population	Infants/toddlers (Count)	Number of infants and toddlers	11.9 million	11.8 million	11.5 million	11.4 million
	Infants/toddlers (Percentage)	Percentage of infants and toddlers in the total population	3.7%	3.6%	3.5%	3.4%
	Race and ethnicity	American Indian/Alaska Native	0.8%	0.8%	0.8%	1.9%
		Asian	4.9%	4.9%	4.8%	5.5%
		Black	13.8%	13.7%	13.7%	14.0%
		Hispanic	26.1%	26.2%	26.0%	26.0%
		Multiple Races	4.8%	4.8%	4.8%	5.2%
		Native Hawaiian/Pacific Islander	0.2%	0.2%	0.2%	0.2%
		White	49.3%	49.3%	49.7%	48.3%
Income Level	Above low income	Infants and toddlers living in families with incomes at or above 200 percent of the FPL	55.4%	57.9%	59.7%	59.7%
	Low income	Infants and toddlers living in families with incomes between 100–199 percent of the FPL	22.0%	22.3%	21.7%	21.7%
	Poverty	Infants and toddlers living in families with incomes below 100 percent of the FPL	22.7%	19.8%	18.6%	18.6%
	• Below 150% of State Median Income	Infants and toddlers living in families with incomes below 150 percent of SMI				77.3%
Urban/Rural Location	Urban	Infants and toddlers living in metro areas	91.3%	91.4%	91.5%	91.5%
	Rural	Infants and toddlers living outside of metro areas	8.7%	8.6%	8.5%	8.5%
Family Structure	Two-parent family	Infants and toddlers living in two-parent families	76.3%	76.7%	77.0%	78.9%
	One-parent family	Infants and toddlers living in one-parent families	21.5%	20.9%	20.5%	18.7%
	No parents present	Infants and toddlers living with no parents	2.2%	2.4%	2.5%	2.4%
	Grandparent-headed household	Infants and toddlers living in grandparent-headed households	9.4%	8.5%	8.4%	8.2%
Employment	Working mothers	Infants and toddlers who have mothers in the labor force	63.0%	61.6%	62.9%	62.4%
	No working parents	Infants and toddlers who live with no working parents			5.3%	5.5%
	• No working parents, in poverty	Infants and toddlers who live with no working parents, below 100% of the FPL				23.9%

• New indicator in 2022

NOTES: CHIP = Children's Health Insurance Program; FPL = Federal Poverty Level; SMI = State Median Income

Key Findings by Domain

Babies' brains grow faster in their first 3 years than at any later point in life, forming more than one million neural connections per second, and setting the stage for their subsequent development and health outcomes. Indicators across the three domains—Good Health, Strong Families, and Positive Early Learning Experiences—provide insight into child and family well-being, extent of services accessed, and policies present or absent in the state.

All impact the goal of promoting the optimal development that enables babies to reach their potential. Some indicators, such as low birthweight or early adverse experiences, show the extent to which babies have experiences that can undermine their development. Others, such as having health insurance, receiving TANF benefits, or receiving child care subsidies, show how access to services can promote healthy development. Policies, such as coverage of IECMH services or providing paid family and medical leave, show how states seek to provide the policy environment that enables all babies to thrive. Those indicators that can be disaggregated by race and ethnicity, income, and urbanicity give a more granular picture of the disparities among babies and the need for policies and practices that promote equity in accessing the ingredients for strong development.

The *Yearbook's* national findings on all indicators for 2022 and previous editions are summarized in tables in the sections for each domain and can be viewed in full online in the interactive National Profile, where the data can be examined by subgroup for all indicators where race/ethnicity, income, and urbanicity data if available. In addition, Appendix A: Summary of Indicator Values provides information on the variation and range of state findings for each indicator.

In the sections that follow, we highlight the notable key findings within each domain, focusing on the results obtained on new indicators, indicators where the data are most concerning, and where disparities exist. We also detail where there are opportunities for improvement through policy. In addition to the *Yearbook's* key findings, which reflect the conditions for babies and families prior to COVID-19, we present the more recent related findings on the pandemic's effects from the RAPID Survey data collected throughout 2021.

Good Health

Healthy development starts in the prenatal period and even before with the health of future parents. It follows that disparities begin during that period as well. The 2022 findings reveal significant disparities in the health outcomes of mothers[6] and babies of color, with the starkest differences found among Black and American Indian/Alaska Native families. This finding echoes previous *Yearbook* editions and the 2021 brief *Racism Creates Inequities in Maternal and Child Health, Even Before Birth.* The indicators exhibiting these disparities can undermine the development of babies, potentially affecting them throughout their lives. The persistence of these inequities continues to make clear the need for policies that directly address and eliminate the effects of generations of structural racism and the remaining barriers that limit access to responsive, quality health care.

Disparities in health are also evident for babies in families with low income, particularly in their access to preventive care.

Ensuring babies and mothers have every opportunity to maintain optimal physical and mental health is critical during this period of rapid growth to provide the foundation for babies' lifelong physical, cognitive, emotional, and social well-being. The Good Health domain examines indicators of mothers' and babies' physical and social-emotional well-being, and it presents policy indicators that assess the extent to which states have adopted policies that ensure families with infants and toddlers have access to and coverage for health care; support nutrition; and promote social-emotional health through coverage of maternal depression screening in well-child visits,

[6] The terms "mother," "pregnant women," and "breastfeeding" are used throughout the *Yearbook* for consistency with the language used in the data sources. However, the authors acknowledge that "pregnant people" and "chest feeding" are more inclusive of individuals who may not identify with these terms.

social-emotional screening of babies, and delivery of IECMH services in various settings.

Access to preventive care, such as well-child medical visits, dental visits, and vaccinations, is essential for the health of all babies and provides an important gateway to developmental support for families. The COVID-19 pandemic has given rise to new challenges that threaten babies' and toddlers' chances at a healthy start in life. Most notably, RAPID findings show disruptions in preventive care and increases in child and caregiver emotional distress, both of which have the potential to negatively impact babies' physical and social-emotional health in the long term. The pre-COVID-19 findings of the *Yearbook* and RAPID data amid the pandemic point out the urgent need for policies that ensure access for all families with young children. Specifically, as illustrated in the findings for Good Health, the nation's babies and families require permanent, comprehensive policies that (a) extend insurance coverage to more people; (b) ensure children have access to a medical home where developmental and family needs receive consistent attention; and (c) support maternal, infant, and early childhood mental health.

Key findings

Key findings for Good Health in 2022 show few areas in which change has occurred for babies and families, and the data reflect persistent disparities, particularly when analyzed by race/ethnicity and income. It is also important to note that no update was available from the data sources for some indicators. These indicators include preventive medical visits and states' Medicaid coverage for IECMH services. For these indicators, we continue to report the data from the latest data set release and note this for the reader because an unchanged value from the previous year, or years, may not yet reflect what is happening within the states.

HEALTH CARE ACCESS AND AFFORDABILITY

Ensuring equitable access to integrated, affordable maternal, pediatric, and family health care is essential to meeting babies' and families' health and developmental needs. Policy improvements from the last decade, which propelled significant gains in access to health coverage, seem to have stalled, and concerning disparities remain.

MEDICAID EXPANSION As of July 2021, **39 states had adopted or implemented Medicaid expansion,** reflecting no additional states from the previous year. Medicaid expansion improves parents' access to care. In addition to increasing the likelihood of babies and families receiving care, Medicaid expansion has been associated with lower rates of infant mortality in states that adopted this policy.

UNINSURED BABIES IN FAMILIES WITH LOW INCOME Despite coverage available through Medicaid and CHIP, **5.1 percent of low-income infants and toddlers still lacked health insurance,** virtually unchanged from the previous report, and substantial variation continued to be found when examined by race/ethnicity and urbanicity.

Race and Ethnicity. Most notably, the percentage of American Indian/Alaska Native babies (12.7 percent) in families with low income without health insurance was more than double the national average of 5.1 percent and was also above the average among Other Race (7.2 percent), White (5.7 percent), and Hispanic (5.5 percent) babies. The incidence of uninsured babies was lower than the national average for Black (3.4 percent), Asian (4.5 percent), and Multiple Race (3.3 percent) babies.

Urbanicity. The percentage of babies in families with low income without health insurance was higher than the national average in rural areas (6.7 percent), compared to urban areas (4.7 percent).

"At 12 weeks after the birth of my child, I was still suffering from anxiety and depression. Having to return to work in order to support my family was emotionally and mentally tough. As an educator, I felt that I did a disservice to my students by returning to the classroom and not having enough time to address my symptoms."

Zurii D., Las Vegas, NV

CHIP MATERNAL COVERAGE FOR UNBORN CHILD OPTION According to this new indicator for the *2022 Yearbook,* **17 states have implemented the Maternal Coverage for Unborn Child option.** This option extends coverage to undocumented pregnant women by covering their unborn child as a targeted low-income child, who will be covered by Medicaid or CHIP at birth. Health coverage for pregnancies under this option includes prenatal care and labor and delivery services, and it ends with the birth of the child.[viii] The need for health coverage is shared by all children, including those born into immigrant families. States can elect to implement several options to address this need, including the option to extend coverage to an unborn child once a pregnancy is confirmed through the "unborn child option."

MEDICAL HOME Only half (51.5 percent) of infants and toddlers had a medical home. Babies benefit most from care and screening provided by a consistent medical provider or practice—a medical home—from which they receive coordinated, ongoing, comprehensive care. Significantly fewer babies in families with low income (41.6 percent) had medical homes than their peers in families above low income (58.4 percent). When examined by race, fewer Asian (41.8 percent), Hispanic (41.4 percent), and Black (41.0 percent) babies had medical homes than the national average. White infants (59.1 percent) were more likely than the national average to have a medical home.

EXTENSION OF MEDICAID COVERAGE FOR PREGNANT WOMEN While states provide pregnant women with Medicaid benefits, **only three states extend Medicaid eligibility beyond the federal requirement of 60 days postpartum.**[ix] This number reflects a decrease from five states in the *2021 Yearbook*, due to the expiration of the policy in two states. However, at the time of this report, a number of states are adopting the five-year state option of extending coverage provided in the American Rescue Plan.

The postpartum period after birth is a particularly important and sensitive time for both the parent who carried the child and their newborn baby. Parents can face a variety of health challenges

postpartum including depression, anxiety, pain, and complications that may have arisen during pregnancy or childbirth. Medicaid coverage provides an avenue for parents with moderate to low income to receive financial support as it relates to their pregnancy and the postpartum period. However, coverage gaps can leave many people in need of support during a very vulnerable time of their lives.

POLICY RECOMMENDATIONS AND RELATED ACTIONS Our recommendations for improvement in Health Care Access and Affordability include:

- **Extend Medicaid coverage for mothers and babies.** While expanded access to health coverage for parents remains a primary goal, several smaller changes to Medicaid could enhance maternal and infant health as well as the role of primary care in prevention and promoting strong development:
  - Mandating Medicaid coverage for women through 12 months postpartum and promoting coverage of approaches such as doulas
  - Ensuring coverage of IECMH services that include multigenerational therapies for babies and caregivers
  - Mandating Medicaid coverage for all children until they are 3 years old
  - Requiring a certain percentage of Medicaid funding to be used for health promotion and prevention, including addressing the social determinants of health, and promoting use of Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) to monitor and address developmental needs

Related federal policy actions and state opportunities

Proposed legislation in the House-passed reconciliation bill that would strengthen access to early and ongoing access to health care for pregnant women with low income and their babies includes provisions that would permanently authorize CHIP. Also, key provisions for Medicaid would extend coverage for postpartum women, increasing from the current requirement of 3 months to 12 months, and would provide 12 months of continuous eligibility to their babies.

The American Families Plan substantially increases funding for Medicaid and proposes mandatory spending for Medicaid, including eliminating funding caps for Puerto Rico and U.S. territories. The plan would also make it easier for eligible people to get and stay covered, and it reduces deductibles for marketplace plans under the Affordable Care Act.

State Opportunity. States should adopt the option provided in the American Rescue Plan (ARP) to extend Medicaid and CHIP postpartum coverage to 12 months. States that have not adopted Medicaid expansion can now receive incentives to do so.

NUTRITION

Consistent access to healthy, nutritious food during the prenatal period and first years of life is vital for families to ensure their babies receive the nourishment and care they need for a strong start in life.

BABIES EVER BREASTFED/BREASTFED AT 6 MONTHS Despite the known benefits of breastfeeding, only a little more than one-half of babies in the U.S. are still breastfed at 6 months. **The percentage of babies ever breastfed was 84.2 percent,** approximately the same percentage reported in previous years; **56.8 percent of babies are still breastfed at 6 months.** Breastfeeding is beneficial to both infants and their mothers. For young children, breastfeeding is associated with numerous benefits, including reduced rates of disease, overweight, and obesity. Breastfeeding is also associated with positive outcomes for the breastfeeding parent, including reduced rates of breast and ovarian cancers.[x] Skin-to-skin contact in breastfeeding also increases oxytocin levels, resulting in breastfeeding parents reporting higher rates of attachment.[xi]

Substantial differences are found in breastfeeding at 6 months by race and ethnicity and by income that reflect the influence of numerous cultural, historical, and economic factors, such as lasting negative connotations of forced wet nursing by Black women during slavery and lack of workplace accommodations and time for breastfeeding parents in low-wage jobs, who are disproportionately women of color.

Race and Ethnicity. The percentage of babies breastfed at 6 months was lower than the national average among Hispanic (52.8 percent) and Black babies (47.8 percent). The percentage of White babies (60.9 percent) breastfed at 6 months was higher than the average.

Income. At the national level, babies in families with low income (47.4 percent) are less likely to be breastfed at 6 months than those in families above low income (65.9 percent).

WIC COVERAGE Nationally, the percentage of eligible infants who participated in WIC was 97.8 percent. While this would appear to be a substantial increase from the nearly 80 percent reported in the last *Yearbook*, this latest rate is not comparable to previous years due to a change in how the U.S. Department of Agriculture calculated eligibility. However, as levels of food insecurity rise amid COVID-19, the importance of connecting families with young children to nutrition assistance has only increased. WIC is a federal grant program that provides access to food, nutrition information, and health care referrals to women and children, from pregnancy through the time the child reaches age 5.[xii] Participating in WIC is associated with lower levels of infant mortality, better cognitive development for the child, and more nutritious diets.[xiii] However, differences in the reach of WIC coverage are revealed when examined by race and ethnicity.

Race and Ethnicity. WIC coverage rates among Hispanic (96.1 percent) and White (89.8 percent) eligible infants were lower than the national average, though only slightly so for Hispanic infants. Black and Other Race eligible infants (both reported to be covered at 100 percent[7]) were higher than the national average.

POLICY RECOMMENDATIONS AND RELATED ACTIONS Our recommendations for improvement in Nutrition include:

- Removing administrative and other barriers to modernize and streamline access to WIC and SNAP;
- Resolving gaps in coverage for WIC;
- Providing additional funding for targeted outreach to reach all eligible families; and
- Extending the WIC certification periods to 2 years and enrollment for children until their sixth birthday.

Related federal policy actions and state opportunities

The Wise Investment in our Children Act of 2021 offers an essential step in closing nutrition gaps and enhancing access to WIC. This bipartisan legislation would extend child eligibility to age 6, extend postpartum eligibility to 2 years, and extend the infant certification period to 2 years.

The Providing Urgent Maternal Protections (PUMP) for Nursing Mothers Act provides the opportunity to close the coverage gap; ensures nursing workers have access to remedies that are available for other violations of the Fair Labor Standards Act; extends protections to 2 years after the child's birth and protects lactating workers in the event of stillbirth, adoption, or surrogacy; directs the Department of Labor to issue guidance to assist employers in complying with the law; and provides employers clarity on implementation and pay requirements. The PUMP Act works toward combatting lactation discrimination in the workplace while closing gaps in labor laws that have previously excluded millions of workers.

In the House-passed Build Back Better Act, the number of schools able to offer free meals to all students through the Community Eligibility Provision would be expanded. States would have the option to implement the Community Eligibility Provision statewide, allowing all students in the state to receive school breakfast and lunch at no charge. The reconciliation bill would also extend Summer Electronic Benefits Transfer (EBT) for students who receive free or reduced-price school meals while allowing states and Indian Tribal Organizations that participate in WIC to also provide Summer EBT.

State Opportunity. Given the national drop in WIC participation and participation disparities across states, increasing outreach to eligible families is an important state undertaking. WIC can also be a platform for parenting and other family support services.

[7] The reliability of rates for Black and Other Race eligible infants could not be established.

MATERNAL HEALTH

The physical and emotional health and well-being of mothers and infants are intrinsically intertwined, beginning in the critical prenatal period and throughout babies' first 3 years. Whether babies are born healthy and with the potential to thrive as they grow greatly depends on their mother's/birthing person's well-being—not just before birth, but even prior to conception. To have a healthy pregnancy and positive birth outcomes, mothers require access to appropriate health care services before, during, and after pregnancy. However, maternal health is one of the most pronounced areas in which there are striking disparities, particularly when examined by race and ethnicity.

As detailed in our 2021 brief, *Racism Creates Inequities in Maternal and Child Health, Even Before Birth,* the connection between maternal and child well-being is particularly important among women of color and their babies due to the intergenerational effects and stressors of lived experiences with institutional and interpersonal racism. These inequities are evident in pregnant women's receipt of prenatal care and maternal mortality rates, as shown in Figures 4 and 5.

LATE OR NO PRENATAL CARE RECEIVED

Nationally, **the percentage of women receiving late or no prenatal care was 6.4 percent,** a slight increase from 6.2 percent last reported. There are wide disparities across racial and ethnic groups, with much higher rates than average for Native Hawaiian/Pacific Islander and American Indian/Alaska Native women.

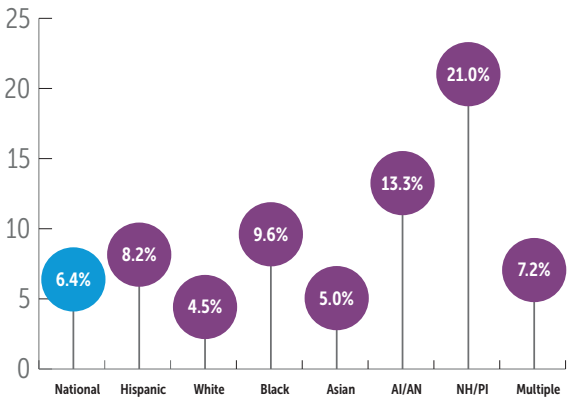
Race and Ethnicity. The percentages of Asian (5.0 percent) and White (4.5 percent) pregnant women who received late or no prenatal care was lower than the national average. The percentages of Native Hawaiian/Pacific Islander (21.0 percent) and American Indian/Alaska Native (13.3 percent) pregnant women who received late or no prenatal care were strikingly high and more than twice the national average. Late or no receipt of prenatal care was also higher than the national average among Black (9.6 percent), Hispanic (8.2 percent), and Multiple Race (7.2 percent) pregnant women.

Urbanicity. Minimal difference was found in receipt of late or no prenatal care among urban and rural pregnant women. The percentage of urban pregnant women (6.3 percent) was slightly below the national average and rural pregnant women (6.5 percent) were slightly above the average.

MATERNAL MORTALITY (DEATHS PER 100,000 LIVE BIRTHS) Alarmingly, maternal mortality has increased to 20.1 pregnancy-related deaths per 100,000 live births from 17.4 reported in the *2021 Yearbook*, a 16 percent increase. The increase for Black mothers, was even larger (18 percent), resulting in a rate of 44 per 100,000 live births. The nation's maternal (and infant) mortality

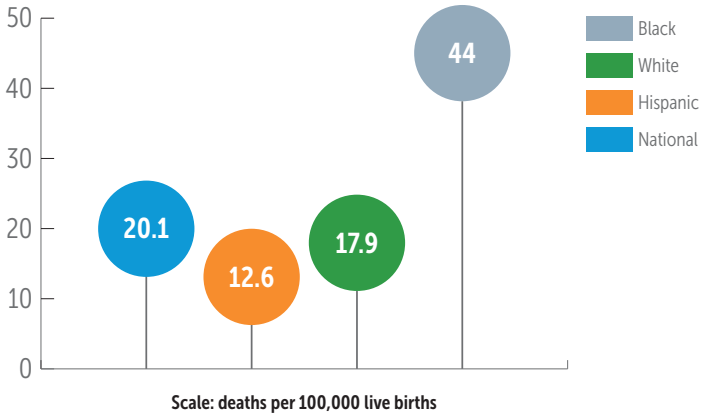
LATE OR NO PRENATAL CARE

Figure 4.



MATERNAL MORTALITY RATE

Figure 5.



rates are concerning and, as previously noted, are higher than rates found in other industrialized countries. Maternal mortality encompasses pregnancy-related deaths, defined as deaths during pregnancy or within one year of the end of pregnancy from a pregnancy complication.[xiv] Differences in states' definitions and reporting practices continue to prevent reporting maternal mortality rates at the state level. Examination of this indicator is possible by race/ethnicity for only three groups (White, Hispanic, and Black mothers), where analysis of the data continues to show deep disparities.

Race and Ethnicity. The maternal mortality rates for Hispanic (12.6) and White (17.9) mothers were lower than the national average. The maternal mortality rate for Black mothers (44.0) continued to be alarmingly high and more than twice the national average.

MOTHERS REPORTING LESS THAN OPTIMAL MENTAL HEALTH Mothers reporting less than optimal mental health remained high. **More than one in five mothers of infants and toddlers (21.9 percent) rated their own mental health as worse than "excellent" or "very good."** This was an increase from the finding of 20.3 percent reported in the *2021 Yearbook*. When examined by race and income the following differences were found:

Race and Ethnicity. The percentage of White mothers (22.8 percent) reporting less than optimal mental health was above the national average. Fewer Black (21.3 percent), Hispanic (20.3 percent), and Asian (16.0 percent) mothers reported this than the national average.

Income. Mothers of infants and toddlers in families with low income (26.9 percent) were more likely to rate their mental health as worse than "excellent" or "very good" than mothers in families above low income (18.8 percent).

POLICY RECOMMENDATIONS AND RELATED ACTIONS Our recommendations for improvement in Maternal Health include:

- Increasing support and access to culturally responsive promising models (e.g., midwifery, doula care, group prenatal care, and breastfeeding support);
- Expanding Medicaid coverage through the first year postpartum;
- Removing administrative and other barriers to support participation in the WIC nutrition program;

- Expanding access to paid family leave; and
- Requiring employment protections and reasonable accommodations for pregnant workers.

RELATED FEDERAL POLICY ACTIONS AND STATE OPPORTUNITIES The bipartisan Black Maternal Health Momnibus Act (H.R. 959), which passed in the House in November 2021, includes 12 bills aimed at addressing the nation's maternal health crisis. If passed into law, its provisions would improve maternal health and birth outcomes and eliminate the profound racial and ethnic disparities found among Black and American Indian/Alaska Native families. The comprehensive package of bills includes historic levels of funding that would "grow and diversify the perinatal workforce, including midwives and doulas; invest in community-based organizations working to promote maternal health equity; address social determinants of health like housing, nutrition, and environmental conditions; and expand access to maternal mental health care."[xv]

The ARP includes a provision that makes major changes to Medicaid coverage for pregnant and postpartum women living with low income. The ARP adds new incentives for states to take up Affordable Care Act Medicaid expansion and also gives all states the new option to extend the postpartum coverage period under Medicaid from 60 days following pregnancy to a full year. Taking effect April 1, 2022, and available for 5 years, the new option requires participating states to provide full Medicaid benefits during pregnancy and the extended postpartum period.

The House-passed Pregnant Worker's Fairness Act will benefit pregnant workers and their families by providing economic security and reasonable accommodations that are not a hardship to one's employer (e.g., provide a stool for the worker's use, assign lighter duty), as well as preventing loss of employment during this period when women's workforce participation is declining.

State Opportunity. States can enact robust policies, especially in the absence of a federal statute, that require employers' pregnant worker protection plans to be applicable to the general public, including private and state employees.

CHILD HEALTH

The *2022 Yearbook's* findings make clear that more intensified efforts are needed to make improvements on a number of indicators that contribute to babies' immediate and future health.

Birth outcomes. Most strikingly, the incidence of negative birth outcomes (i.e., preterm births and low birthweight) and rates of infant mortality remain high and are unchanged from previous *Yearbook* findings. As detailed in this section and depicted in Figures 6 and 7, deep racial and ethnic disparities persist on these critical indicators of infant health. However, the pattern of disparities is also apparent in most states. The root causes of these inequities lie in differences in access to quality care, implicit biases encountered in medical treatment, and the cumulative effects of racism-related stress (also known as "weathering") that, as the data show, are most prominent among Black and American Indian/Alaska Native women. These experiences result in high rates of preterm births and babies born at low birthweight, and they contextualize their babies' mortality outcomes.[xvi]

BABIES BORN PRETERM Nationally, **1 in 10 babies (10.2 percent) are born preterm,** placing them at early risk for health complications. Preterm births (births before 37 weeks of completed gestation) are the second leading cause of death among children younger than 5 years old.[xvii] The percentage of babies born preterm can be reduced through early intervention. The most effective interventions for improving infant survival rates are those that support the pregnant woman before, during, and after pregnancy. These can ensure that complications often associated with preterm delivery, such as infection, neurological challenges, and lung immaturity, are treated early.[xviii] The largest differences on this indicator are found when viewed by race and ethnicity. Analysis is also possible by urbanicity; however, minimal differences are found between babies in urban and rural settings.

Race and Ethnicity. The percentages of Hispanic (10.0 percent), White (9.3 percent), and Asian (8.7 percent) babies born preterm were lower than

the national average of 10.2 percent, though only slightly for Hispanic and White infants. Preterm births were significantly higher than the national average for Black (14.4 percent), American Indian/Alaska Native (11.7 percent), Native Hawaiian/Pacific Islander (11.2 percent), and Multiple Race (10.9 percent) babies.

Urbanicity. The incidence of preterm births was similar for infants born in urban and rural areas. Preterm birth among urban babies (10.2 percent) is the same as the national average, and preterm birth among rural babies (10.6 percent) is only slightly higher than the average.

BABIES WITH LOW BIRTHWEIGHT Similar to the last edition of the *Yearbook*, as many as **1 in 12 infants (8.3 percent) were born at low birthweight,** nationally. Low birthweight (weight of less than 5.5 pounds at birth) is strongly associated with poor developmental outcomes that, beginning in infancy, can affect school readiness and extend into adult life.[xix] Low birthweight is often associated with pre-term delivery, but it can occur also with full-term births.

Race and Ethnicity. The percentages of American Indian/Alaska Native (8.0 percent), Hispanic (7.6 percent), White (6.9 percent), and Native

Hawaiian/Pacific Islander (7.5 percent) infants born at low birthweight were below the national average of 8.3 percent. The incidence of low birthweight was strikingly higher than the national average for Black infants (14.2 percent), approaching nearly twice the national rate and affecting 1 in 7 Black babies. Low birthweight was also above the national average for Multiple Race (9.1 percent) and Asian babies (8.7 percent).

Urbanicity. The percentage of infants born at low birthweight was very similar for babies in rural and urban areas, with the percentage of urban babies (8.3 percent) equaling the national average and rural babies (8.4 percent) slightly higher than the average.

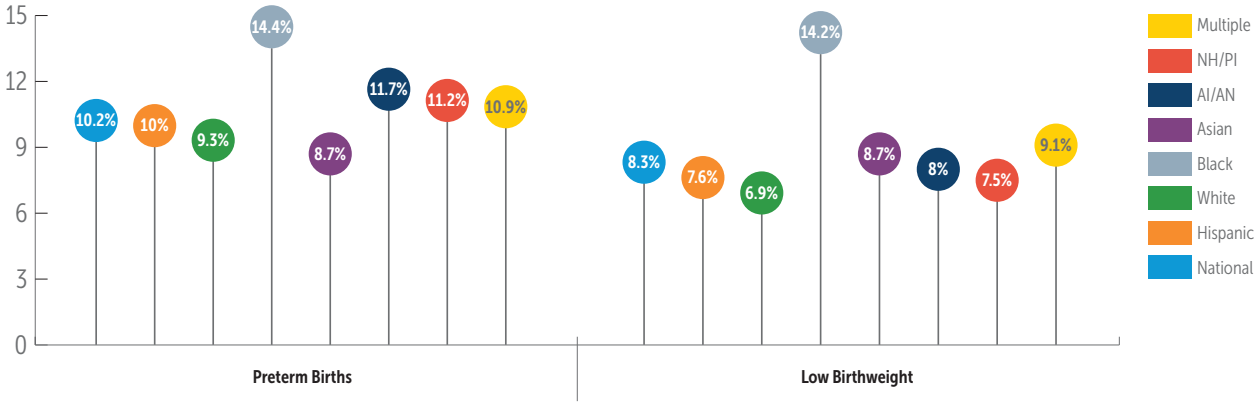
INFANT MORTALITY RATE (DEATHS PER 1,000 LIVE BIRTHS) The national infant mortality rate was 5.6 deaths per 1,000 live births, higher than the rates of many other high-income countries,[xx] and the disparities by race and ethnicity continue to be profound. Infant mortality is defined as a death within the first year of life and is typically measured as the number of deaths per 1,000 live births.[xxi] After birth defects, preterm birth and low birthweight are two of the most common causes of infant mortality[xxii].

Race and Ethnicity. The infant mortality rates for Hispanic (4.9 per 1,000 live births) and White (4.6) babies were lower than the national average and slightly decreased from the previous report. The mortality rate for Asian (3.6) babies was also lower than the national average. The infant mortality rates for Black (10.8), Native Hawaiian/Other Pacific Islander (9.4), and American Indian/Alaska Native (8.2) babies were markedly higher than the national average, with Black infant mortality nearly twice the national rate.

Preventive Care. The *Yearbook's* pre-pandemic findings on the health of babies and their families continued to be positive in two areas of preventive health care—medical visits and vaccinations. However, differences remain in receipt of care among babies in families with low income. In contrast, a substantial number of babies have the benefit of receiving care in a medical home. And, as will be reported at the end of this section, the pandemic continued to disrupt families' abilities to maintain their previous levels of preventive care.

PREVENTIVE MEDICAL VISITS[8] Although nationally, a high percentage of babies (91 percent) had received regularly scheduled preventive medical care in the past 12 months, only 87.8 percent of babies in families with low income received a preventative medical visit in the previous year as compared to 93.4 percent of those in families above low income.

NEGATIVE BIRTH OUTCOMES BY RACE AND ETHNICITY Figure 6.



[8] Note: Due to a change in National Survey of Children's Health question language, this indicator was not updated for the 2021 or 2022 *Yearbook*. Sample sizes do not support looking at subgroups beyond income.

VACCINATIONS Receipt of vaccinations was relatively high, with 72.8 percent of babies overall having completed vaccinations according to schedule. However, fewer babies in families with low income (66.1 percent) received all recommended vaccines, compared with those in families above low income (79.2 percent).

MEDICAL HOME Only one-half (51.5 percent) of infants and toddlers had a medical home. Babies benefit most from care and screening provided by a consistent medical provider or practice—a medical home—from which they receive coordinated, ongoing, comprehensive care. Yet, significantly fewer babies in families with low income (41.6 percent) had medical homes than their peers in families above low income (58.4 percent). When examined by race and ethnicity, fewer Asian (41.8 percent), Hispanic (41.4 percent) and Black (41.0 percent) babies had medical homes than the national average. White infants (59.1 percent) were more likely than the national average to have a medical home.

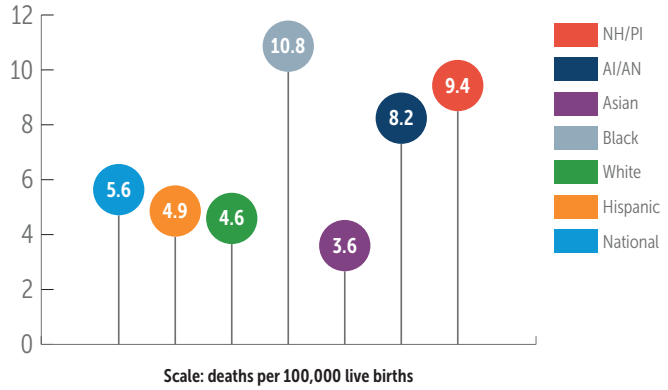
EFFECTS OF COVID-19 ON PREVENTIVE CARE

According to the 2021 RAPID data, 24.3 percent of families surveyed[9] reported that they had missed a well-baby or well-child visit, a decrease from 37.8 percent in 2020. Despite the decrease, the rate of missed visits continues to be worrisome, and nearly 3 times higher than the pre-pandemic level of 9 percent. As many as 68.7 percent of families reported concern about exposure to COVID-19 as the reason for missed visits, with inability to find child care (reported by 15.5 percent of families) being the second most frequent reason.

COVID-19's impact on health care continues to be significant. Many preventive health measures for young children have been compromised during the pandemic, especially for lower-income households and Black and Latinx households. Well-child visits are an essential part of good health, giving physicians the chance to screen for early issues with development, child and caregiver mental health, physical safety, and child–caregiver relationships. Young children also receive vital vaccinations against deadly childhood illnesses during these visits. Among the families surveyed in 2021, 13.1 percent (a decrease from 18.1 percent in 2020) reported that their children had missed a recommended vaccine, which creates an increased risk for outbreaks in childhood illnesses such as hepatitis, measles, and whooping cough.[xxiii]

Subgroup analysis of the RAPID data further reveals that Black and Latinx babies, children with disabilities, and those in families with low income are disproportionately missing well-child visits and accompanying vaccines. The percentage of Black (34.8 percent) and Latinx (31.2 percent) babies missing well-child visits continued to be significantly higher than the national average of 24.3 percent; the percentage of White babies (23.0 percent) was slightly below the average. A similar pattern was found in missed vaccinations (see Figure 8). As reported in 2020, young children with disabilities were more likely than children without disabilities to miss preventive visits at key milestone ages of 12 and 24 months.[xxiv] Families with low income were also more likely than middle- and high-income households to miss check-ups and vaccinations, reporting concerns about cost and significantly more challenges finding care for other family members necessary to attend doctor visits (see Figure 9).

INFANT MORTALITY BY RACE AND ETHNICITY Figure 7.



[9] Analyses for health and health care are based on responses collected from 1,353 caregivers who responded to at least one follow-up survey between the dates of January 5 and December 14, 2021. Proportions/percentages are calculated on the basis of item-level response rates, not out of the total sample size. The data for these analyses are not weighted.

POLICY RECOMMENDATIONS AND RELATED ACTIONS Our recommendations for improvement in Child Health include:

- **Transforming pediatric care to support early development.** Pediatric primary care is a universal touchpoint that reaches almost every baby, toddler, and young child in the nation. We can transform the pediatric setting into a family-centered support by adding a child development specialist to the primary care team, an approach pioneered by ZERO TO THREE's HealthySteps program, driving better developmental trajectories and outcomes for young children and parents.

RELATED FEDERAL POLICY ACTIONS AND STATE OPPORTUNITIES Early Childhood Support in Pediatric Offices would provide new funding for Early Childhood Development Expert Grants to help cities place early childhood development experts in primary care practices with a high percentage of patients with Medicaid and CHIP.

Additional investments include the Maternal and Child Health Block Grant, designed to promote and improve the health and well-being of mothers, children, and their families, as well as the funding of Community Health Centers to continue providing culturally competent care, help patients overcome geographic barriers, and reach the most vulnerable populations.

State Opportunity. States can incorporate a child development specialist in pediatric primary care into their maternal and child health approaches, using financing strategies such as Medicaid to sustain the approach.

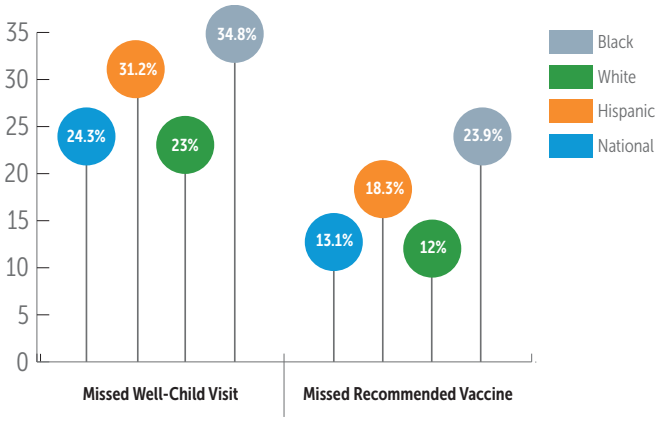
INFANT AND EARLY CHILDHOOD MENTAL HEALTH

IECMH is the developing capacity of the child from birth to 5 years old to form close and secure adult and peer relationships; experience, manage, and express a full range of emotions; and explore the environment and learn—all in the context of family, community, and culture.[xxv] Experts from a range of disciplines consider IECMH to be the foundation of healthy, lifelong development. During the infant and toddler years, there are many opportunities to promote emotional health, to prevent emotional disturbances from taking root, and to treat mental health problems before they can manifest into more severe problems later in life.[xxvi] Availability of mental health services for babies and families has only increased in importance with the additional stressors caused by the pandemic. RAPID survey findings in 2021 reveal the ongoing effects of these stressors in the form of caregiver distress and child emotional distress.

SOCIAL-EMOTIONAL SCREENING OF YOUNG CHILDREN The Medicaid plans of **43 states cover**

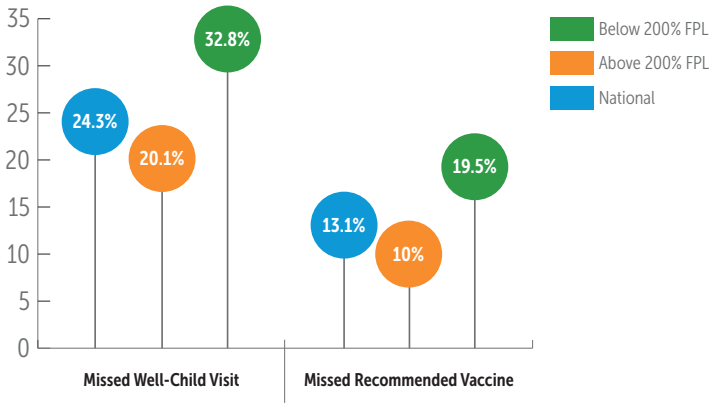
DISRUPTIONS IN PREVENTIVE HEALTH DURING THE COVID-19 PANDEMIC BY RACE/ETHNICITY

Figure 8.



DISRUPTIONS IN PREVENTIVE HEALTH DURING THE COVID-19 PANDEMIC BY INCOME LEVEL

Figure 9.



social-emotional screening of young children, which was high when last reported.

MEDICAID COVERAGE OF IECMH SERVICES Nearly all states' Medicaid plans cover IECMH services provided in settings most accessible to families with young children. **49 states covered IECMH services in the home, 46 states covered these services in pediatric/family medicine practices,** and **34 states covered these services in early care and education settings.** Despite broadening public recognition of the significance of babies' social-emotional health and access to IECMH services, at the time of development of this *Yearbook*, no update was available to the survey of state IECMH services. The available data on which we can report are unchanged from the 2020 and *2021 Yearbook* editions.

EFFECTS OF COVID-19: RAPID FINDINGS ON SOCIAL-EMOTIONAL HEALTH In 2021, caregivers with infants and toddlers continued to report increased emotional distress amid the pandemic, which coincided with an increase in their children's emotional distress (see Figures 10 and 11). Overall, child and caregiver mental health has improved since the pandemic began, with modest variation across racial and ethnic subgroups. Emotional support can serve as an important buffer against emotional distress in young children,[xxvii] but families are reporting lower levels of emotional support and higher levels of loneliness than before the pandemic.

The pandemic's effects on the social-emotional health of families with young children are particularly concerning given that the early years are crucial to the developing brain. Prolonged stressful early life experiences can permanently impact children's brain and biological systems, increasing the risk of learning difficulties and lifelong health problems such as obesity and heart disease.[xxviii] It is important to note that, as the RAPID findings continue to demonstrate, caregiver and child mental health are linked. Higher rates of caregiver anxiety, depression, and stress in 2021 were directly related to increases in young children's emotional distress, although the relationship was weaker than seen in the previous year.[xxix]

POLICY RECOMMENDATIONS AND RELATED ACTIONS Our recommendations for improvement in children's mental health include:

- Increasing the capacity to support strong IECMH. How young children feel about themselves and relate to others is at the core of all learning and development. Our nation must build the infrastructure and means to promote and address the foundational mental health needs of young children.

- Infusing all early childhood settings, such as pediatric care, child care, and home visiting, with an understanding of IECMH to promote positive social-emotional development and seek support from IECMH professionals to address behavioral health concerns.

- Developing a well-trained IECMH workforce by establishing IECMH Centers of Excellence and clinical leadership programs to address mental health needs of infants and toddlers, especially the effects of trauma and other ACEs. Such IECMH expertise should be infused in state child welfare systems to support babies and families who have experienced trauma.

- Consistently applying the science of IECMH with the widespread use of developmentally appropriate practices and tools. Promoting the use of developmentally appropriate assessment instruments and the Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (DC:0–5)[xxx] to assess and diagnose mental health disorders in young children will help fill a critical gap.

RELATED FEDERAL POLICY ACTIONS AND STATE OPPORTUNITIES The ARP includes much-needed mental health funding for families with infants and toddlers and designates record amounts for the Community Mental Health Block Grant (MHBG) and the National Child Traumatic Stress Network. Provisions in the MHBG urge states to dedicate a portion of their block grant funding through the new Prevention and Early

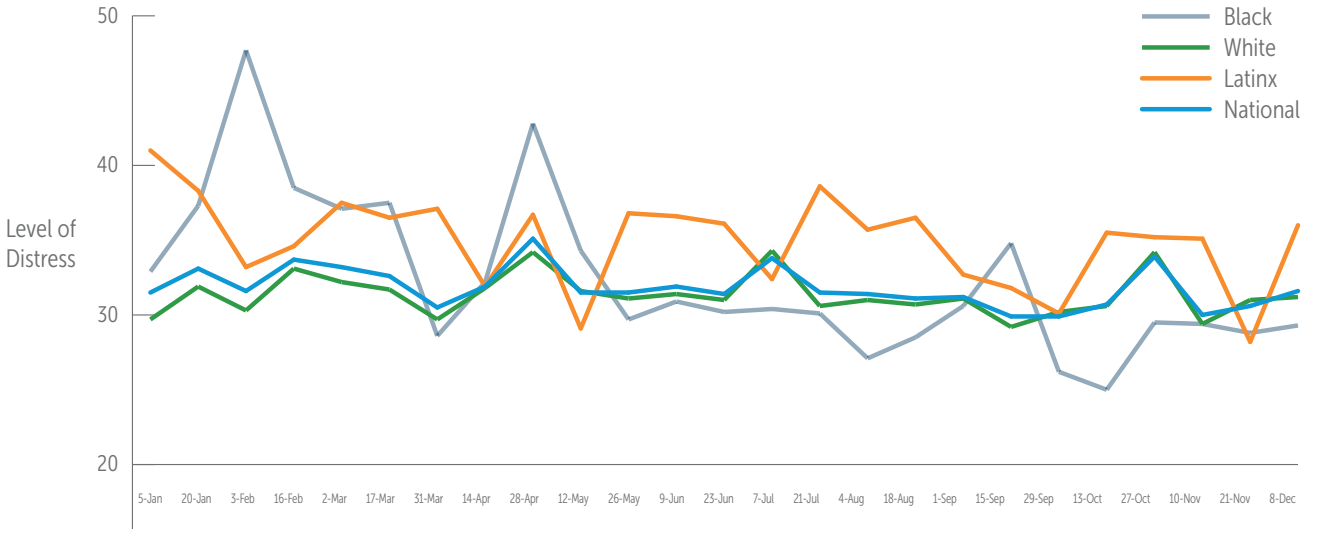
Intervention Set-Aside for services and activities related to infants and toddlers, such as expanding the IECMH workforce; improving the quality of services available to children and families; increasing knowledge of IECMH among professionals who see children most; and strengthening systems and networks for identification and referral to reach more young children in need.

Additional investments include the reintroduction in 2021 of the *Resilience Investment, Support, and Expansion ("RISE") from Trauma Act* to expand the trauma-informed workforce and increase resources for communities. The bill gives specific attention to the needs of trauma-affected young children, the specialized training required for clinicians who work with them, and provider shortages.

State Opportunity. States can specify in their Medicaid plans that multigenerational mental health therapies for babies and caregivers are covered based on the children's eligibility.

CAREGIVER EMOTIONAL DISTRESS TREND (BIWEEKLY JAN 5 – DEC 14, 2021) Figure 10.

CHILD EMOTIONAL DISTRESS TREND (BIWEEKLY JAN 5 – DEC 14, 2021) Figure 11.



NOTE: Parent emotional distress was obtained by an average composite score of depression, anxiety, stress, and loneliness symptoms, ranging from 0 to 100.

State Spotlight

Maine Conducts Study on Disparities in Access to Prenatal Care

Systemic racism in the United States has created an environment in which maternal health outcomes—already among the worst in the world—are significantly worse for communities that are Black, Indigenous, and People of Color. While the causes for such negative maternal health outcomes and disparities by race and ethnicity are complex and interrelated, one factor that helps to improve maternal health outcomes for every population is access to uninterrupted, high-quality prenatal care.[xxxi] In Maine, it was found that Black, Indigenous, and People of Color communities not only have worse maternal health outcomes than their White counterparts, they also have reduced access to prenatal care.

In 2021, the Maine Permanent Commission on the Status of Racial, Indigenous, and Tribal Populations was directed to study the extent of disparities in access to prenatal care through data and other information; study the causes of the disparities in access to prenatal care, including through interviews with those women who had no prenatal visit until the last trimester or who had no prenatal care at all; and recommend solutions to disparities in access to prenatal care in the state.

Authorized through state legislation, the Commission was charged with studying the extent and causes of disparities as well as with conducting interviews with individuals who had no prenatal care or did not have prenatal care until their third trimester. The study found that while severe maternal morbidity has been increasing nationally over recent years, Maine data showed relatively similar annual numbers. However, during that same time period, the severe maternal morbidity rate was 176 percent higher among Black delivery hospitalizations than among White delivery hospitalizations in Maine. It was also found that White pregnant people in Maine are more likely to receive adequate prenatal care and have access to prenatal care as early as they want than their Black, Indigenous, and People of Color counterparts.

Many factors drive the disparities observed in maternal health outcomes among Black, Indigenous, and People of Color communities. The report groups the main driving factors into four broad categories: racism, structural barriers, the social determinants of health, and community norms. On the basis of the data collected through the survey, five recommendations are made to improve maternal and child health outcomes for Black, Indigenous, and People of Color communities: expand community-led data gathering and align with statewide systems; invest in relationship-centered care; address structural inequities; support community-led education; and enhance statewide data collection to better serve communities.

For more information on Maine's report on racial disparities in access to prenatal care, visit here.

Good Health—Summary of All Indicators Table 4.

Subdomain	Indicator	Description	2019 *Yearbook*	2020 *Yearbook*	2021 *Yearbook*	2022 *Yearbook*
Health Care Access/ Affordability	Eligibility limit (% FPL) for pregnant women in Medicaid	Income cutoff (percent of the FPL) for Medicaid eligibility for pregnant women (median)	200	200	200	200
	Medicaid expansion state	State-adopted Medicaid expansion under the Affordable Care Act	34 states	37 states	39 states	39 states
	Uninsured low-income infants/toddlers[a]	Percentage of low-income infants/toddlers who are uninsured	5.8%	5.4%	5.1%	5.1%
	• CHIP Maternal Coverage for Unborn Child option	State extends CHIP coverage to undocumented pregnant women by covering their unborn child as a targeted low-income child	--	--	--	17 states
	Medical home	Percentage of infants/toddlers who received coordinated, ongoing, comprehensive care within a medical home	--	--	50.9%	51.5%
	Extension of Medicaid coverage for pregnant women postpartum	State efforts to extend Medicaid coverage beyond 60 days postpartum	--	--	45 states—no law beyond mandatory 60 days; 5 states—law covering either (a) some women but not all, or (b) all women but for less than 1 year; 1 state—law covering all women for 1 year postpartum	48 states—no law beyond mandatory 60 days; 3 states—law covering either (a) some women but not all, or (b) all women but for less than 1 year; 0 states—law covering all women for 1 year postpartum
Nutrition	Infants ever breastfed[a]	Percentage of infants ever breastfed	83.2%	82.9%	83.6%	84.2%
	Infants breastfed at 6 months[a]	Percentage of infants breastfed at 6 months	57.6%	54.6%	55.1%	56.8%
	WIC coverage[a]	Percentage of eligible infants who participated in WIC	--	85.9%	79.3%	97.8%
	High weight-for-length among WIC recipients	Percentage of WIC recipients 3–23 months old who have high weight-for-length	--	Available at state level only	Available at state level only	Available at state level only

Subdomain	Indicator	Description	2019 *Yearbook*	2020 *Yearbook*	2021 *Yearbook*	2022 *Yearbook*
Maternal Health	Maternal mortality rate	Number of pregnancy-related deaths per 100,000 live births	--	17.4	17.4	20.1
	Late or no prenatal care received	Percentage of women receiving late or no prenatal care	6.2%	6.2%	6.2%	6.4%
	State Medicaid policy for maternal depression screening in well-child visits[a]	State Medicaid policy requires, recommends, or allows maternal depression screenings during well-child visits	36 states	37 states	43 states	44 states
	Mothers reporting less than optimal mental health	Percentage of mothers of infants/toddlers rating their mental health as worse than "excellent" or "very good"	22.0%	19.8%	20.3%	21.9%
	Pregnant worker protections	Protections or accommodations are set in place for pregnant working people	--	--	31 states (3–state employees only; 23–state and private with limitations; 5–all employees)	31 states (3–state employees only; 23–state and private with limitations; 5–all employees)
Child Health	Infant mortality rate	Deaths per 1,000 live births	5.9	5.8	5.7	5.6
	Low birth weight	Percentage of babies with low birth weight	8.2%	8.3%	8.3%	8.3%
	Preterm birth	Percentage of babies born preterm	--	10.0%	10.0%	10.2%
	Preventive medical care received[a]	Percentage of infants/toddlers who had a preventive medical visit in the past year	90.7%	91.1%	91.1%	91.1%
	Preventive dental care received[a]	Percentage of infants/toddlers who had a preventive dental visit in the past year	30.0%	31.9%	32.9%	34.5%
	Received recommended vaccines	Percentage of infants/toddlers receiving the recommended doses of DTaP, polio, MMR, Hib, HepB, varicella, and PCV vaccines by ages 19–35 months	70.7%	70.4%	72.8%	72.7%

Subdomain	Indicator	Description	2019 *Yearbook*	2020 *Yearbook*	2021 *Yearbook*	2022 *Yearbook*
Infant and Early Childhood Mental Health	Medicaid plan covers social-emotional screening for young children	State Medicaid plan covers social-emotional screening for young children (birth–6 years old) with a tool specifically designed for this purpose	41 states	43 states	43 states	43 states
	Medicaid plan covers IECMH services—at home[b]	Medicaid plan covers services in home settings	46 states	49 states	49 states	49 states
	Medicaid plan covers IECMH services—in medical settings[b]	Medicaid plan covers services in pediatric/family medicine practices	45 states	46 states	46 states	46 states
	Medicaid plan covers IECMH services—in ECE settings[b]	Medicaid plan covers services in early care and education program settings	34 states	34 states	34 states	34 states

• New indicator in 2022

NOTES: CHIP = Children's Health Insurance Program; ECE = early childhood education; FPL = federal poverty level; IECMH = infant and early childhood mental health; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children

[a] Due to changes in data reporting and/or changes to the methods for calculating this indicator, we caution against directly comparing estimates from the *2019 Yearbook* and the *2020 and 2021 Yearbooks*. For a more detailed discussion, see the indicators and methodological appendices.

[b] The Infant Early Childhood Mental Health Medicaid Survey was completed by two additional states in the survey administration reported in the *2020 Yearbook* than in the *2019 Yearbook*. Therefore, increases from the *2020 Yearbook* may be real or may be a result of the increase in survey coverage. No updates to the data were available for the *2021 Yearbook*.

Strong Families

The economic and social impacts of COVID-19 have increased the incidence of material hardship and have deepened the need to support parents in nurturing the development of their young children. Even prior to the pandemic, many families with young children, especially those with low income, faced material hardship—and indications are that these hardships increased with the pandemic. Families have been tested, with an overall high assessment of their own resilience pre-pandemic that varied by income and race/ethnicity, and now an elevated level of emotional distress during the pandemic.

Young children develop in the context of their families, where stability, safety, and supportive relationships nurture their growth. For babies, the family is central to their well-being, starting with the unhurried time they need with their parents to form healthy attachments. Nurturing and responsive relationships offer both immediate and long-term benefits, fostering trust, positive social-emotional development, and the capacity to form strong relationships in the future.

Indicators of well-being in this domain examine the economic and environmental contexts in which babies develop as well as the extent to which infants and toddlers experienced adverse events or maltreatment. We also present the experience of infants and toddlers involved in the child welfare system. It is important to note that no update was available from the data sources for the following child welfare indicators: removals from home and types of permanency achieved. For these indicators, we continue to report the data from the latest data set release. Policy indicators in this domain address the degree to which

families are assisted by supportive policies, such as home visiting, paid family leave, and sick time, and benefit from the financial boosts offered through the direct assistance of TANF or tax credits.

Key Findings

2022 Yearbook findings on most indicators in this domain indicate minimal or no improvement for the nation's babies and families on average. Similar to past findings for many indicators, babies in families with low income and babies of color disproportionately encounter challenges to family and child well-being. For example, babies in families with low income are more likely than their peers to experience **housing instability**, live in **unsafe neighborhoods**, and have at least **one ACE** during their critical first 3 years.

BASIC NEEDS SUPPORT

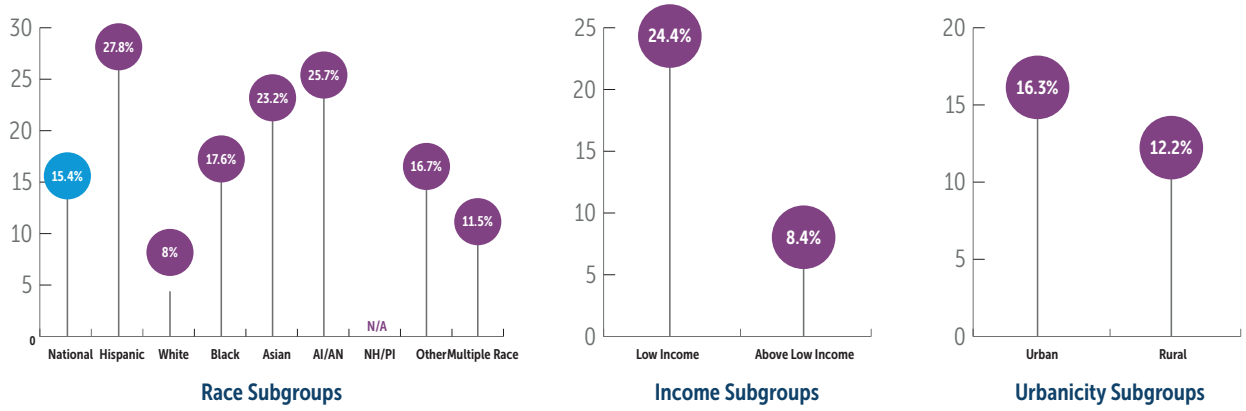
Families with young children face many challenges that threaten their abilities to meet their children's basic needs and provide the stable physical environments required for optimal development. Challenges such as financial instability, crowded housing, and food insecurity can jeopardize babies' development and have both immediate and long-term effects.

TANF BENEFITS RECEIPT AMONG FAMILIES IN POVERTY For families living in poverty, feeding, clothing, and housing are among the largest challenges. Yet, the latest *Yearbook* data show that **less than 1 in 5 (18.5 percent) of families who could benefit from TANF's basic cash assistance receive it**—a decrease of 3 percentage points from previous reports. Although analysis by subgroup could not be done for the *Yearbook,* ZERO TO THREE's 2021 fact sheet, TANF at 25: Poverty Remains High Among the Nation's Babies, but Few Are Assisted, provides an in-depth look at barriers to receipt of TANF assistance despite the important role this program plays in the lives of babies in poverty. Many of these barriers are due to the persistent effects of historical racism and sexism in TANF and earlier economic assistance programs that contribute to lower allocation of

"If you've never experienced the frustration of having to choose between keeping your job, paying for child care, or putting food on the table, try to remember the thousands of families that are in that situation."

Allison R., Columbus, OH

BABIES LIVING IN CROWDED HOUSING Figure 12



TANF funds to direct assistance in states with higher populations of Black families and other families of color.

CROWDED HOUSING Infants and toddlers are uniquely sensitive to challenges in their environments, and several can jeopardize babies' development. **Prior to COVID-19, nearly 1 in 6 babies (15.4 percent) were living in crowded housing,** homes in which numerous people live in close quarters. This finding is virtually unchanged from previous *Yearbook* reports, and it raises even greater concern in the context of the pandemic because crowding has also been associated with children's health problems, including respiratory conditions, injuries, and infectious diseases, as well as with young children's food insecurity.[xxxii] In homes where families are crowded, parents may also have fewer opportunities to be adequately responsive to infants and toddlers and may be more likely to use punitive discipline.[xxxiii] Subgroup data available for this indicator showed substantial differences by race/ethnicity, income, and urbanicity (see Figure 12).

Race and Ethnicity. Notably, the percentage of Hispanic infants and toddlers (27.8 percent) living in crowded housing was nearly twice the national average of 15.4 percent. The incidence of crowded housing for American Indian/Alaska Native (25.7 percent) and Asian (23.2 percent) babies was also markedly above the average, followed by Black (17.6 percent) babies and those of Other Race (16.7 percent). The rate of crowded housing for White infants and toddlers (8.0 percent) was below and close to half the national average.

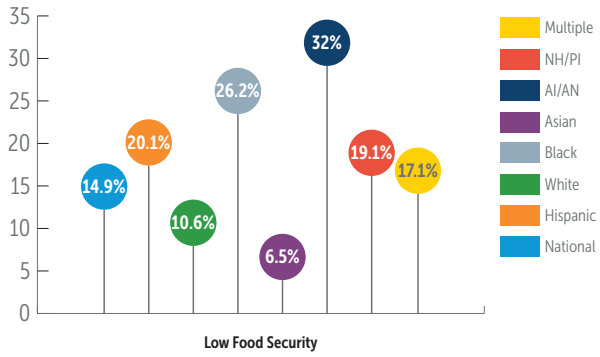
Income. Infants and toddlers living in families with low incomes (24.4 percent) were more likely to live in crowded housing than babies in families above low income (8.4 percent).

Urbanicity. Infants and toddlers living in metro areas (16.3 percent) were more likely to live in crowded housing than babies living in rural areas (12.2 percent).

LOW OR VERY LOW FOOD SECURITY As many as **1 in 7 (14.9 percent) of the nation's households with babies were experiencing food insecurity before the pandemic.** This reflects an increase from 13.7 percent reported in the 2021 edition and is an area in which the economic impacts of the pandemic have had devastating effects.

Access to healthy and nutritious food is vital during the prenatal period and first years of life to ensure that babies receive the nourishment they need for a strong start in life. A lack of sufficient nutritious food is associated with a number of serious health, behavior, and cognitive deficits in children. Children living with food insecurity have poorer health than children who are in food-secure households.[xxxiv] For infants and toddlers, even mild levels of food insecurity may result in developmental deficits during their sensitive period of rapid brain growth,[xxxv] and infants who experience food insecurity are more likely to perform poorly

FOOD INSECURITY BY RACE AND ETHNICITY Figure 13



on tests of cognitive development.[xxxvi] Equally important, food insecurity is one of the strongest drivers of caregiver anxiety, depression, and stress in lower-income households.[xxxvii]

When analyzed by race/ethnicity, the *Yearbook*'s findings show stark disparities, with particularly high rates of food insecurity among American Indian/Alaska Native and Black households with babies (Figure 13). Minimal difference was found between urban and rural households with babies.

Race and Ethnicity. American Indian/Alaska Native (32.0 percent) and Black (26.2 percent) households with babies experienced food insecurity at rates significantly higher than the national average of 14.9 percent. Hispanic (20.1 percent) and Native Hawaiian/Pacific Islander (19.1 percent) households were also above the average. White (10.6 percent) and Asian (6.5 percent) households with babies experienced food insecurity at rates below the average.

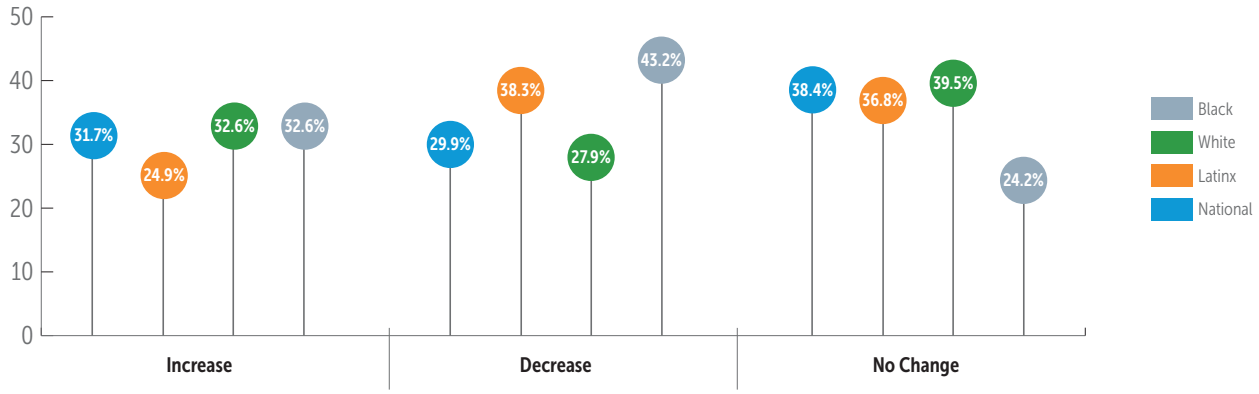
Urbanicity. At the national level[10], households in urban areas with infants and toddlers (14.8 percent) experienced food insecurity at a rate similar to and only fractionally below the national average, while those in rural areas (15.8 percent) were more likely to have had food insecurity.

EFFECTS OF COVID-19 PANDEMIC ON BASIC NEEDS. The economic effects of COVID-19 have placed an extraordinary burden on families with young children, as caregivers struggle with job and income loss, as well as the related increases in material hardship. As the *Yearbook's* pre-pandemic data show, families with infants and toddlers who are families of color or with low income already had high levels of economic insecurity, crowded housing, and food insecurity, and they rated their mental health and resilience lower than the national averages for these indicators. The pandemic has exacerbated existing inequities and additional barriers faced in marginalized

[10] Indicator was based on RAPID responses from weeks 39 through 87 of the survey. This corresponds with responses between January 5 and December 14, 2021 .

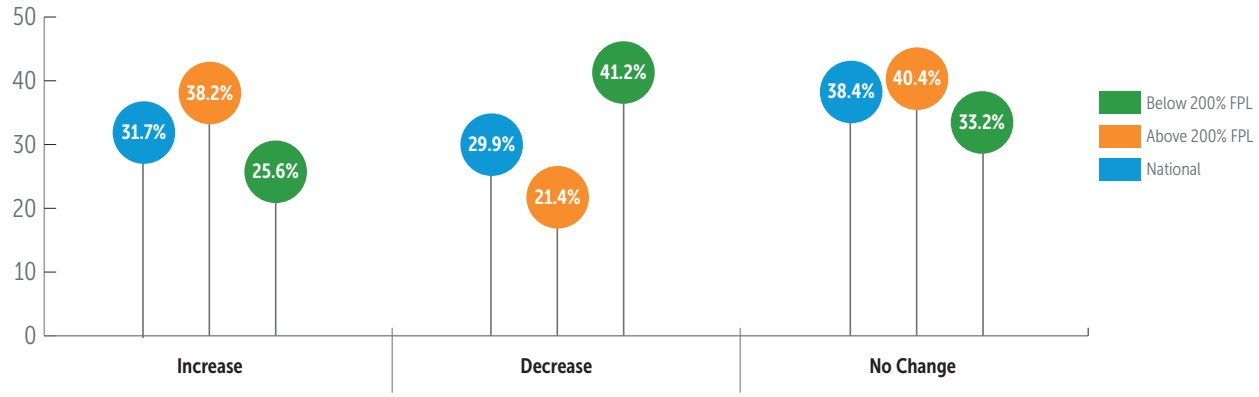
HOUSEHOLD INCOME CHANGE DURING COVID BY RACE AND ETHNICITY

Figure 14



HOUSEHOLD INCOME CHANGE DURING COVID BY INCOME LEVEL

Figure 15



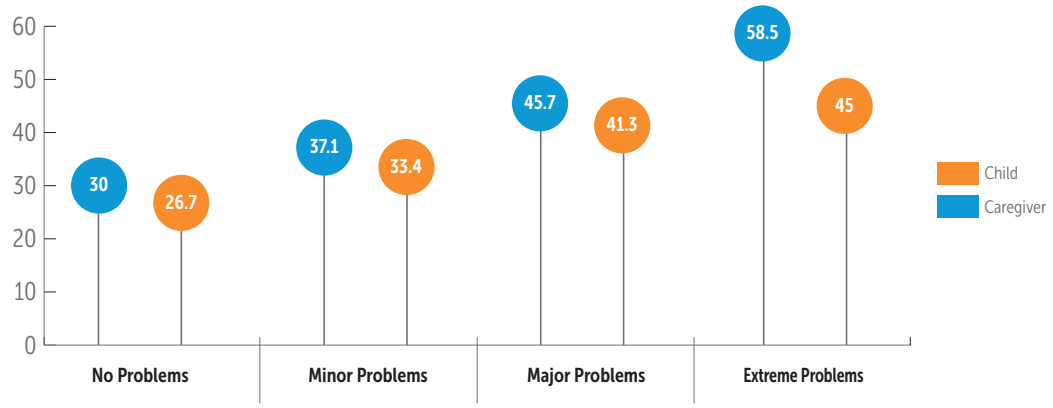
NOTE: Figure data based on the full sample of 3,869 families from the RAPID-EC survey between January 5 and December 14, 2021. Changes in income were self-reported by survey respondents.

communities. The prevalence of financial and material hardship places babies and toddlers at considerable risk, as stressful early life experiences that are chronic and unrelenting can have lasting effects on brain and social-emotional development. In 2021, the RAPID project further reported that the disruptions that the pandemic continues to cast into families' lives have been particularly difficult, placing additional strain on households.[xxxviii]

As more families began to return to work, twice as many families overall reported an increase in household income than in the first year of the pandemic (31.7 percent), compared to 15.2 percent in 2020. Similarly, fewer households with babies (29.9 percent) reported a decrease in their income since the start of the pandemic. However, subgroup analysis of the RAPID data show that Black, Latinx, and low-income households continue to experience decreased income at high and virtually unchanged rates from the previous year (see Figures 14 and 15). These families continued to be impacted the most by financial problems, job loss, and basic needs insecurity. In addition, when experiences of material hardship for middle- and high-income households were analyzed by race and ethnicity, a similar pattern was found.

Caregiver rates of stress, anxiety, and depression have risen during the pandemic, which may be partially accounted for by difficult decisions about returning to work, putting children in child care arrangements that feel unsafe, and balancing responsibilities at home. RAPID data show a linear relationship between household level of financial

EMOTIONAL DISTRESS BY LEVEL OF FINANCIAL HARDSHIP Figure 16

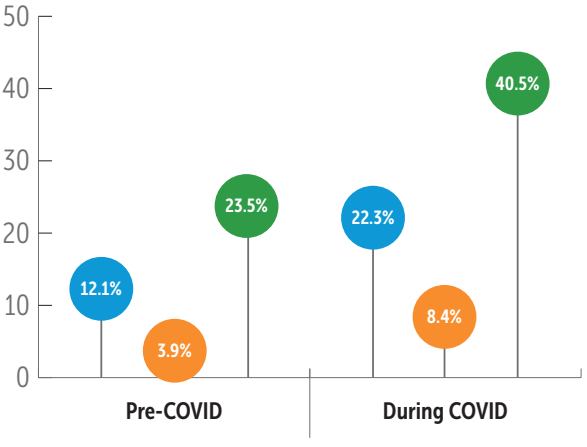


NOTE: Data on financial problems and caregiver/child distress were based on the full sample of 3,869 families from the RAPID-EC survey between January 5 and December 14, 2021. Emotional distress scores were calculated based on aggregated responses. Financial hardship was self-reported.

hardship and emotional distress, among both caregivers and babies and toddlers (See Figure 16).

RAPID findings for food insecurity both prior to and during the pandemic showed stark differences by income (see Figure 17). Nationally, more than 1 in 5 surveyed families (22.3 percent) in 2021 reported a high level of food insecurity during the pandemic, compared with 12.1 percent reporting high food insecurity prior to COVID-19.

FOOD INSECURITY DURING COVID BY INCOME LEVEL Figure 17



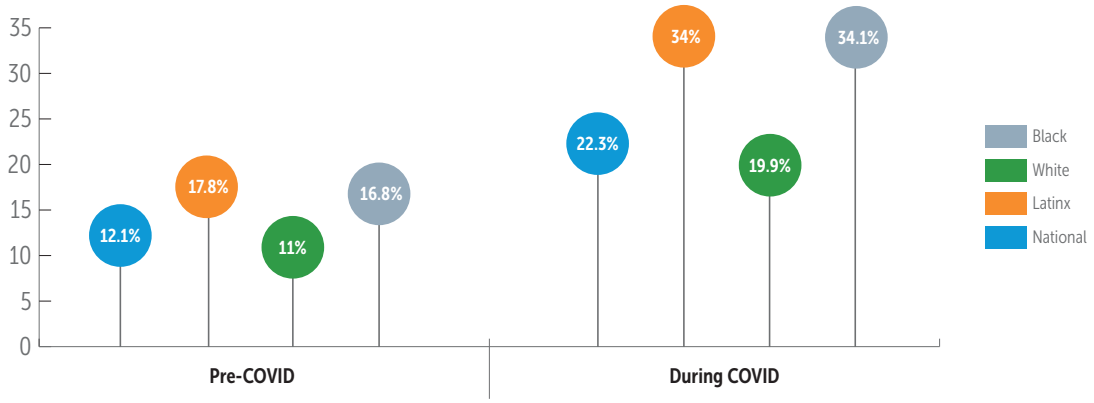
NOTE: FPL = Federal Poverty Level; High food insecurity was calculated based on the aggregated responses of survey questions relating to food insecurity. Figure data based on caregiver responses from the RAPID-EC survey between January 5 and December 14, 2021 (weeks 39 through 87 of the survey).

However, the reported rates of food insecurity were nearly 6 times higher for families with low income or in poverty pre-COVID-19 (23.5 percent) than those above low income (3.9 percent). A similar pattern was found during the pandemic, with families with low income (40.5 percent) reporting food insecurity approximately 5 times higher than reported by those above low income (8.4 percent). When analyzed by race and ethnicity, the incidence of food insecurity was higher than the national rate prior to and during the pandemic among Latinx and Black families with babies, as depicted in Figure 18.

Although the initial CARES Act's enhanced unemployment benefits and eviction moratorium buffered early economic fallouts of the pandemic, many families slipped into financial hardship when those benefits expired. As of December 2021, 61.6 percent of RAPID respondents reported that they were experiencing financial problems, and 29.3 percent reported difficulty paying for basic needs (e.g., food, housing, and utilities).* In the past year, job loss and income loss began to decrease during the pandemic. Among families with young children, 29.9 percent in 2021 reported that they had experienced a decrease in income (down from 42.2 percent in the previous year),* 30.5 percent experienced a decrease in employment, and 14.6 percent were unemployed, temporarily out of work, or furloughed as of December 2021.*

* Indicator was based on RAPID responses from weeks 39 through 87 of the survey. This corresponds with responses between January 5 and December 14, 2021.

FOOD INSECURITY DURING COVID BY RACE AND ETHNICITY Figure 18



NOTE: High food insecurity was calculated based on the aggregated responses of survey questions relating to food insecurity. Figure data based on caregiver responses from the RAPID-EC survey between January 5 and December 14, 2021 (weeks 39 through 87 of the survey).

POLICY RECOMMENDATIONS AND RELATED ACTIONS Our recommendations for improvement in Basic Needs Support include:

- Building an equitable economic base. Families need a range of policies that bolster economic security when children are young and their development is most sensitive to economic want. Families need a minimum wage of $15 per hour and a universal child allowance—such as a permanent adoption of the enhanced, fully refundable Child Tax Credit with a higher level for young children.

- Ensuring families' ability to access and sustain safe, stable, and affordable housing. Safe and stable housing is a basic necessity for everyone and is particularly important for infants and toddlers. Babies reap particular developmental benefits from having a safe and stable place to call home. Stable housing supports family well-being and lower stress levels, setting the stage for nurturing parenting. However, many families struggle with the high cost of housing, causing them to move frequently, live in crowded housing or unsafe neighborhoods, or experience homelessness—all of which deprive young children of a stable environment needed to thrive. While the robust rental assistance funding in the ARP temporarily helped to address the risk of eviction during the pandemic, the previously extended eviction moratorium came to an end in July 2021; federal housing assistance continues to fall short of the overall need, and the number of households with children receiving rental assistance has declined over time.

RELATED FEDERAL POLICY ACTIONS AND STATE OPPORTUNITIES The state of food insecurity paints a worrisome picture for our nation's babies and toddlers, for whom adverse early life experiences can be detrimental to development. Nonprofit organizations, state agencies, school districts, and volunteers have mobilized across the country to meet families' nutritional needs during the pandemic, but many young children are still experiencing food insecurity, especially as many critical federal supports have lapsed. To meet the needs of families facing food insecurity, Congress worked to boost the cash value benefit for WIC, and these increases were most recently extended through the fiscal year 2022 appropriations process. Another helpful support at the federal level has been allowing states to add the value of school meals when schools are in remote learning—and, more recently, meals in early learning settings—to family SNAP benefits.

The Consolidated Appropriations Act, signed into law on December 27, 2020, and the ARP, passed March 6, 2021, have provided additional federal support for families with young children. Although

the RAPID data included in this report does not reflect financial hardship and food insecurity after December 2021, these economic supports, which included an enhanced Child Tax Credit and pandemic paid family and medical leave, took key steps in the direction of supporting families and promoting healthy development. Unfortunately, the nation has faltered in continuing these policies.

State Opportunities. States often have parallel policies that can exceed federal policy, as with the current minimum wage, or enhance federal supports, such as state EITC or CTC. They can work toward improving families' economic security in a variety of ways. While most funding for housing comes directly from the federal government, states have the opportunity to direct and target state funds in a way that can best meet the needs of households with young children. States can target funds to pregnant women, or to households with young children, to address this ongoing issue. States should ensure families with young children benefit from pandemic housing assistance.

CHILD WELL-BEING AND RESILIENCE

Adversities experienced early in life can create stress that undermines lifelong development.[xxxix] Chronic stress experienced in early childhood, such as that caused by extreme poverty or abuse and neglect, can be toxic to the developing brain and may lead to problems with self-regulation, lags in cognitive and social-emotional development, and chronic health problems in adulthood. However, caring relationships with trusted caregivers can buffer babies' exposure to adverse events and mitigate long-term negative effects. In this regard, the nation's families with young children continued to demonstrate strength in facing the substantial challenges that existed prior to COVID-19, but reported lower levels of resilience. Similarly, as reported earlier in the Good Health section, parents responding to the RAPID survey continued to report increased levels of emotional distress due to the additional impacts of the pandemic, which in turn leads to higher levels of child distress.

FAMILY RESILIENCE Nationally, 84.9 percent of families with infants and toddlers report resilience—the capacity when faced with a problem to talk together about what to do, work together to solve their problems, know they have strengths to draw on, and stay hopeful even in difficult times. This is relatively unchanged from the previous *Yearbook* finding of 85.3 percent. However, analyses by race/ethnicity and income do reveal differences in these subgroups.

How families cope with challenges can make a difference in their babies' overall well-being. Children who learn that families can solve problems together, participate in decision-making, and reduce conflict gain valuable skills related to planning, communicating, managing emotions, and optimism that can improve their chances of being resilient when encountering their own challenges.[xl]

Race and Ethnicity. The percentage of White families with babies (88.5 percent) reporting "family resilence" was higher than the national average, while the percentages for Hispanic (81.5 percent), Asian (80.3 percent), and Black (78.0 percent) families were lower than the national average.

Income. Babies living in families above low income (88.3 percent) have a higher percentage of families that report "family resilience" compared to the national average, while babies living in families with low incomes (79.9 percent) have a lower percentage than the national average.

TWO OR MORE ACES One in 5 babies (19.6 percent) nationally has already had at least one ACE and nearly 1 in 12 (7.3 percent) has experienced two or more ACEs. Each of these findings are similar to previous reports and show differences when analyzed by race/ethnicity and income.

Exposure to stressful events can interfere with the normal development of the body's neurological, endocrine, and immune systems, leading to increased susceptibility to disease. Because their brains are developing rapidly, infants and toddlers are especially vulnerable to ACEs, and the damage may be long-lasting.[xli] Estimates of ACEs in the *State of Babies Yearbook* are based on the National Survey of Children's Health items that asked parents to indicate whether their child had ever experienced one or more of the following: economic hardship, divorce/separation of parent, death of a parent, a parent who served time in jail, witness to domestic violence, victim of or witness to neighborhood violence, lived with someone who was mentally ill or suicidal, lived with someone with an alcohol/drug problem, or was treated or judged unfairly because of race/ethnicity.

Race and Ethnicity. Among those groups for whom data are available, the incidence of Black babies (11.8 percent) who experienced two or more ACEs is markedly higher than the national average; the incidence is also above the average for Hispanic (8.5 percent) babies. The number of White babies (5.8 percent) who experienced two or more ACEs was below the average, and among Asian babies (0.8 percent) the incidence was significantly lower.

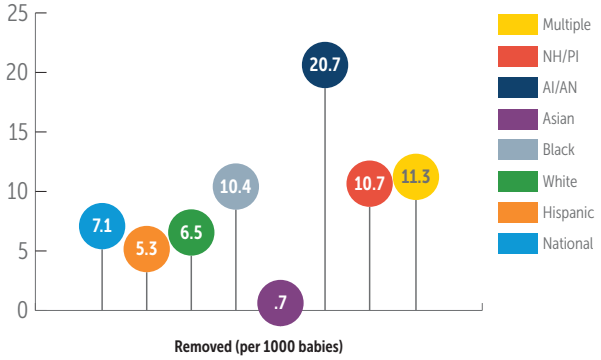
Income. Infants and toddlers in families with low income (12.7 percent) were significantly more likely than those in families above low income (3.6 percent) to have experienced two or more ACEs, with a rate nearly 4 times higher.

REMOVED FROM HOME Nationally, 7.1 babies per 1,000 were removed from their homes and placed in foster care,[11] and concerning disparities exist in rates of removal when examined by race/ethnicity (see Figure 19).

Unstable conditions at home can cause infants and toddlers to be placed out of home in foster care. Placement in foster care means a sudden disruption in caregiving, further jeopardizing a very young child's well-being. In losing their primary caregiver, a baby experiences profound loss and fear that can overwhelm their ability to cope. This traumatic stress, in turn, can negatively impact the developing brain and babies' future development and learning. Although child welfare systems should be responsive to the needs of very young children in their policies and practices, they seldom are,[xlii] which makes it particularly important to examine the extent to which policies and practices contribute to disproportional rates of removal found by race and ethnicity.

Race and Ethnicity. The number of American Indian/Alaska Native (20.7 per 1,000) infants and toddlers removed from home is strikingly 3 times the national average of 7.1; removal rates are also above average for Multiple Race (11.3), Native Hawaiian/Pacific Islander (10.7), and Black (10.4) infants and toddlers. The removal rates of White (6.5), Hispanic (5.3) and Asian (0.7) infants and toddlers were lower than the national average.

BABIES REMOVED FROM HOME BY RACE AND ETHNICITY Figure 19



[11] Updated data for the 2022 *Yearbook* were not available for this indicator.

POLICY RECOMMENDATIONS AND RELATED ACTIONS Our recommendations for improvement in Child Well-Being and Resilience include:

- **Creating communities that reinforce family strengths.** Create a robust new funding stream to help communities design strategies and implement services and supports to address the social determinants of health, giving every family a place to turn for support as they nurture their young children's development. Such support helps families form protective factors that buffer babies and young children from intolerable stresses that can derail their development. Our nation spends billions separating families and placing children in foster care, perpetuating institutionalized racism and inequities, while investing almost nothing in prevention. It is time to create a continuum of parent and family support services.

- **Transforming child welfare into a family-focused, trauma-informed "child well-being system."** Transforming the child welfare system by applying the science of early childhood development and adopting trauma-responsive and healing-centered policies and practices can help courts and communities keep families intact and thriving. The Strengthening America's Families Act (SAFA) would build on promising work by states and judicially led community teams that are spreading across the country, instilling equity in family support and outcomes. SAFA also creates a framework for effectively implementing preventive services under the Family First Prevention Services Act.

RELATED FEDERAL POLICY ACTIONS AND STATE OPPORTUNITIES Few federal programs focus on creating or building systems for family strengthening or prevention. The impetus for such approaches often comes from the child welfare perspective, to prevent needless child welfare involvement, rather than from a starting point that many families could use support in nurturing their children's development and in meeting family needs.

Several federal opportunities could provide avenues to building community approaches. Reauthorization of the Child Abuse Prevention and Treatment Act provides an opportunity to revise the Community-Based Child Abuse Prevention (CBCAP) grants to address systems building for family strengthening. Both the House and Senate bills would adopt this approach. More robust appropriations would be needed to have a significant impact, although the appropriators have recognized the promise of community-based approaches with increases in the CBCAP funds as well as ARP funding. Reauthorization of the child welfare programs in Title IV-B of the Social Security Act also provide an opportunity to rethink a continuum of services for families, from prevention to child welfare, using principles of orienting decisions around child development and addressing parents' needs, including past trauma. Individual approaches that could be part of a community systems approach to support families also can be funded with federal dollars. The Maternal, Infant, and Early Childhood Home Visiting program

must be reauthorized this year, with a need to increase its stagnant funding level. Placing child development specialists in primary care—the place where almost all babies are seen—received a tiny toehold in federal funding through the FY 2022 Omnibus Appropriations Act.

State Opportunity. Although federal funding for flexible, comprehensive support for families is limited, states can work to pool funds, draw down funds for sources such as Medicaid, or use Family First Prevention Services Act funds to build a community infrastructure that reaches all families with support that will be welcomed. States can use current CBCAP funds, including ARP funding, to expand approaches such as Family Resource Centers or lay the groundwork for family strengthening systems-building.

SUPPORTIVE POLICIES

In addition to the benefits babies derive from the unhurried, dedicated time with their parents that is required to form healthy attachments, parents benefit from family–friend employer policies that allow them time to nurture and care for their children. Economic supports in the form of direct assistance, such as WIC and TANF benefits, and tax credits are particularly critical for families with young children and directly contribute to lifting families out of poverty.

Paid leave. Comprehensive paid family and medical leave promotes bonding between parents and babies, and it enables workers to care for their own and family members' extended health needs. Paid sick days allow all workers to earn time to address short-term care needs for themselves or their ill child or family member, and to obtain preventive care.

PAID FAMILY LEAVE At the time of the *2022 Yearbook*, **only 10 states had enacted paid family medical leave.** The number of states is unchanged from the previous *Yearbook*.

PAID SICK TIME THAT COVERS CARE FOR

"My family and so many others deserve a chance. An extended, expanded Child Tax Credit would ensure support with day care, food, mortgage, etc., not to mention our mental health. With so much uncertainty, knowing our government recognizes that families are doing our best, but that economic security is hard to come by, makes it a whole lot better."

Pasqueal N., New Orleans, LA

CHILD Only **14 states require employers to provide paid sick days that cover care for a child.** This represents an increase of two states since the previous *Yearbook*.

Economic and tax supports. Improving the economic status of young children is associated with improvement in their immediate well-being as well as the benefits of better health, education, employment, and earnings as adults.[xliii] TANF work exemption and CTC and EITC tax credits reflect the extent to which states support families with young children through employment and tax policies.

TANF WORK EXEMPTION Less than one-half of states (24) exempt a single-parent head of household from work-related activity if caring for a child under 12 months old, which is unchanged from previous years' reports.

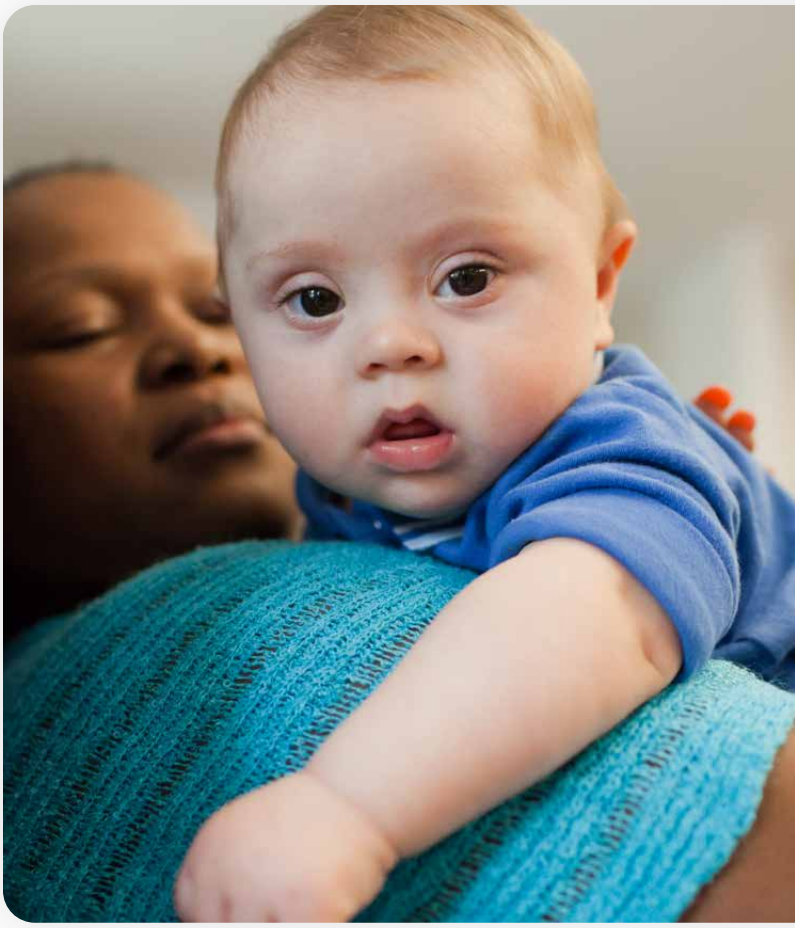
STATE CHILD TAX CREDIT At the time of the *Yearbook*, **only 6 states had offered a CTC.** This was unchanged from previous years' reports.

STATE EARNED INCOME TAX CREDIT More than one-half of states (31) offer an EITC, only one more state than in the previous report.

POLICY RECOMMENDATIONS AND RELATED ACTIONS Our recommendations for improvement in Supportive Policies include:

- **Enacting comprehensive national paid leave policies.** Comprehensive paid family and medical leave, such as proposed in the FAMILY Act, promotes bonding between parents and babies and enables workers to care for their own and family members' extended health needs. Paid sick days, such as proposed in the Healthy Families Act, allows all workers to earn time to address short-term care needs for themselves or their ill child or family member, and to obtain preventive care.

- **Reinstating fully refundable, monthly, expanded CTC payments made in 2021 through the ARP.** The effect of the CTC was to put money into the pockets of families, preventing 3.7 million children from entering poverty, as last estimated by the Columbia University Center on Poverty and Social Policy.[xliv] CTC funds were used by families with low income to meet household expenses (e.g., food, rent, and other basic needs).



RELATED FEDERAL POLICY ACTIONS AND STATE OPPORTUNITIES The House-passed Build Back Better Act included a 1-year extension of the expanded monthly CTC benefits that were included in the ARP. In addition, the legislation, which has stalled in the Senate, would make the CTC fully refundable moving forward, ensuring the most overburdened and under-resourced families could continue to benefit. The bill also included up to four weeks of paid family and medical leave for the vast majority of American workers. This legislation has, however, met a roadblock in the Senate.

State Opportunity. In the absence of national paid leave policies, some states have moved ahead with their own initiatives. States can continue this progress, working to enact policies or improve those they already have. If national policies are enacted, states can work to provide enhanced benefits to families.

State Spotlight

Connecticut Becomes the First State to Pass Baby Bonds

Connecticut made history as the first state in the nation to pass Baby Bonds legislation. Beginning July 1, 2021, the state legislature authorized an investment of up to $3,200 in a trust managed by the Office of the Treasurer for any baby whose birth is covered by the state Medicaid program, HUSKY. Eligible young people between 18 and 30 years old who are Connecticut residents and complete a financial literacy course can make a claim for their share of the CT Baby Bond Trust, which can be used for one of four wealth-building activities: home ownership in CT, investment in a small business in CT, post-secondary education, or retirement. The investment will have a great impact on families with young children in the state. One analysis suggests that child development accounts increase educational attainment by making those children more likely to think of themselves as one day going to college while also making their families more financially prepared for college tuition.[xlv]

Connecticut might be home to the highest annual income per capita in the country but it also has one of the highest rates of income inequality and stark racial wealth gap disparities, especially among families with babies and toddlers. This landmark legislation will work toward alleviating the wealth gap in the state and addressing generational poverty and racial inequities. Experts in the state have noted that this is not a stopgap fix to eradicate poverty in the state, but rather is one, very important solution needed in the toolkit.

The District of Columbia quickly followed suit and unanimously approved their own version of Baby Bonds legislation in October 2021 that will put up to $1,000 a year into trust funds for any child born in the District to a family enrolled in Medicaid and making less than 300 percent of the federal poverty line. Families living at or under the poverty line will receive an initial $500 deposit in their account, followed by annual deposits capped at $1,000.

An opportunity to expand Baby Bonds federally exists—in February 2021, Senator Cory Booker (D-NJ) and Representative Ayanna Pressley (D-MA-7) reintroduced the American Opportunity Accounts Act, which would enact Baby Bonds nationwide for qualifying families in poverty. According to a study by Columbia University, the legislation would considerably narrow wealth inequalities by race while alleviating the concentration of wealth at the top.[xlvi]

For more information about Connecticut's Baby Bonds legislation, visit here.

Strong Families – Summary of All Indicators Table 5.

Subdomain	Indicator	Description	2019 *Yearbook*	2020 *Yearbook*	2021 *Yearbook*	2022 *Yearbook*
Basic Needs Support	TANF benefits receipt among families in poverty[a]	Percentage of families with infants/toddlers living below 100% of the FPL that receive TANF benefits	20.6%	21.7%	21.7%	18.5%
	Low or very low food security	Percentage of households with infants/toddlers experiencing low or very low food security	16.5%	15.9%	13.7%	14.9%
	Housing instability[a]	Percentage of infants/toddlers who have moved three or more times since birth	2.5%	2.7%	2.6%	2.9%
	Crowded housing	Percentage of infants/toddlers who live in crowded housing	15.6%	15.5%	15.5%	15.4%
	Unsafe neighborhoods[a]	Percentage of infants/toddlers living in unsafe neighborhoods, as reported by parents	6.3%	5.8%	4.9%	5.2%

Subdomain	Indicator	Description	2019 *Yearbook*	2020 *Yearbook*	2021 *Yearbook*	2022 *Yearbook*
Child Welfare	Family resilience[a]	Percentage of families with infants/toddlers who report "family resilience"	82.6%	85.2%	85.3%	84.9%
	ACEs—1[a]	Percentage of infants/toddlers who have experienced one adverse childhood experience	21.9%	22.4%	20.7%	19.6%
	ACEs—2 or more[a]	Percentage of infants/toddlers who have experienced two or more adverse childhood experiences	8.3%	8.6%	7.7%	7.3%
	Infant/toddler maltreatment rate[a,b]	Maltreatment rate per 1,000 infants/toddlers	16.0	15.9	16.4	15.9
	Removed from home	Number per 1,000 infants and toddlers who have been removed from home and placed in foster care			7.1	7.1
	Time in out-of-home placement	Percentage of infants/toddlers who exited foster care in less than 12 months	--	20.2%	18.7%	18.7%
	Permanency – Adopted	Percentage of infants/toddlers exiting foster care who are adopted	--	--	34.6%	34.6%
	Permanency – Reunified	Percentage of infants/toddlers exiting foster care who are reunified			48.1%	48.1%
	Permanency – Guardian	Percentage of infants/toddlers exiting foster care who are placed with a guardian			8.3%	8.3%
	Permanency – Relative	Percentage of infants/toddlers exiting foster care who are placed with a relative			7.8%	7.8%
Home Visiting	Potential home visiting beneficiaries served	Percent of infants/toddlers who could benefit from evidence-based home visiting and are receiving those services	1.9%	1.9%	2.0%	2.1%
Supportive Policies	Paid sick time that covers care for child	State requires employers to provide paid sick days that cover care for child	11 states	11 states	12 states	14 states
	Paid family leave	State has a paid family leave program	7 states	9 states	10 states	10 states
	TANF work exemption	Single-parent head of unit is exempt from work-related activity if caring for a child under 12 months old	--	24 states (11 of which exempt for a single child only)	24 states (11 of which exempt for a single child only)	24 states (11 of which exempt for a single child only)
	State Child Tax Credit (CTC)	State has a Child Tax Credit	--	6 states	6 states	6 states
	State earned income tax credit (EITC)	State has an earned income tax credit	--	30 states	30 states	31 states

NOTES: ACE = adverse childhood experience; CTC = Child Tax Credit; EITC = earned income tax credit; TANF = Temporary Assistance to Needy Families

[a] Due to changes in data reporting and/or changes to the methods for calculating this indicator, we caution against directly comparing estimates from the 2019 *Yearbook* with the 2020 and 2021 *Yearbooks*. For a more detailed discussion, see the indicators and methodological appendices.

[b] This indicator appears in the *State of Babies Yearbook* domain tables only because of concerns about its data quality (see Appendix C for more information). As of the 2022 edition, it is no longer included in the rankings.

Positive Early Learning Experiences

Access to quality early learning experiences was challenging before the pandemic, from reading with family members to accessing high-quality early care and learning settings. The pandemic's impact continues to have serious implications for babies' early learning and development, both in the home and in increasingly stressed child care settings.

Over the course of the past year, more child care centers have reopened than were available in 2020; however, the child care sector as a whole has not yet recovered to pre-pandemic levels. Programs that have reopened continue to operate with social distancing measures in place for parents, staff, and babies, as well as mask wearing and additional hygienic protocols in place to prevent virus spread. As noted in the *2020 Yearbook*, these measures have the potential to reduce infants and toddlers' opportunities to spend time interacting with other children and practicing key social skills such as sharing and working with a group. At the time of this *Yearbook*, the child care workforce job loss since the start of the pandemic is estimated to be as high as 12.4 percent,[xlvii] and those providers who are operating face an ongoing struggle to keep their doors open to families, although a more broad collapse of the child care sector has been forestalled for now due to critical investments made in child care stabilization through the ARP.[xlviii] The costs of care have substantially increased for parents, especially those with infants and toddlers, and frequent temporary closures due to outbreaks of the virus continue to destabilize parents' work and children's experiences in care.

Infants and toddlers learn through interactions with the significant adults in their lives and active exploration of enriching environments. The quality of infants and toddlers' early learning experiences at home and in other care settings can impact their cognitive and social-emotional development, as well as early literacy. High-quality early childhood care benefits infants and toddlers in multiple ways, providing direct stimulating and nurturing

interactions that support their development, reinforcing and enhancing their parents' interactions with them in the home learning environment, and supporting their parents' ability to go to work or attend school. Equitable access to high-quality care ensures all infants and toddlers have the opportunity for optimal development; however, access to quality care remains a challenge for many families with young children, due in large part to the high cost of infant and toddler care and limited availability of quality options.

Indicators in this domain address infants and toddlers' exposure to learning experiences at home, families' access to child care (including costs and the reach of assistance to families), child care quality, and the extent to which babies receive developmental screening and early intervention services.

Key Findings

EARLY CARE AND EDUCATION OPPORTUNITIES

Long before they are able to read, infants and toddlers develop literacy skills and an awareness of language.[xlix] Language and literacy skills begin developing at birth and are fostered by parents and caregivers. Because language development is fundamental to many areas of learning, language skills developed early in life help set the stage for later school success. The *Yearbook* includes two indicators of adult-child interaction that support early language—reading to babies every day, and singing or telling stories every day.

PARENT READS TO BABY EVERY DAY By reading aloud to their young children, parents help them acquire the skills they will need to be ready for school.[l] Young children who are regularly read to have a larger vocabulary; higher levels of phonological, letter name, and sound awareness; and better success at decoding words.[li] Despite the importance of reading, **nationally, only 36.9 percent of babies are read to daily.** This low level is virtually unchanged from the previous Yearbook's finding and may be due to a combination of practical factors (e.g., limited time available to parents, parental stress); cultural influences (e.g., traditions of oral storytelling); or the broader public's general lack of understanding that even very young infants benefit from hearing language and the close contact these activities bring. Notable differences continued to be found on this indicator when examined by race/ethnicity and income.

Race and Ethnicity. Nationally, the percentage of White parents (45.2 percent) who reported reading to their baby daily was above the national average of 36.9 percent. The percentages of Asian (35 percent), Black (24 percent), and Hispanic (23 percent) parents who reported reading to their baby daily were lower than the national average.

Income. Parents in households with low income were significantly less likely to read to their infants/toddlers every day (26.9 percent) than those in households above low income (43.7 percent).

ACCESS TO EARLY LEARNING PROGRAMS

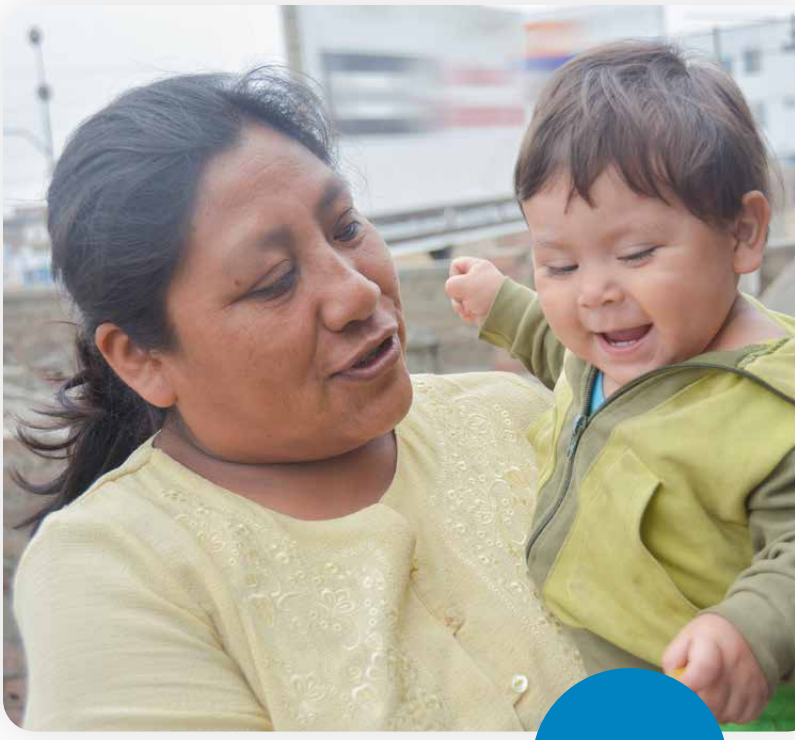
Investments in comprehensive early childhood education, beginning at birth, are a powerful and cost-effective way to mitigate the negative consequences that poverty has on child development and later opportunity in adulthood.[lii] Economic analysis shows that high-quality care from birth to 5 years old yields a return on investment of 13 percent per annum in the form of better outcomes in education, earnings, and health.[liii] Despite these benefits, far too few babies have access to high-quality early learning programs, due in large part to limited funding.

INCOME-ELIGIBLE INFANTS/TODDLERS WITH EHS ACCESS Only 11 percent of eligible infants and toddlers were reached by the EHS program. EHS is the only federal program dedicated to comprehensively promoting healthy child and family development for pregnant women, infants, and toddlers living in families with incomes below the poverty line. EHS's effectiveness is supported by program performance standards that are a benchmark toward which other early childhood programs should strive.

INFANTS/TODDLERS IN CCDF-FUNDED CARE Fewer than 1 in 7 federally eligible families (4.6 percent) receive help paying for child care under the Child Care and Development Fund (CCDF),[liv] and the floor for the quality of care families receive through CCDF varies widely from state to state. The federal government and the states do provide some public support for child care, largely through CCDF, but that funding is far too limited to ensure quality care for all families who need it. Notably, states have flexibility under federal law to increase both access to child care and the quality of care available to families with low incomes, but they are limited in the ability to do so by the diminishing value of federal child care dollars.

ELEMENTS THAT SUPPORT CHILD CARE QUALITY

For infants and toddlers, child care is second only to interactions with their families in shaping the foundation of early brain development.



"Before COVID, I worked a minimum-wage job, 40 hours a week, at our local grocery store. After each of my daughters was born, I had to quit work, as we could not afford child care. We faced many difficulties living on one paycheck."

Teresa S., Garden City, KS

High-quality child care improves children's early learning, cognitive and language development, social and emotional development, and school achievement, building the foundation children need to thrive as adults. Child care of lower quality does not provide this boost and can even be detrimental to development where children lack other resources. Higher-quality child care and early education has been found to be of particular benefit to children in families with low income, promoting positive child development outcomes to a greater extent than for their more affluent peers.[lv] However, it comes at high costs for families.

Too often, families' access to quality child care is limited by underinvestment in the child care system. This issue is explored in-depth in the 2021 brief, *The State of Child Care for Babies: The Need to Do Better for Our Youngest Children*.[lvi] Unlike K-12 education, which is largely funded through public tax dollars, the United States places the majority of the burden for paying for child care on parents of young children, subsidized by the low wages of the early educators who provide care. Even families with moderate incomes struggle to afford child care for infants, which exceeds the cost of 4-year public college in 30 states and the District of Columbia.[lvii] Exceedingly high costs and low-quality floors, combined with insufficient public investment, means access to quality care that supports this foundational development is limited to far too few infants and toddlers.

STATE STANDARDS FOR INFANT AND TODDLER CARE Given the importance of quality in supporting strong early development, the minimum floor that states set for providers caring for infants and toddlers should be shared and based on requirements that research has demonstrated create optimal environments for early learning and development. The Early Head Start (EHS) program provides such a benchmark, with performance standards for adult-child ratios and group size that optimize the amount of individualized attention and interaction babies receive from their care providers, as well as education requirements that ensure lead teachers have the foundational knowledge to provide infants and toddlers with enriching cognitive, developmental, and social-emotional experiences.

ADULT–CHILD RATIO REQUIREMENTS More states meet or exceed EHS's adult–child ratio requirement (one adult for every four infants and toddlers) for infants than for older babies. **35 states meet or exceed the standard for children at 11 months old, 14 states at 19 months, and 2 states at 30 months.** Among the 35 states, 21 meet or exceed the standard for one of the ages (infants), 12 states achieve it for 2 ages (infants and 1-year-olds), and two states achieve it for all three ages, including 2-year-olds.

GROUP SIZE REQUIREMENTS More states meet or exceed EHS's group-size requirement (no more than eight infants or toddlers in a group) for infants than for older babies. **23 states meet or exceed the requirement for one of the ages (infants), seven states achieve it for two ages (infants and toddlers), and only one state achieves it for all three ages.**

TEACHER QUALIFICATIONS Only six states require teachers of infants and toddlers to have either a child development associate (CDA) credential or state equivalent. In fact, **a vast majority—45 states—require no credential beyond a high school diploma.** These requirements fall short of EHS's requirement that teachers have

a minimum of a CDA or comparable credential, with training or coursework in early childhood development with a focus on infant/toddler development.

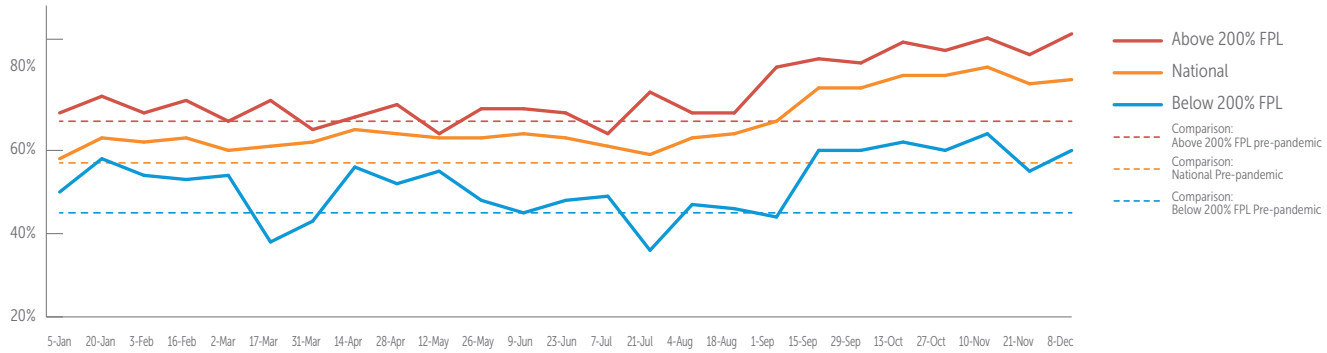
INFANT/TODDLER PROFESSIONAL CREDENTIAL Thirty states have adopted an infant/toddler professional credential, a component of early childhood workforce development that recognizes providers' achievement of the specialized knowledge and skills required to provide high-quality care for babies.

EFFECTS OF COVID-19 ON CHILD CARE The RAPID Survey findings in 2021 continued to show the impacts of chaotic child care situations on families and providers, with lower levels of improvement among families with low income. **Overall household use of non-parental child care[12] (center-based or non-center-based) substantially increased over the course of the year, from 53.3 percent of surveyed families in January to 66 percent in December; however the return to non-parental care was lower among families with low income.** While this is a marked change from the initial plunge seen at the start of the pandemic (when factors such as job loss, reduced child care affordability, and safety concerns kept non-parental child care use well below pre-pandemic levels), use of non-parental care continued to be lower for families with low income than those above low income. Trends in non-parental child care use in 2021 also show declines in use, for families of both income levels, around weeks when national COVID-19 spread data patterns were elevated (see Figure 20). Specifically, child care use dropped around weeks that coincided with the emergence of new and more contagious strains of the virus.[lviii]

This slower rate of return to non-parental child care among households with low income coincides with higher rates of unemployment and job loss compared with higher-income families. While widespread closure of child care programs and pandemic-related unemployment in families initially decreased the need for non-parental child care in 2020, child care shortages and disruptions in the availability of reliable non-parental care options in 2021 may also contribute to lower use of care.[lix] This ongoing challenge is reflected in the comments of one RAPID Survey respondent from Tennessee, "[My biggest challenge is] finding child care for the baby I'll be having next month. Between staffing shortages and knowing they won't be safe from COVID-19, I'm unsure if I'll be able to return to work full time."

Across all families, as new variants of the virus brought new spikes in infection rates, caregivers

NON-PARENTAL CHILD CARE USE DURING COVID-19 Figure 20.



Note: FPL = Federal Poverty Level. Figure includes data collected between January 5 and December 14, 2021. Caregivers reported whether they had used non-parental child care in the last week.

[12] In 2021, a change was made in the way RAPID asked child care questions. For questions regarding who provides the child care, the sample size is limited and should be interpreted with caution.

"[My biggest challenge is] finding child care for the baby I'll be having next month. Between staffing shortages and knowing they won't be safe from COVID-19, I'm unsure if I'll be able to return to work full time."

RAPID Survey respondent, TN

experienced additional levels of unpredictability, and they were forced once again to make difficult decisions between delaying or disrupting their return to work in order to care for young children and placing children in child care settings that felt unsafe.

Beginning in March 2021, the RAPID team expanded its research to include a survey of family and child care provider well-being, financial circumstances, health-promoting behavior, and workplace conditions. Similar to the experience of many of the families they serve, the pandemic has taken a toll on both the emotional well-being and economic stability of child care providers, which can have adverse effects on the care they provide.[lx] The survey findings provide important details on the extent to which providers were experiencing food insecurity, economic hardship, and work schedule disruption. As reported by the RAPID team in November, "these challenges are associated with pronounced emotional distress among child care providers and may be contributing to some providers leaving the field and to severe child care shortages during the COVID-19 pandemic."[lxi] With the uncertainty of the pandemic's duration still a part of families' lives, it is essential that focus be placed on the recovery and strengthening of our critical child care system.

POLICY RECOMMENDATIONS AND RELATED ACTIONS

Our recommendations for improvement in access to early learning programs include:

- **Fully funding EHS as a beacon of hope.** As more families are challenged by the sharp economic downturn, this effective early development and family support program should be empowered to reach all eligible infants and toddlers as well as serve significantly more pregnant people.

- **Sustaining child care and building the world-class system families deserve.** As a key foundation for a strong economy, as well as for young children's healthy development, child care is a public good. After the COVID-19

pandemic has further decimated our existing, threadbare child care system, we must finally invest in our child care system as such. We must enact a comprehensive child care program that places quality child care within reach of all working families, particularly those with low and moderate income.

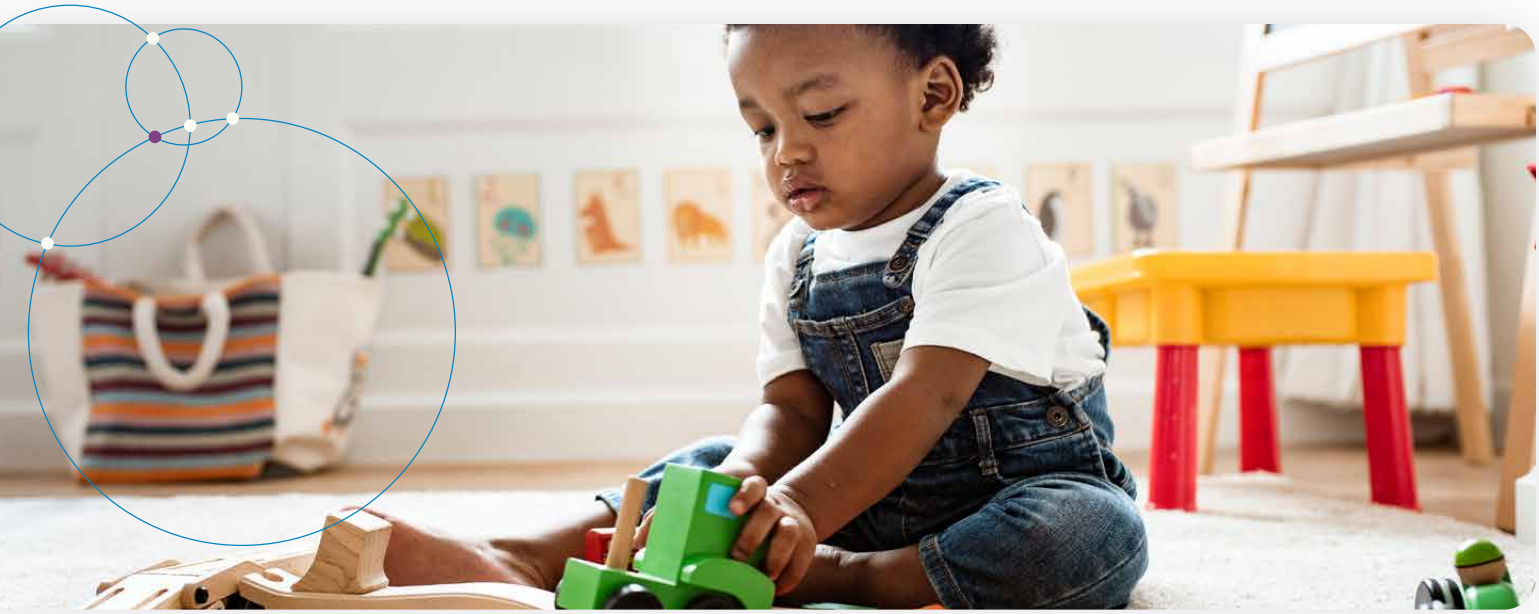
RELATED FEDERAL POLICY ACTIONS AND STATE OPPORTUNITIES The reconciliation bill that passed out of the House last November and is now stalled in the Senate includes an historic investment in our child care and pre-K system that would help build the comprehensive, high-quality care program families, providers, and children need. The bill would create a new child care entitlement for the vast majority of families with young children; build, expand, and continually support a diverse supply of high-quality care; and ensure an appropriately compensated workforce.

State Opportunity. As states move to stabilize child care providers hard hit by the pandemic, they should adopt strategies that create a foundation for an improved system in the future. These include increasing the use of contracts to ensure that all types of providers, as well as families, can count on financing that preserves capacity. States should be particularly attentive to ensuring that child care programs that serve the most under-resourced and overburdened families, many of whom are families of color, have the resources to reopen, remain open, or pay back debts they incurred to stay open, and that they are creating the conditions to alleviate child care deserts as rebuilding begins. States should also be sensitive to the range of family preferences in types of care and increase the availability of mechanisms, such as staffed family child care networks, shared services models, resource and referral agencies, and Infant-Toddler Specialist networks that can support and stabilize all provider types. In addition, with a robust funding stream, states should be encouraged to invest in EHS services for babies in under-resourced families.

EARLY INTERVENTION AND PREVENTION SERVICES

Early intervention to identify and address developmental delays is critical, but only one in three babies received a developmental screening and only 7.2 percent received Individuals with Disabilities Education Act (IDEA) Part C services. *2022 Yearbook* data show that timeliness and receipt of IDEA Part C services for infants and toddlers continued to be inadequate, despite the rapid pace of development babies experience in their first 3 three years. It is important to note that **only six states include children at risk for disabilities as eligible for IDEA Part C services or report that they serve them**, unchanged from the time of the last report.

DEVELOPMENTAL SCREENING RECEIVED **Nationally, one in three babies (33.8 percent) aged 9–35 months old received a developmental screening** using a parent-completed tool. The percentage of White (36.4 percent) babies screened was higher than the national average,



and the percentage of Hispanic (31.1 percent), Black (27.5 percent), and Asian (26.2 percent) babies screened was lower than the average. Differences were also evident when examined by income, with screening of babies in families above low income (36.9 percent) being higher than the national average, and screening of babies in families with low income (29 percent) lower than the average.

INFANTS/TODDLERS RECEIVING IDEA PART C SERVICES Although subgroup data are not available for this indicator, **the number of infants and toddlers with disabilities from birth to 2 years old who received early intervention services under IDEA Part C during the most recent 12-month period was virtually unchanged at 7.3 percent,** up from 6.8 percent in the previous year.

POLICY RECOMMENDATIONS AND RELATED ACTIONS Our recommendations for improvement in early intervention and prevention services include:

- **Expanding early intervention (as an essential part of the early care and learning system.** The federal funding structure for early intervention services through Part C of IDEA should enable states to fully meet the developmental needs of infants and toddlers, including developmental screening and follow-up, helping families navigate the system; expanding the early intervention workforce and ensuring adequate reimbursement, ensuring coverage for more children who are at risk or could benefit from services; and incorporating more infant and early childhood mental health expertise and services.

RELATED FEDERAL POLICY ACTIONS AND STATE OPPORTUNITIES The bipartisan Funding Early Childhood Is the Right IDEA Act was introduced in the House of Representatives in early February. This legislation would set new authorization levels for early intervention services through Part C of IDEA to return funding levels to their high points in the late 1990s, adjusted for inflation, and begin to reverse decades of underinvestment in these critical services.

State Opportunity. States can consider including children at risk for developmental delays in their eligible population to ensure early intervention can be a preventive service, especially if they have concerning levels in *Yearbook* indicators related to risk for developmental delays. They also can work to expand developmental and social-emotional screening for more children, expand outreach to parents to assist them in understanding their children's developmental needs and helping them navigate the system, and incorporate IECMH expertise into their early intervention services.

State Spotlight

North Carolina Brings Dolly Parton's Imagination Library to Families with Babies

Early literacy and shared literacy activities between caregivers and babies are developmentally appropriate, nurturing opportunities that promote language development and can facilitate bonding between baby and caregiver. Since 2017, North Carolina has provided Dolly Parton's Imagination Library to children across the state from birth through 4 years old. North Carolina legislators provided funding for the statewide program, and North Carolina's network of Smart Start programs and partners ensure implementation in each of the state's 100 counties.[lxii] The state's North Carolina Partnership for Children further supports the initiative by conducting an annual evaluation of the program, providing information back to local communities to use in enrolling and serving children and families.

The program provides a free book to each enrolled child, mailed directly to their home (or the address provided upon registration) each month. Some books may be available in English or Spanish, and children exiting from the program on their fifth birthday receive a Graduation Book to mark the occasion. Books are chosen by a Blue Ribbon Book Selection Committee of early childhood literacy experts and are age-appropriate and developmentally appropriate.[lxiii] North Carolina communities are focused on enrolling children as early as possible, with books available starting at birth.

The program doesn't just supply free books, however. Resources and age-specific tips for parents and caregivers also are available and help parents appreciate and enjoy the special time they can spend with their young children engaged in reading and language development.[lxiv]

North Carolina isn't the only state to partner with Dolly Parton's Imagination Library. As reported by Dolly Parton's Imagination Library and in Rolling Stone,[lxv] Arkansas, Colorado, Delaware, Kansas, Kentucky, Ohio, Tennessee, and West Virginia also have statewide programs.[lxvi] Oklahoma also had legislation in 2020 that would initiate a similar state-wide program.[lxvii]

For more information about Dolly Parton's Imagination Library in North Carolina, visit here.

Positive Early Learning Experiences Table 6.

Subdomain	Indicator	Description	2019 *Yearbook*	2020 *Yearbook*	2021 *Yearbook*	2022 *Yearbook*
Early Care and Education Opportunities	Parent reads to baby every day[a]	Percentage of parents who report reading to their infants/toddlers every day	38.2%	37.8%	37.2%	36.8%
	Parent sings to baby every day[a]	Percentage of parents who report singing songs or telling stories to their infants/ toddlers every day	56.4%	57.6%	57.4%	57.3%
	Income-eligible infants/toddlers with Early Head Start access	Percentage of infants/toddlers below 100% of the FPL with access to Early Head Start	7.0%	7.0%	11.0%	11.0%
	Cost of care, as % of income (married families)	Average state cost of center-based infant care as a percentage of median income for married families	Not available at national level	Not available at national level	Not available at national level	Not available at national level
	Cost of care, as % of income (single parents)	Average state cost of center-based infant care as a percentage of median income for single parents	Not available at national level	Not available at national level	Not available at national level	Not available at national level
	Families above 200% of FPL eligible for child care subsidy	Income eligibility level for child care subsidy above 200% of the FPL	12 states	13 states	16 states	16 states
	Low-/moderate-income infants/toddlers in CCDF-funded care	Percentage of infants/toddlers with family incomes equal to or below 150% of the state median income who are receiving a child care subsidy	4.2%	4.2%	4.2%	4.6%
	Allocated CCDBG funds	State-allocated new Child Care and Development Block Grant (CCDBG) funds to invest in infant/toddler care		34 states	34 states	34 states
Child Care Quality	Group size	Whether group size requirements meet or exceed the standards set by Early Head Start at 11 months, 19 months, and 30 months old	--	23 states[b] (16 states for one age group, six states for two age groups, one for three age groups)	23 states[b] (16 states for one age group, six states for two age groups, one for three age groups)	23 states[b] (16 states for one age group, six states for two age groups, one for three age groups)
	Adult/child ratio	Whether adult/child ratios meet or exceed the standards set by Early Head Start at 11 months, 19 months, and 30 months old	--	35 states[c] (21 states for one age group, 12 states for two age groups, two states for three age groups)	35 states[c] (21 states for one age group, 12 states for two age groups, two states for three age groups)	35 states[c] (21 states for one age group, 12 states for two age groups, two states for three age groups)

Subdomain	Indicator	Description	2019 *Yearbook*	2020 *Yearbook*	2021 *Yearbook*	2022 *Yearbook*
Child Care Quality (continued)	Teacher qualifications	Level of teacher qualification required by the state, for teachers of 11-month-olds, 19- month-olds, and 30-month-olds across five categories: no credential beyond high school degree; CDA or state equivalent; specific infant/toddler credential or CDA with infant/toddler credential; associate's degree; bachelor's degree	--	6 states—CDA/state equivalent (45 states—no credential beyond high school)	6 states—CDA/state equivalent (45 states—no credential beyond high school)	6 states—CDA/state equivalent (45 states—no credential beyond high school)
	Infant/toddler professional credential	State has adopted an infant/toddler credential	--	30 states	30 states	30 states
	State reimburses center-based child care	State reimburses center-based child care at or above the 75th percentile of current market rates		1 state	4 states	1 state
Early Intervention and Prevention Services	Developmental Screening	Percentage of infants/toddlers, ages 9–35 months old, who received a developmental screening using a parent-completed tool in the past year	30.4%	31.1%	32.5%	33.8%
	At-risk children included in IDEA Part C eligibility definition	State includes "at-risk" children as eligible for IDEA Part C services	--	5 states	6 states	6 states
	Infants/toddlers receiving IDEA Part C services	Percentage of infants/toddlers receiving IDEA Part C services	3.1%	6.4%[d]	6.8%[d]	7.3%[d]
	Timeliness of Part C services	Percentage of eligible infants/toddlers required to have an initial Individual Family Service Plan (IFSP) meeting who had the meeting within 45 days	--	Not available at national level	Not available at national level	Not available at national level

NOTES: CDA = child development associate degree; EHS = Early Head Start; CCDBG = Child Care Development Block Grant; CCDF = Child Care Development Fund; FPL = federal poverty level; IDEA = Individuals with Disabilities in Education Act

[a] Due to changes in data reporting and/or changes to the methods for calculating this indicator, we caution against directly comparing estimates from the 2019 *Yearbook* and the 2020 and 2021 *Yearbooks*. For a more detailed discussion, see the indicators and methodological appendices (Appendix B and Appendix C).

[b] 23 states meet or exceed the requirement for one of the ages (infants), 6 states achieve it for two ages (infants and toddlers), and only 1 state achieves it for all three ages.

[c] 21 states meet or exceed the standard for one of the ages (infants), 12 states achieve it for two ages (infants and one-year-olds), and 2 states achieve it for all three ages, including 2-year-olds.

[d] Beginning with the 2020 calculation, cumulative count for most recent 12-month period is used, whereas snapshot was used for 2019.

Applying *Yearbook* Data

Guidance for Reviewing the Data

Data can be overwhelming, as a large number and type of factors (i.e., indicators) impact the early childhood ecosystem. The overview and findings described in the *Yearbook* help policymakers and advocates understand the overall story of babies and families, the potential threats to development, and policies that support well-being. State profiles at stateofbabies.org provide details on babies in the state where they live and the means to compare each state with the others.

In addition to the extensive data presented in this *Yearbook*, states and communities may have additional data systems or sources that can enhance understanding of context, equity, the nature and scale of needs, etc. Further, multiple forms of data should be consulted—the metrics and statistics included in this *Yearbook*, the language of policy and statute, and feedback from a broad range of parents and stakeholders. In making comparisons of the *2022 Yearbook* data to these other forms of data, it is important to bear in mind that the *Yearbook* data sources are retrospective and serve as an important pre-pandemic baseline.

It may be tempting to jump straight to indicators of specific interest, either by topic or for a specific region or state. We suggest first taking the time to consider how to make the most of the information provided. Here are some suggested strategies and questions:

1. What are your immediate impressions of the data?

- Do the data ring true for your state? Do the data align with your understanding of an issue or do some indicators challenge your assumptions?
- Are there inconsistencies within the data for your state? Do some data values contradict other data points for your state?
- Are these data consistent with what you're hearing from families and providers?
- Are the concerns or issues documented in the data equally experienced by children and families across the state, or are there differences between groups when data are examined by race or ethnicity (or location, family structure, education, socioeconomic status, etc.)? What policies or systems, or lack thereof, could be contributing to disparities?
- What issues surface from the data that you or others can prioritize to address (e.g., birth outcomes, housing, poverty)?

2. What is happening in the world that may explain what you see in the data?

Consider societal issues or initiatives such as major influxes or decreases in funding, changes in leadership, legal or policy changes, changes in administrative procedures, progress (or lack thereof) in complementary or supporting initiatives or programs, technological changes, or

Quick Start

Prepare a fact sheet for easy reference that bullets out your reflections and responses to these questions.

Identify 1–3 ways for your team to respond to each of your bullet items.

Prioritize your tasks and get started.

general large-scale issues (e.g., health, economic, social). It can be hard to figure out how a shift on a societal issue or a change in another sector may be affecting the data you are interested in—it may be helpful to have a work or study group that can tackle these types of questions.

3. What are the implications of the data?

- Are conditions and outcomes improving, staying the same, or getting worse?
- What types of resources will be necessary to address the issues? Do you have the programs you need—just not enough of them? Do you need new solutions?

4. Based on the data, where do you have momentum for babies that you can build on?

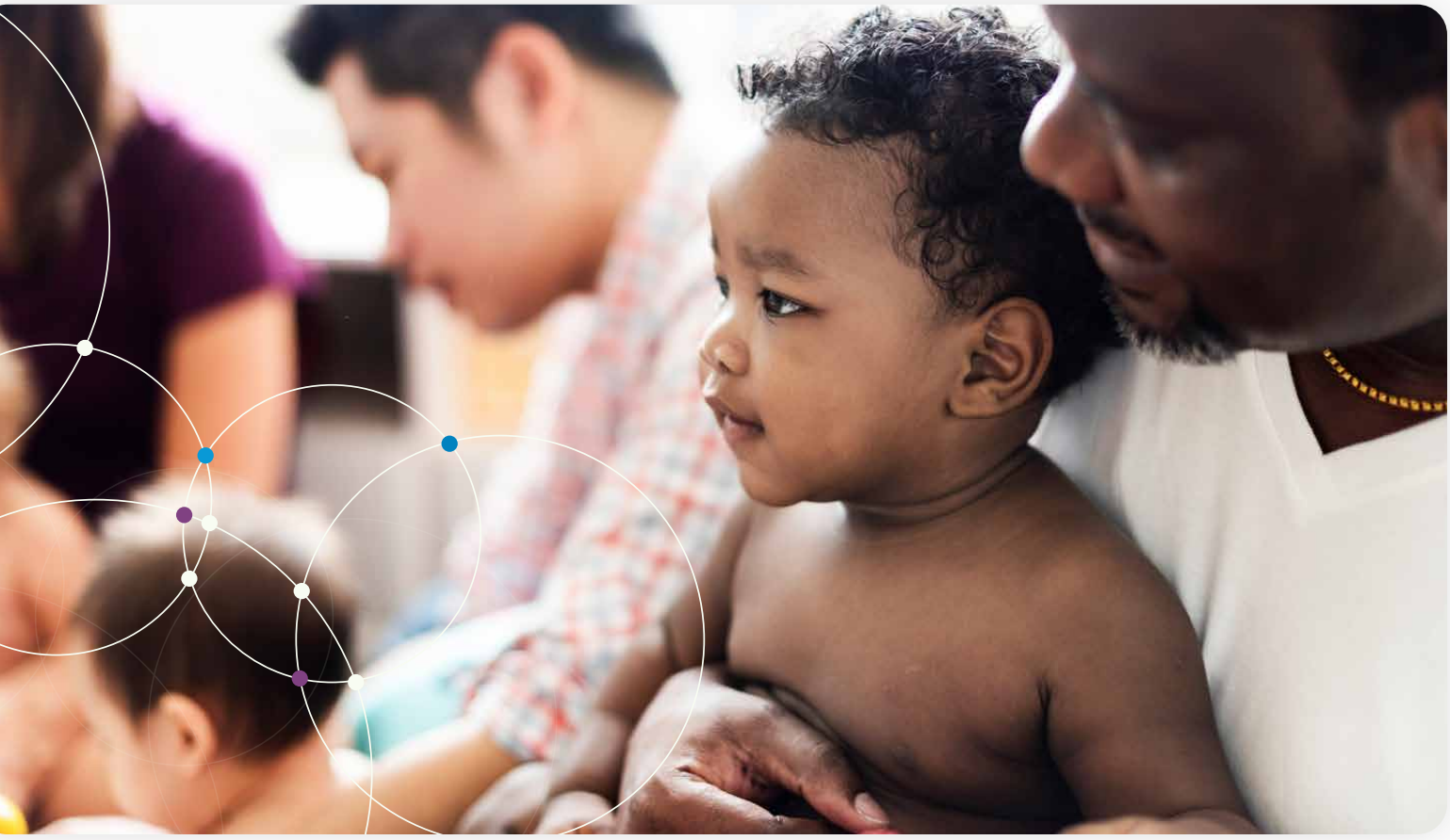
- Where do you need to grow or change course?
- Where do you need to examine data in more detail or from additional sources?
- How can you learn from other communities and states?

5. What is a realistic sequence and time frame for success?

What indicators will help you understand if you are making progress? Are these indicators already present in the data?

6. Are there any groups or individuals that might be resistant to change or progress on this issue? What are their reasons or concerns?

Further, we encourage you to consider your approach to strategy, ensuring that strategic actions have a beginning, middle, and end. For example, in creating strategy, is there a clear demarcation of who will do what actions, in what sequence, and over what time frame? Can you identify how challenges will (or will not) be addressed or where conversations will take place? Are there sufficient feedback loops in place to know when different actions or tasks are ready to be implemented? How adaptable are strategic actions to changing political, economic, or social conditions?



Giving Advocates the Tools to Connect Data to Policy

ZERO TO THREE has created several tools to assist policymakers, advocates, and other stakeholders in using the *State of Babies Yearbook*.

- *The State of Babies Yearbook: 2022* Advocacy and Outreach Tools (stateofbabies.org/take-action) provide stakeholders the resources they need to use the *Yearbook* as a lever to advocate for improved policies and programs, including key messages and talking points, sample e-mails to state and federal policymakers, and social media posts and graphics to use in telling the story of babies in a state.

- *Think Babies* (thinkbabies.org) provides opportunities for stakeholders to use data to advocate for policies that ensure all babies and their families have Good Health, Strong Families, and Positive Early Learning Experiences.

In addition, the following resources describe strategies that policymakers can consider as they-determine how to begin developing infant/toddler policies and include examples of states currently implementing each of the strategies.

- **Addressing Bias and Advancing Equity in State Policy:** This article explores the ways in which states can and are addressing racial equity in problem solving and policymaking. The authors explore national data that make the case for addressing bias and advancing equity in state policy; share strategies and best practices for engaging families and communities; and provide examples of policies that can disrupt and dismantle institutional racism, promote equity, and ensure all babies get a strong start in life.

- **Envisioning Your Home Visiting Expansion:** This infographic and companion resources are designed to help states and communities

engage in collaborative and inclusive planning efforts to expand home visiting. They offer reflective questions to help users come to agreement on vision and goals for their home visiting continuum, center equity and community voice, and determine next steps.

- **Places for All Babies: Home-based Child Care Is an Essential Part of the Solution:** This policy brief includes examples of state strategies and recommendations that policymakers can explore in building a truly robust mixed delivery system that embraces both family child care and family, friend, and neighbor care as essential components in an array of high-quality options for all families of infants and toddlers.

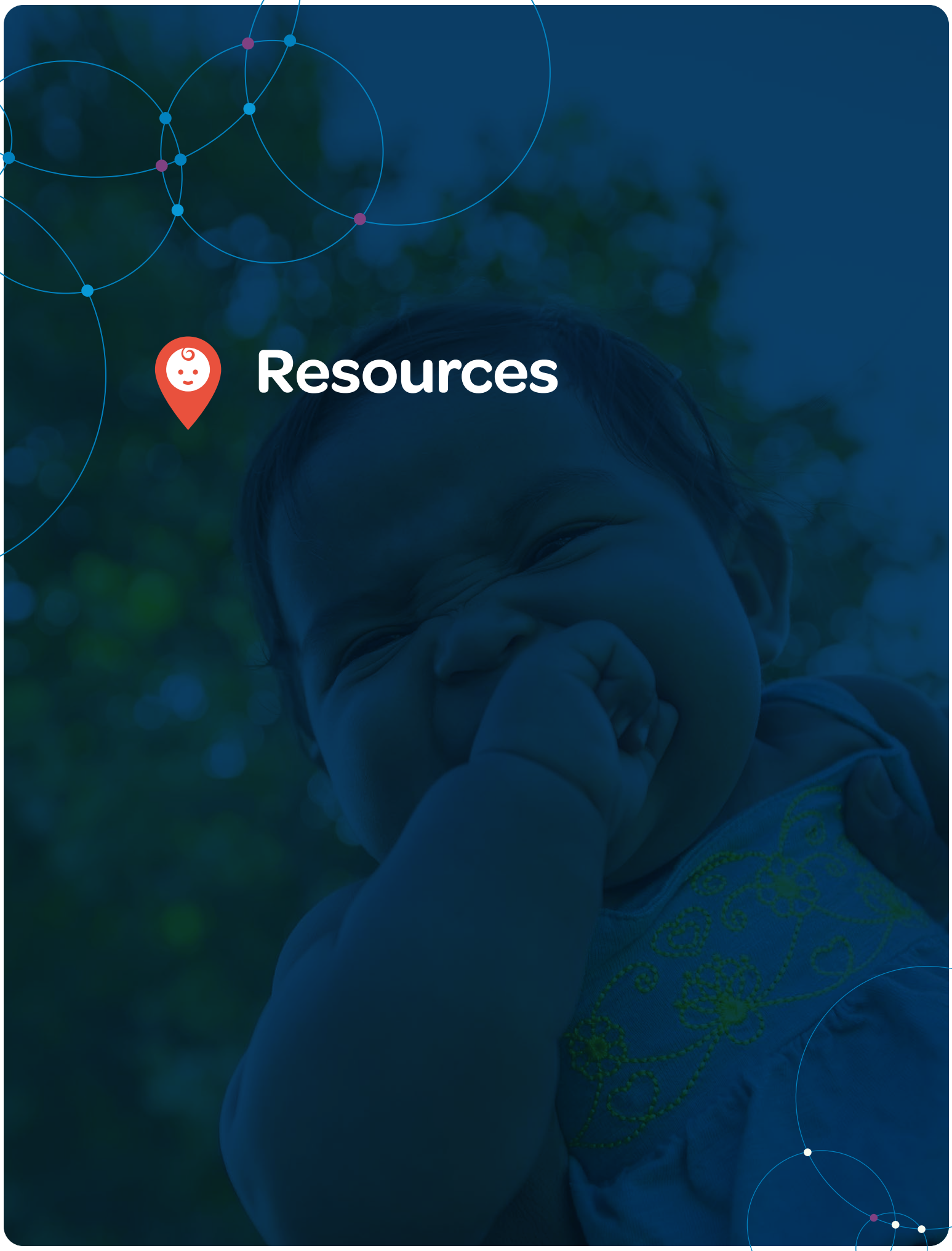
- **Supporting High-quality Early Care and Education from Birth to 5: State Strategies to Strengthen Infant-Toddler Care as Public Pre-K Expands:** This brief and the accompanying webinar outline strategies to protect and expand access to a full continuum of high-quality care and education in the context of Pre-K expansion.

- **Strengthening Connections: State Approaches to Connecting Families to Services:** These case studies illustrate how states can help families locate and access appropriate supports.

In addition, the **ZERO TO THREE State Initiatives Collection** highlights innovative state policies and initiatives that affect infants, toddlers, and their families. It provides many examples of how states are tackling the policy priorities identified in the *Yearbook*. It is searchable by state or by elements of the ZERO TO THREE Policy Center's Infant and Toddler Policy Framework.

Also, consider subscribing to the ZERO TO THREE Policy Center for the latest policy and advocacy resources to help you Be a Big Voice for Little Kids™, including The Baby Monitor newsletter and opportunities to take action with *Think Babies*™.

For the early childhood field, this is an exciting time of policy innovation. The importance of children's earliest years of life has gained more attention than ever before. Across states, this new awareness is translating into creative policy strategies that seek to address the needs of children from birth to 3 years old. The key to further success, especially for states where challenges across all the domains seem daunting, is to find a manageable place to begin and to be thoughtful about how policy choices fit within a broader system of support for infants, toddlers, and their families.



Resources

Resources

STATE OF BABIES YEARBOOK: 2022 WEBSITE

https://stateofbabies.org

Visit the website to learn more about the *State of Babies*, download a full copy of the *Yearbook*, view and download state profiles, obtain a copy of the companion brief, Promising Approaches at Work in States, and take action using the *State of Babies Yearbook* : *2022 Advocacy and Outreach Tools.*

STATE OF BABIES YEARBOOK: 2022 ADVOCACY AND OUTREACH TOOLS

https://stateofbabies.org/take-action

Resources provided in the Toolkit (e.g., talking points, sample social media posts, templates for letters and e-mails, and graphics) are designed to help advocates use the *State of Babies Yearbook* to call on their federal, state, and local policymakers to *Think Babies* and work to improve outcomes for babies and families.

BRIEF: RACISM CREATES INEQUITIES IN MATERNAL AND CHILD HEALTH EVEN BEFORE BIRTH

https://stateofbabies.org/wp-content/uploads/2021/07/ZTTRacismInequitiesMaternalChildHealth_ChildTrends_May2021.pdf

This updated companion brief to the *State of Babies Yearbook*: *2021* addresses serious inequities in maternal health and birth outcomes, when health data are disaggregated and examined by race and ethnicity, and it describes the influences of systemic and interpersonal racism that underlie these disparities.

ARTICLE: ADDRESSING BIAS AND ADVANCING EQUITY IN STATE POLICY

https://www.zerotothree.org/resources/4198-addressing-bias-and-advancing-equity-in-state-policy

This ZERO TO THREE Journal article explores the many ways in which states can and are addressing racial equity in problem solving and policymaking. The authors explore national data that make the case for addressing bias and advancing equity in state policy; share strategies and best practices for engaging families and communities; and provide examples of policies that can disrupt and dismantle institutional racism, promote equity, and ensure all babies get a strong start in life.

STATE INITIATIVE ARTICLE COLLECTION

This is a collection of articles highlighting innovative state policies and initiatives that impact infants, toddlers, and their families. There are many examples of how states are tackling the policy priorities identified in the *State of Babies Yearbook: 2022*, which may give you ideas for improving outcomes in your state. You can search by state or by elements of the ZERO TO THREE Policy Center's Infant and Toddler Policy Framework.

THINK BABIES

thinkbabies.org

Think Babies is a call to action for federal and state policymakers to prioritize the needs of infants, toddlers, and their families and invest in our future, providing stakeholders opportunities to use data to advocate for policies that ensure all babies and their families have good health, strong families, and positive early learning experiences.

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Endnotes

i Center on the Developing Child (2017). *Brain architecture.* Harvard University. https://developingchild.harvard.edu/science/key-concepts/brain-architecture/#neuron-footnote

ii Center for Translational Neuroscience. (2021). *Rapid Assessment of Pandemic Impact on Development Early Childhood Household Survey Project.* University of Oregon [data set]. https://ctn.uoregon.edu/projects/rapid-assessment-pandemic-impact-development-rapid-early-childhood

iii Burgess, S. R., Hecht, S. A., & Lonigan, C. J. (2002). Relations of the home literacy environment (HLE) to the development of reading-related abilities: A one-year longitudinal study. *Reading Research Quarterly, 37*(4), 408–426.

iv National Conference of State Legislatures. (2018). *The territories: They are us.* https://www.ncsl.org/Portals/1/Documents/magazine/articles/2018/SL_0118-Stats.pdf

v Center for Translational Neuroscience. (2020). *Rapid Assessment of Pandemic Impact on Development Early Childhood Household Survey Project.* University of Oregon [data set]. https://ctn.uoregon.edu/projects/rapid-assessment-pandemic-impact-development-rapid-early-childhood

vi Darling, K. & Ryberg, R. (2022). *Better data needed for monitoring and promoting infant and toddler well-being.* Child Trends. https://www.childtrends.org/publications/better-data-needed-for-monitoring-and-promoting-infant-and-toddler-well-being

vii Frey, W. H. (2018). The millennial generation: A demographic bridge to America's diverse future. [Presentation]. Brookings Institution.

viii Clark, M. (2020). *Medicaid and CHIP coverage for pregnant women: Federal requirements, state options.* Georgetown University Health Policy Institute, Center for Children and Families. https://ccf.georgetown.edu/wp-content/uploads/2020/11/Pregnancy-primary-v6.pdf

ix Ranji, U., Gomez, I., & Salganicoff, A. (2019). *Expanding postpartum Medicaid coverage.* Henry J. Kaiser Family Foundation Issue Brief. https://firstfocus.org/wp-content/uploads/2019/11/Issue-Brief-Expanding-Postpartum-Medicaid-Coverage.pdf

x Office on Women's Health. (2019). *Making the decision to breastfeed.* https://www.womenshealth.gov/breastfeeding/making-decision-breastfeed

xi Health Services and Resources Administration. (2020). Understanding breastfeeding benefits. https://mchb.hrsa.gov/maternal-child-health-topics/understanding-breastfeeding-benefits

xii Food and Nutrition Service. (2021). *About WIC.* U.S. Department of Agriculture. https://www.fns.usda.gov/wic/about-wic

xiii Carlson, S., & Neuberger, Z. (2021). *WIC works: Addressing the nutrition and health needs of low-income families for more than four decades.* Center on Budget and Policy Priorities. https://www.cbpp.org/research/food-assistance/wic-works-addressing-the-nutrition-and-health-needs-of-low-income-families

xiv Centers for Disease Control and Prevention. (2019). *Preventing pregnancy-related deaths.* https://www.cdc.gov/reproductivehealth/maternal-mortality/preventing-pregnancy-related-deaths.html

xv U.S. House of Representatives. (2021, November 19). *Underwood's 'Momnibus' passes House in Build Back Better Act; makes largest investment to advance birth equity in American history* [Press release]. https://underwood.house.gov/media/press-releases/underwood-s-momnibus-passes-house-build-back-better-act-makes-largest

xvi Wilkinson, A., Laurore, J., Maxfield, E., Gross, E., Daily, S., & Keating, K. (2021). *Racism creates inequities in maternal and child health, even before birth.* https://www.zerotothree.org/resources/4122-racism-creates-inequities-in-maternal-and-child-health-even-before-birth

xvii World Health Organization. (2015). *WHO recommendations on interventions to improve preterm birth outcomes.* https://www.who.int/reproductivehealth/publications/maternal_perinatal_health/preterm-birth-guideline/en

xviii World Health Organization. (2015). *WHO recommendations on interventions to improve preterm birth outcomes.* https://www.who.int/reproductivehealth/publications/maternal_perinatal_health/preterm-birth-guideline/en

xix Reichman, N. (2005). Low birth weight and school readiness. *The Future of Children, 15*(1), 91–116. https://doi.org/10.1353/foc.2005.0008

xx The World Bank, World Development Indicators. (n.d.). *Mortality rate, infant (per 1,000 live births)* [Data file]. https://data.worldbank.org/indicator/SP.DYN.IMRT.IN

xxi Driscoll, A. K., & Rossen, L. M. (2020). *Quarterly provisional estimates for infant mortality, 2017-Quarter 4, 2019*. National Center for Health Statistics, National Vital Statistics System, Vital Statistics Rapid Release Program. https://www.cdc.gov/nchs/nvss/vsrr/infant-mortality-dashboard.htm

xxii Centers for Disease Control and Prevention. (2020). *Infant mortality.* https://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm

xxiii Bode, S. M., Gowda, C., Mangini, M., & Kemper, A. R. (2021). COVID-19 and primary measles vaccination rates in a large primary care network. *Pediatrics*, 147(1), e2020035576.

xxiv Center for Translational Neuroscience. (2020). *Overloaded: Families with children who have special needs are bearing an especially heavy weight, and support is needed.* https://medium.com/rapid-ec-project/overloaded-families-with-children-who-have-special-needs-are-bearing-an-especially-heavy-weight-4e613a7681bd

xxv ZERO TO THREE. (2017). *The basics of infant and early childhood mental health: A briefing paper.* https://www.zerotothree.org/resources/1951-the-basics-of-infant-and-early-childhood-mental-health-a-briefing-paper

xxvi Ibid.

xxvii Center for Translational Neuroscience. (2020). *How long can the levee hold?* https://medium.com/rapid-ec-project/how-long-can-the-levee-hold-2a2cd0779914

xxviii Shonkoff, J. P., Garner, A. S., The Committee on Psychosocial Aspects of Child and Family Health, The Committee on Early Childhood, Adoption, and Dependent Care, & The Section on Developmental and Behavioral Pediatrics (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics, 129*(1), e232–e246.

xxix Center for Translational Neuroscience. (2021). Emotional distress on the rise for parents...again. https://static1.squarespace.com/static/5e7cf2f62c45da32f3c6065e/t/6182a1827f87ab67ea7d06fa/1635950978619/emotional-distress-factsheet-nov2021.pdf

xxx ZERO TO THREE. (2021). Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (DC:0–5). https://www.zerotothree.org/resources/1664-dc-0-5-resources.

xxxi Bahls, C. (2011). Achieving equity in health. Racial and ethnic minorities face worse health and health care disparities—but some interventions have made a difference. https://www.healthaffairs.org/do/10.1377/hpb20111006.957918/full/healthpolicybrief_53.pdf

xxxii Children's Bureau. (2018). Child maltreatment 2016. U.S. Department of Health and Human Services, Administration on Children, Youth and Families. http://www.acf.hhs.gov/programs/cb/resource/child-maltreatment-2016

xxxiii Evans, G. W. (2006). Child development and the physical environment. *Annual Review of Psychology, 57,* 423–451. https://www.lightningpath.org/files/Child-development-and-the-physical-environment.pdf

xxxiv Coleman-Jensen, A., McFall, W., & Nord, M. (2013). *Food insecurity in households with children: Prevalence, severity, and household characteristics, 2010-11.* U.S. Department of Agriculture, Economic Research Service. https://www.ers.usda.gov/webdocs/publications/43763/37672_eib-113.pdf

xxxv Rose-Jacobs, R., Black, M. M., Casey P. H., Cook, J. T., Cutts, D. B., Chilton, M., Heeren, T., Levenson, S. M., Meyers, A. F., & Frank, D. A. (2008). Household food insecurity: Associations with at-risk infant and toddler development. *Pediatrics, 121*(1), 65–72.

xxxvi Zaslow, M., Bronte-Tinkew, J., Capps, R., Horowitz, A., Moore, K. A., & Weinstein, D. (2009). Food security during infancy: Implications for attachment and mental proficiency in toddlerhood. *Maternal and Child Health Journal, 13*(1), 66–80.

xxxvii Center for Translational Neuroscience. (2021). *Emotional distress on the rise for parents again.* https://rapidsurveyproject.com/our-research/emotional-distress-on-rise-again

xxxviii Ibid.

xxxix Shonkoff, J. P., Garner, A. S., the Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood Adoption and Dependent Care, & Section on Developmental and Behavioral Pediatrics. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics, 129*, e232-e246. Doi:10.1542/peds.2011-2663

xl Moore, K. A., Bethell, C. D., Murphey, D. A., Martin, M. C., & Beltz, M. (2017). *Flourishing from the start: What is it and how can it be measured?* Child Trends. https://www.childtrends.org/wp-content/uploads/2017/03/2017-16FlourishingFromTheStart-1.pdf

xli Shonkoff, J. P., Garner, A. S., the Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood Adoption and Dependent Care, & Section on Developmental and Behavioral Pediatrics. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics, 129,* e232-e246. Doi:10.1542/peds.2011-2663

xlii ZERO TO THREE & Child Trends. (2013). *Changing the course for infants and toddlers: A survey of state child welfare policies and initiatives.* https://www.zerotothree.org/resources/218-changing-the-course-for-infants-and-toddlers

xliii Center on Budget and Policy Priorities. (2019). *Policy basics: The earned income tax credit.* https://www.cbpp.org/research/federal-tax/the-earned-income-tax-credit

xliv Center on Poverty and Social Policy. (2022). *December Child Tax Credit kept 3.7 million children from poverty.* Columbia University. https://www.povertycenter.columbia.edu/news-internal/monthly-poverty-december-2021

xlv Center for Social Development. (2013). *Child development accounts and college success: Accounts, assets, expectations, and achievements.* https://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=1135&context=csd_research

xlvi Zewde, N. (2018). *Universal Baby Bonds reduce Black-White wealth inequality, progressively raise net worth of all young adults.* https://static1.squarespace.com/static/5743308460b5e922a25a6dc7/t/5c4339f67ba7fc4a9add58f9/1547909624486/Zewde-Baby-Bonds-WP-10-30-18.pdf

xlvii House, S., Pugliese, M., & Vesely, K. (2022). *Who cares? How the childcare industry's problems are every employer's problem.* Wells Fargo Economics. https://wellsfargo.bluematrix.com/docs/html/3f0d1aae-6a00-472a-8a4c-6f9fe2d6c4e6.html

xlviii The Century Foundation. (2022). *More than three million child care spots saved by American Rescue Plan funding.* https://tcf.org/content/commentary/three-million-child-care-spots-saved-american-rescue-plan-funding/

xlix Burns, M. S., Griffin, P., & Snow, C. (Eds.). (1999). *Starting off right: A guide to promoting children's reading success. National Academy Press.* https://www.nap.edu/read/6014/chapter/1

l Raikes, H., Pan, B. A., Luze, G. J., Tamis-LeMonda, C. S., Brooks-Gunn, J., Constantine, J., Tarullo, L. B., Raikes, H. A., & Rodriguez, E. (2006). Mother-child book reading in low-income families: Correlates and outcomes during the first three years of life. *Child Development, 77*(4), 924–953.

li Burgess, S. R., Hecht, S. A., & Lonigan, C. J. (2002). Relations of the home literacy environment (HLE) to the development of reading-related abilities: A one-year longitudinal study. *Reading Research Quarterly, 37*(4), 408–426.

lii Heckman, J. (2016). *There's more to gain by taking a comprehensive approach to early childhood development.* The Heckman Equation. https://heckmanequation.org/assets/2017/01/F_Heckman_CBAOnePager_120516.pdf

liii Ibid.

liv Chien, N. (2020). Factsheet: *Estimates of child care eligibility & receipt for Fiscal Year 2017.* Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. https://aspe.hhs.gov/sites/default/files/private/pdf/264341/CY2017-Child-Care-Subsidy-Eligibility.pdf

lv Greenberg, E., Isaacs, J. B., Derrick-Mills, T., Michie, M., & Stevens, K. (2018). *Are higher subsidy payment rates and provider-friendly payment policies associated with child care quality?* Urban Institute Center on Labor, Human Services, and Population. https://www.urban.org/sites/default/files/publication/96681/are_higher_subsidy_payment_rates_and_provider-friendly_payment_policies_associated_with_child_care_quality_1.pdf

lvi Hains, D., & Neuenswander, A. (2021). *The state of child care for babies: The need to do better for our youngest children.* ZERO TO THREE. https://www.zerotothree.org/resources/3924-the-state-of-child-care-for-babies-the-need-to-do-better-for-our-youngest-children

lvii Ibid.

lviii Centers for Disease Control and Prevention. (n.d.). *COVID data tracker: Daily trends in number of COVID-19 cases in the United States reported to CDC.* https://covid.cdc.gov/covid-data-tracker/#trends_dailytrendscases

lix Center for Translational Neuroscience. (2021). *Rapid Assessment of Pandemic Impact on Development Early Childhood Household Survey Project.* https://static1.squarespace.com/static/5e7cf2f62c45da32f3c6065e/t/61a51257cb3aea5591b7aedd/1638208087990/child-care-shortages-nov2021.pdf

lx Center for Translational Neuroscience. (2021). *Who is providing for child care providers?* https://www.uorapidresponse.com/our-research/who-is-providing-for-child-care-providers

lxi Center for Translational Neuroscience (2021). *Child care shortages weigh heavily on parents and providers.* https://www.uorapidresponse.com/our-research/child-care-shortages-weigh-heavily-on-parents-and-providers

lxii Smart Start. (2017). Smart Start and Dolly Parton's Imagination Library are working together to get books into the hands of North Carolina's youngest children. https://www.smartstart.org/dolly-partons-imagination-library

lxiii Imagination Library. (n.d.). *Choosing our books.* https://imaginationlibrary.com/usa/choosing-our-books

lxiv Imagination Library (n.d.). *Parent resources.* https://imaginationlibrary.com/news-resources/parent-resources

lxv Betts, S.L. (2021). Turning Pages: Inside Dolly Parton's Imagination Library. https://www.rollingstone.com/music/music-country/dolly-parton-imagination-library-1138409

lxvi Ibid.

lxvii Bourgeois, C. (2020). Dolly Parton-inspired book program coming to Oklahoma. https://www.news9.com/story/5ec85137d3e9966bac2ff5cc/dolly-partoninspired-book-program-coming-to-oklahoma

lxviii Center for Translational Neuroscience. (2021). *Rapid Assessment of Pandemic Impact on Development Early Childhood Household Survey Project.* University of Oregon [data set]. https://ctn.uoregon.edu/projects/rapid-assessment-pandemic-impact-development-rapid-early-childhood

lxix Burgess, S. R., Hecht, S. A., & Lonigan, C. J. (2002). Relations of the home literacy environment (HLE) to the development of reading-related abilities: A one-year longitudinal study. *Reading Research Quarterly, 37*(4), 408–426.

Appendices

Appendix A. Summary of Indicator Values

Good Health				
Subdomain	**Indicator**	**National Average/ Policy Count (most current data available)**	**Range**	**Summary**
Health Care Access/ Affordability	Income cutoff (percentage of the FPL) for Medicaid eligibility for pregnant women (median)	200%	138% (ID, LA, OK, SD) – 380% (IA)	32 states at or above 200% *includes D.C.
	State adopted Medicaid expansion under the Affordable Care Act	39 states	--	--
	Percentage of low-income infants/toddlers who are uninsured	5.1%	0.7% (VT) – 17.8% (ND)	3 states > 10%
	State extends CHIP coverage to undocumented pregnant women by covering their unborn child as a targeted low-income child	17 states	--	--
	Percentage of infants/toddlers who received coordinated, ongoing, comprehensive care within a medical home	51.5%	42.5% (AZ) – 63.7% (VT)	36 states at or above 50%
	State efforts to extend Medicaid coverage beyond 60 days postpartum	48 states— no law beyond mandatory 60 days 3 states— law covering either a) some women but not all, or b) all women but for less than 1 year 0 sstates— law covering all women for 1 year post-partum	--	--
Nutrition	Percentage of infants ever breastfed	84.2%	67% (LA) – 92.5% (OR)	38 states at or above 80% *includes D.C.
	Percentage of infants breastfed at six months	56.8%	38.9% (WV) – 70.9% (WA)	41 states at or above 50% *includes D.C.
	Percent of eligible infants who participated in WIC	97.8%	64.7% (NH) – 100% (AL, AK, DE, HI, IN, IA, KY, ME, MD, MA, MI, MN, MS, MO, NC, OH, OK, OR, PA, SC, TN, WV, WI, and PR)	46 states at or above 80% *includes D.C.
	Percent of WIC recipients ages 3–23 months who have high weight-for-length	Not available at national level	6.3% (CO) – 16.5% (KY)	43 states at or above 10% *includes D.C.

Maternal Health	Number of pregnancy-related deaths per 100,000 live births	20.1	Available at national level only	--
	Percentage of women receiving late or no prenatal care	6.4%	1.3% (RI) – 13.4% (NM)	2 states at or above 10%
	State Medicaid policy requires, recommends, or allows maternal depression screenings during well-child visits	44 states	--	--
	Percentage of mothers of infants/toddlers rating their mental health as worse than "excellent" or "very good"	21.9%	12% (NJ) – 31.5% (MT)	40 states at or above 20%
	Protections or accommodations are set in place for pregnant working people	31 states (3 – state employees only; 23 – state and private with limitations; 5 – all employees)	--	--
Child Health	Number of infant deaths per 1,000 live births	5.6	3.1 (NH) – 9.1 (MS)	10 states at or above 7
	Percentage of babies with low birthweight	8.3%	6.3% (AK) – 12.3% (MS)	4 states at or above 10%
	Percentage of babies born preterm	10.2%	8.2% (NH) – 14.6% (MS)	27 states at or above 10% *includes D.C.
	Percentage of infants/toddlers who had a preventive medical visit in the past year	91.1%	85.4% (NM) – 96.8% (ME, OR)	34 states at or above 90% *includes D.C.
	Percentage of infants/toddlers who had a preventive dental visit in the past year	34.5%	17.3% (ND) – 52.7% (WA)	45 states at or above 25% *includes D.C.
	Percentage of infants/toddlers receiving the recommended doses of DTaP, polio, MMR, Hib, HepB, varicella, and PCV vaccines by ages 19–35 months	72.7%	61.6% (AK, OR) – 84.4% (MN)	38 states at or above 70% *includes D.C.
Infant and Early Childhood Mental Health	State Medicaid plan covers social–emotional screening for young children (ages 0–6) with a tool specifically designed for this purpose	43 states	--	--
	Medicaid plan covers services in home settings	49 states	--	--
	Medicaid plan covers services in pediatric/family medicine practices	46 states	--	--
	Medicaid plan covers services in early care and education program settings	34 states	--	--

Strong Families				
Subdomain	**Indicator**	**National Average/ Policy Count**	**Range**	**Summary**
Basic Needs Support	Percentage of families with infants/toddlers living below 100% of the federal poverty line that receive TANF benefits	18.5%	2.5% (ID) –65.8% (CA)	9 states at or above 30% *no data for CO and D.C.
	Percentage of households with infants/ toddlers experiencing low or very low food security	14.9%	5.4% (NH) – 24.3% (PA)	27 states at or above 15%
	Percentage of infants/toddlers who have moved three or more times since birth	2.9%	Less than 1% (CT, DC, MD, MA, NH, DE, NJ) – 8.3% (OK)	11 states at or above 5%
	Percentage of infants/toddlers who live in crowded housing	15.4%	7.3% (WV) – 28% (CA)	36 states at or above 10% *includes D.C.
	Percentage of infants/toddlers living in unsafe neighborhoods, as reported by parents	5.2%	1.3% (ME) – 10.7% (CA)	4 states at or above 10%
Child Welfare	Percentage of families with infants/toddlers who report "family resilience"	84.9%	78.4% (TX) – 91.3% (NV)	48 states at or above 80% *includes D.C.
	Percentage of infants/toddlers who have experienced one adverse childhood experience	19.6%	12.6% (MA) – 29% (OK)	25 states at or above 20% *includes D.C.
	Percentage of infants/toddlers who have experienced two or more adverse childhood experiences	7.3%	1.5% (MD) – 15.8% (OK)	1 state at or above 15%
	Maltreatment rate per 1,000 infants/toddlers	15.9	2.2 (PA) – 39.3 (WV)	20 states at or above 20
	Number per 1,000 infants/toddlers who have been removed from home and placed in foster care	7.1	2.5 (VA) – 24.6(WV)	16 states at or above 10
	Percentage of infants/toddlers who exited foster care in less than 12 months	18.6%	4.5% (IL) – 40.6% (CO)	14 states at or above 25%
	Percentage of infants/toddlers exiting foster care who are adopted	34.6%	11% (WY) – 58.9% (DE)	36 states at or above 25% *includes D.C.
	Percentage of infants/toddlers exiting foster care who are reunified	48.1%	24.7% (DE) – 71.2% (NM)	50 states at or above 25% *includes D.C.
	Percentage of infants/toddlers exiting foster care who are placed with a guardian	8.3%	1.6% (NJ) – 24.1% (TX)	0 states at or above 25% *no data for AK, D.C., ID, KY, ME, MD, NH, VT
	Percentage of infants/toddlers exiting foster care who are placed with a relative	7.8%	1.3% (IL) – 47.3% (KY)	6 states at or above 25% *no data for AK, AZ, CA, CT, DE, D.C., FL, HI, ID, IA, KS, ME, MI, MO, MT, NE, NH, NM, RI, SD, TX, WA, WV, WI, WY

Home Visiting	Percentage of infants/toddlers who could benefit from evidence-based home visiting and are receiving those services	2.1%	Less than 1% (NV, MS, GA, UT, CA, TN, TX, MD) – 7.6% (IA)	5 states at or above 5%
Supportive Policies	State requires employers to provide paid sick days that cover care for child (Y/N)	14 states	--	--
	State has a paid family leave program (Y/N)	10 states	--	--
	Single-parent head of unit is exempt from work-related activity if caring for a child under 12 months old (Y/N)	24 states	--	--
	State has a child tax credit	6 states	--	--
	State has an earned income tax credit	31 states	--	--

Positive Early Learning Experiences				
Subdomain	**Indicator**	**National Average/ Policy Count**	**Range**	**Summary**
Early Care and Education Opportunities	Percentage of parents who report reading to their infants/toddlers every day	36.8%	27% (TX) – 54.7% (VT)	4 states at or above 50% *includes D.C.
	Percentage of parents who report singing songs or telling stories to their infants/toddlers every day	57.3%	48.6% (TX) – 70.8% (VT)	49 states at or above 50% *includes D.C.
	Percentage of infants/toddlers below 100% of the federal poverty line with access to Early Head Start	11.0%	5% (NV, SC) – 31% (DC)	36 states at or above 10% *includes D.C. and P.R.
	Average state cost of center-based infant care as a percentage of median income for married families	Not available at national level	7.3% (MS) – 16.7% (CA)	6 states at or above 15%
	Average state cost of center-based infant care as a percentage of median income for single parents	Not available at national level	26.3% (SD) – 79.4% (DC)	43 states at or above 33% *includes D.C. and P.R.
	Income eligibility level for child care subsidy above 200% of the federal poverty line	16 states	--	--
	Percentage of infants/toddlers with family incomes equal to or below 150% of the state median income who are receiving a child care subsidy	4.6%	2.1% (VA) – 9.5% (NM)	20 states at or above 5%
	State allocated new Child Care and Development Block Grant (CCDBG) funds to invest in infant/toddler care	34 states	--	--

Child Care Quality	Whether group size requirements meet or exceed the standards set by Early Head Start at age 11 months, 19 months, and 30 months (value 0–3)	23 states (16 states for one age group, six states for two age groups, one state for three age groups)	--	--
	Whether adult/child ratio meet or exceed the standards set by Early Head Start at age 11 months, 19 months, and 30 months (value 0–3)	35 states (21 states for one age group, 12 states for two age groups, two states for three age groups)	--	--
	Level of teacher qualification required by the state, for teachers of 11-month-olds, 19-month-olds, and 30-month-olds across five categories: no credential beyond high school degree; CDA or state equivalent; specific infant/toddler credential or CDA with infant/toddler credential; associate's degree; bachelor's degree (value 3–15)	6 states—CDA/state equivalent (45 states—no credential beyond high school)	--	--
	State has adopted an infant/toddler credential	30 states	--	--
	State reimburses center-based child care at or above the 75th percentile of current market rates	1 state	--	--
Early Intervention and Prevention Services	Percentage of infants/toddlers, ages 9–35 months, who received a developmental screening using a parent-completed tool in the past year	33.8%	23.3% (MS) – 54.6% (MN)	11 states at or above 40%
	State includes "at-risk" children as eligible for IDEA Part C services	6 states	--	--
	Percentage of infants/toddlers receiving IDEA Part C services	7.3%	2.1% (AR) – 21.9% (NM)	12 states at or above 10%
	Percentage of eligible infants and toddlers required to have an initial IFSP meeting who had the meeting within 45 days	Not available at national level	79.2% (SC) – 100% (AL, LA, MO, MT, SD, and P.R.)	36 states at or above 95% *includes D.C. and P.R.

Appendix B. *State of Babies Yearbook: 2022* Indicator Dictionary

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CONTENTS

GOOD HEALTH

Health Care Coverage and Affordability

Children's Health Insurance Program (CHIP) unborn child option

States take different approaches to providing health coverage to children of immigrants. Below we provide an overview of these options and then detail the approach that we are tracking with the "unborn child option" indicator. Medicaid and the Children's Health Insurance Program (CHIP) also provide health coverage for immigrants based on what may be matched with federal Medicaid funds. Some states have chosen to use state-only funds to provide health coverage to children or other groups regardless of immigration status and use state funds to pay when a federal match is unavailable. There are two state options to receive federal matching funds for covering immigrant children and pregnant women in Medicaid and CHIP. More than one-half of states have opted to draw down federal matching funds in Medicaid or CHIP to cover lawfully residing immigrant pregnant women and/or children during their

first five years residing in the U.S.[1]

States also have an option in CHIP to cover an unborn child once a pregnancy is confirmed through the "unborn child option." This option extends coverage to undocumented pregnant people by covering their unborn child as a targeted low-income child who will be covered by Medicaid or CHIP at birth. Health coverage for pregnancies under this option includes prenatal care and labor and delivery services and ends with the birth of the child.[2]

The data here reflect rules in effect as of January 2021, as reported by the Kaiser Family Foundation.

Source: Brooks, T., Gardner, A., Tolbert, J., Dolan, R. & Pham, O. (2021). *Medicaid and CHIP eligibility, enrollment, and cost sharing policies as of January 2021: Findings from a 50-state survey.* Kaiser Family Foundation. *https://www.kff.org/medicaid/report/medicaid-and-chip-eligibility-and-enrollment-policies-as-of-january-2021-findings-from-a-50-state-survey/*

Eligibility limit (percentage of the federal poverty level) for Medicaid eligibility for pregnant women

Caring well for infants and toddlers begins with prenatal care. Medicaid and the Children's Health Insurance Program (CHIP) help women from lower-income households pay for health services that help ensure a healthy pregnancy and birth. States have flexibility to set income thresholds for eligibility; these are expressed as a percentage of the federal poverty level (FPL).

The data here reflect Medicaid rules in effect as of January 2021, as reported by the Kaiser Family Foundation. For the *State of Babies Yearbook: 2022*, we have included CHIP eligibility thresholds when they are higher than Medicaid thresholds. The national average presents the national average for Medicaid only, as CHIP does not cover pregnant people in all states. The original source uses "pregnant women" and we have maintained this language to be consistent, where we prefer the term "pregnant people."

Source: Brooks, T., Gardner, A., Tolbert, J., Dolan, R. & Pham, O. (2021). *Medicaid and CHIP eligibility, enrollment, and cost sharing policies as of January 2021: Findings from a 50-state survey.* Kaiser Family Foundation. *https://www.kff.org/medicaid/report/medicaid-and-chip-eligibility-and-enrollment-policies-as-of-january-2021-findings-from-a-50-state-survey/*

Percentage of low-income infants/toddlers who are uninsured

Health insurance is an important financial backstop for families. An infant or toddler with a serious injury or illness can incur medical expenses that are overwhelming, particularly for families with low incomes. While health insurance coverage for this age group is nearly universal, some groups of children are still uncovered.

The denominator for this indicator is the number of children ages 0–2 living below 200 percent of the federal poverty level. The numerator is the number of these children who do not have health insurance at the time of the interview.

1 This is called ICHIA. For more information, see *https://www.kff.org/health-reform/state-indicator/medicaid-chip-coverage-of-lawfully-residing-immigrant-children-and-pregnant-women/view/print/?activeTab=map&currentTimeframe=0&selectedDistributions=lawfully-residing-immigrant-children-covered-without-5-year-wait-ichia-option&print=true&selectedRows=%7B%22states%22:%7B%22tennessee%22:%7B%7D%7D%7D&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D*

2 Clark, M. (2020). *Medicaid and CHIP coverage for pregnant women: Federal requirements, state options.* Georgetown University Health Policy Institute, Center for Children and Families. *https://ccf.georgetown.edu/wp-content/uploads/2020/11/Pregnancy-primary-v6.pdf*

This indicator can be disaggregated by race/ethnicity and urbanicity. *Race/ethnicity:* Survey respondents report the infant or toddler's race and ethnicity. Respondents can select one or more of the following groups: White, Black or African American, American Indian or Alaska Native, Asian Indian, Japanese, Chinese, Korean, Filipino, Vietnamese, Other Asian, Native Hawaiian, Guamanian or Chamorro, Samoan, other Pacific Islander, and/or some other race. Ethnicity is asked as a separate question. Responses of Mexican, Puerto Rican, Cuban, and Other Hispanic are coded as Hispanic, regardless of response to the race item. We then group the remaining non-Hispanic respondents into the following race categories for analyses: Non-Hispanic White, Non-Hispanic Black, Non-Hispanic American Indian or Alaska Native, Non-Hispanic Asian, Non-Hispanic Hawaiian or Pacific Islander, Non-Hispanic Other, and Non-Hispanic multiple races. *Urbanicity:* Urban residence is defined as living within a metropolitan area. Metropolitan areas include central/principal cities, metro areas outside of central/principal cities, and metro areas with central/principal city status indeterminable. Non-metropolitan areas are areas outside of metropolitan areas. Cases with metropolitan status that is indeterminable or mixed are excluded from the urbanicity subgroup analysis. We relied on American Community Survey data from 2019 that do not include estimates for Puerto Rico for the urbanicity subgroups.

Source: Ruggles, S., Flood, S., Foster, S., Goeken, R., Pacas, J., Shouweilter, M., & Sobek, M. (2021). *American Community Survey* 2019, five-year estimates. (IPUMS USA: Version 11.0) [Data set]. *https://doi.org/10.18128/D010.V11.0*

State-adopted Medicaid expansion under the Affordable Care Act

Under the Affordable Care Act, states have the option of expanding Medicaid eligibility criteria to a broader group of people. By adopting Medicaid expansion, more children and families become eligible for Medicaid, and more children and families are covered by health insurance. Expanded eligibility for Medicaid coverage has been shown to improve children's use of preventive care,[3] reduce infant mortality,[4] lower families' out-of-pocket medical expenditures,[5] and reduce the amount of unpaid medical bills.[6]

Medicaid expansion status for each state is based on the Kaiser Family Foundation's tracking and analysis of state expansion activity. States' decisions on adopting Medicaid expansion are as of July 2021. States that have adopted but not yet implemented Medicaid expansion are included as being Medicaid expansion states. Additional state-specific notes are provided in the data source.

Source: Kaiser Family Foundation. (2021). *Status of state action on the Medicaid expansion decisions: Interactive table. https://www.kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D*

3 Venkataramani, M., Pollack, C. E., & Roberts, E. T. (2017). Spillover effects of adult Medicaid expansions on children's use of preventive services. *Pediatrics, 140*(6). *https://doi.org/10.1542/peds.2017-0953*

4 Bhatt, C. & Beck-Sagué, C. M. (2018). Medicaid expansion and infant mortality in the United States. *Research and Practice, American Journal of Public Health, 108*(4), 565-567. *https://doi.org/10.2105/AJPH.2017.304218*

5 Brevoort, K., Grodzicki, D., & Hackmann, M. B. (2017). *Medicaid and financial health.* NBER Working Paper No. 24002. National Bureau of Economic Research. *https://www.nber.org/system/files/working_papers/w24002/w24002.pdf*

6 Abramowitz, J. (2020). The effect of ACA state Medicaid expansions on medical out-of-pocket expenditures. *Medical Care Research and Review, 77*(1), 19-33. *https://doi.org/10.1177/1077558718768895*

Percentage of infants/toddlers who received coordinated, ongoing, comprehensive care within a medical home

The American Academy of Pediatrics defines a medical home as a health care model that is "accessible, family-centered, continuous, comprehensive, coordinated, compassionate, and culturally effective."[7] Having a medical home is associated with improved health outcomes and healthy behaviors, as well as decreased sick and emergency room visits for children without special healthcare needs.[8] Medical homes are also linked to better health status and increases to family functioning for children with special health care needs.[9]

The denominator is children ages 0–2. The numerator is children ages 0–2 whose parents affirmed the following items: their child has a personal doctor or nurse, a usual source for sick care, family-centered care, no problems getting needed referrals (if applicable), and effective care coordination when needed (if applicable). Estimates in the *State of Babies Yearbook: 2022* are based on a four-year (2016–2019) combined sample of the National Survey of Children's Health (NSCH). These results are more reliable than the results presented in the 2021 *Yearbook*, which were based on three years of NSCH data (2016–2018). They should be considered improved estimates, not new estimates that can be compared directly to previous *Yearbook* estimates.

This indicator can be disaggregated by race/ethnicity and household income. *Race/ethnicity:* The child's race/ethnicity is reported by their caregiver, and the included subgroups are Hispanic of all races, non-Hispanic White, non-Hispanic Black, and non-Hispanic Asian. The U.S. Census Bureau recommends against using state or national population estimates for the following groups with the NSCH since these categories are not controlled independently: American Indian or Alaska Native, Hawaiian or Pacific Islander, and some "other" and "two or more races" categories, so those estimates are not presented. In 2019, the "some other race" category was removed from the questionnaire. Missing responses were imputed and categorized into existing race groups. *Household income:* NSCH derives household income-to-poverty ratios based on family income and household size. Missing values were imputed by the Census Bureau, and the single imputation version provided in the 2016–2019 data files is used. Households with incomes less than 200 percent of the federal poverty level are classified as "low-income." Households with incomes at or above 200 percent of the federal poverty level are classified as "not low-income."

Sources: Child and Adolescent Health Measurement Initiative. (2017). *2016 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Child and Adolescent Health Measurement Initiative. (2018). *2017 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

7 National Resource Center for Patient/Family-centered Medical Home. (2020). *What is the medical home? https://medicalhomeinfo.aap.org/overview/Pages/Whatisthemedicalhome.aspx*

8 Long, W. E., Bauchner, H., Sege, R. D., Cabral, H. J., & Garg, A. (2012). The value of the medical home for children without special health care needs. *Pediatrics, 129*(1), 87-98. *https://pediatrics.aappublications.org/content/129/1/87?ijkey=9ab7a63be22b823793d6c92ad721129ebf98c0fe&keytype2=tf_ipsecsha*

9 Homer, C. J., Klatka, K., Romm, D., Kuhlthau, K., Bloom, S., Newacheck, P., Van Cleave, J. & Perrin, J. M. (2008). A review of the evidence for the medical home for children with special health care needs. *Pediatrics, 122*(4), e922-e937. *https://pediatrics.aappublications.org/content/122/4/e922?ijkey=809ac017f019f89122cb130b06716342cf7c08ab&keytype2=tf_ipsecsha*

Child and Adolescent Health Measurement Initiative. (2019). *2018 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Child and Adolescent Health Measurement Initiative. (2020). *2019 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

State efforts to extend Medicaid coverage beyond 60 days postpartum

The postpartum stage (after delivery) is an important period of time both for the parent who carried the child and the newborn baby. Parents can face a variety of health challenges postpartum, including depression, anxiety, pain, and any other complication that may have taken place during childbirth. Medicaid coverage is a way for parents to receive financial support as it relates to their pregnancy and the postpartum period. However, coverage gaps can leave many people in need of support during a very vulnerable time of their lives. While states provide pregnant people with Medicaid benefits, only some states extend eligibility beyond the nationally mandated 60 days postpartum.[10]

The data source organized states into categories describing the current status of state efforts to extend Medicaid coverage to pregnant people beyond 60 days postpartum as of 2021. Those categories included "enacted," if the state passed a bill and/or had money included in the state budget but was not yet implementing the policy, and "implemented," if the state was currently providing some form of extended postpartum coverage.

For the specific categorization and coding, if a bill was introduced but not enacted, it was categorized as a 0. If the bill was enacted or implemented, it was categorized as a 1 if any health or population restrictions were listed, or as a 2 if the bill was serving all pregnant people for at least one year.

Source: The American College of Obstetricians and Gynecologists. (2021). *Policy priorities: Extend postpartum Medicaid coverage. https://www.acog.org/advocacy/policy-priorities/extend-postpartum-medicaid-coverage*

Nutrition

Percentage of infants who are ever breastfed, breastfed at 6 months

Breastfeeding conveys advantages to both infants and their mothers. For young children, breastfeeding is associated with numerous benefits, including reduced rates of disease, overweight, and obesity. Breastfeeding is also associated with positive outcomes for the breastfeeding parent, including reduced rates of breast and ovarian cancers.[11] The skin-to-skin contact in breastfeeding improves oxytocin levels,

10 Ranji, U., Gomez, I., & Salganicoff, A. (2019). *Expanding postpartum Medicaid coverage.* Henry J. Kaiser Family Foundation Issue Brief. *https://firstfocus.org/wp-content/uploads/2019/11/Issue-Brief-Expanding-Postpartum-Medicaid-Coverage.pdf*

11 Office on Women's Health (OWH) (2019). *Making the decision to breastfeed.* https://www.womenshealth.gov/breastfeeding/making-decision-breastfeed

and breastfeeding parents report higher rates of attachment.[12] Experts recommend that babies are breastfed throughout the first year of life.[13]

For the percentage of infants who are ever breastfed, the denominator is the number of toddlers ages 19–35 months in 2019. The numerator is the number of that group who were ever breastfed, according to the parent's report.

For the percentage of infants breastfed at 6 months, the denominator is the number of toddlers ages 19–35 months in 2019. The numerator is the number of that group who were breastfed for any amount of time at six months of age, according to the mother's report.

For the *State of Babies Yearbook: 2022,* the *State of Babies Yearbook: 2021*, and the *State of Babies Yearbook: 2020,* we calculated data based on the National Immunization Survey (NIS), whereas for the *State of Babies Yearbook: 2019,* information was obtained from the CDC Breastfeeding Report Card. For both indicators, the NIS estimates presented may not line up with estimates published by the CDC, as the published estimates are based on a birth cohort. The public-use data does not have the information needed to calculate birth cohort estimates.

This indicator can be disaggregated by race/ethnicity and income. *Race/ethnicity:* Survey respondents, who are likely the child's parent or caregiver, reported the toddler's race. The public-use file includes the following categories: Hispanic, non-Hispanic White, non-Hispanic Black, and non-Hispanic other. The non-Hispanic other category includes Asian, American Indian or Alaska Native, Native Hawaiian or Pacific Islander, other races, and multiple races. These are the race/ethnicity categories presented with the indicator; however, the other and multiple race categories are very limited as they are an amalgamation of many different cultures. *Income:* NIS reports family income-to-poverty ratios based on family income, number of persons in the household, number of children in the household, and the 2018 Census poverty thresholds. The imputed income-to-poverty ratio is used for the *State of Babies Yearbook: 2022.* Families with an income-to-poverty ratio less than 2 are considered "low-income." Those with values greater than 2 are considered "not low-income."

Source: U.S. Department of Health and Human Services (DHHS). National Center for Immunization and Respiratory Diseases (2021). *The 2019 National Immunization Survey – Child* [Data set]. Centers for Disease Control and Prevention. *https://ftp.cdc.gov/pub/Vaccines_NIS/NISPUF19.DAT*

Percentage of WIC recipients, age 3–23 months, who have high weight-for-length

While obesity is not typically measured among very young children, it is important to monitor infant and child growth over time and identify any abnormalities in the child's development that may arise.[14]

The American Academy of Pediatrics recommends using the weight-for-length growth standards to

12 Health Services and Resources Administration (2020). *Understanding breastfeeding benefits.* https://mchb.hrsa.gov/maternal-child-health-topics/understanding-breastfeeding-benefits

13 Centers for Disease Control and Prevention. (2021). *Recommendations and benefits.* https://www.cdc.gov/nutrition/infantandtoddlernutrition/breastfeeding/recommendations-benefits.html

14 Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity, and Obesity. (2015). *Growth Chart Training: Using WHO Growth Charts. https://www.cdc.gov/nccdphp/dnpao/growthcharts/who/using/assessing_growth.htm*

assess the nutritional status of children younger than 2.[15] These standards have been recognized internationally in efforts to prevent child malnutrition and obesity.[16]

The estimates are from 2018. High weight-for-length is defined as ≥2 standard deviations above the sex- and age-specific median in the World Health Organization (WHO) growth standards. Weight is measured to the nearest one-quarter pound and length to the nearest one-eighth inch, using an infant measuring board according to CDC surveillance standards. Children with missing values of sex, weight, or length, or who had a length outside the range in the WHO growth standards (45–110 cm) were excluded. In addition, children with biologically implausible values were excluded from analyses. State estimates do not include data from WIC agencies in Indian Tribal Organizations (ITOs).

This indicator can be disaggregated by race/ethnicity. The included subgroups are American Indian/Alaska Native, Asian/Pacific Islander, non-Hispanic Black, Hispanic, and non-Hispanic White.

Source: Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion, Division of Nutrition, Physical Activity, and Obesity. (2021). *Data, trends and maps.* https://www.cdc.gov/nccdphp/dnpao/data-trends-maps/index.html

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Percentage of eligible infants who participated in WIC

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a federal grant program that provides access to food, nutrition information, and health care referrals to women and children, from pregnancy through the time the child reaches the age of 5.[17] A woman's or infant's eligibility to participate in WIC is based on the caregiver's income, as well as the child's medical or dietary status.[18] Participating in WIC is associated with lower levels of infant mortality and better cognitive development for the child, as well as more nutritious diets.[19]

The estimates reported in the *State of Babies Yearbook: 2022* reflect 2018 data. The USDA changed the way the number of infants eligible for WIC is calculated, so the data presented in the *State of Babies Yearbook: 2022* are not directly comparable with the data in previous yearbooks. The source report has recalculated estimates for previous years to facilitate comparisons over time. The estimated coverage rates exceed 100 percent for infants in Alabama, Alaska, Connecticut, Hawaii, Indiana, Iowa, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, West Virginia, and Wisconsin. This is likely a result of sampling variability in the survey data used to estimate the number of eligible individuals in those states (the denominator for the rate).

Source: USDA Food and Nutrition Service (2021). *WIC eligibility and coverage rates – 2018.* https://www.fns.usda.gov/wic/eligibility-and-coverage-rates-2018#5

15 Daniels, S. R., & Hassink, S. G. (2015). The role of the pediatrician in primary prevention of obesity. *Pediatrics, 136*(1), e275-e292. https://doi.org/10.1542/peds.2015-1558

16 De Onis, M., & Onyango, A. W. (2008). WHO child growth standards. *Lancet, 371*(9608), 204-204. https://doi.org/10.1016/S0140-6736(08)60131-2

17 U.S. Department of Agriculture. Food and Nutrition Service. (2021). *About WIC*. https://www.fns.usda.gov/wic/about-wic

18 Black, M. M., Cutts, D. B., Frank, D. A., Geppert, J., Skalicky, A., Levenson, S., Casey, P. H., Berkowitz, C., Zaldivar, N., Cook, J. T., Meyers, A. F., Herren, T., & Children's Sentinel Nutritional Assessment Program Study Group. F. (2004). Special Supplemental Nutrition Program for Women, Infants, and Children participation and infants' growth and health: A multisite surveillance study. *Pediatrics, 114*(1), 169-176. https://doi.org/10.1542/peds.114.1.169

19 Carlson, S., & Neuberger, Z. (2021). *WIC works: Addressing the nutrition and health needs of low-income families for more than Four Decades.* Center on Budget and Policy Priorities. https://www.cbpp.org/research/food-assistance/wic-works-addressing-the-nutrition-and-health-needs-of-low-income-families

Maternal Health

Late or no prenatal care

Pregnant people who receive no prenatal care, or whose care begins only in the last trimester of pregnancy, are more likely to have infants with health problems. Pregnant people who do not receive prenatal care are three times more likely to give birth to a low-weight baby, and their baby is five times more likely to die.[20] In addition to receiving care early, frequency and timing of prenatal care are also important, especially for effective responses to specific maternal risk factors.[21]

Data for the *State of Babies Yearbook: 2022* were calculated using data from the CDC Wonder database. The denominator is the total number of births for which timing of prenatal care is known. The numerator is the number of births with prenatal care that began during the third trimester of pregnancy or an absence of prenatal care.

This indicator can be disaggregated by race/ethnicity and urbanicity. *Race/ethnicity:* CDC Wonder contains very detailed information on the pregnant parent's race/ethnicity. After examining sample sizes, we are presenting the following subgroups: non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, non-Hispanic Black, non-Hispanic more than one race, non-Hispanic native Hawaiian or other Pacific islander, non-Hispanic White, and Hispanic of all races. The Division of Vital Statistics of the National Center for Health Statistics includes births with origin of the pregnant parent not stated with non-Hispanic births, according to the race of the pregnant parent in their reported statistics. We have excluded births with unknown Hispanic origins. *Urbanicity:* CDC Wonder classifies pregnant parents as living in a metro (urban) or non-metro (rural) area according to 2013 designations. The metro group includes counties in these categories: large central metro, large fringe metro, medium metro, and small metro. The non-metro group includes counties in these categories: micropolitan (non-metro) and non-core (non-metro). For the subgroups, the total/national average is out of states whose data is presented for that subgroup, rather than all states.

Source: U.S. Department of Health and Human Services (DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics. (2020). *Natality public-use data 2019, on CDC WONDER Online Database, October 2020.* http://wonder.cdc.gov/natality-expanded-current.html

Maternal mortality rate (pregnancy-related deaths per 100,000 live births)

Maternal mortality can be defined as the death of a parent that takes place during pregnancy, childbirth, or post-partum.[22] A parent's death is detrimental to the development of the newborn child and poses a great hardship to the affected household.

This indicator is available at the national level only because the CDC does not suggest comparing state-level estimates. The CDC recently adopted a new method to calculate maternal mortality rates (called the 2018 method), which we have used in the *State of Babies Yearbook: 2022* and the *State of Babies*

20 Maternal and Child Health Bureau, Health Resources and Services Administration, U.S. Department of Health and Human Services. (2019). *Prenatal care.* https://www.womenshealth.gov/a-z-topics/prenatal-care

21 Alexander, G.R., & Kotelchuck, M. (2001). Assessing the role and effectiveness of prenatal care: History, challenges, and directions for future research. *Public Health Reports, 116*(4), 306. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1497343/pdf/12037259.pdf

22 MacDorman, M. F., Declercq, E., Cabral, H., & Morton, C. (2016). Is the United States maternal mortality rate increasing? Disentangling trends from measurement issues. *Obstetrics and gynecology, 128*(3), 447. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5001799/

Yearbook: 2021. This new 2018 method was adopted to mitigate errors that were revealed with the reporting of maternal deaths (e.g., overreporting of maternal deaths among older women) but is not comparable to previous calculations. Data reflect maternal mortality in 2019.

This indicator can be disaggregated by mother's race/ethnicity at the national level only. The only subgroups reported in the source document are non-Hispanic Black, non-Hispanic White, and Hispanic of all races.

Source: Hoyert, D. L. (2021). Health E-Stats: Maternal mortality rates in the United States, 2019. National Center for Health Statistics, Centers for Disease Control and Prevention. *https://www.cdc.gov/nchs/data/hestat/maternal-mortality-2021/E-Stat-Maternal-Mortality-Rates-H.pdf*

Percentage of infants/toddlers whose mothers rate their mental health as worse than "excellent" or "very good"

The links between parental mental health—particularly depression—and child well-being are well established in research.[23] The negative effects of maternal depression can begin prenatally.[24] Parents who are depressed are less likely to engage in the kinds of reciprocal social interplay that is so important to the healthy development of infants and toddlers.[25] Untreated depression in mothers or fathers is also associated with greater risk for delays in cognitive and motor development,[26] child maltreatment, [27] and neglectful parenting practices.[28] Several intervention models are effective in treating parents' depression.[29]

This indicator summarizes the mental or emotional health status of the child's biological, step, adoptive, or foster mother. The denominator is children ages 0–2 who live with their biological, step, adoptive, or foster mother. The numerator is the number of those children whose mothers rate their mental/emotional health status as "good," "fair," or "poor." Estimates in the *State of Babies Yearbook: 2022* are based on a four-year (2016–2019) combined sample of the National Survey of Children's Health (NSCH). These results are more reliable than the results presented in the 2021 report, which were based on three years of NSCH data (2016–2018); the 2020 report, which were based on two years of NSCH data (2016–2017); or the 2019 report, which were based on 2016 data. They should be considered improved estimates, not new estimates, that can be compared directly to the 2021, 2020, or 2019 *Yearbook* estimates.

This indicator can be disaggregated by race/ethnicity and household income. *Race/ethnicity:* The child's race/ethnicity is reported by their caregiver, and the included subgroups are Hispanic of all races,

23 Chester, A., Schmit, S., Alker, J., & Golden, O. (2016). *Medicaid expansion promotes children's development and family success by treating maternal depression.* Georgetown University Health Policy Institute, Center for Children and Families. *https://ccf.georgetown.edu/wp-content/uploads/2016/07/Maternal-Depression-4.pdf*

24 Oberlander, T. F., Papsdorf, M., Brain, U. M., Misri, S., Ross, C., & Grunau, R. E. (2010). Prenatal effects of selective serotonin reuptake inhibitors antidepressants, serotonin transporter promoter genotype (SLC6A4), and maternal mood on child behavior at 3 years of age. *Archives of Pediatrics & Adolescent Medicine, 164*(5), 444-451. *https://doi.org/10.1001/archpediatrics.2010.51*

25 Hops, H. (1995). Age- and gender-specific effects of parental depression: A commentary. *Developmental Psychology,* 31(3), 428-431. *https://doi.org/10.1037/0012-1649.31.3.428*

26 Petterson, S.M. & Albers, A.B. (2001). Effects of poverty and maternal depression on early child development. *Child Development, 72*(6), 1794-1813. *https://doi.org/10.1111/1467-8624.00379*

27 Administration for Children and Families. (2007). *Depression among caregivers of young children reported for child maltreatment.* National Survey of Child and Adolescent Well-Being: Research Brief No. 13. *https://www.acf.hhs.gov/opre/report/nscaw-no-13-depression-among-caregivers-young-children-reported-child-maltreatment*

28 Chung, E. K., McCollum, K. F., Elo, I. T., & Culhane, J. F. (2004). Maternal depressive symptoms and infant health practices among low-income women. *Pediatrics, 113*(6), e523-e529. *https://doi.org/10.1542/peds.113.6.e523*

29 Goodman, S. H. & Garber, J. (2017). Evidence-based interventions for depressed mothers and their young children. *Child Development, 88*(2), 368-377. *https://doi.org/10.1111/cdev.12732*

non-Hispanic White, non-Hispanic Black, and non-Hispanic Asian. The U.S. Census Bureau recommends against using state or national population estimates for the following groups with the NSCH since these categories are not controlled independently: American Indian or Alaska Native, Hawaiian or Pacific Islander, and some "other" and "two or more races" categories; so those estimates are not presented. In 2019, the "some other race" category was removed from the questionnaire. Missing responses were imputed and categorized into existing race groups. *Household income:* NSCH derives household income-to-poverty ratios based on family income and household size. Missing values were imputed by the Census Bureau, and the single imputation version provided in the 2016–2019 data files is used. Households with incomes less than 200 percent of the federal poverty level are classified as "low-income." Households with incomes at or above 200 percent of the federal poverty level are classified as "not low-income."

Sources: Child and Adolescent Health Measurement Initiative. (2017). *2016 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Child and Adolescent Health Measurement Initiative. (2018). *2017 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Child and Adolescent Health Measurement Initiative. (2019). *2018 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Child and Adolescent Health Measurement Initiative. (2020). *2019 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Accommodations for pregnant workers, protection from job loss

The Pregnancy Discrimination Act of 1978 (PDA) established a law for pregnant people to be treated and provided with the same benefits as non-pregnant workers. Without these protections and accommodations set in place, many pregnant workers may find themselves having to leave their jobs or work under non-accommodating conditions (e.g., unable to sit or take rest).[30] However, despite the PDA of 1978, pregnant workers still found themselves facing workplace discrimination. To combat this, various states have taken the effort to ensure pregnant workers have the protections and accommodations they need to promote healthy pregnancies and ensure inclusiveness of the pregnant workers in the workforce.

The data reflect laws passed by states that require employers to provide protections and accommodations to pregnant workers. These data are as of September 2020, reported by the National Partnership for Women and Families.

30 National Partnership for Women & Families. (2021). *The pregnant workers fairness act fact sheet. https://www.nationalpartnership.org/our-work/resources/economic-justice/pregnancy-discrimination/fact-sheet-pwfa.pdf*

"None" was assigned to states that did not have any protection plans set in place. "State level" protection was assigned to states that specifically referenced protections or accommodations for pregnant workers that were considered "state" or "county" employees. States were classified as having protections for state employees only if the terms "state employers," "county," or "municipal employees" were used. The category "limited" was assigned to states that offer protections for state employees and private employees with exceptions (this would include states that have any employer size limit for eligibility, including "one or more" employees). "All employee" protection was assigned to states with protection plans applicable to the general public, including private and state employees.

Source: National Partnership for Women and Families. (2020). *Reasonable accommodations for pregnant workers: State and local laws.* https://www.nationalpartnership.org/our-work/resources/economic-justice/pregnancy-discrimination/reasonable-accommodations-for-pregnant-workers-state-laws.pdf

State Medicaid policy requires, recommends, or allows maternal depression screening during well-child visits

Regular, periodic well-child visits during the first year of life are an opportune time to screen for parental depression, which can have detrimental effects on caregiving and the well-being of both the parent and the child. Recent federal guidance[31] allows states to include screening for maternal depression as part of a well-child visit, and limited treatment for depressed mothers, within the context of the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) Medicaid program for children.

The National Academy for State Health Policy's website states that the main sources of this policy information are state Medicaid agency websites and provider guidance. Any information not cited by the National Academy for State Health Policy is from communication with the state's Medicaid agency. Information is accurate as of January 2021.

Source: National Academy for State Health Policy. (2021). *Medicaid policies for maternal depression screening during well-child visits, by state.* https://healthychild.nashp.org/wp-content/uploads/2021/04/Maternal-Depression-Screen-updates-4-1-2021.pdf

CHILDREN'S HEALTH

Percentage of babies born preterm (before 37 completed weeks of gestation)

Preterm births are the second leading cause of death among children younger than 5.[32] The percentage of babies born preterm can be reduced through early intervention. The most effective interventions for improving infant survival rates are those that support the pregnant parent right before, during, and after pregnancy. These can ensure that complications often associated with preterm delivery, such as infection, neurological challenges, and lung immaturity, are treated early.[33]

Data for the *State of Babies Yearbook: 2022* were calculated using data from CDC Wonder. The

31 Center for Medicaid and CHIP Services. (2016). *Maternal depression screening and treatment: A critical role for Medicaid in the care of mothers and children.* https://www.medicaid.gov/federal-policy-guidance/downloads/cib051116.pdf

32 World Health Organization. (2015). *WHO recommendations on interventions to improve preterm birth outcomes.* https://www.who.int/reproductivehealth/publications/maternal_perinatal_health/preterm-birth-guideline/en/

33 *World Health Organization. (2015). WHO recommendations on interventions to improve preterm birth outcomes.* https://www.who.int/reproductivehealth/publications/maternal_perinatal_health/preterm-birth-guideline/en/

numerator is the number of infants born preterm, which is defined by the CDC as births before 37 completed weeks of gestation. The denominator is the total number of infants whose completed weeks of gestation is known.

This indicator can be disaggregated by race/ethnicity and urbanicity. *Race/ethnicity:* CDC Wonder contains very detailed information on the pregnant parent's race/ethnicity. After examining sample sizes, we are presenting the following subgroups: non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, non-Hispanic Black, non-Hispanic more than one race, non-Hispanic native Hawaiian or other Pacific islander, non-Hispanic White, and Hispanic of all races. The Division of Vital Statistics of the National Center for Health Statistics includes births with origin of the pregnant parent not stated with non-Hispanic births, according to the race of the pregnant parent in their reported statistics. We have excluded births with unknown Hispanic origins. The total/national average by race and ethnicity is out of states whose data is presented for that subgroup, rather than all states. *Urbanicity:* CDC Wonder classifies each pregnant parent as living in a metro (urban) or non-metro area according to 2013 designations. The metro group includes counties in these categories: large central metro, large fringe metro, medium metro, and small metro. The non-metro group includes counties in these categories: micropolitan (non-metro) and noncore (non-metro). For the subgroups, the total/national average is out of states whose data is presented for that subgroup, rather than all states.

Source: U.S. Department of Health and Human Services (DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics. (2020). *Natality public-use data 2019, on CDC WONDER Online Database, October 2020.* http://wonder.cdc.gov/natality-expanded-current.html

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Percentage of babies with low birthweight (less than 5.5 pounds)

Low birthweight (less than 5.5 pounds) is strongly associated with poor developmental outcomes, beginning in infancy but extending into adult life.[34] Low weight is often associated with pre-term delivery, but can occur also with full-term births. Research points to a number of factors that can contribute to the likelihood of low weight at birth, including smoking during pregnancy; low weight gain during pregnancy or low pre-pregnancy weight; and the pregnant parent's stress during pregnancy.[35] The National Center for Health Statistics defines low birth weight as a weight of less than 2,500 grams, or 5 pounds and 8 ounces.

Data for the *State of Babies Yearbook: 2022* were calculated using data from CDC Wonder. The denominator is the total number of all births whose weight is known, and the numerator is the number of those babies with low birthweight.

This indicator can be disaggregated by race/ethnicity and urbanicity. *Race/ethnicity:* CDC Wonder contains very detailed information on the pregnant parent's race/ethnicity. After examining sample sizes, we are presenting the following subgroups: non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, non-Hispanic Black, non-Hispanic more than one race, non-Hispanic native Hawaiian or other Pacific islander, non-Hispanic White, and Hispanic of all races. The Division of Vital Statistics of the National Center for Health Statistics includes births with origin of the pregnant parent not stated with non-Hispanic births, according to the race of the pregnant parent in their reported statistics. We have excluded births with unknown Hispanic origins. *Urbanicity:* CDC Wonder classifies the pregnant parent

34 Reichman, N. (2005). Low birth weight and school readiness. In School readiness: Closing racial and ethnic gaps. *The Future of Children, 15*(1), 91-116. https://doi.org/10.1353/foc.2005.0008

35 Ricketts, S. A., Murray, E. K., & Schwalberg, R. (2005). Reducing low birthweight by resolving risks: Results from Colorado's Prenatal Plus Program. *American Journal of Public Health, 57*(11),1952-1957. https://doi.org/10.2105/AJPH.2004.047068

as living in a metro (urban) or non-metro (rural) area according to 2013 designations. The metro group includes counties in these categories: large central metro, large fringe metro, medium metro, and small metro. The non-metro group includes counties in these categories: micropolitan (non-metro) and non-core (non-metro). For the subgroups, the total/national average is out of states whose data is presented for that subgroup, rather than all states.

Source: U.S. Department of Health and Human Services (DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics. (2020). *Natality public-use data 2019, on CDC WONDER Online Database, October 2020*. http://wonder.cdc.gov/natality-expanded-current.html

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Infant mortality rate (deaths per 1,000 live births)

Children are much more likely to die during the first year of life than they are at older ages. Infant deaths can reflect underlying problems, such as barriers to accessing prenatal care, living in violent neighborhoods, or circumstances that challenge parents' ability to adequately supervise their young children. Infant deaths can also highlight inequities (e.g., in access to health care or safe places to play, or exposure to environmental toxins). Among infants, the leading causes of death include congenital and chromosomal abnormalities, problems related to short gestation and low birthweight, and sudden infant death syndrome (SIDS).[36]

The Centers for Disease Control and Prevention (CDC) website reports the infant mortality rate as the number of infant deaths per 1,000 live births. The national- and state-level estimates for the *State of Babies Yearbook 2022* reflect data from 2019. National data, subgroup data, and data for D.C. all come from separate sources, while all state data comes from one source.

This indicator can be disaggregated by mother's race/ethnicity, using a secondary source. Subgroup data are from 2018. The included subgroups are non-Hispanic White, non-Hispanic Black, non-Hispanic American Indian and Alaska Native, non-Hispanic Asian, and non-Hispanic Native Hawaiian and Pacific Islander. Mother's reported race was used for the subgroup calculations.

Sources: Centers for Disease Control and Prevention (2019). *Infant mortality rates by state.* [Interactive map]. https://www.cdc.gov/nchs/pressroom/sosmap/infant_mortality_rates/infant_mortality.htm

Centers for Disease Control and Prevention. National Center for Health Statistics. (2019). *District of Columbia.* https://www.cdc.gov/nchs/pressroom/states/dc/DC1.htm

Kochanek, K.D., Xu, J. & Arias, E. (2020). *Mortality in the United States, 2019.* National Center for Health Statistics Data Brief. No. 395. https://www.cdc.gov/nchs/data/databriefs/db395-H.pdf

Subgroup source: Ely, D.M. & Driscoll, A.K. (2020). Infant mortality in the United States, 2018: Data from the period linked birth/infant death file. *National Vital Statistics Reports, 69*(7). https://www.cdc.gov/nchs/data/nvsr/nvsr69/NVSR-69-7-508.pdf

36 Kochanek, K. D., Murphy, S. L., Xu, J., & Tejada-Vera, B. (2016). Deaths: Final data for 2014. *National Vital Statistics Reports, 65*(4). http://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65_04.pdf

Percentage of infants/toddlers who had a preventive dental care visit in the past year

Early childhood tooth decay can be damaging to developing primary teeth[37] and can negatively affect child oral health quality of life,[38] increase experience of dental pain, and negatively impact school performance.[39]

The denominator is children ages 1–2, and the numerator is children ages 1–2 who ever had one or more preventive dental visits. Estimates in the *State of Babies Yearbook: 2022* are based on a four-year (2016–2019) combined sample of the National Survey of Children's Health (NSCH). These results are more reliable than the results presented in the 2021 report, which were based on three years of NSCH data (2016–2018); the 2020 report, which were based on two years of NSCH data (2016–2017); or the 2019 report, which were based on 2016 data. They should be considered improved estimates, not new estimates that can be compared directly to the 2021, 2020, or 2019 *Yearbook* estimates.

This indicator can be disaggregated by race/ethnicity and household income. *Race/ethnicity:* The child's race/ethnicity is reported by their caregiver, and the included subgroups are Hispanic of all races, non-Hispanic White, non-Hispanic Black, and non-Hispanic Asian. The U.S. Census Bureau recommends against using state or national population estimates for the following groups with the NSCH since these categories are not controlled independently: American Indian or Alaska Native, Hawaiian or Pacific Islander, and some "other" and "two or more races" categories, so those estimates are not presented. In 2019, the "some other race" category was removed from the questionnaire. Missing responses were imputed and categorized into existing race groups. *Household income:* NSCH derives household income-to-poverty ratios based on family income and household size. Missing values were imputed by the Census Bureau, and the single imputation version provided in the 2016–2019 data files is used. Households with incomes less than 200 percent of the federal poverty level are classified as "low-income." Households with incomes at or above 200 percent of the federal poverty level are classified as "not low-income."

Sources: Child and Adolescent Health Measurement Initiative. (2017). *2016 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Child and Adolescent Health Measurement Initiative. (2018). *2017 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Child and Adolescent Health Measurement Initiative. (2019). *2018 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

37 U.S. Department of Health and Human Services. (2020). *Oral health in America: A report of the surgeon general.* U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health. *https://www.nidcr.nih.gov/sites/default/files/2017-10/hck1ocv.%40www.surgeon.fullrpt.pdf*

38 Filstrup, S. L., Briskie, D., Da Fonseca, M., Lawrence, L., Wandera, A., & Inglehart, M. R. (2003). Early childhood caries and quality of life: child and parent perspectives. *Pediatric Dentistry, 25*(5), 431-440. *https://www.researchgate.net/profile/Marita_Inglehart/publication/8980934_Early_childhood_caries_and_quality_of_life_Child_and_parent_perspectives/links/56792e2c08aeaf87ed8afd72.pdf*

39 Jackson, S. L., Vann Jr, W. F., Kotch, J. B., Pahel, B. T., & Lee, J. Y. (2011). Impact of poor oral health on children's school attendance and performance. *American Journal of Public Health, 101*(10), 1900-1906. *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3222359/*

Child and Adolescent Health Measurement Initiative. (2020). *2019 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). www.childhealthdata.org

Percentage of infants/toddlers who had a preventive medical care visit in the past year

Preventive medical care (also known as "well-child care") is a critical opportunity to detect a developmental delay or disability so that early treatment can reduce its impact on both the child and family.[40] Well-child visits also allow medical providers to promote behaviors conducive to healthy development, and to share advice with the parents of infants and toddlers. For example, physician guidance increases the likelihood that parents will read to their child, or that a child will be breastfed.[41]

The denominator is children ages 0–2, and the numerator is those children who had one or more preventive medical visits in the past 12 months. Estimates in the *State of Babies Yearbook: 2022* are based on the 2016–17 combined National Survey of Children's Health (NSCH). These results are more reliable than the results presented in the *State of Babies Yearbook: 2019* report, which were based on the 2016 NSCH. This should be considered an improved estimate, not a new estimate that can be compared directly to the 2016 estimate. The estimates have not been updated to include 2018 or 2019 data due to a change in item language in the 2018 and 2019 NSCH restricting comparability to previous years. This also precludes adding subgroup analyses by race and ethnicity, as was done for the other NSCH indicators, because of the smaller sample size.

This indicator can be disaggregated by household income. NSCH derives household income-to-poverty ratios based on family income and household size. Missing values were imputed by the Census Bureau, and the single imputation version provided in the combined 2016–2017 data file is used. Households with incomes less than 200 percent of the federal poverty level are classified as "low-income." Households with incomes at or above 200 percent of the federal poverty level are classified as "not low-income."

Source: Child and Adolescent Health Measurement Initiative. (2019). *2016–17 National Survey of Children's Health (NSCH) Stata constructed data set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). www.childhealthdata.org

Percentage of infants/toddlers receiving the recommended doses of DTaP, polio, MMR, Hib, HepB, varicella, and PCV vaccines by age 19–35 months

Vaccines are important for infants and toddlers because many of the diseases vaccines prevent are more common, and more deadly, at this age. Vaccination protects not only the child who receives the vaccine, but also others in the child's community, including those who, for health reasons, cannot be vaccinated. The Centers for Disease Control and Prevention (CDC) recommends four doses of the diphtheria, tetanus, and pertussis (DTaP) vaccine; three or more doses of polio vaccine; one or more doses of the

40 American Academy of Pediatrics. (2002). Developmental surveillance and screening of infants and young children. *Pediatrics, 109*(1), 144-145. https://doi.org/10.1542/peds.109.1.144

41 Young, K. T., Davis, K., Schoen, C., & Parker, S. (1998). Listening to parents. A national survey of parents with young children. *Archives of Pediatric and Adolescent Medicine, 152*(3), 255-262. https://doi.org/10.1001/archpedi.152.3.255

measles-mumps-rubella (MMR) vaccine; three or more doses of the *Haemophilus influenzae* type b (Hib) vaccine (or, for certain brands, four or more doses); the hepatitis B vaccine; and the varicella (chicken pox) vaccine.

The estimates reported here are from 2019. Technical notes on vaccine abbreviations, dose definitions, and vaccine series for the National Immunization Survey (NIS) surveillance tables are available at *https://www.cdc.gov/vaccines/imz-managers/coverage/nis/child/tech-notes.html.*

The numerator is the number of toddlers ages 19–35 months who received the recommended doses of DTaP, polio, MMR, Hib, HepB, varicella, and PCV vaccines. The denominator is the number of toddlers ages 19–35 months.

This indicator can be disaggregated by race/ethnicity and income. *Race/ethnicity:* Survey respondents reported the toddler's race. The public-use file includes the following categories: Hispanic, non-Hispanic White, non-Hispanic Black, and non-Hispanic other. The non-Hispanic other category includes Asian, American Indian or Alaska Native, Native Hawaiian or Pacific Islander, other races, and multiple races. These are the race/ethnicity categories presented with the indicator; however, the other and multiple race categories are very limited as they are an amalgamation of many different cultures. *Income:* NIS reports income-to-poverty ratios based on family income, number of persons in the household, number of children in the household, and the 2018 Census poverty thresholds. The imputed income-to-poverty ratio is used for the *State of Babies Yearbook: 2022*. Families with an income-to-poverty ratio less than 2 are considered "low-income." Those with values greater than 2 are considered "not low-income."

Source: U.S. Department of Health and Human Services (DHHS). National Center for Immunization and Respiratory Diseases (2021). *The 2019 National Immunization Survey – Child.* [Data set]. Centers for Disease Control and Prevention. *https://www.cdc.gov/vaccines/imz-managers/nis/datasets.html*

Children's Mental Health Services

Medicaid plan covers infant and early childhood mental health services

Mental health concerns arising during the first years of life can develop into serious problems if not identified and treated promptly.[42] Families with low incomes may not be able to afford these services unless they care covered by Medicaid. To provide more robust services, state Medicaid plans can cover infant and early childhood mental health (I-ECMH) services in any of the following settings: home, pediatric/family medicine practices, and early care and education programs.

A survey administered by the National Center for Children in Poverty asked participants if the state's Medicaid plan provides coverage for services to address a child's mental health needs provided by an early childhood mental health specialist in early care and education settings, pediatric settings, or family medicine settings. The data reflect 2018. Georgia's Medicaid only covers mental health services for children ages 4 and above.

Source: Smith, S., Granja, M. R., Nguyen, U. T., & Rajani, K. (2018). *How states use Medicaid to cover key infant and early childhood mental health services: Results of a 50-state survey (2018 Update).* National Center for Children in Poverty. *https://academiccommons.columbia.edu/doi/10.7916/d8-8rre-9y19*

42 Clinton, J., Feller, A. F., Williams, R. C. (2016). The importance of infant mental health. *Paediatrics and Child Health 21(5),* 239-241. *https://doi.org/10.1093/pch/21.5.239*

State Medicaid plan covers social-emotional screening for young children (ages 0–6 years) with a tool specifically designed for this purpose

Because young children's social-emotional development is so critical to their present well-being, as well as their later success, an accurate assessment of their status in this area is important.[43] To fully understand social-emotional development, health care providers should specifically use an instrument that identifies young children at risk of behavioral health problems, not just a general developmental screening.

A survey administered by the National Center for Children in Poverty asked Medicaid officials if the state's Medicaid plan covers social-emotional screening for children ages 0–6 with a tool specifically designed for the purpose of identifying young children who may need further evaluation for social-emotional and behavioral difficulties.

Source: Smith, S., Granja, M. R., Nguyen, U. T., & Rajani, K. (2018). *How states use Medicaid to cover key infant and early childhood mental health services: Results of a 50-state survey (2018 Update).* National Center for Children in Poverty. https://www.nccp.org/wp-content/uploads/2018/11/text_1211.pdf

STRONG FAMILIES

Basic Needs

Percentage of families with infants/toddlers living below 100 percent of the federal poverty level that receive TANF benefits

The Temporary Assistance for Needy Families (TANF) program was designed to help lower-income families with minor children with cash assistance, particularly while parents are seeking employment. However, states are allowed to spend TANF funds for a variety of other activities (e.g., administrative costs, child care and pre-K programs, child welfare services, and work support activities) in addition to directly supporting families. TANF's reach has declined over the years to the point where, in 2019, 23 of every 100 families living in poverty received any TANF benefits, with access being especially challenging for Black families.[44]

The numerator for this indicator is the number of TANF-receiving families whose youngest child was younger than 3 in fiscal year 2019 (October 2018 to September 2019). The denominator is the number of families whose youngest child is younger than 3 and have incomes below 100% of the federal poverty level, based on estimates from the 2018–2020 Current Population Survey (Annual Social and Economic Supplement), which spans from March 2017 to February 2020. For the *State of Babies Yearbook: 2022*, we combine three years of data for the denominator in order to improve indicator reliability. This should be considered an improved estimate and not a new estimate that can be compared directly to the 2021, 2020, or 2019 *Yearbook* estimates. Washington, D.C. and Colorado do not have estimates this year due to errors in their reported TANF data.

43 Paschall, K., Moore, K. A., Pina, G., & Anderson, S. (2020). *Comparing the National Outcome Measure of Healthy and Ready to Learn with other well-being and school readiness measures.* Child Trends. https://www.childtrends.org/wp-content/uploads/2020/03/NOMMeasurement_ChildTrends_April2020.pdf

44 Floyd, I., & Meyer, L. (2020). *Cash assistance should reach millions more families to lessen hardship.* Center on Budget and Policy Priorities. https://www.cbpp.org/research/family-income-support/cash-assistance-should-reach-millions-more-families-to-lessen

Sources: U.S. Department of Health and Human Services Administration for Children and Families Office of Family Assistance. (2020). *Characteristics and financial circumstances of TANF recipients, fiscal year 2019.* [Tables]. *https://www.acf.hhs.gov/ofa/data/characteristics-and-financial-circumstances-tanf-recipients-fiscal-year-2019*

Flood, S., King, M., Rodgers, R., Ruggles, S., Warren, J.R. & Westberry, M. (2021). *Current Population Survey.* (IPUMS, Current Population Survey: Version 9.0) [Data set]. IPUMS. *https://doi.org/10.18128/D030.V9.0*

Housing instability (percentage of infants/toddlers who have moved three or more times since birth)

The stability of housing—as measured by the frequency of residential moves—plays a role in young children's well-being. Frequent moves can disrupt many aspects of families' lives, including their connections with social support networks and formal services such as child care. High rates of moving may also be indicative of economic insecurity and parents' tenuous hold on employment.

The denominator is the number of children ages 0–2. The numerator is those who moved to a new address three or more times since they were born, as reported by parents. Estimates in the *State of Babies Yearbook: 2022* are based on a four-year (2016–2019) combined sample of the National Survey of Children's Health (NSCH). These results are more reliable than the results presented in the 2021 report, which were based on three years of NSCH data (2016–2018); 2020 report, which were based on two years of NSCH data (2016–2017); or the 2019 report, which were based on 2016 data. They should be considered improved estimates, not new estimates that can be compared directly to the 2021, 2020, or 2019 *Yearbook* estimates.

This indicator can be disaggregated by household income and race/ethnicity. *Race/ethnicity:* The child's race/ethnicity is reported by their caregiver, and included subgroups are Hispanic of all races, non-Hispanic White, non-Hispanic Black, and non-Hispanic Asian. The U.S. Census Bureau recommends against using state or national population estimates for the following groups with the NSCH since these categories are not controlled independently: American Indian or Alaska Native, Hawaiian or Pacific Islander, and some "other" and "two or more races" categories, so those estimates are not presented. In 2019, the "some other race" category was removed from the questionnaire. Missing responses were imputed and categorized into existing race groups. *Household income:* NSCH derives household income-to-poverty ratios based on family income and household size. Missing values were imputed by the Census Bureau, and the single imputation version provided in the 2016–2019 data files is used. Households with incomes less than 200 percent of the federal poverty level are classified as "low-income." Households with incomes at or above 200 percent of the federal poverty level are classified as "not low-income."

Sources: Child and Adolescent Health Measurement Initiative. (2017). *2016 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Child and Adolescent Health Measurement Initiative. (2018). *2017 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Child and Adolescent Health Measurement Initiative. (2019). *2018 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of

Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). www.childhealthdata.org

Child and Adolescent Health Measurement Initiative. (2020). *2019 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). www.childhealthdata.org

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Crowded housing (percentage of infants/toddlers who live in crowded housing)

Overcrowded living conditions can also be associated with negative outcomes. In homes where families are crowded, parents may have fewer opportunities to be adequately responsive to infants and toddlers, and more likely to use punitive discipline.[45] Crowding has also been associated with children's health problems, including respiratory conditions, injuries, and infectious diseases, as well as with young children's food insecurity.[46]

The denominator is the total number of children ages 0–2. The numerator is the number of those children who live in homes with more than two household members per bedroom, or, if no bedrooms, more than one person per room. Data reflect 2015–2019.

This indicator can be disaggregated by race/ethnicity, income, and urbanicity. *Race/ethnicity:* Survey respondents (typically parents) report the infant or toddler's race and ethnicity. Respondents can select one or more of the following groups: White, Black or African American, American Indian or Alaska Native, Asian Indian, Japanese, Chinese, Korean, Filipino, Vietnamese, other Asian, Native Hawaiian, Guamanian or Chamorro, Samoan, other Pacific Islander, and/or some other race. Ethnicity is asked as a separate question. Responses of Mexican, Puerto Rican, Cuban, and Other Hispanic are coded as Hispanic, regardless of response to the race item. We then group the remaining non-Hispanic respondents into the following race categories for analyses: non-Hispanic White, non-Hispanic Black, non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, non-Hispanic Hawaiian or Pacific Islander, non-Hispanic Other, and non-Hispanic multiple races. *Income:* The American Community Survey (ACS) reports family income as a percentage of poverty thresholds. The poverty threshold is based on total family income, the size of the family, the number of people who are children, and the age of the householder. Infants and toddlers are considered to live in low-income families if this percentage is less than 200. Infants and toddlers are considered to live in non-low-income families if their family's total income is at least twice the poverty threshold for their family. *Urbanicity:* Urban residence is defined as living within a metropolitan area. Metropolitan areas include central/principal cities, metro areas outside of central/principal cities, and metro areas with central/principal city status indeterminable. Non-metropolitan areas are areas outside of metropolitan areas. Cases whose metropolitan status is indeterminable or mixed are excluded from the urbanicity subgroup analysis.

Source: Ruggles, S., Flood, S., Foster, S., Goeken, R., Pacas, J., Shouweilter, M., & Sobek, M. (2021). *American Community Survey 2019, five-year estimates.* (IPUMS USA: Version 11.0) [Data set]. https://doi.org/10.18128/D010.V11.0

45 Evans, G. (2006). Child development and the physical environment. *Annual Review of Psychology,* 57, 423-451. https://doi.org/10.1146/annurev.psych.57.102904.190057

46 Cutts, D. B., Meyers, A. F., Black, M. M., Casey, P. H., Chilton, M., Cook, J. T., Geppert, J., Ettinger de Cuba, S., Heeren, T., Coleman, S., Rose-Jacobs, R., & Frank, D. A. (2011). U.S. housing insecurity and the health of very young children. *American Journal of Public Health, 101*(8), 1508-1514. https://doi.org/10.2105/AJPH.2011.300139

Percentage of infants/toddlers living in unsafe neighborhoods, as reported by parents

Living in neighborhoods that are unsafe can be a source of stress and may pose threats—through violence or pollutants—to physical well-being. Neighborhoods that are unsafe are associated with high rates of infant mortality and low birthweight, child abuse and neglect, and poor motor and social development among young children.[47] Parents in these neighborhoods may restrict children's opportunities for outdoor play out of concern for safety.[48]

The indicator denominator is children ages 0–2. The numerator is those children whose parents disagree somewhat or definitely that their children are safe in the neighborhood.

Estimates in the *State of Babies Yearbook: 2022* are based on a four-year (2016–2019) combined sample of the National Survey of Children's Health (NSCH). These results are more reliable than the results presented in the 2021 report, which were based on three years of NSCH data (2016–2018); the 2020 report, which were based on two years of NSCH data (2016–2017) or the 2019 report, which were based on 2016 data. They should be considered improved estimates, not new estimates that can be compared directly to the 2021, 2020, or 2019 *Yearbook* estimates.

This indicator can be disaggregated by race/ethnicity and household income. *Race/ethnicity:* The child's race/ethnicity is reported by their caregiver, and included subgroups are Hispanic of all races, non-Hispanic White, non-Hispanic Black, and non-Hispanic Asian. The U.S. Census Bureau recommends against using state or national population estimates for the following groups with the NSCH since these categories are not controlled independently: American Indian or Alaska Native, Hawaiian or Pacific Islander, and some "other" and "two or more races" categories; so those estimates are not presented. In 2019, the "some other race" category was removed from the questionnaire. Missing responses were imputed and categorized into existing race groups. *Household income:* NSCH derives household income-to-poverty ratios based on family income and household size. Missing values were imputed by the Census Bureau, and the single imputation version provided in the 2016–2019 data files is used. Households with incomes less than 200 percent of the federal poverty level are classified as "low-income." Households with incomes at or above 200 percent of the federal poverty level are classified as "not low-income."

Sources: Child and Adolescent Health Measurement Initiative. (2017). *2016 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Child and Adolescent Health Measurement Initiative. (2018). *2017 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Child and Adolescent Health Measurement Initiative. (2019). *2018 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

47 To, T., Cadarette, S. M., & Liu, Y. (2001). Biological, social, and environmental correlates of preschool development. *Child Care Health & Development, 27(2),* 187-200. *https://doi.org/10.1046/j.1365-2214.2001.00182.x*

48 Beets, M. W. & Foley, J. T. (2008). Association of father involvement and neighborhood quality with kindergarteners' physical activity: A multilevel structural equation model. *American Journal of Health Promotion, 22*(3), 195-203. *https://doi.org/10.4278/ajhp.22.3.195*

Child and Adolescent Health Measurement Initiative. (2020). 2019 National Survey of Children's Health (NSCH) Stata Constructed Data Set. Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Percentage of households with infants/toddlers experiencing low or very low food security

A lack of sufficient nutritious food is associated with a number of serious health, behavior, and cognitive deficits in children. Children living with food insecurity have poorer health than children who are in food-secure households.[49] Infants who experience food insecurity are more likely to perform poorly on tests of cognitive development.[50] For infants and toddlers, even mild levels of food insecurity may result in developmental deficits during this period of rapid brain growth.[51]

The denominator for this indicator is the number of households with one or more children ages 0–2. The numerator is the number of these households that experienced low or very low food security (not child- or adult-specific), as determined by survey responses. This indicator was updated with three years of data to improve reliability for the *State of Babies Yearbook: 2022*.

This indicator can be disaggregated by race/ethnicity and urbanicity. *Race/ethnicity:* Race/ethnicity is reported by the survey respondent who is likely the child's caregiver. The Current Population Survey includes race and ethnicity data for the following single categories as well as specific combinations for two or three as well as specific combinations for two or three categories and unspecified combinations of the races: White only, Black or African American only, American Indian or Alaska Native only, Asian only, Native Hawaiian or other Pacific Islander only. Ethnicity is asked as a separate question. Responses of Mexican, Puerto Rican, Cuban, Dominican, Salvadoran, Other Hispanic, Central American (excluding Salvadoran), and South American are coded as Hispanic, regardless of response to the race item. We then group the remaining non-Hispanic respondents into the following race categories for analyses: Non-Hispanic White, Non-Hispanic Black, Non-Hispanic American Indian or Alaska Native, Non-Hispanic Asian, Non-Hispanic Hawaiian or Pacific Islander, and Non-Hispanic two or more races. *Urbanicity:* Metropolitan areas include central cities, metro areas outside of central cities, and metro areas with central city status unknown. Non-metropolitan areas are areas outside of metropolitan areas.

Source: Flood, S., King, M., Rodgers, R., Ruggles, S., Warren, J.R. & Westberry, M. (2021). *Current Population Survey (IPUMS, Current Population Survey: Version 9.0)* [Data set]. IPUMS. https://doi.org/10.18128/D030.V9.0

Child Well-being and Resilience

Percentage of families with infants/toddlers who report "family resilience"

How families cope with challenges can make a difference in their overall well-being. Children who learn

49 Coleman-Jensen, A., McFall, W., & Nord, M. (2013). Food insecurity in households with children: *Prevalence, severity, and household characteristics, 2010-11.* U.S. Department of Agriculture, Economic Research Service. *https://www.ers.usda.gov/publications/pub-details/?pubid=43765*

50 Zaslow, M., Bronte-Tinkew, J., Capps, R., Horowitz, A., Moore, K. A., & Weinstein, D. (2009). Food security during infancy: Implications for attachment and mental proficiency in toddlerhood. *Maternal and Child Health Journal, 13*(1), 66-80. DOI 10.1007/s10995-008-0329-1

51 Rose-Jacobs, R., Black, M. M., Casey P. H., Cook, J. T., Cutts, D. B., Chilton, M., Heeren, T., Levenson, S. M., Meyers, A. F., & Frank, D. A. (2008). Household food insecurity: Associations with at-risk infant and toddler development. *Pediatrics, 121*(1), 65-72. *https://doi.org/10.1542/peds.2006-3717*

that families can solve problems together, participate in decision-making, and reduce conflict gain valuable skills related to planning, communicating, managing emotions, and optimism that can improve their chances of being resilient when encountering their own challenges.[52]

The indicator denominator is the number of children ages 0–2. The numerator is those children whose parent responded to the question "When your family faces problems, how often are you likely to do each of the following?" with the responses "most of the time" or "all of the time" to all four family resilience items. The four items are (a) talk together about what to do, (b) work together to solve our problems, (c) know we have strengths to draw on, and (d) stay hopeful even in difficult times. Response options for each item are none of the time, some of the time, most of the time, or all of the time.

Estimates in the *State of Babies Yearbook: 2022* are based on a four-year (2016–2019) combined sample of the National Survey of Children's Health (NSCH). These results are more reliable than the results presented in the 2021 report, which were based on three years of NSCH data (2016–2018); the 2020 report, which were based on two years of NSCH data (2016–2017); or the 2019 report, which were based on 2016 data. They should be considered improved estimates, not new estimates that can be compared directly to the 2021, 2020, or 2019 *Yearbook* estimates.

This indicator can be disaggregated by race/ethnicity and household income. *Race/ethnicity:* The child's race/ethnicity is reported by their caregiver, and the included subgroups are Hispanic of all races, non-Hispanic White, non-Hispanic Black, and non-Hispanic Asian. The U.S. Census Bureau recommends against using state or national population estimates for the following groups with the NSCH since these categories are not controlled independently: American Indian or Alaska Native, Hawaiian or Pacific Islander, and some "other" and "two or more races" categories, so those estimates are not presented. In 2019, the "some other race" category was removed from the questionnaire. Missing responses were imputed and categorized into existing race groups. *Household income:* NSCH derives household income-to-poverty ratios based on family income and household size. Missing values were imputed by the Census Bureau, and the single imputation version provided in the 2016–2019 data files is used. Households with incomes less than 200 percent of the federal poverty level are classified as "low-income." Households with incomes at or above 200 percent of the federal poverty level are classified as "not low-income."

Sources: Child and Adolescent Health Measurement Initiative. (2017). *2016 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Child and Adolescent Health Measurement Initiative. (2018). *2017 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Child and Adolescent Health Measurement Initiative. (2019). *2018 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). www.childhealthdata.org

52 Moore, K. A., Bethell, C. D., Murphey, D. A., Martin, M. C., & Beltz, M. (2017). *Flourishing from the start: What is it and how can it be measured?* Child Trends. *https://www.childtrends.org/wp-content/uploads/2017/03/2017-16FlourishingFromTheStart-1.pdf*

Child and Adolescent Health Measurement Initiative. (2020). *2019 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). www.childhealthdata.org

Percentage of infants/toddlers who have experienced one adverse childhood experience; two or more adverse childhood experiences

Exposure to unmanageable stress can interfere with the normal development of the body's neurological, endocrine, and immune systems, leading to increased susceptibility to disease. Because their brains are developing rapidly, infants and toddlers are especially vulnerable, and the damage may be long-lasting.[53] Survey items asked parents to indicate whether their child had ever experienced one or more of the following: economic hardship, divorce/separation of parent, death of a parent, a parent who served time in jail, being a witness to domestic violence, being a victim of or witness to neighborhood violence, living with someone who was mentally ill or suicidal, living with someone with an alcohol/drug problem, or being treated or judged unfairly due to race/ethnicity.

The denominator is children ages 0–2. The numerators are all children ages 0–2 whose parent reports one adverse childhood experience (ACE) or two or more ACEs, respectively. There are nine ACE items: hard to get by on family's income; parent or guardian divorced or separated; parent or guardian died; parent or guardian served time in jail; saw or heard parents or adults slap, hit, kick, or punch one another in the home; was a victim of violence or witnessed violence in neighborhood; lived with anyone who was mentally ill, suicidal, or severely depressed; lived with anyone who had a problem with alcohol or drugs; and treated or judged unfairly due to race/ethnicity. A response of "somewhat often" or "very often" to the question "How often has it been very hard to get by on your family's income?" was coded as an adverse childhood experience. The remaining survey items are dichotomous yes/no response options, with "yes" coded as an ACE. The wording of the economic hardship item was changed in the 2018 National Survey of Children's Health (NSCH). Data for that item are no longer comparable with earlier versions of the NSCH, however, the composite measure may continue to be compared.[54] Estimates in the *State of Babies Yearbook: 2022* are based on a four-year (2016–2019) combined sample of the NSCH. These results are more reliable than the results presented in the 2021 report, which were based on three years of NSCH data (2016–2018); the 2020 report, which were based on two years of NSCH data (2016–2017); or the 2019 report, which were based on 2016 data. They should be considered improved estimates, not new estimates that can be compared directly to the 2021, 2020, or 2019 *Yearbook* estimates.

This indicator can be disaggregated by race/ethnicity and household income. *Race/ethnicity:* The child's race/ethnicity is reported by their caregiver, and the included subgroups are Hispanic of all races, non-Hispanic White, non-Hispanic Black, and non-Hispanic Asian. The U.S. Census Bureau recommends against using state or national population estimates for the following groups with the NSCH since these categories are not controlled independently: American Indian or Alaska Native, Hawaiian or Pacific Islander, and some "other" and "two or more races" categories; so those estimates are not presented. In 2019, the "some other race" category was removed from the questionnaire. Missing responses were

53 Shonkoff, J. P., Garner, A. S., The Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood Adoption and Dependent Care & Section on Developmental and Behavioral Pediatrics. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics,* 129(1), e232-e246. *https://doi.org/10.1542/peds.2011-2663*

54 Child and Adolescent Health Measurement Initiative (CAHMI) (2019). *2017-2018 National Survey of Children's Health (2 years combined data set): Child and family health measures, national performance and outcome measures, and subgroups, STATA codebook, Version 1.0.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *https://www.childhealthdata.org/learn-about-the-nsch/nsch-codebooks*

imputed and categorized into existing race groups. *Household income:* NSCH derives household income-to-poverty ratios based on family income and household size. Missing values were imputed by the Census Bureau, and the single imputation version provided in the 2016–2019 data files is used. Households with incomes less than 200 percent of the federal poverty level are classified as "low-income." Households with incomes at or above 200 percent of the federal poverty level are classified as "not low-income."

Sources: Child and Adolescent Health Measurement Initiative. (2017). *2016 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). www.childhealthdata.org

Child and Adolescent Health Measurement Initiative. (2018). *2017 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). www.childhealthdata.org

Child and Adolescent Health Measurement Initiative. (2019). *2018 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). www.childhealthdata.org

Child and Adolescent Health Measurement Initiative. (2020). *2019 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). www.childhealthdata.org

Maltreatment rate per 1,000 infants/toddlers

Infants and toddlers are the age group most likely to suffer abuse and neglect, accounting for more than one-quarter of all incidents that are formally substantiated.[55] By far the most prevalent form of maltreatment is neglect, defined as "the absence of sufficient attention, responsiveness, and protection that are appropriate to the ages and needs of a child."[56] Child maltreatment is influenced by a number of factors, including inadequate access to education about child development, substance abuse, other forms of domestic violence, and mental illness. Although maltreatment occurs in families at all economic levels, abuse—and especially neglect—are more common in economically disadvantaged families than in families with higher incomes.[57] Note that the data source for this indicator is reports that are substantiated by the child welfare agency or a court, not actual prevalence of maltreatment.

For the *State of Babies Yearbook: 2022*, the numerator is the number of unique maltreatment victims under 1, age 1, and age 2 as reported in the Child Maltreatment 2019 report. The denominator is the total

55 U.S. Department of Health and Human Services, Administration on Children, Youth and Families. (2018). *Child maltreatment 2016.* U.S. Government Printing Office. https://www.acf.hhs.gov/cb/report/child-maltreatment-2016

56 National Center on the Developing Child. (2012). *The science of neglect: The persistent absence of responsive care disrupts the developing brain.* Working Paper 12. https://developingchild.harvard.edu/wp-content/uploads/2012/05/The-Science-of-Neglect-The-Persistent-Absence-of-Responsive-Care-Disrupts-the-Developing-Brain.pdf

57 Slack, K. S., Holl, J. L., McDaniel, M., Yoo, J., & Bolger, K. (2004). Understanding the risks of child neglect: An exploration of poverty and parenting characteristics. *Child Maltreatment, 9*(4), 395-408. https://doi.org/10.1177/1077559504269193

number of children of the same ages, according to the Child Maltreatment 2019 report.

Use caution when comparing this indicator across states, as states' child welfare systems vary significantly.

Sources: U.S. Department of Health & Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2021). *Child maltreatment 2019.* https://www.acf.hhs.gov/cb/research-data-technology/statistics-research/child-maltreatment

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Percentage of infants/toddlers exiting foster care achieving permanency who are reunified, placed with guardian, placed with non-guardian relative, or adopted

Young children fare best when they experience stable and consistent caregiving. One stated goal of the child welfare system is to "ensure that every child and youth has a permanent family or family connection."[58] Multiple temporary placements, by contrast, can disrupt a young child's sense of trust and security and contribute to emotional and behavioral problems.[59] This indicator examines the types of permanency that infants and toddlers attain when leaving foster care. The most common permanency outcome is reunification with their own parents. Other types of permanency are placement with a guardian, placement with a relative, and adoption.

Data reflect the 2019 federal fiscal year.

For the percentage of infants/toddlers exiting foster care who are reunified, the denominator is children exiting foster care during the fiscal year who are ages 0–2 at the time of exit and achieve permanency. The numerator is children exiting foster care during the fiscal year who are ages 0–2 at the time of exit and are reunified with the parent.

For the percentage of infants/toddlers exiting foster care who are placed with a guardian, the denominator is children exiting foster care during the fiscal year who are ages 0–2 at the time of exit and achieve permanency. The numerator is children exiting foster care during the fiscal year who are ages 0–2 at the time of exit and are placed with a guardian.

For the percentage of infants/toddlers exiting foster care who are placed with a relative, the denominator is children exiting foster care during the fiscal year who are ages 0–2 at the time of exit and achieve permanency. The numerator is children exiting foster care during the fiscal year who are ages 0–2 at the time of exit and are placed with a relative.

For the percentage of infants/toddlers exiting foster care who are adopted, the denominator is children exiting foster care during the fiscal year who are ages 0–2 at the time of exit and achieve permanency. The numerator is children exiting foster care during the fiscal year who are ages 0–2 at the time of exit and are adopted.

Use caution when interpreting this group of indicators, as states' child welfare systems can vary significantly.

These indicators can be disaggregated by race/ethnicity. Classification of infants and toddlers into racial

58 U.S. Department of Health and Human Services, Administration on Children, Youth and Families, Children's Bureau. (2021). *What we do.* https://www.acf.hhs.gov/cb/about/what-we-do

59 Wulczyn, F., Ernst, M., & Fisher, P. (2011). *Who are the infants in out-of-home care? An epidemiological and developmental snapshot.* Chapin Hall Issue Brief. https://fcda.chapinhall.org/wp-content/uploads/2012/10/2011_infants_issue-brief.pdf

and ethnic groups may vary from state to state, but typically a caseworker enters this information into the database. The included subgroups are non-Hispanic American Indian and Alaska Native, non-Hispanic Asian, non-Hispanic Black, non-Hispanic Native Hawaiian or Pacific Islander, Hispanic (of any race), non-Hispanic multi-racial, and non-Hispanic White.

Source: Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, U. S. Department of Health and Human Services (2020). *Adoption and Foster Care Analysis and Reporting System (AFCARS), Foster Care File 2019* [Data set]. National Data Archive on Child Abuse and Neglect. *https://www.ndacan.acf.hhs.gov/datasets/dataset-details.cfm?ID=239*

Number of infants/toddlers who have been removed from home and placed in foster care, per 1,000

Unstable conditions at home can cause infants and toddlers to be placed in out-of-home care.

The denominator is the number of infants and toddlers ages 0–2 in the population in 2019, according to U.S. Census population estimates. The numerator is the number of infants and toddlers who were removed from home and placed in foster care in the 2019 federal fiscal year. This fraction is then translated into a rate per 1,000 infants and toddlers.

This indicator can be disaggregated by race/ethnicity. Classification of infants and toddlers into racial and ethnic groups may vary from state to state, but typically a caseworker enters this information into their database. The included subgroups are non-Hispanic American Indian and Alaska Native, non-Hispanic Asian, non-Hispanic Black, non-Hispanic Native Hawaiian or Pacific Islander, Hispanic (of any race), non-Hispanic multi-racial, and non-Hispanic White.

Sources: Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, U. S. Department of Health and Human Services (2020). *Adoption and Foster Care Analysis and Reporting System (AFCARS), Foster Care File 2019* [Data set]. National Data Archive on Child Abuse and Neglect. *https://www.ndacan.acf.hhs.gov/datasets/dataset-details.cfm?ID=239*

U.S. Census Bureau, Population Division. (2020). *Annual state resident population estimates for 6 race groups (5 race alone groups and two or more races) by age, sex, and Hispanic origin: April 1, 2010 to July 1, 2019. https://www.census.gov/data/tables/time-series/demo/popest/2010s-state-detail.html*

Percentage of infants/toddlers in out-of-home placement who exited care in less than 12 months

The U.S. Department of Health and Human Services recognizes four ways a young child can exit the child welfare system: through reunification with the parents or caregivers, legal adoption, placement with other relative(s), or through placement with a non-relative legal guardian(s).[60] Stability and permanency are crucial for children's well-being.[61] The Adoption and Safe Families Act of 1997 (ASFA) was passed to ensure timely permanency and placement for children in the child welfare system, but the youngest infants stay in foster care longer than their counterparts ages 3–12 months.[62]

60 U.S. Department of Health and Human Services, Administration on Children, Youth and Families, Children's Bureau. (2005). *Child welfare outcomes 2002-2005: Report to Congress prepared by the Children's Bureau (ACYF, ACF) of the U.S. Department of Health and Human Services. https://www.acf.hhs.gov/sites/default/files/documents/cwo02_05_0.pdf*

61 Casey Family Programs. (2018). *What impacts placement stability?* Strong Families Strategy Brief. Casey Family Programs. *https://caseyfamilypro-wpengine.netdna-ssl.com/media/SF_Placement-stability-impacts_2021.pdf*

62 Cohen, J., Cole, P., & Szrom, J. (2011). *A call to action on behalf of maltreated infants and toddlers.* American Humane Association, Center for the Study of Social Policy, Child Welfare League of America, Children's Defense Fund, and ZERO TO THREE. *https://www.zerotothree.org/resources/454-a-call-to-action-on-behalf-of-maltreated-infants-and-toddlers*

The denominator is all infants and toddlers ages 0–2 who entered care in 2018, and who either left care by 2019 or were also in the data set for 2019. The numerator is the number of infants and toddlers in this cohort who exited care in less than 12 months.

This indicator can be disaggregated by race/ethnicity. Classification of infants and toddlers into racial and ethnic groups may vary from state to state, but typically a caseworker enters this information into the database. The included subgroups are non-Hispanic American Indian and Alaska Native, non-Hispanic Asian, non-Hispanic Black, non-Hispanic Native Hawaiian or Pacific Islander, Hispanic (of any race), non-Hispanic multi-racial, and non-Hispanic White.

Sources: Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, U. S. Department of Health and Human Services (2019). *Adoption and Foster Care Analysis and Reporting System (AFCARS), Foster Care File 2018* [Data set]. National Data Archive on Child Abuse and Neglect. *https://www.ndacan.acf.hhs.gov/datasets/dataset-details.cfm?ID=235*

Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, U. S. Department of Health and Human Services (2020). *Adoption and Foster Care Analysis and Reporting System (AFCARS), Foster Care File 2019* [Data set]. National Data Archive on Child Abuse and Neglect. *https://www.ndacan.acf.hhs.gov/datasets/dataset-details.cfm?ID=239*

Percentage of infants/toddlers who could benefit from evidence-based home visiting services and are receiving those services

Home visiting is a two-generation approach to serving the varied needs of families with an infant or toddler. Trained home visitors teach parents about milestones of early development and other appropriate expectations for very young children, as well as help parents promote good health and keep their homes safe for babies and toddlers, use effective parenting practices, and access additional resources within their communities. A number of home visiting programs have been shown to be effective at improving one or more aspects of family well-being.[63] Yet, in most communities, the need for home visiting services far outpaces current capacity.[64]

The denominator is the number of children ages 0–2 who could benefit from home visiting according to the source document, which is calculated as the total number of children ages 0–2 based on the American Community Survey. The numerator is calculated by multiplying the total number of children who received home visiting by the percentage of children who receive home visiting who are ages 0–2. The national total was calculated from the data provided in the National Home Visiting Resource Center National Profile, which included children served in the tribal and U.S. territory communities. All of the other state data were pulled from each individual state profile, also located on the National Home Visiting Resource Center website. The information in the NHVRC state profiles do not include families served through tribal home visiting. The state profiles only include families that are served through local implementing agencies funded through the State Maternal and Infant Early Childhood Home Visiting (MIECHV) programs. Data reflect 2020 values.

Source: National Home Visiting Resource Center. (2021). 2021 *Home Visiting Yearbook – State profile information.* James Bell Associates and the Urban Institute. *https://nhvrc.org/yearbook/2021-yearbook/*

63 Sama-Miller, E., Akers, L., Mraz-Esposito, A., Zukiewicz, M., Avellar, S., Paulsell, D., & Del Grosso, P. (2018). *Home visiting evidence of effectiveness review: Executive summary.* 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/documents/opre/HomVEE_Executive%20Summary%20October%202018_0.pdf*

64 National Home Visiting Resource Center. (2017). *2017 Home visiting yearbook. https://www.nhvrc.org/wp-content/uploads/NHVRC_Yearbook_2017_Final.pdf*

Supportive Policies

State has a paid family leave program

In the absence of a federal paid family leave policy, states vary widely on if and how they require paid family leave. Family leave is used primarily to care for a newborn child, but also to meet other exceptional caregiving needs, such as for an older, disabled, or chronically ill relative, or a newly adopted child. In addition to economic benefits for families, paid family leave promotes parent-infant bonding and can increase the likelihood of breastfeeding, lessen the likelihood of maternal depression, promote fathers' involvement in childrearing, increase mothers' attachment to the labor force, and reduce reliance on public assistance.[65]

The National Partnership for Women and Families (NPWF) produced a table summarizing state-paid family and medical leave insurance laws, as of January 2021. States that have enacted a policy but whose policy has not yet taken effect are counted as having a policy. NPWF references the term "family leave" to mean time off to care for another person in the family, such as a newborn or newly adopted child, child, spouse, or parent with a serious health condition.

Source: National Partnership for Women and Families. (2021). *State paid family and medical leave insurance laws.* *https://www.nationalpartnership.org/our-work/resources/economic-justice/paid-leave/state-paid-family-leave-laws.pdf*

State requires employers to provide paid sick days that cover care for child

While the Family and Medical Leave Act provides *unpaid* sick leave for some employees,[66] there is not a national paid sick leave policy. States, therefore, vary on provisions for paid sick leave.

Paid sick leave may enable working parents to take care of sick children and provide them with routine medical care. For example, parents with access to paid sick leave are more likely to take their children to the doctor than parents without access to paid sick leave.[67]

This indicator reports whether the state has a policy covering paid sick time for the care of family members that includes care for children, as reported by the National Partnership for Women and Families. Data reflect laws and policies as of July 2021.

Source: National Partnership for Women and Families. (2021). *Paid sick days: State and district statutes.* *https://www.nationalpartnership.org/our-work/resources/economic-justice/paid-sick-days/paid-sick-days-statutes.pdf*

State offers a child tax credit

The federal Child Tax Credit (CTC) is a federal program for parents with low and moderate earnings.[68]

65 Schulte, B., Durana, A., Stout, B., & Moyer, J. (2017). *Paid family leave: How much time is enough?* New America. *https://www.newamerica.org/better-life-lab/reports/paid-family-leave-how-much-time-enough/*

66 U.S. Department of Labor. Wage and Hour Division. *Family and Medical Leave Act.* https://www.dol.gov/agencies/whd/fmla

67 Seixas, B. V., & Macinko, J. (2020). Unavailability of paid sick leave among parents is a barrier for children's utilization of nonemergency health services: Evidence from the National Health Interview Survey. *The International Journal of Health Planning and Management 35*(5), 1083-1097. *https://doi.org/10.1002/hpm.2988*

68 Tax Credits for Workers and Their Families (2018). *State Tax Credits.* Tax Credits for Workers and Their Families. *http://www.taxcreditsforworkersandfamilies.org/state-tax-credits/*

For a child to be eligible, the parent must answer certain qualifying questions regarding the child's age, relationship to the parent, support, dependency, citizenship, and residence. Because the CTC serves middle-income and most upper-middle-income families, in addition to low- and moderate-income families, more families are able to receive this tax credit than families under the Earned Income Tax Credit (EITC). The CTC helps to pay for the cost of raising children.[69] Research suggests that families receiving a larger refundable tax credit have children who do better in school, have a higher chance of going to a university, and will likely earn more as adults.[70] Some states have also implemented a child tax credit to complement the federal CTC.

This indicator documents whether a state offers any child tax credit, as of 2019. Details on states' child tax credits, including their amounts and their eligibility requirements are available in the source document.

Source: Tax Credits for Workers and Their Families (2019). *State Tax Credits.* http://www.taxcreditsforworkersandfamilies.org/state-tax-credits/

TANF work exemption for single parents of infants

The Temporary Assistance for Needy Families (TANF) program was designed to help low-income families with minor children by providing cash assistance, particularly while parents are seeking employment. However, states are allowed to spend TANF funds for a variety of other activities (e.g., administrative costs, child care and pre-K programs, child welfare services, and work support activities) in addition to directly supporting families.

Certain work-related activities are required in order for each state to meet the annual work participation rates, which are determined by the federal government.[71] States can determine exemptions that can be made for single-parent unit households with different household circumstances.

This indicator documents, as of July 2019, whether a state exempts a single parent "head of unit" over 21 years of age, caring for an infant, from TANF work-related activity if caring for a child less than 12 months old. The source document contains details about the duration and conditions for exemptions. For some states, the exemption is only valid for a single child.

Source: Goehring, B., Heffernan, C., Minton, S., & Giannarelli, L. (2020). *Welfare rules databook: State TANF policies as of July 2019.* OPRE Report 2020-141, Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. https://www.acf.hhs.gov/opre/report/welfare-rules-databook-state-tanf-policies-july-2019

State offers an earned income tax credit

The federal Earned Income Tax Credit (EITC) is a federal tax credit for working people with low and

69 Marr, C., Huang, C. C., Sherman, A., & Debot, B. (2015). *EITC and Child Tax Credit promote work, reduce poverty, and support children's development, research finds.* Center on Budget and Policy Priorities. https://www.cbpp.org/research/federal-tax/eitc-and-child-tax-credit-promote-work-reduce-poverty-and-support-childrens

70 Ibid.

71 Goehring, B., Heffernan, C., Minton, S., & Giannarelli, L. (2019). *Welfare rules databook: State TANF policies as of July 2018. OPRE Report 2019-83.* Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. https://www.acf.hhs.gov/opre/report/welfare-rules-databook-state-tanf-policies-july-2019

moderate earnings. The EITC provides workers with a tax credit that is applied to some or all of a worker's federal tax obligation and thus can serve as a supplemental source of income.[72] The EITC is currently targeted toward workers who are raising children, with eligibility depending on the worker's income, marital status, and number of children.

State EITCs provide an additional benefit to families by reducing their state income tax liability.[73]

Research has found that children who are beneficiaries of greater state or federal EITCs obtain better test scores, compared with similar families who are receiving lesser amounts.[74]

For this indicator, states were counted as having the policy if they had enacted a law regarding EITC, even if it has not yet gone into effect. Data are as of 2021.

Source: Urban Institute. (2021). *State Earned Income Tax Credits.* https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/state-and-local-backgrounders/state-earned-income-tax-credits

POSITIVE EARLY LEARNING EXPERIENCES

Elements that Support Child Care Quality

Adult/child ratio for infants and toddlers in CCDF licensed center-based child care

The Child Care Development Fund (CCDF) program requires states to describe their standards for child-to-provider ratios in their CCDF plans. Although each state has the ability to set their own standards for child-to-provider ratios, the Office of the Administration for Children and Families (ACF) advises states to refer to the recommended standards in the *Caring for Our Children: National Health and Safety Performance Standards.* The child-to-provider ratio states the maximum number of children that should be allowed under each adult/provider. Smaller child-to-provider ratios promote improved quality of caregiving and improved verbal interactions between the provider and the child. Additionally, children's safety and sanitation could get compromised if providers are busy meeting the needs of other children.[75]

The Early Head Start (EHS) standard for adult-to-child ratio for children ages 0–3 is one teacher for every four children.[76] This indicator is a count of whether the state's ratio requirements meet or exceed EHS standards of 1:4 at the following ages: 11 months, 19 months, and 30 months, as reported in their CCDF plans for fiscal years 2019–2021. States received one point for meeting this benchmark at each age.

72 Tax Credits for Workers and Their Families (2018). *State tax credits.* http://www.taxcreditsforworkersandfamilies.org/state-tax-credits/

73 National Conference of State Legislatures. (2019). *Tax credits for working families: Earned Income Tax Credit (EITC).* https://www.ncsl.org/research/labor-and-employment/earned-income-tax-credits-for-working-families.aspx

74 Marr, C., Huang, C. C., Sherman, A., & Debot, B. (2015). *EITC and Child Tax Credit promote work, reduce poverty, and support children's development, research finds.* Center on Budget and Policy Priorities. https://www.cbpp.org/research/federal-tax/eitc-and-child-tax-credit-promote-work-reduce-poverty-and-support-childrens

75 American Academy of Pediatrics, American Public Health Association. (2011). *Caring for our children: National health and safety performance standards; Guidelines for early care and education programs, Third Edition.* https://nrckids.org/files/CFOC3_updated_final.pdf

76 Early Childhood Learning & Knowledge Center. (n.d.). Head Start Policy and Regulations: 1302.21 Center-based Option. https://eclkc.ohs.acf.hhs.gov/policy/45-cfr-chap-xiii/1302-21-center-based-option

Source: Administration for Children and Families, Office of Child Care. (2018). *Approved CCDF plans (FY 2019-2021).* U.S. Department of Health and Human Services. https://www.acf.hhs.gov/occ/resource/state-plans

Teacher qualifications for infants and toddlers in CCDF licensed center-based child care

One of the most important factors contributing to a child's development is the care setting they are exposed to. The Child Care and Development Fund (CCDF) program requires states to develop a system for continuing professional development for teachers. Additionally, each state sets its own requirements around teacher qualifications. Teacher qualifications play a role in early childhood education quality and can help bring about the conditions for the positive interactions and experiences that are associated with positive child outcomes.[77]

This indicator documents the states' teacher qualifications for infants and toddlers, as reported in their CCDF plans for fiscal years 2019–2021. We classified qualifications into five categories: no credential beyond a high school diploma; CDA or state equivalent credential; specific infant/toddler credential or CDA with an infant/toddler credential; associate degree; and bachelor's degree. Most states did not differentiate requirements by age within infants and toddlers. When requirements did vary by age, we selected the lowest qualifications. If the state made a distinction between types of teachers, qualifications for the lead teacher were used.

Source: Administration for Children and Families, Office of Child Care (2018). *Approved CCDF Plans* (FY 2019-2021). U.S. Department of Health and Human Services. https://www.acf.hhs.gov/occ/resource/state-plans

Group size for infants and toddlers in CCDF licensed center-based child care

The Child Care Development Fund (CCDF) program requires states to describe their standards for group sizes in their CCDF plans. Although each state has the ability to set their own standards for group size, the Office of the Administration for Children and Families (ACF) advises states to refer to the recommended standards in the *Caring for Our Children: National Health and Safety Performance Standards.* Group size specifically refers to the number of children assigned to a designated space/classroom under a specific teacher or group of teachers in that classroom. Research has found that smaller infant and toddler group sizes are associated with positive interactions and better developmental outcomes.[78]

The Early Head Start (EHS) standard for group size for children ages 0–3 is eight children.[79] This indicator is a count of whether the state's group size requirements meet or exceed EHS standards at the following ages: 11 months, 19 months, and 30 months, as reported in their CCDF plans for fiscal years 2019–2021. States received one point for meeting this benchmark at each age.

Source: Administration for Children and Families, Office of Child Care. (2018). *Approved CCDF Plans (FY 2019–2021).* U.S. Department of Health and Human Services. https://www.acf.hhs.gov/occ/resource/state-plans

77 Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M. R., Espinosa, L. M., Gormley, W. T., & Zaslow, M. J. (2013). *Investing in our future: The evidence base on preschool education.* Society for Research in Child Development. https://www.fcd-us.org/assets/2013/10/Evidence20Base20on20Preschool20Education20FINAL.pdf

78 American Academy of Pediatrics, American Public Health Association. (2011). *Caring for our children: National health and safety performance standards; Guidelines for early care and education programs, Third Edition.* https://nrckids.org/files/CFOC3_updated_final.pdf

79 Early Childhood Learning & Knowledge Center. (n.d.). *Head Start Policy and Regulations: 1302.21 Center-based Option.* https://eclkc.ohs.acf.hhs.gov/policy/45-cfr-chap-xiii/1302-21-center-based-option

State has adopted a professional credential for infant/toddler teachers

The quality of a child's care and education depends on the care environment and the interactions that take place there. A professional credential can expose a teacher to a greater variety of knowledge and skills, which in turn benefit the classroom where the child spends most of the day.[80]

This indicator denotes whether a state has adopted a professional credential for teachers of infants and toddlers. There is not a consensus definition of infant/toddler professional credentials; they can include continuing education hours and credit programs. This information was collected by ZERO TO THREE from the State Capacity Building Center and was supplemented with information from the National Center on Early Childhood Development, Teaching, and Learning (NCECDTL). These data have not been vetted with states.

Source: ZERO TO THREE (2019). *State Policy Tracker*. https://www.zerotothree.org/resources/360-state-policy-tracker#downloads

Activities That Support Early Learning

Percentage of parents who report reading to their infants/toddlers every day

Long before they are able to read, infants and toddlers develop literacy skills and an awareness of language.[81] Since language development is fundamental to many areas of learning, skills developed early in life help set the stage for later school success. By reading aloud to their young children, parents help them acquire the skills they will need to be ready for school.[82] Young children who are regularly read to have a larger vocabulary; higher levels of phonological, letter name, and sound awareness; and better success at decoding words.[83]

The denominator for this indicator is all children ages 0–2. The numerator is the number of children ages 0–2 whose family members report reading to them every day.

Estimates in the *State of Babies Yearbook: 2022* are based on a four-year (2016–2019) combined sample of the National Survey of Children's Health (NSCH). These results are more reliable than the results presented in the 2021 report, which were based on three years of NSCH data (2016–2018); the 2020 report, which were based on two years of NSCH data (2016–2017); or the 2019 report, which was based on 2016 data. They should be considered improved estimates, not new estimates that can be compared directly to the 2021, 2020, or 2019 *Yearbook* estimates.

This indicator can be disaggregated by race/ethnicity and household income. *Race/ethnicity:* The child's race/ethnicity is reported by their caregiver, and the included subgroups are Hispanic of all races, non-Hispanic White, non-Hispanic Black, and non-Hispanic Asian. The U.S. Census Bureau recommends

80 Chen, J. J., Martin, A., & Erdosi-Mehaffey, V. (2017). The process and impact of the infant/toddler credential as professional development: Reflections from multiple perspectives and recommendations for policy. *Early Childhood Education Journal, 45*(3), 359-368. https://doi.org/10.1007/s10643-015-0767-5

81 National Research Council. (1999). *Starting out right: A guide to promoting children's reading success.* The National Academies Press. https://doi.org/10.17226/6014

82 Raikes, H., Pan, B.A., Luze, G.J., Tamis-LeMonda, C.S., Brooks-Gunn, J., Constantine, J., Tarullo, L.B., Raikes, H.A, & Rodriguez, E. (2006). Mother-child bookreading in low-income families: Correlates and outcomes during the first three years of life. *Child Development,* 77(4), 924-953. https://doi.org/10.1111/j.1467-8624.2006.00911.x

83 Burgess, S. R., Hecht, S. A., & Lonigan, C. J. (2002). Relations of the home literacy environment (HLE) to the development of reading-related abilities: A one-year longitudinal study. *Reading Research Quarterly, 37*(4), 408-426. https://www.jstor.org/stable/748260

against using state or national population estimates for the following groups with the NSCH since these categories are not controlled independently: American Indian or Alaska Native, Hawaiian or Pacific Islander, and some "other" and "two or more races" categories; so those estimates are not presented. In 2019, the "some other race" category was removed from the questionnaire. Missing responses were imputed and categorized into existing race groups. *Household income:* NSCH derives household income-to-poverty ratios based on family income and household size. Missing values were imputed by the Census Bureau, and the single imputation version provided in the 2016–2019 data files is used. Households with incomes less than 200 percent of the federal poverty level are classified as "low-income." Households with incomes at or above 200 percent of the federal poverty level are classified as "not low-income."

Sources: Child and Adolescent Health Measurement Initiative. (2017). *2016 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). www.childhealthdata.org

Child and Adolescent Health Measurement Initiative. (2018). *2017 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). www.childhealthdata.org

Child and Adolescent Health Measurement Initiative. (2019). *2018 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). www.childhealthdata.org

Child and Adolescent Health Measurement Initiative. (2020). *2019 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). www.childhealthdata.org

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Percentage of parents who report singing songs or telling stories to their infants/toddlers every day

Reading is not the only way parents can promote their young child's language development. Singing songs and telling stories are language-rich activities that are also typically rich in cultural traditions, thus contributing to a child's positive identity. Important features of many songs and stories are repetition, internal structure, and multiple perspectives—all features that help children develop the skills that underlie school success. Not all parents are comfortable with reading or have the appropriate materials, so encouraging parents to use songs and stories to nurture their child's language development is a smart strategy.

The indicator denominator is all children ages 0–2. The numerator is children ages 0–2 whose family members report singing or telling stories to them every day.

Estimates in the *State of Babies Yearbook: 2022* are based on a four-year (2016–2019) combined sample of the National Survey of Children's Health (NSCH). These results are more reliable than the results presented in the 2021 report, which were based on three years of NSCH data (2016–2018); the 2020 report, which were based on two years of NSCH data (2016–2017); or the 2019 report, which was based on 2016 data. They should be considered improved estimates, not new estimates that can be compared directly to the 2021, 2020, or 2019 *Yearbook* estimates.

This indicator can be disaggregated by race/ethnicity and household income. *Race/ethnicity:* The

child's race/ethnicity is reported by their caregiver, and the included subgroups are Hispanic of all races, non-Hispanic White, non-Hispanic Black, and non-Hispanic Asian. The U.S. Census Bureau recommends against using state or national population estimates for the following groups with the NSCH since these categories are not controlled independently: American Indian or Alaska Native, Hawaiian or Pacific Islander, and some "other" and "two or more races" categories; so those estimates are not presented. In 2019, the "some other race" category was removed from the questionnaire. Missing responses were imputed and categorized into existing race groups. *Household income:* NSCH derives household income-to-poverty ratios based on family income and household size. Missing values were imputed by the Census Bureau, and the single imputation version provided in the 2016–2018 data files is used. Households with incomes less than 200 percent of the federal poverty level are classified as "low-income." Households with incomes at or above 200 percent of the federal poverty level are classified as "not low-income."

Sources: Child and Adolescent Health Measurement Initiative. (2017). *2016 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Child and Adolescent Health Measurement Initiative. (2018). *2017 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Child and Adolescent Health Measurement Initiative. (2019). *2018 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Child and Adolescent Health Measurement Initiative. (2020). *2019 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Access to Early Learning Programs

Percentage of infants/toddlers below 100 percent of the federal poverty level with access to Early Head Start

Early Head Start (EHS) is a comprehensive child development and family support program for infants, toddlers, and pregnant women in families experiencing poverty. Apart from family income, each EHS program sets its own eligibility criteria, targeting their services to best meet the needs of families and children in their community. Services may be delivered in centers, family child care homes, or individual family homes.[84,85] A recent study found that, among families participating in EHS, children had enhanced

84 Head Start Early Childhood Learning and Knowledge Center. (2020). *Early Head Start programs.* *https://eclkc.ohs.acf.hhs.gov/programs/article/early-head-start-programs*

85 Head Start Early Childhood Learning and Knowledge Center. (2018). *Early Head Start program options.* *https://eclkc.ohs.acf.hhs.gov/programs/article/early-head-start-program-options*

cognitive development, attention, and engagement; their parents had less stress and family conflict, and were more likely to be responsive, warm, and supportive. EHS families had lower rates of subsequent child maltreatment than those in a control group.[86]

The National Head Start Association reports the percentage of eligible children ages 0–2 who had access to Early Head Start during the 2018 fiscal year. Due to the pandemic, more recent data are not available. The denominator for this indicator is the number of children ages 0–2 below 100 percent of the federal poverty level, according to the 2018 U.S. Census Bureau's Current Population Survey, Annual Social and Economic Supplement. The numerator is total funded EHS slots, based on the 2019 Head Start Program Information Report. This percentage does not account for eligibility criteria beyond income.

Source: National Head Start Association (2021). *Access to Head Start in the United States state-by-state fact sheets*. *https://www.nhsa.org/national-head-start-fact-sheets*

Income eligibility level for child care subsidy is at or above 200 percent of the federal poverty level

Families in every state need an income at least twice the federal poverty level to meet basic needs for food, housing, child care, transportation, and health care. In states with a lower income threshold for subsidy eligibility, families with an infant or toddler cannot afford child care without sacrificing other essentials.[87]

The National Women's Law Center reports the income eligibility limits for a child care subsidy as a percentage of the 2020 federal poverty level for a family of three. We recoded this data to capture eligibility limits that are equal to or above 200% of the federal poverty level. Data reflect policies as of February 2020. In Texas and Virginia, counties set their income limits and the median eligibility limit depending on the different regions, so it is not possible to compute this indicator for these states.

Source: Schulman, K. (2021). *Early progress: State child care assistance policies 2020.* National Women's Law Center. *https://nwlc.org/wp-content/uploads/2021/05/NWLC-State-Child-Care-Assistance-Policies-2020.pdf*

State-allocated new CCDBG funds to invest in infant/toddler care

The Child Care and Development Block Grant (CCDBG) Act was signed in 2014, reauthorizing the Child Care and Development Fund (CCDF) program. CCDF is the primary federal funding source dedicated to helping low-income families pay for child care through child care subsidies, while also setting new requirements to improve child care quality across the country. Improving school readiness and promoting healthy child development is one of the key purposes of the CCDBG Act.[88] The 2014 reauthorization created new requirements for states to expand access to child care, expand education to families around child development and other financial assistance programs, and enhance health and safety practices to all the providers under the grant, as well as several other requirements.[89] In addition to insufficient funding

86 Green, B. L., Ayoub, C., Bartlett, J. D., Furrer, C., Cohen, R. C., Buttita, K., Von Ende, A., Koepp, A., Regalbuto, E., & Sanders, M. B. (2018). *How Early Head Start prevents child maltreatment.* Child Trends. *https://www.childtrends.org/publications/how-early-head-start-prevents-child-maltreatment*

87 Schulman, K. (2018). *Overdue for investment: State child care assistance policies, 2018.* National Women's Law Center. *https://nwlc.org/wp-content/uploads/2018/11/NWLC-State-Child-Care-Assistance-Policies-2018.pdf*

88 Office of the Administration for Children & Families: Office of Child Care. (2016). *Child Care and Development Fund Final Rule Frequently Asked Questions. https://www.acf.hhs.gov/occ/faq/child-care-and-development-fund-final-rule-frequently-asked-questions#Reauthorization%20and%20the%20New%20Regulations%20(OR%20FINAL%20RULE)*

89 Banghart, P., King, C., Bedrick, E., Hirilall, A., Daily, S. (2019). *States' use of the Child Care and Development Block Grant funding increase.* Child Trends. *https://*

for eligible families, many states found themselves struggling to meet the new requirements that were set in place with the 2014 reauthorization, prompting Congress to respond to these concerns by providing a national increase of $2.37 billion dollars to the CCDBG. States could choose how to allocate their increased funding to best align with the needs of their communities.[90]

This indicator tracks whether states responded yes to allocating increased CCDBG funding to access to child care services and specified increasing the number of child care slots for infants and toddlers. The data are current as of August 2019.

Source: Banghart, P., King, C., Bedrick, E., Hirilall, A., Daily, S. (2019). *States' use of the Child Care and Development Block Grant Funding increase.* Child Trends. *https://www.childtrends.org/publications/states-use-of-the-child-care-and-development-block-grant-funding-increase*

State child care subsidy system reimburses center-based child care at or above the 75th percentile of current market rates

Higher-quality child care and early education has been found to benefit low-income children in promoting positive child development outcomes to a greater extent than their more affluent peers.[91] In response to federal efforts to expand high-quality child care to more children, some states have begun to reimburse center-based child care for children receiving a child care subsidy at or above the 75th percentile of the current market rates.

Increasing the state reimbursement percentile allows more families to access higher-quality child care using a child care subsidy. Additionally, higher reimbursement rates allow providers to serve more families receiving a subsidy, since the cost for serving those families is covered.[92]

The National Women's Law Center reports whether state payment rates are at or above the 75th percentile of current market rates in Table 4b of the source document. Payment rates are considered to be at this level if rates in all (or nearly all) categories—such as different regions, age groups, types of care, and quality levels (including the base rate)—are at or above the 75th percentile of current market rates. Data are current as of 2020.

Source: Schulman, K. (2020). *On the precipice: State child care assistance policies 2020.* National Women's Law Center. *https://nwlc.org/wp-content/uploads/2021/05/NWLC-State-Child-Care-Assistance-Policies-2020.pdf*

Percentage of infants/toddlers with family incomes equal to or below 150 percent of the state median income who are receiving a child care subsidy

The federal Child Care and Development Fund (CCDF) is the primary source of financing for states' child care subsidy programs. Within broad federal requirements, states set their own eligibility requirements. Even in the most generous states, however, various barriers (including waiting lists or frozen intake, high

www.childtrends.org/publications/states-use-of-the-child-care-and-development-block-grant-funding-increase

90 Ibid.

91 Greenberg, E., Isaacs, J. B., Derrick-Mills, T., Michie, M., & Stevens, K. (2018). *Are higher subsidy payment rates and provider-friendly payment policies associated with child care quality?* Urban Institute Center on Labor, Human Services, and Population. *https://www.urban.org/sites/default/files/publication/96681/are_higher_subsidy_payment_rates_and_provider-friendly_payment_policies_associated_with_child_care_quality_1.pdf*

92 Child Care Aware of America. (2019). *2019 CCDBG state snapshots. https://info.childcareaware.org/ccdbg-2019-state-snapshots*

family copayments, and low reimbursement rates for care providers) restrict access to these programs.[93] This indicator captures the reach of these child care subsidies among families with incomes equal to or less than 150 percent of the state median income within states.

The denominator for this indicator is the number of children ages 0–2 with family incomes less than or equal to 150 percent of the state median income. To calculate the denominator, we took the following steps: a) obtained the state median incomes for four-person families, by state, from the Low-Income Home Energy Assistance Information Memorandum; b) multiplied those numbers by 1.5 to get 150 percent of the state median income for four-person families; c) calculated 150 percent of the state median income for families of different configurations, using the conversion provided in a table footnote in the Low-Income Home Energy Assistance Information Memorandum; d) applied to each respondent in the 2019 one-year American Community Survey (ACS) the appropriate 150 percent of state median income threshold, based on their state and family size; e) flagged respondents whose family income was less than or equal to this threshold; and f) exported the weighted number of children ages 0–2 with these flags. The denominator was not updated for the *State of Babies Yearbook: 2022* due to the delay in the 2020 one-year ACS data release related to COVID-19. The numerator is the number of children ages 0–2 who received CCDF-funded care in fiscal year 2019 (based on estimates from the Administration for Children and Families Office of Child Care). The denominator covers January 2018 to December 2019, while the numerator covers October 2018 to September 2019.

Sources: Administration for Children and Families, Office of Child Care. (2021). FY 2019 CCDF Data Tables (Preliminary). *https://www.acf.hhs.gov/occ/data/fy-2019-ccdf-data-tables-preliminary*

Administration for Children and Families, Office of Community Services. (2020). *The Low-Income Home Energy Assistance Program IM 2018-3 State median income estimates for optional use in FY 2018 and mandatory use in FY 2019. https://www.acf.hhs.gov/ocs/policy-guidance/liheap-im-2018-3-state-median-income-estimates-optional-use-fy-2018-and*

Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E. Jose Pacas, J. & Sobek, M. (2020). *American Community Survey 2019, one-year estimates.* (IPUMS USA: Version 10.0) [Data set]. IPUMS. *https://doi.org/10.18128/D010.V10.0*

Average state cost of center-based infant care as a percentage of median income for married families/ single parents

Providing care for infants and toddlers is more expensive than for older children, because higher adult-child ratios are required, and additional costs are associated with maintaining appropriate hygiene around diapering, bottle feeding, bedding, and so on. Parents can pay more than $20,000 per year for center-based infant care, depending on where they live.[94] The new federal standard is that families should spend no more than 7 percent of their income for child care.[95]

Data for the *State of Babies Yearbook: 2022* were provided by Child Care Aware of America, based on

93 Ibid.

94 Child Care Aware of America. (2019). *The U.S. and the high cost of child care: 2019. https://cdn2.hubspot.net/hubfs/3957809/2019%20Price%20of%20Care%20State%20Sheets/Final-TheUSandtheHighPriceofChildCare-Appendices.pdf?__hssc=122076244.2.1605543695491&__hstc=122076244.abdbe2aa1098f4ba8bffad2689acb437.1602611682546.1605025891932.1605543695491.6&__hsfp=3629513924&hsCtaTracking=b84e60b8-da54-4971-9364-7d5667e1a1b7%7C0be5fe22-5bef-4e54-908a-f95a653d2b14*

95 Department of Health and Human Services, Child Care and Development Fund (CCDF) Program; Proposed Rule, 80 Fed. Reg. 80466–80582 (December 24, 2015). *https://www.govinfo.gov/content/pkg/FR-2015-12-24/pdf/2015-31883.pdf*

their 2021 survey, through a data request process. In the calculation of cost of care for single-parent families, the denominator is the median income for single-parent families, and the numerator is the 2020 annual cost of center-based infant care. In the calculation of cost of care for married-parent families, the denominator is the median income for married-parent families, and the numerator is the 2020 annual cost of center-based infant care.

Sources: Child Care Aware of America. (2021). *Child Care Prices as a Percentage of Median Household Income, 2020.* Child Care Aware of America. https://www.childcareaware.org/our-issues/research/the-us-and-the-high-price-of-child-care-2019/

Early Intervention

Percentage of infants/toddlers, ages 9–35 months, who received a developmental screening using a parent-completed tool in the past year

Developmental screening is an efficient, cost-effective way to identify potential health or behavioral problems. In primary health care settings, the most effective screening tools rely on parent-reported information.[96] Children who get screened are more likely to have delays identified, be referred for early intervention, and be determined eligible for early intervention services.[97] The American Academy of Pediatrics recommends that children receive developmental screening from their physicians at least three times before their third birthday.[98]

The denominator for this indicator is all children ages 9–35 months. The numerator is those children who received a developmental screening using a parent-completed screening tool in the past year, as reported by parents.

Estimates in the *State of Babies Yearbook: 2022* are based on a four-year (2016–2019) combined sample of the National Survey of Children's Health (NSCH). These results are more reliable than the results presented in the 2021 report, which were based on three years of NSCH data (2016–2018); the 2020 report, which were based on two years of NSCH data (2016–2017); or the 2019 report, which was based on 2016 data. They should be considered improved estimates, not new estimates that can be compared directly to the 2020 or 2019 *Yearbook* estimates.

This indicator can be disaggregated by race/ethnicity and household income. *Race/ethnicity:* The child's race/ethnicity is reported by their caregiver, and the included subgroups are Hispanic of all races, non-Hispanic White, non-Hispanic Black, and non-Hispanic Asian. The U.S. Census Bureau recommends against using state or national population estimates for the following groups with the NSCH since these categories are not controlled independently: American Indian or Alaska Native, Hawaiian or Pacific Islander, and some "other" and "two or more races" categories; so those estimates are not presented. In 2019, the "some other race" category was removed from the questionnaire. Missing responses were imputed and categorized into existing race groups. *Household income:* NSCH derives household income-to-poverty ratios based on family income and household size. Missing values were imputed by the Census

96 Glascoe, F. P. (2000). Early detection of developmental and behavioral problems. *Pediatrics in Review, 21*(8), 272-280. https://doi.org/10.1542/pir.21.8.272

97 Guevara, J. P., Gerdes, M., Localio, R., Huang, Y. V., Pinto-Martin, J., Minkovitz, C. S., Hsu, D., Kyriakou, L, Baglivo, S., Kavanagh, J., & Pati, S. (2012). Effectiveness of developmental screening in an urban setting. *Pediatrics, 13(1),* 30-37. https://doi.org/10.1542/peds.2012-0765

98 American Academy of Pediatrics, Council on Children with Disabilities, Section on Developmental Behavioral Pediatrics, Bright Futures Steering Committee and Medical Home Initiatives for Children with Special Needs Project Advisory Committee. (2006). Identifying infants and young children with developmental disorders in the medical home: An algorithm for developmental surveillance and screening. *Pediatrics, 118(1),* 405-420. https://doi.org/10.1542/peds.2006-1231

Bureau, and the single imputation version provided in the 2016–2019 data files is used. Households with incomes less than 200 percent of the federal poverty level are classified as "low-income." Households with incomes at or above 200 percent of the federal poverty level are classified as "not low-income."

Sources: Child and Adolescent Health Measurement Initiative. (2017). *2016 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

Child and Adolescent Health Measurement Initiative. (2018). *2017 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

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Child and Adolescent Health Measurement Initiative. (2020). *2019 National Survey of Children's Health (NSCH) Stata Constructed Data Set.* Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). *www.childhealthdata.org*

State's Part C eligibility criteria include infants and toddlers who are at risk of having substantial developmental delays

The federal Program for Infants and Toddlers with Disabilities, which is Part C of the Individuals with Disabilities Education Act (IDEA), is a grant program that aids states' provision of early intervention services for infants and toddlers with disabilities, ages 0–2.[99]

Under IDEA Part C, states provide services to children who are experiencing developmental delays and children who have been diagnosed with a mental or physical condition putting them at high risk for developmental delay.[100] States vary in their eligibility criteria for Part C services, their inclusion of "at-risk infants and toddlers," and/or their way of defining "at-risk infants and toddlers." Among states that have included "at-risk" as part of their eligibility criteria, these conditions may include established risk, biological or medical risk, or environmental risk.

States reported whether their Part C eligibility criteria include "at-risk" children as eligible for IDEA Part C services and whether they serve "at-risk" children in their Annual Progress Reports. Section 618 data was used to cross-check whether states' eligibility criteria include "at-risk" children. Data reflect fiscal year 2019–2020.

99 Ibid.

100 Shackelford, J. (2002). *State and jurisdictional eligibility definitions for infants and toddlers with disabilities under IDEA.* NECTAC Notes. https://files.eric.ed.gov/fulltext/ED471884.pdf

Sources: The Office of Special Education Programs (OSEP). (2021). *2021 SPP/APR and State Determination Letters PART C.* https://sites.ed.gov/idea/spp-apr-letters

U.S. Department of Education. (2021). *IDEA Section 618 Data Products: State Level data files: Part C: 2019-20 child count and settings.* https://www2.ed.gov/programs/osepidea/618-data/state-level-data-files/index.html#cccs

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Percentage of infants/toddlers receiving services under the Individuals with Disabilities Education Act Part C

Early intervention services, also known as the Program for Infants and Toddlers with Disabilities, provide services for infants and toddlers with disabilities and their families.101 In some states, eligibility extends to those who are at risk of developing a disability. States' eligibility criteria for early intervention services vary, as do the services they offer.

The numerator is the cumulative number of infants and toddlers with disabilities ages 0–2 who received early intervention services under IDEA, Part C during the most recent 12-month period for which data are available. The denominator is the number of children ages 0–2 in the population. The data reflect 2019.

Source: U.S. Department of Education. (2020). *IDEA Section 618 Data Products: Static tables. Part C Child count and settings.* https://www2.ed.gov/programs/osepidea/618-data/static-tables/index.html

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Timeliness of Part C services

Individual Family Service Plans (IFSPs) are early intervention plans for children, ages 0–3, who qualify under the Individuals with Disabilities Education Act (IDEA). The IFSP documents the child's level of development, desired outcomes, and services to meet those goals. It is unique in that it uses a family-focused lens. This approach requires a partnership between the family and professionals to create an early intervention that is respectful of the child's and family's values and practices.[102]

The federal Program for Infants and Toddlers with Disabilities (Part C of IDEA) requires that the initial evaluation, assessment of the family and child, and an initial IFSP meeting take place within 45 days of receiving a child's referral.[103]

The denominator is the number of eligible infants and toddlers evaluated and assessed for whom an initial IFSP meeting was required to be conducted. The numerator is the number of eligible infants and toddlers with IFSPs for whom an initial evaluation and assessment and an initial IFSP meeting was conducted within Part C's 45-day timeline. Infants and toddlers whose services were delayed due to exceptional family circumstances are counted as meeting the 45-day timeline.

Source: The Office of Special Education Programs. (OSEP) (2021). *2021 SPP/APR and State Determination Letters PART C.* https://sites.ed.gov/idea/spp-apr-letters

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101 Early Childhood Technical Assistance Center. *Part C of IDEA.* http://ectacenter.org/partc/partc.asp#overview

102 Minke, K. M., & Scott, M. M. (1993). The development of individualized family service plans: Roles for parents and staff. *The Journal of Special Education*, *27*(1), 82-106. https://eric.ed.gov/?id=EJ465360

103 Individuals with Disabilities Education Act, 20 U.S.C. § 303.310 (2014). https://sites.ed.gov/idea/regs/c/d/303.310

Number of infants/toddlers

We use vintage 2020 population estimates for the number of infants and toddlers in the United States. The numbers are produced by the Census Bureau by adding births and net migration, and subtracting deaths from the results of the 2010 Census. The 2020 Census results were not used for this calculation.

Source: U.S. Census Bureau, Population Division. (2020). *Annual state resident population estimates for 6 race groups (5 race alone groups and two or more races) by age, sex, and Hispanic origin: April 1, 2020 to July 1, 2020.* https://www.census.gov/programs-surveys/popest/technical-documentation/research/evaluation-estimates/2020-evaluation-estimates/2010s-state-detail.html

Percentage of infant/toddler population

The denominator is the total population of all ages, based on the Census Bureau's vintage 2020 population estimates. The numerator is the population ages 0–2. The numbers are produced by the Census Bureau by adding births and net migration, and subtracting deaths from the results of the 2010 Census. The 2020 Census results were not used for this calculation.

Source: U.S. Census Bureau, Population Division. (2020). *Annual state resident population estimates for 6 race groups (5 race alone groups and two or more races) by age, sex, and Hispanic origin: April 1, 2020 to July 1, 2020.* https://www.census.gov/programs-surveys/popest/technical-documentation/research/evaluation-estimates/2020-evaluation-estimates/2010s-state-detail.html

Percentage of infants/toddlers who are Hispanic

The denominator is the total population ages 0–2, based on the Census Bureau's vintage 2020 population estimates. The numerator is the total Hispanic population ages 0–2. Hispanic origin is considered an ethnicity, not a race, and Hispanic individuals may be of any race. The numbers are produced by the Census Bureau by adding births and net migration, and subtracting deaths from the results of the 2010 Census. The 2020 Census results were not used for this calculation.

Source: U.S. Census Bureau, Population Division. (2020). *Annual state resident population estimates for 6 race groups (5 race alone groups and two or more races) by age, sex, and Hispanic origin: April 1, 2020 to July 1, 2020.* https://www.census.gov/programs-surveys/popest/technical-documentation/research/evaluation-estimates/2020-evaluation-estimates/2010s-state-detail.html

Percentage of infants/toddlers who are non-Hispanic White

The denominator is the total population ages 0–2, based on the Census Bureau's vintage 2020 population estimates. The numerator is the non-Hispanic White population ages 0–2. Hispanic origin is considered an ethnicity, not a race, and Hispanic individuals may be of any race. The numbers are produced by the Census Bureau by adding births and net migration, and subtracting deaths from the results of the 2010 Census. The 2020 Census results were not used for this calculation.

Source: U.S. Census Bureau, Population Division. (2020). *Annual state resident population estimates for 6 race groups (5 race alone groups and two or more races) by age, sex, and Hispanic origin: April 1, 2020 to July 1, 2020.* https://www.census.gov/programs-surveys/popest/technical-documentation/research/evaluation-estimates/2020-evaluation-estimates/2010s-state-detail.html

Percentage of infants/toddlers who are non-Hispanic Black

The denominator is the total population ages 0–2, based on the Census Bureau's vintage 2020 population estimates. The numerator is the non-Hispanic Black population ages 0–2. Hispanic origin is considered an ethnicity, not a race, and Hispanic individuals may be of any race. The numbers are produced by the Census Bureau by adding births and net migration, and subtracting deaths from the results of the 2010 Census. The 2020 Census results were not used for this calculation.

Source: U.S. Census Bureau, Population Division. (2020). *Annual state resident population estimates for 6 race groups (5 race alone groups and two or more races) by age, sex, and Hispanic origin: April 1, 2020 to July 1, 2020.* https://www.census.gov/programs-surveys/popest/technical-documentation/research/evaluation-estimates/2020-evaluation-estimates/2010s-state-detail.html

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Percentage of infants/toddlers who are non-Hispanic Asian

The denominator is the total population ages 0–2, based on the Census Bureau's vintage 2020 population estimates. The numerator is the non-Hispanic Asian population ages 0–2. Hispanic origin is considered an ethnicity, not a race, and Hispanic individuals may be of any race. The numbers are produced by the Census Bureau by adding births and net migration, and subtracting deaths from the results of the 2010 Census. The 2020 Census results were not used for this calculation.

Source: U.S. Census Bureau, Population Division. (2020). *Annual state resident population estimates for 6 race groups (5 race alone groups and two or more races) by age, sex, and Hispanic origin: April 1, 2020 to July 1, 2020.* https://www.census.gov/programs-surveys/popest/technical-documentation/research/evaluation-estimates/2020-evaluation-estimates/2010s-state-detail.html

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Percentage of infants/toddlers who are non-Hispanic American Indian or Alaska Native

The denominator is the total population ages 0–2, based on the Census Bureau's vintage 2020 population estimates. The numerator is the non-Hispanic American Indian or Alaska Native population ages 0–2. Hispanic origin is considered an ethnicity, not a race, and Hispanic individuals may be of any race. The numbers are produced by the Census Bureau by adding births and net migration, and subtracting deaths from the results of the 2010 Census. The 2020 Census results were not used for this calculation.

Source: U.S. Census Bureau, Population Division. (2020). *Annual state resident population estimates for 6 race groups (5 race alone groups and two or more races) by age, sex, and Hispanic origin: April 1, 2020 to July 1, 2020.* https://www.census.gov/programs-surveys/popest/technical-documentation/research/evaluation-estimates/2020-evaluation-estimates/2010s-state-detail.html

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Percentage of infants/toddlers who are non-Hispanic Native Hawaiian or Pacific Islander

The denominator is the total population ages 0–2, based on the Census Bureau's vintage 2020 population estimates. The numerator is the non-Hispanic Native Hawaiian or other Pacific Islander population ages 0–2. Hispanic origin is considered an ethnicity, not a race, and Hispanic individuals may be of any race. The numbers are produced by the Census Bureau by adding births and net migration, and subtracting deaths from the results of the 2010 Census. The 2020 Census results were not used for this calculation.

Source: U.S. Census Bureau, Population Division. (2020). *Annual state resident population estimates for 6 race groups (5 race alone groups and two or more races) by age, sex, and Hispanic origin: April 1, 2020 to July 1, 2020.* https://www.census.gov/programs-surveys/popest/technical-documentation/research/evaluation-estimates/2020-evaluation-estimates/2010s-state-detail.html

Percentage of infants/toddlers who are non-Hispanic multiple races

The denominator is the total population ages 0–2, based on the Census Bureau's vintage 2020 population estimates. The numerator is the non-Hispanic population of multiple races ages 0–2. Hispanic origin is considered an ethnicity, not a race, and Hispanic individuals may be of any race. The numbers are produced by the Census Bureau by adding births and net migration, and subtracting deaths from the results of the 2010 Census. The 2020 Census results were not used for this calculation.

Source: U.S. Census Bureau, Population Division. (2020). *Annual state resident population estimates for 6 race groups (5 race alone groups and two or more races) by age, sex, and Hispanic origin: April 1, 2020 to July 1, 2020.* https://www.census.gov/programs-surveys/popest/technical-documentation/research/evaluation-estimates/2020-evaluation-estimates/2010s-state-detail.html

Percentage of infants/toddlers living in two-parent families

The denominator is the total number of children ages 0–2. The numerator is those who have two parents present in their household. The definition of parent includes biological as well as social (step or adoptive) parents, and unmarried partners of a parent. Families with two same-sex parents present in the household are included as two-parent families.

This indicator can be disaggregated by race/ethnicity, income, and urbanicity. *Race/ethnicity:* Race/ethnicity is reported by the survey respondent who is likely the child's caregiver. The Current Population Survey (CPS) includes race and ethnicity data for the following single categories as well as specific combinations for two or three as well as specific combinations for two or three categories and unspecified combinations of the races: White only, Black or African American only, American Indian or Alaska Native only, Asian only, Native Hawaiian or other Pacific Islander only. Ethnicity is asked as a separate question. Responses of Mexican, Puerto Rican, Cuban, Dominican, Salvadoran, Other Hispanic, Central American (excluding Salvadoran), and South American are coded as Hispanic, regardless of response to the race item. We then group the remaining non-Hispanic respondents into the following race categories for analyses: non-Hispanic White, non-Hispanic Black, non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, non-Hispanic Hawaiian or Pacific Islander, and non-Hispanic two or more races. *Income:* Income is asked only on the March Annual Social and Economic (ASEC) supplement of the CPS. Total family income is divided by the official poverty rate cutoff provided by CPS to calculate the ratio of family income to the federal poverty level. Infants and toddlers are considered to live in low-income families if this ratio is less than 2. Infants and toddlers are considered to live in non-low-income families if their family's total income is at least twice the federal poverty level. *Urbanicity:* Metropolitan (urban) areas include central cities, metro areas outside of central cities, and metro areas with central city status unknown. Non-metropolitan (rural) areas are areas outside of metropolitan areas.

Source: Flood, S., King, M., Rodgers, R., Ruggles, S. & Warren, J.R. (2020). *Current Population Survey 2020 (IPUMS, Current Population Survey: Version 8.0)* [Data set]. IPUMS. https://doi.org/10.18128/D030.V8.0

Percentage of infants/toddlers living in one-parent families

The denominator is the total number of children ages 0–2. The numerator is the number of children ages 0–2 who have one parent present in their household. The definition of parent includes biological as well as social (step or adoptive) parents.

This indicator can be disaggregated by race/ethnicity, income, and urbanicity. *Race/ethnicity:* Race/ethnicity is reported by the survey respondent who is likely the child's caregiver. The Current Population Survey (CPS) includes race and ethnicity data for the following single categories as well as specific

combinations for two or three as well as specific combinations for two or three categories and unspecified combinations of the races: White only, Black or African American only, American Indian or Alaska Native only, Asian only, Native Hawaiian or other Pacific Islander only. Ethnicity is asked as a separate question. Responses of Mexican, Puerto Rican, Cuban, Dominican, Salvadoran, other Hispanic, Central American (excluding Salvadoran), and South American are coded as Hispanic, regardless of response to the race item. We then group the remaining non-Hispanic respondents into the following race categories for analyses: non-Hispanic White, non-Hispanic Black, non-Hispanic American Indian and Alaska Native, non-Hispanic Asian, non-Hispanic Hawaiian and Pacific Islander, and non-Hispanic two or more races. *Income:* Income is asked only on the March Annual Social and Economic (ASEC) supplement of the CPS. Total family income is divided by the official poverty rate cutoff provided by CPS to calculate the ratio of family income to the federal poverty level. Infants and toddlers are considered to live in low-income families if this ratio is less than 2. Infants and toddlers are considered to live in non-low-income families if their family's total income is at least twice the federal poverty level. *Urbanicity:* Metropolitan (urban) areas include central cities, metro areas outside of central cities, and metro areas with central city status unknown. Non-metropolitan (rural) areas are areas outside of metropolitan areas.

Source: Flood, S., King, M., Rodgers, R., Ruggles, S. & Warren, J.R. (2020). *Current Population Survey 2020 (IPUMS, Current Population Survey: Version 8.0)* [Data set]. IPUMS. https://doi.org/10.18128/D030.V8.0

Percentage of infants/toddlers living with no parents

The denominator is the total number of children ages 0–2. The numerator is those who have no parents present in their household. The definition of parent includes biological as well as social (step or adoptive) parents.

This indicator can be disaggregated by race/ethnicity, income, and urbanicity. *Race/ethnicity:* Race/ethnicity is reported by the survey respondent who is likely the child's caregiver. The Current Population Survey (CPS) includes race and ethnicity data for the following single categories as well as specific combinations for two or three as well as specific combinations for two or three categories and unspecified combinations of the races: White only, Black or African American only, American Indian or Alaska Native only, Asian only, Native Hawaiian or other Pacific Islander only. Ethnicity is asked as a separate question. Responses of Mexican, Puerto Rican, Cuban, Dominican, Salvadoran, other Hispanic, Central American (excluding Salvadoran), and South American are coded as Hispanic, regardless of response to the race item. We then group the remaining non-Hispanic respondents into the following race categories for analyses: non-Hispanic White, non-Hispanic Black, non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, non-Hispanic Hawaiian or Pacific Islander, and non-Hispanic two or more races. *Income:* Income is asked only on the March Annual Social and Economic (ASEC) supplement of the CPS. Total family income is divided by the official poverty rate cutoff provided by CPS to calculate the ratio of family income to the federal poverty level. Infants and toddlers are considered to live in low-income families if this ratio is less than 2. Infants and toddlers are considered to live in non-low-income families if their family's total income is at least twice the federal poverty level. *Urbanicity:* Metropolitan (urban) areas include central cities, metro areas outside of central cities, and metro areas with central city status unknown. Non-metropolitan (rural) areas are areas outside of metropolitan areas.

Source: Flood, S., King, M., Rodgers, R., Ruggles, S. & Warren, J.R. (2020). *Current Population Survey 2020 (IPUMS, Current Population Survey: Version 8.0)* [Data set]. IPUMS. https://doi.org/10.18128/D030.V8.0

Percentage of infants/toddlers living in grandparent-headed households

The denominator is the total number of children ages 0–2. The numerator is those who live in a household headed by their grandparent. Note that this classification is not mutually exclusive with other family structure categories.

This indicator can be disaggregated by race/ethnicity, income, and urbanicity. *Race/ethnicity:* Race/ethnicity is reported by the survey respondent who is likely the child's caregiver. The Current Population Survey (CPS) includes race and ethnicity data for the following single categories as well as specific combinations for two or three as well as specific combinations for two or three categories and unspecified combinations of the races: White only, Black or African American only, American Indian or Alaska Native only, Asian only, Native Hawaiian or other Pacific Islander only. Ethnicity is asked as a separate question. Responses of Mexican, Puerto Rican, Cuban, Dominican, Salvadoran, other Hispanic, Central American (excluding Salvadoran), and South American are coded as Hispanic, regardless of response to the race item. We then group the remaining non-Hispanic respondents into the following race categories for analyses: non-Hispanic White, non-Hispanic Black, non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, non-Hispanic Hawaiian or Pacific Islander, and non-Hispanic two or more races. *Income:* Income is asked only on the March Annual Social and Economic (ASEC) supplement of the CPS. Total family income is divided by the official poverty rate cutoff provided by CPS to calculate the ratio of family income to the federal poverty level. Infants and toddlers are considered to live in low-income families if this ratio is less than 2. Infants and toddlers are considered to live in non-low-income families if their family's total income is at least twice the federal poverty level. *Urbanicity:* Metropolitan (urban) areas include central cities, metro areas outside of central cities, and metro areas with central city status unknown. Non-metropolitan (rural) areas are areas outside of metropolitan areas.

Source: Flood, S., King, M., Rodgers, R., Ruggles, S. & Warren, J.R. (2020). *Current Population Survey 2020 (IPUMS, Current Population Survey: Version 8.0)* [Data set]. IPUMS. https://doi.org/10.18128/D030.V8.0

Percentage of infants/toddlers who have mothers in the labor force

The denominator is the number of children ages 0–2 who live with their mothers. The numerator is those whose mother is in the labor force (either employed or unemployed but looking for work). People in the armed forces are not in the universe for labor force participation. If there are two mothers in the household, the labor force participation of only the first mother is considered. Mothers are all age 16 or older.

This indicator can be disaggregated by race/ethnicity, income, and urbanicity. *Race/ethnicity:* Race/ethnicity is reported by the survey respondent who is likely the child's caregiver. The Current Population Survey (CPS) includes race and ethnicity data for the following single categories as well as specific combinations for two or three as well as specific combinations for two or three categories and unspecified combinations of the races: White only, Black or African American only, American Indian or Alaska Native only, Asian only, Native Hawaiian or other Pacific Islander only. Ethnicity is asked as a separate question. Responses of Mexican, Puerto Rican, Cuban, Dominican, Salvadoran, other Hispanic, Central American (excluding Salvadoran), and South American are coded as Hispanic, regardless of response to the race item. We then group the remaining non-Hispanic respondents into the following race categories for analyses: non-Hispanic White, non-Hispanic Black, non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, non-Hispanic Hawaiian or Pacific Islander, and non-Hispanic two or more races. *Income:* Income is asked only on the March Annual Social and Economic (ASEC) supplement of the CPS. Total family income is divided by the official poverty rate cutoff provided by CPS to calculate the ratio of family income to the federal poverty level. Infants and toddlers are considered to live in low-income families if this ratio is less than 2. Infants and toddlers are considered to live in non-low-income families if their family's total income is at least twice the federal poverty level. *Urbanicity:* Metropolitan (urban) areas include

central cities, metro areas outside of central cities, and metro areas with central city status unknown. Non-metropolitan (rural) areas are areas outside of metropolitan areas.

Source: Flood, S., King, M., Rodgers, R., Ruggles, S. & Warren, J.R. (2020). *Current Population Survey 2020 (IPUMS, Current Population Survey: Version 8.0)* [Data set]. IPUMS. https://doi.org/10.18128/D030.V8.0

Percentage of infants/toddlers who live with no working parents

The denominator is the total number of children ages 0–2 who live with at least one parent. Parents include those in the armed forces. The numerator is the number of children ages 0–2 who live with only disconnected parents (i.e., parents who were not working in the past 12 months, and were not working for a reason other than going to school). All residential parents must be disconnected, according to the above definition, in order to qualify as living with disconnected parents. For the *State of Babies Yearbook: 2022,* we pooled three years of data (2018–2020) to increase reliability. For the 2020 data, we used weights adjusted to account for non-random non-response related to COVID-19.

This indicator can be disaggregated by race/ethnicity, income, and urbanicity. *Race/ethnicity:* Race/ethnicity is reported by the survey respondent who is likely the child's caregiver. The Current Population Survey (CPS) includes race and ethnicity data for the following single categories as well as specific combinations for two or three as well as specific combinations for two or three categories and unspecified combinations of the races: White only, Black or African American only, American Indian or Alaska Native only, Asian only, Native Hawaiian or other Pacific Islander only. Ethnicity is asked as a separate question. Responses of Mexican, Puerto Rican, Cuban, Dominican, Salvadoran, other Hispanic, Central American (excluding Salvadoran), and South American are coded as Hispanic, regardless of response to the race item. We then group the remaining non-Hispanic respondents into the following race categories for analyses: non-Hispanic White, non-Hispanic Black, non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, non-Hispanic Hawaiian or Pacific Islander, and non-Hispanic two or more races. *Income:* Income is asked only on the March Annual Social and Economic (ASEC) supplement of the CPS. Total family income is divided by the official poverty rate cutoff provided by CPS to calculate the ratio of family income to the federal poverty level. Infants and toddlers are considered to live in low-income families if this ratio is less than 2. Infants and toddlers are considered to live in non-low-income families if their family's total income is at least twice the federal poverty level. *Urbanicity:* Metropolitan (urban) areas include central cities, metro areas outside of central cities, and metro areas with central city status unknown. Non-metropolitan (rural) areas are areas outside of metropolitan areas.

Source: Flood, S., King, M., Rodgers, R., Ruggles, S., Warren, J.R. & Westberry, M. (2021). *Current Population Survey (IPUMS, Current Population Survey: Version 9.0)* [Data set]. IPUMS. https://doi.org/10.18128/D030.V9.0

Percentage of infants/toddlers below the poverty line who live with no working parents

This is a new indicator for the *State of Babies Yearbook: 2022*. The denominator is the total number of children ages 0–2 below the poverty line who live with at least one parent. The numerator is the number of children ages 0–2 below the poverty line who live with only disconnected parents (i.e., parents who were not working in the past 12 months, and were not working for a reason other than going to school). All residential parents must be disconnected, according to the above definition, in order to qualify as living with disconnected parents. Due to small state sample sizes, only the national estimate is presented. We used weights adjusted to account for non-random non-response related to COVID-19 in the 2020 Current Population Survey (CPS).

This indicator can be disaggregated by race/ethnicity and urbanicity. *Race/ethnicity:* Race/ethnicity is reported by the survey respondent who is likely the child's caregiver. The CPS includes race and ethnicity data for the following single categories as well as specific combinations for two or three as well as specific combinations for two or three categories and unspecified combinations of the races: White only, Black or African American only, American Indian or Alaska Native only, Asian only, Native Hawaiian or other Pacific Islander only. Ethnicity is asked as a separate question. Responses of Mexican, Puerto Rican, Cuban, Dominican, Salvadoran, other Hispanic, Central American (excluding Salvadoran), and South American are coded as Hispanic, regardless of response to the race item. We then group the remaining non-Hispanic respondents into the following race categories for analyses: non-Hispanic White, non-Hispanic Black, non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, non-Hispanic Hawaiian or Pacific Islander, and non-Hispanic two or more races. *Urbanicity:* Metropolitan areas include central cities, metro areas outside of central cities, and metro areas with central city status unknown. Non-metropolitan areas are areas outside of metropolitan areas.

Source: Flood, S., King, M., Rodgers, R., Ruggles, S. & Warren, J.R. (2020). *Current Population Survey 2020 (IPUMS, Current Population Survey: Version 8.0)* [Data set]. IPUMS. *https://doi.org/10.18128/D030.V8.0*

Percentage of infants/toddlers living in families with incomes below 100 percent of the federal poverty level

The denominator is the total number of children ages 0–2. The numerator is those who live in families with incomes below 100 percent of the federal poverty level. Note that this poverty rate does not match the rates published by the Census Bureau, because the public-use version of the American Community Survey is not complete.

This indicator was also reported by race/ethnicity. Survey respondents (typically parents) report the infant or toddler's race and ethnicity. Respondents can select one or more of the following groups: White, Black or African American, American Indian or Alaska Native, Asian Indian, Japanese, Chinese, Korean, Filipino, Vietnamese, other Asian, Native Hawaiian, Guamanian or Chamorro, Samoan, other Pacific Islander, and/or some other race. Ethnicity is asked as a separate question. Responses of Mexican, Puerto Rican, Cuban, and other Hispanic are coded as Hispanic, regardless of response to the race item. We then group the remaining non-Hispanic respondents into the following race categories for analyses: non-Hispanic White, non-Hispanic Black, non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, non-Hispanic Other, and non-Hispanic multiple races.

Source: Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E. Jose Pacas, J. & Sobek, M. (2020). *American Community Survey 2019, one-year estimates.* (IPUMS USA: Version 10.0) [Data set]. IPUMS. *https://doi.org/10.18128/D010.V10.0*

Percentage of infants/toddlers living in families with incomes between 100–199 percent of the federal poverty level

The denominator is the total number of children ages 0–2. The numerator is those who live in families with incomes at or above 100 percent and below 200 percent of the federal poverty level. Note that this poverty rate does not match the rates published by the Census Bureau, because the public use version of the American Community Survey is not complete.

This indicator was also reported by race/ethnicity. Survey respondents (typically parents) report the infant or toddler's race and ethnicity. Respondents can select one or more of the following groups: White, Black or African American, American Indian or Alaska Native, Asian Indian, Japanese, Chinese, Korean, Filipino, Vietnamese, other Asian, Native Hawaiian, Guamanian or Chamorro, Samoan, other Pacific Islander, and/or some other race. Ethnicity is asked as a separate question. Responses of Mexican, Puerto Rican, Cuban, and other Hispanic are coded as Hispanic, regardless of response to the race item. We then group the remaining non-Hispanic respondents into the following race categories for analyses: non-Hispanic White, non-Hispanic Black, non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, non-Hispanic Other, and non-Hispanic multiple races.

Source: Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E. Jose Pacas, J. & Sobek, M. (2020). *American Community Survey 2019, one-year estimates.* (IPUMS USA: Version 10.0) [Data set]. IPUMS. https://doi.org/10.18128/D010.V10.0

Percentage of infants/toddlers living in families with incomes at or above 200 percent of the federal poverty level

The denominator is the total number of children ages 0–2. The numerator is those who live in families with incomes at or above 200 percent of the federal poverty level. Note that this poverty rate does not match the rates published by the Census Bureau, because the public use version of the American Community Survey is not complete.

This indicator was also reported by race/ethnicity. Survey respondents (typically parents) report the infant or toddler's race and ethnicity. Respondents can select one or more of the following groups: White, Black or African American, American Indian or Alaska Native, Asian Indian, Japanese, Chinese, Korean, Filipino, Vietnamese, other Asian, Native Hawaiian, Guamanian or Chamorro, Samoan, other Pacific Islander, and/or some other race. Ethnicity is asked as a separate question. Responses of Mexican, Puerto Rican, Cuban, and other Hispanic are coded as Hispanic, regardless of response to the race item. We then group the remaining non-Hispanic respondents into the following race categories for analyses: non-Hispanic White, non-Hispanic Black, non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, non-Hispanic Other, and non-Hispanic multiple races.

Source: Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E. Jose Pacas, J. & Sobek, M. (2020). *American Community Survey 2019, one-year estimates.* (IPUMS USA: Version 10.0) [Data set]. IPUMS. https://doi.org/10.18128/D010.V10.0

Percentage of infants/toddlers living in families with incomes below 150 percent of state median income

This is a new indicator for the *State of Babies Yearbook: 2022.* The denominator is the total number of children ages 0–2. The numerator for this indicator is the number of children ages 0–2 with family incomes less than or equal to 150 percent of their state's median income as of January 2018 to December 2019. To calculate the numerator, we took the following steps: a) obtained the state median incomes for four-person families, by state as of October 1, 2018 to September 30, 2019, from the Low Income Home Energy Assistance Information Memorandum; b) multiplied those numbers by 1.5 to get 150 percent of the state median income for four-person families; c) calculated 150 percent of the state median income for families of different configurations, using the conversion provided in a table footnote in the Low-Income Home Energy Assistance Information Memorandum; d) applied the relevant state median income threshold to each respondent in the 2019 one-year American Community Survey (ACS), based on their

state and family size; and e) counted respondents whose family income was less than or equal to the 150 percent state median income threshold.

This indicator can be disaggregated by race/ethnicity and urbanicity. *Race/ethnicity:* Survey respondents (typically parents) report the infant or toddler's race and ethnicity. Respondents can select one or more of the following groups: White, Black or African American, American Indian or Alaska Native, Asian Indian, Japanese, Chinese, Korean, Filipino, Vietnamese, Other Asian, Native Hawaiian, Guamanian or Chamorro, Samoan, other Pacific Islander, and/or some other race. Ethnicity is asked as a separate question. Responses of Mexican, Puerto Rican, Cuban, and Other Hispanic are coded as Hispanic, regardless of response to the race item. We then group the remaining non-Hispanic respondents into the following race categories for analyses: Non-Hispanic White, Non-Hispanic Black, Non-Hispanic American Indian/Alaska Native, Non-Hispanic Asian, Non-Hispanic Hawaiian/Pacific Islander, Non-Hispanic Other, and Non-Hispanic multiple races. *Urbanicity:* Metropolitan areas include central/principal cities, metro areas outside of central/principal cities, and metro areas with central/principal city status indeterminable. Non-metropolitan areas are areas outside of metropolitan areas. Cases where metropolitan status is indeterminable or mixed are excluded from the urbanicity subgroup analysis.

Sources: Ruggles, S., Flood, S., Foster, S., Goeken, R., Pacas, J., Shouweilter, M., & Sobek, M. (2020). *American Community Survey 2019, one-year estimates.* (IPUMS USA: Version 11.0) [Data set]. *https://doi.org/10.18128/D010.V10.0*

Administration for Children and Families, Office of Community Services. (2020). *The Low-Income Home Energy Assistance Program IM 2018-3 state median income estimates for optional use in FY 2018 and mandatory use in FY 2019. https://www.acf.hhs.gov/ocs/policy-guidance/liheap-im-2018-3-state-median-income-estimates-optional-use-fy-2018-and*

Percentage of infants/toddlers living outside of metro areas

The denominator is the total number of children ages 0–2. The numerator is those who live outside of metro areas. Metropolitan areas include central/principal cities, metro areas outside of central/principal cities, and metro areas with central/principal city status indeterminable. Non-metropolitan areas are areas outside of metropolitan areas. Cases whose metropolitan status is indeterminable or mixed are excluded from the urbanicity subgroup analysis.

Source: Ruggles, S., Flood, S., Goeken, R., Grover, J., Meyer, E., Pacas, J. & Sobek, M. (2020). *American Community Survey 2019, one-year estimates. (IPUMS USA: Version 10.0)* [Data set]. IPUMS. *https://doi.org/10.18128/D010.V10.0*

Appendix C. Methodology

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ABOUT THE SELECTED INDICATORS

THE SELECTION PROCESS

The indicators used for the *State of Babies Yearbook* provide a snapshot of the state of babies across three domains: Good Health, Strong Families, and Positive Early Learning Experiences. While there are many measures we might have included in each of these domains in the 2022 *Yearbook*, we limited our selection, as we did for previous editions, to those indicators that meet the following three criteria:

- They draw from a reliable, ongoing source that yields data for all 50 states.
- They are of central importance to the domain, either because they directly measure a component of well-being or are policy choices strongly linked to well-being.
- They can be readily understood by a broad audience.

The resulting set of 63 indicators address the following topics, by domain and subdomain:

Domain	Subdomain Topics Covered by the Selected Indicators
Good Health	• Health Care Coverage and Affordability • Nutrition • Maternal Health • Children's Health • Children's Mental Health Services
Strong Families	• Basic Needs • Child Well-being and Resilience • Supportive Policies
Positive Early Learning Experiences	• Elements that Support Child Care Quality • Activities that Support Early Learning • Access to Early Learning Programs • Early Intervention

In making our selection of indicators for the inaugural *State of Babies Yearbook: 2019,* ZERO TO THREE and Child Trends reviewed potential indicators and obtained input from a panel of experts in the field.

As new data become available, we continue to refine indicators and incorporate additional indicators. In the second edition of the report, we added more than a dozen additional policy indicators. In the third edition, we added four additional indicators focusing on the Good Health domain. In this fourth edition, we have added one additional indicator focusing on the Good Health domain and two additional contextual indicators in the Demographics domain. See the Indicator Dictionary in Appendix B for a list of changes to indicators between reports, and the full list of indicators.

Note that many of the indicators here are interrelated within and across the three domains of Good Health, Strong Families, and Positive Early Learning Experiences. We discourage users from focusing on any single indicator in isolation. For instance, when it comes to child care: access, affordability, and quality are three dynamically related legs of a stool. All states struggle with the trade-offs that come with policies that emphasize one or more indicators at the expense of the others.

To round out the policy indicators, we turned to the framework created by ZERO TO THREE and the Center for Law and Social Policy in Building Strong Foundations: Advancing Comprehensive Policies for infants, Toddlers, and Families, a project that laid out a core set of policies to advance the well-being of very young children and their families. We added indicators that determined the absence or presence in states of key policies identified in that framework as forming the basis of strong support for early development and thriving families.

In making our final indicator selection, ZERO TO THREE and Child Trends again obtained input from a panel of experts in the field. Panelists also provided feedback on our approach to ranking states. We know some important topics are absent here, especially measures of positive social-emotional development. In these cases, we still have to acknowledge that available data do not meet our criteria.[1] Other topics may have to wait until improvements are made in measures used to collect data about young children. As noted above, the *State of Babies Yearbook: 2019* was a starting place and we intend to continue to refine indicators in future editions and consider creative ways to measure state policies.

Subgroup analyses

We have deepened our emphasis on equity throughout the *Yearbook* and present results disaggregated by race/ethnicity, urbanicity, and family income, wherever data allow. Beginning with indicator updates for the 2021 *Yearbook*, we are presenting data for all of the racial and ethnic subgroups that each data source allows. We are now including estimates for American Indian and Alaska Native, Native Hawaiian and Pacific Islander, and multiracial groups wherever possible instead of aggregating them into an "Other" category. These upgrades are an iterative process over time. As new data become available and we update indicators, we are incorporating these improvements.

Incorporating information on territories

For the 2022 *Yearbook*, we have taken the first step toward incorporating information on U.S. territories. For this year's *Yearbook*, we have added data for Puerto Rico where it is available. Unless otherwise specified, national totals represent the continental United States, Alaska, and Hawaii. Because many data sources do not contain information on Puerto Rico, it is excluded from the ranking process.

Cautions for interpretation of the data

Across indicators, we have suppressed estimates that are based on a small number of infants and toddlers. For indicators based on survey data, we suppress estimates based on less than 30 survey respondents. Additionally, estimates using data from the Adoption and Foster Care Analysis and Reporting System (AFCARS) are suppressed if the numerator has less than 10 respondents to protect children's identity. We have also flagged estimates as unreliable when estimates are unstable—when their 95 percent confidence interval is larger than 20 percentage points—or when all respondents are in one category (e.g., the state has a rate of 100 percent or 0 percent). It is especially important to use caution when interpreting the subgroup analyses. As we present more subgroup data, our estimates are based on fewer survey respondents. Readers should also use caution when comparing estimates across states and across time with these flags. Please see the Indicator Dictionary in Appendix B for details on each indicator.

1 For more information on what data are and are not available, see Ryberg, R., Wiggins, L., Daily, S., Moore, K. A., Piña, G., & Klin, A. (Forthcoming). Measuring state-level infant and toddler well-being in the United States: Gaps in data lead to gaps in understanding. *Child Indicators Research.*

THE STATE RANKING PROCESS

Indicators used in the ranking

Good Health		Included in ranking
Health Care Coverage and Affordability subdomain	Children's Health Insurance Program (CHIP) unborn child option	
	Eligibility limit (% FPL) for pregnant women in Medicaid	✔
	Uninsured low-income infants and toddlers	✔
	Medicaid expansion state	✔
	Medical home	✔
	Postpartum extension of Medicaid coverage	
Nutrition subdomain	Infants ever breastfed	
	Infants breastfed at 6 months	✔
	High weight-for-length	
	WIC coverage	✔
Maternal Health subdomain	Late or no prenatal care received	✔
	Maternal mortality (deaths per 100,000 live births)	
	Mothers reporting less than optimal mental health	✔
	Accommodations for pregnant workers, protection from job loss	✔
	State Medicaid policy for maternal depression screening in well-child visits	✔
Children's Health subdomain	Babies born preterm	✔
	Babies with low birthweight	✔
	Infant mortality rate (deaths per 1,000 live births)	✔
	Preventive dental care received	✔
	Preventive medical care received	✔
	Recommended vaccines received	✔
Children's Mental Health Services subdomain	Medicaid plan covers IECMH services at ECE programs	✔
	Medicaid plan covers IECMH services at home	✔
	Medicaid plan covers IECMH services at pediatric/family medicine practices	✔
	Medicaid plan covers social–emotional screening for young children	✔

Strong Families		Included in ranking
Basic Needs subdomain	TANF benefits receipt among families in poverty	✔
	Housing instability	✔
	Crowded housing	✔
	Unsafe neighborhoods	✔
	Low or very low food security	✔

Child Well-being and Resilience subdomain	Family resilience	✔
	One adverse childhood experience	
	Two or more adverse childhood experiences	✔
	Infant/toddler maltreatment rate (per 1,000 children ages 0–2)	
	Permanency: Adopted	
	Permanency: Guardian	
	Permanency: Relative	
	Permanency: Reunified	
	Removed from home	
	Time in out-of-home placement	
	Potential home visiting beneficiaries served	✔
Supportive Policies subdomain	Paid family leave	✔
	Paid sick time that covers care for child	✔
	State child tax credit	✔
	TANF work exemption	✔
	State earned income tax credit	✔

Positive Early Learning Experiences		**Included in ranking**
Elements that Support Child Care Quality subdomain	Adult/child ratio	✔
	Teacher qualifications	✔
	Group size	✔
	Infant/toddler professional credential	
Activities that Support Early Learning	Parent reads to baby every day	✔
	Parent sings to baby every day	✔
Access to Early Learning Programs subdomain	% income-eligible infants/toddlers with Early Head Start access	✔
	Families above 200% of FPL eligible for child care subsidy	✔
	Allocated CCDBG funds	✔
	State reimburses center-based child care	✔
	Low-/moderate-income infants/toddlers in CCDF-funded care	✔
	Cost of care, as % of income (married families)	
	Cost of care, as % of income (single parents)	
Early Intervention subdomain	Developmental screening received	✔
	At-risk children included in Part C eligibility definition	
	Percentage of infants/toddlers receiving IDEA Part C services	✔
	Timeliness of Part C services	✔

Changes to the ranking in the *State of Babies Yearbook 2022* version

For the *State of Babies Yearbook 2022* we explored ways to improve our current approach to the ranking. We examined the ranking methodology through several mechanisms, such as: two panel discussions with experts and several follow-ups to those discussions; a survey sent to 14 experts on early childhood and related fields asking them to rank the importance of each indicator; a review of relevant literature and similar initiatives that ranked indicators related to children's well-being and policies; and data analysis (e.g., correlations across indicators, principal component analysis, and factor analysis). As a result of all these activities, the *Yearbook's* 2022 ranking presents the following updates:

1. Including new indicators in the ranking that have been added and reported in the *Yearbook* but had not been a part of the ranking process

By domain, the indicators now included in the ranking are:

Health: Preterm births, medical home, pregnant workers protection, and WIC coverage.

Strong Families: State child tax credit, TANF work exemption, and State Earned Income Tax Credit (EITC). Low or very low food insecurity was moved from the Good Health domain to the Strong Families domain.

Positive Early Learning Experiences: Group size requirements meet or exceed EHS standards, adult/child ratio requirements meet or exceed EHS standards, level of teacher qualification required by the state, allocated CCDBG funds, state reimburses center-based child care at/above 75th percentile of market rates, infant eligibility level for child care subsidy above 200% of FPL, and timeliness of Part C services.

2. Renaming subdomains, updating names and location of indicators

Good Health: We changed the name of "Health Care Access and Affordability" to "Health Care Coverage and Affordability" to more accurately describe the indicators related to health insurance coverage. "Child Health" was renamed "Children's Health" and "Infant/Toddler Mental Health" was renamed "Children's Mental Health Services" to describe the indicators' emphasis on services. We also changed the name of the indicator "pregnant worker protection" to "accommodations for pregnant workers, protection from job loss" to more clearly describe the indicator.

Strong Families: "Basic Needs Support" was renamed "Basic Needs" because only one of the indicators refers to supportive services. "Low and very low food insecurity" was moved to the "Basic Needs" subdomain in Strong Families from the Good Health domain since we thought this indicator is more closely related to basic needs than health. The "Child Welfare" subdomain was renamed "Child Well-being and Resilience" to provide a more detailed description of the indicators included within the subdomain. "Infants/toddlers exiting foster care to permanency" was removed from the *Yearbook*. We moved the indicator "potential home visiting beneficiaries served" into the "Child Well-being and Resilience" subdomain since we only have one measure of home visiting and want to avoid having one subdomain with a single indicator.

Positive Early Learning Experiences: We split the previous "Child Care Quality" subdomain into two subdomains: "Activities that Support Early Learning" and "Access to Early Learning Programs." The indicators "low-/moderate-income infants/toddlers in CCDF-funded care," "allocated CCDBG funds," and "state reimburses center-based child care" were included in the "Access to Early Learning Programs" domain. The subdomain "Early Care and Education Opportunities" was renamed "Activities that Support Early Learning" in order to focus on supports for early learning that occur outside of child care settings. In keeping with the new subdomain focus, we moved four indicators from this subdomain into "Access to Early Learning Programs": "families above 200% FPL eligible for child care subsidy," "% income-eligible infants/toddlers with EHS access," "cost of care, as % of income (married families)," and "cost of care, as % of income (single parents)." "Early Intervention and Prevention Services" was renamed "Early Intervention" because the indicators in this subdomain refer to early intervention as opposed to prevention services. After talking to experts on special education/disabilities, we decided to omit the indicator "delay" from this subdomain because of reliability issues.

3. Weighting indicators so that each subdomain is equally represented in the overall domain

Previous versions of the ranking had an implicit weight that was driven by data availability, not by the constructs the ranking aims to measure. The *Yearbook's* 2022 ranking addresses this concern. Previous versions of the ranking used an "equal weighting method"[2] by computing an average domain score of all the indicators comprising each domain, and then computing an average overall score as the mean of the domain scores. This method has the advantage of being transparent, but it does not provide a truly equal weight; the more indicators a domain has, the less their weight will be for each indicator. Moreover, the more indicators measuring a subdomain (e.g., child health within health), the more weight that subdomain will have in the overall ranking.

After consulting with the experts on the advisory panel, the team decided to weight all subdomains equally to avoid giving a larger weight to subdomains and domains with a larger number of indicators. We now compute a score for each subdomain, then an average of subdomain scores as an overall domain score, and finally a ranking score as an average of the domain scores. We found that adding weights did not change the results significantly; for 39 states, the results are the same with and without subdomain weights. This is consistent with previous research.[3]

4. Some indicators included in the 2022 *Yearbook* were not included in the ranking

Good Health: The "Children's Health Insurance Program (CHIP) unborn child option" indicator and the "postpartum extension of Medicaid coverage" indicator were omitted. Including these two indicators would imply equating them to the Medicaid expansion for the Health Care Affordability subdomain, and there is not sufficient evidence around these two policies and child outcomes, unlike the Medicaid expansion. We also omitted "infants ever breastfed" because we have another indicator about breastfeeding at 6 months and "high weight-for-length" since it only applies to a subpopulation within each state (WIC recipients). "Maternal mortality" was not included because estimates cannot be compared between states.

Strong Families: We omitted "Infant/toddler maltreatment rate" because data for this indicator is not comparable across states. "Out of home placements" was excluded due to an unclear relationship with infant and toddler well-being. We excluded the permanency indicators and "removed from home" due to unclear directionality. We also excluded "one adverse childhood experience" because we have another indicator measuring adverse experiences ("two or more adverse childhood experiences").

Positive Early Learning Experiences: We omitted the indicator "infant/toddler professional credential" since we are not aware of research showing that this is a strong predictor of early care quality. We omitted measures of cost of care primarily because the directionality of this indicator is difficult to interpret. Low cost of care might equate to low quality; high cost of care might equate to higher quality. We also removed "state includes 'at-risk' children as eligible for IDEA Part C services or reports that they serve 'at-risk' children" since it is redundant with other measures of access to Part C.

We developed a transparent ranking process to facilitate users' understanding of how states fare on the selected indicators and policy domains. As mentioned in the *Yearbook*, the 2022 version of the ranking adds new indicators, renames subdomains, uses subdomain weights, and excludes some indicators

2 O'hare, W. P. (2015). A research note on statistical methods used to create indices of child well-being. *Child Indicators Research, 8*(2), 279-298. https://doi.org/10.1007/s12187-014-9244-8

3 Ibid.

included in the *State of Babies Yearbook 2022* edition. Despite these changes, the ranking process follows the same three steps used in every version of the *Yearbook:* rescaling the indicators, calculating domain scores, and calculating the state's overall ranking.

Rescaling the indicators

Because indicators vary in their units of measurement, as well as in the range of values observed across the states, their values are standardized (i.e., mathematically transformed to facilitate comparisons across indicators and across states).

The performance of each state on a given indicator is compared with the highest and lowest values, to create a score ranging from 0 to 100.[4]

Score (Rescaled Value) =

[(Observed Value – Lowest Value) / (Highest Value – Lowest Value)] X 100

For indicators (such as "babies with low birthweight") where higher scores mark less desirable outcomes, we adjust the directionality before calculating the score, so that higher scores consistently mark more desirable outcomes, while lower scores are less desirable. For example, the percentage of births with low birthweight was changed to percentage of births that are *not* low birthweight before computing the score. With this adjustment, higher values are more desirable for all indicators.

Policy indicators with "yes" or "no" values (e.g., whether the state has expanded Medicaid), are grouped within a subdomain, and we compute a composite index measuring the percentage of policies a state has enacted. For example, we counted the number of affirmative scores related to the states' provision of mental health services at home, at pediatric/family practices, and at early care and education programs, and expressed the total as a percentage of the possible maximum (three, in this example). A few indicators were coded as a scale; for instance, for "state Medicaid policy for maternal depression screening in well-child visits," we created a scale from 1 to 4, with scores depending on whether such screening was "not covered," "allowed," "recommended," or "required." These values were then transformed to a 0 to 100 scale, as with the other indicators.

Calculating domain scores

To create state-level composite scores for each of the three domains (Good Health, Strong Families, and Positive Early Learning Experiences), we first compute an unweighted average of the scores of the component indicators for each subdomain. We then compute an unweighted average of the subdomain-level scores to obtain the domain score. Likewise, to compute overall state scores, we used an unweighted average of the domain-level scores.

Assigning states to tiers

Once the state-level data for each indicator were rescaled to scores ranging from 0 to 100, we divided the rescaled data into four tiers to show a state's performance on each indicator relative to other states,

4 We used a "min-max" scaling procedure, based on the indicators' maximum and minimum values. We chose this method over Z-scores (another standardization method), as its interpretation is more transparent.

overall, and by domain. These tiers, also referred to as quartiles, represent four roughly equal-size groupings of states, ordered from lowest-performing to next-to-lowest to next-to-highest, to highest-performing. We use the tiering symbols throughout the *Yearbook* to designate a given state's placement in one of the four tiers.

In contrast to individualized state rankings (ranging from 1 to 51), this approach emphasizes that differences between any two states can be relatively minor and/or not statistically significant, and all states have room for improvement. Since most of the indicators are based on survey data, minor differences between states may be within the standard error intrinsic to sample designs. We experimented with different numbers of tiers and found that using four groups yielded statistically significant differences on most of the indicators among states' scores falling in the middle of each group.

Appendix D. State Median Income

ESTIMATED STATE MEDIAN INCOME BY HOUSEHOLD SIZE AND BY STATE, THE DISTRICT OF COLUMBIA, AND PUERTO RICO

FEDERAL FISCAL YEAR 2019

STATES, THE DISTRICT OF COLUMBIA, AND PUERTO RICO	ESTIMATED SMI FOR FOUR-PERSON FAMILIES[i]	60 PERCENT OF STIMATED SMI FOR FOUR-PERSON FAMILIES[ii]	60 PERCENT OF ESTIMATED STATE MEDIAN INCOME					
			1-Person Household	2-Person Household	3-Person Household	4-Person Household	5-Person Household	6-Person Household
Alabama	$70,380	$42,228	$21,959	$28,715	$35,472	$42,228	$48,984	$55,741
Alaska	$100,165	$60,099	$31,251	$40,867	$50,483	$60,099	$69,715	$79,331
Arizona	$71,731	$43,039	$22,380	$29,267	$36,153	$43,039	$49,925	$56,811
Arkansas	$62,957	$37,774	$19,642	$25,686	$31,730	$37,774	$43,818	$49,862
California	$83,490	$50,094	$26,049	$34,064	$42,079	$50,094	$58,109	$66,124
Colorado	$91,226	$54,736	$28,463	$37,220	$45,978	$54,736	$63,494	$72,252
Connecticut	$112,550	$67,530	$35,116	$45,920	$56,725	$67,530	$78,335	$89,140
Delaware	$91,134	$54,680	$28,434	$37,182	$45,931	$54,680	$63,429	$72,178
District of Columbia	$99,095	$59,457	$30,918	$40,431	$49,944	$59,457	$68,970	$78,483
Florida	$70,094	$42,056	$21,869	$28,598	$35,327	$42,056	$48,785	$55,514
Georgia	$73,201	$43,921	$22,839	$29,866	$36,894	$43,921	$50,948	$57,976
Hawaii	$93,785	$56,271	$29,261	$38,264	$47,268	$56,271	$65,274	$74,278
Idaho	$66,310	$39,786	$20,689	$27,054	$33,420	$39,786	$46,152	$52,518
Illinois	$89,400	$53,640	$27,893	$36,475	$45,058	$53,640	$62,222	$70,805
Indiana	$76,063	$45,638	$23,732	$31,034	$38,336	$45,638	$52,940	$60,242
Iowa	$83,857	$50,314	$26,163	$34,214	$42,264	$50,314	$58,364	$66,414
Kansas	$80,875	$48,525	$25,233	$32,997	$40,761	$48,525	$56,289	$64,053
Kentucky	$72,226	$43,336	$22,535	$29,468	$36,402	$43,336	$50,270	$57,204
Louisiana	$74,906	$44,944	$23,371	$30,562	$37,753	$44,944	$52,135	$59,326
Maine	$81,233	$48,740	$25,345	$33,143	$40,942	$48,740	$56,538	$64,337
Maryland	$111,677	$67,006	$34,843	$45,564	$56,285	$67,006	$77,727	$88,448
Massachusetts	$113,815	$68,289	$35,510	$46,437	$57,363	$68,289	$79,215	$90,141
Michigan	$81,588	$48,953	$25,456	$33,288	$41,121	$48,953	$56,785	$64,618
Minnesota	$99,936	$59,962	$31,180	$40,774	$50,368	$59,962	$69,556	$79,150
Mississippi	$61,183	$36,710	$19,089	$24,963	$30,836	$36,710	$42,584	$48,457
Missouri	$77,891	$46,735	$24,302	$31,780	$39,257	$46,735	$54,213	$61,690
Montana	$76,526	$45,916	$23,876	$31,223	$38,569	$45,916	$53,263	$60,609
Nebraska	$81,686	$49,012	$25,486	$33,328	$41,170	$49,012	$56,854	$64,696
Nevada	$71,593	$42,956	$22,337	$29,210	$36,083	$42,956	$49,829	$56,702

STATES, THE DISTRICT OF COLUMBIA, AND PUERTO RICO	ESTIMATED SMI FOR FOUR-PERSON FAMILIES[I]	60 PERCENT OF STIMATED SMI FOR FOUR-PERSON FAMILIES[II]	60 PERCENT OF ESTIMATED STATE MEDIAN INCOME					
New Hampshire	$105,643	$63,386	$32,961	$43,102	$53,244	$63,386	$73,528	$83,670
New Jersey	$113,350	$68,010	$35,365	$46,247	$57,128	$68,010	$78,892	$89,773
New Mexico	$61,722	$37,033	$19,257	$25,182	$31,108	$37,033	$42,958	$48,884
New York	$91,964	$55,178	$28,693	$37,521	$46,350	$55,178	$64,006	$72,835
North Carolina	$72,694	$43,616	$22,680	$29,659	$36,637	$43,616	$50,595	$57,573
North Dakota	$92,406	$55,444	$28,831	$37,702	$46,573	$55,444	$64,315	$73,186
Ohio	$81,451	$48,871	$25,413	$33,232	$41,052	$48,871	$56,690	$64,510
Oklahoma	$68,213	$40,928	$21,283	$27,831	$34,380	$40,928	$47,476	$54,025
Oregon	$78,683	$47,210	$24,549	$32,103	$39,656	$47,210	$54,764	$62,317
Pennsylvania	$88,581	$53,149	$27,637	$36,141	$44,645	$53,149	$61,653	$70,157
Rhode Island	$96,855	$58,113	$30,219	$39,517	$48,815	$58,113	$67,411	$76,709
South Carolina	$70,238	$42,143	$21,914	$28,657	$35,400	$42,143	$48,886	$55,629
South Dakota	$80,689	$48,413	$25,175	$32,921	$40,667	$48,413	$56,159	$63,905
Tennessee	$69,659	$41,795	$21,733	$28,421	$35,108	$41,795	$48,482	$55,169
Texas	$74,896	$44,938	$23,368	$30,558	$37,748	$44,938	$52,128	$59,318
Utah	$77,057	$46,234	$24,042	$31,439	$38,837	$46,234	$53,631	$61,029
Vermont	$87,630	$52,578	$27,341	$35,753	$44,166	$52,578	$60,990	$69,403
Virginia	$96,804	$58,082	$30,203	$39,496	$48,789	$58,082	$67,375	$76,668
Washington	$91,766	$55,060	$28,631	$37,441	$46,250	$55,060	$63,870	$72,679
West Virginia	$70,346	$42,208	$21,948	$28,701	$35,455	$42,208	$48,961	$55,715
Wisconsin	$88,076	$52,846	$27,480	$35,935	$44,391	$52,846	$61,301	$69,757
Wyoming	$84,078	$50,447	$26,232	$34,304	$42,375	$50,447	$58,519	$66,590
Puerto Rico	$30,098	$18,059	$9,391	$12,280	$15,170	$18,059	$20,948	$23,838

[I] Prepared by the U.S. Census Bureau, U.S. Department of Commerce (Census Bureau) from the 2012 through 2016 American Community Surveys (ACSs). For further information, see Table B19119 for the five-year estimates of the 2012 through 2016 ACSs.

[II] Prepared by the Administration for Children and Families, Office of Community Services, Division of Energy Assistance. In accordance with 45 CFR 96.85, 60 percent of each state's estimated median income for a four-person family is multiplied by the following percentages to adjust for household size for LIHEAP: 52 percent for one person, 68 percent for two persons, 84 percent for three persons, 100 percent for four persons, 116 percent for five persons, and 132 percent for six persons. For each additional household member above six persons, add three percentage points to the percentage for a six-person household (132 percent), and multiply the new percentage by 60 percent of the state's estimated median income for a four-person household.

Source: Administration for Children and Families, Office of Community Services. (2020). *The Low-Income Home Energy Assistance Program IM 2018-3 state median income estimates for optional use in FY 2018 and mandatory use in FY 2019.* https://www.acf.hhs.gov/ocs/policy-guidance/liheap-im-2018-3-state-median-income-estimates-optional-use-fy-2018-and

Appendix E. Pathways for Making Change

Making change through legislation and policy

ZERO TO THREE's Policy Agenda lays out priority issues to ensure all babies have Good Health, Strong Families, and Positive Early Learning Experiences. As a complement to the Policy Agenda, the data in this *Yearbook* fuel a review of how well we as a nation and individual states are faring with regard to this commitment. The data in the *Yearbook* clearly show our nation's commitment to families with young children has been inadequate. Now is the time to push federal and state policymakers to initiate broad and far-reaching structural changes in how we fund, regulate, and operate services that work to support families and communities.

FEDERAL

ZERO TO THREE's Federal Policy Agenda, Recovery Begins With Babies and Families, was provided to the new Administration and the 117th Congress as well as other policymakers and advocates. At the time of this *Yearbook,* there have been unprecedented efforts at the federal level through President Biden's Build Back Better Act, proposal and the House-passed reconciliation bill incorporating much of that plan to address many of the challenges reported in the *Yearbook's* pre-pandemic findings on indicators in our Good Health, Strong Families, and Positive Early Learning Experiences policy framework domains.

Together, *Yearbook* data and the supplemental real-time findings during the pandemic of the RAPID Survey Project[lxviii] point to the need for these and other bold policy actions. For example, proposed legislation would directly address persistent racial and ethnic disparities in maternal mortality and negative birth outcomes that the *Yearbook* shows disproportionately affect Black and American Indian/Alaska Native families. *Yearbook* indicators point to economic insecurity and inability to meet basic needs affecting many babies and families. Pending legislation would expand and strengthen economic and family supports for the growing number of families with young children who struggle to meet basic needs (e.g., food security and housing stability). Finally, *Yearbook* data show few families receiving child care assistance and low floors for quality in many states. Proposed legislation would invest in transforming the nation's disjointed child care system—a vital component of our infrastructure—into a comprehensive system while increasing the quality and availability of child care for babies and toddlers in families of all income levels, including those living in poverty or with low income for whom quality care has been out of reach. These and other aspects of pending legislation will be of immediate and long-term benefit to babies and families nationwide.

As this report is published, the fate of these proposals remains uncertain. But their existence shows that the lack of a comprehensive family policy in the United States is a failure of will, not a failure of imagination.

- **Good Health:** There are numerous policy initiatives under consideration that would facilitate and promote:
  - addressing disparities in maternal and infant health;
  - embedding support for parents in meeting their babies' early development and social-emotional needs into the pediatric setting through programs such as HealthySteps; and
  - advancing parents and babies' mental health through Infant and Early Childhood Mental Health (IECMH) services.

- **Strong Families:** Policy initiatives facilitate and promote family-supportive strategies such as paid leave. Additional strategies that support families and contribute to economic security include:
  - tax credits for economic security;
  - home visitation programs;
  - adequate and affordable housing; and
  - economic security through increased minimum wage.
- **Positive Early Learning Experiences:** All babies need high-quality and nurturing early learning experiences. Initiatives under consideration that could improve access to high quality non-parental care include:
  - building a comprehensive child care system, and
  - increased funding to expand Early Head Start (EHS).

STATE

Individual states also are creating or enhancing policies that reinforce state priorities for families and babies. Examples are provided below.

Good Health

The *Yearbook* highlights disparities in early adverse experiences as well as in birth outcomes, particularly for Black and American Indian/Alaska Native infants. States are working to improve the health of young children. California's SB 428 would require commercial health plans to include coverage for adverse childhood experience (ACE) screenings as early as 2022. In Maryland, there is action to use Medicaid to reimburse doula costs at childbirth. New Jersey is considering policies that address health care for low-income families and support doula services. New Jersey also is addressing equity in health outcomes through training and other professional support activities. Nevada is considering initiatives that would use Medicaid funds to cover certain prenatal costs and costs related to breastfeeding.

Strong Families:

The *Yearbook* shows the gaps in meeting basic needs and the need for supports such as home visitation. Some states are working to expand these supports. Alabama realized an increase in its First Teacher program while Connecticut is implementing a Universal Home Visitation pilot project. Minnesota is working to increase funding and program flexibility in home visitation while New Jersey's universal home visitation law would allow for at least one home visit after childbirth. In Pennsylvania, new legislation would use Medicaid funding to support home visitation (and doula) services. States also are addressing one of the largest economic expenses for families: housing. California's Bringing Families Home program would address family homelessness, and Oregon is considering legislation that would fund affordable housing for families.

Positive Early Learning Experiences:

The *Yearbook* looks at the need for supporting babies' language development. Most notably, the *Yearbook* data continue to show low rates of daily reading aloud to babies, which fosters a larger vocabulary; higher levels of phonological, letter name, and sound awareness; and better success at decoding words.[lxix] Several states are developing investments in early literacy. Examples include, Alabama's Feed Me Words initiative, which provides the adults in young children's lives with access to and awareness of early language and literacy resources, and North Carolina's and Ohio's investments in Dolly Parton's Imagination Library which gets books into the hands of young children.

There are strengths and gaps in every state, so there are opportunities for the nation, state, and community to take stock of current positions and develop strategies to grow. One way to respond to the data presented in the *Yearbook* is to advocate for or contribute to legislation and policies that directly address the causes and symptoms of issues affecting the health and welfare of babies and their families.

Making change by improving practice

Another avenue for change is working to improve the implementation of programs and services, especially when combined with efforts to support and sustain a professional early childhood workforce. For example, states or agencies may consider cross-sector approaches that improve the alignment of prenatal/infant/toddler programs through cross-sector training or shared professional development, data sharing, or collective impact initiatives. These efforts increase in value when parent and community voices are included in planning, implementation, and evaluation. States or agencies also can address early childhood professional compensation, work-life conditions, and mentoring as a means of supporting and nurturing young professionals.

Making change by ensuring strong engagement

Another avenue that helps states or agencies use data to enact change is improving engagement with services. In this process, states or agencies may consider the equitable development of policies and regulation as well as family and staff perceptions of services. In other words, users can use *Yearbook* data to consider not only the policy but also the practice of equity.

First, it is important to value and act on feedback received from families themselves. If we remember our guiding assumptions, most parents are making practical and wise decisions for their families. Thus, their feedback is invaluable in shaping service implementation, including logistics, climate, and cultural relevance.

Second, all services are local. This means that while policies and statutes are written in federal and state capitals, service delivery and engagement occur in one classroom or doctor's office at a time. Thus, consideration must be given to the level of autonomy granted to localities in identifying priorities and providing services. In addition, local autonomy benefits from the input of community members with lived experiences.

STATE OF BABIES YEARBOOK 2022

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