



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

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## 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.<sup>1</sup>

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.<sup>2</sup>

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/>

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### **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/>

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### **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., Shouweiller, 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>

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### **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,<sup>3</sup> reduce infant mortality,<sup>4</sup> lower families' out-of-pocket medical expenditures,<sup>5</sup> and reduce the amount of unpaid medical bills.<sup>6</sup>

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&sort-Model=%7B%22collid%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](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>

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### **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.”<sup>7</sup> 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.<sup>8</sup> Medical homes are also linked to better health status and increases to family functioning for children with special health care needs.<sup>9</sup>

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](http://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](http://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&keytype=tf\\_ipsecsha](https://pediatrics.aappublications.org/content/129/1/87?ijkey=9ab7a63be22b823793d6c92ad721129ebf98c0fe&keytype=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](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](http://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](http://www.childhealthdata.org)

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### **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.<sup>10</sup>

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**

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### **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.<sup>11</sup> 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.<sup>12</sup> Experts recommend that babies are breastfed throughout the first year of life.<sup>13</sup>

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](https://ftp.cdc.gov/pub/Vaccines_NIS/NISPUF19.DAT)

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### **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.<sup>14</sup>

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](https://www.cdc.gov/nccdphp/dnpao/growthcharts/who/using/assessing_growth.htm)

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

The estimates are from 2018. High weight-for-length is defined as  $\geq 2$  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.<sup>17</sup> 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.<sup>18</sup> Participating in WIC is associated with lower levels of infant mortality and better cognitive development for the child, as well as more nutritious diets.<sup>19</sup>

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., & Nyango, A. W. (2008). WHO child growth standards. *Lancet*, 371(9608), 204–204. [https://doi.org/10.1016/S0140-6736\(08\)60131-2](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

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### 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.<sup>20</sup> In addition to receiving care early, frequency and timing of prenatal care are also important, especially for effective responses to specific maternal risk factors.<sup>21</sup>

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). *Nativity public-use data 2019, on CDC WONDER Online Database, October 2020*. <http://wonder.cdc.gov/nativity-expanded-current.html>

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### 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.<sup>22</sup> 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>

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### **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.<sup>23</sup> The negative effects of maternal depression can begin prenatally.<sup>24</sup> 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.<sup>25</sup> Untreated depression in mothers or fathers is also associated with greater risk for delays in cognitive and motor development,<sup>26</sup> child maltreatment,<sup>27</sup> and neglectful parenting practices.<sup>28</sup> Several intervention models are effective in treating parents' depression.<sup>29</sup>

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](http://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](http://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](http://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](http://www.childhealthdata.org)

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### **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).<sup>30</sup> 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>

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### **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<sup>31</sup> 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**

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### **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.<sup>32</sup> 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.<sup>33</sup>

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/](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/](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.<sup>34</sup> 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.<sup>35</sup> 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). *Nativity public-use data 2019*, on CDC WONDER Online Database, October 2020. <http://wonder.cdc.gov/nativity-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).<sup>36</sup>

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](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>

<sup>36</sup> 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](http://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65_04.pdf)

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### 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<sup>37</sup> and can negatively affect child oral health quality of life,<sup>38</sup> increase experience of dental pain, and negatively impact school performance.<sup>39</sup>

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) State 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](http://www.childhealthdata.org)

Child and Adolescent Health Measurement Initiative. (2018). *2017 National Survey of Children’s Health (NSCH) State 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](http://www.childhealthdata.org)

Child and Adolescent Health Measurement Initiative. (2019). *2018 National Survey of Children’s Health (NSCH) State 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](http://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](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](http://www.childhealthdata.org)

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### **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.<sup>40</sup> 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.<sup>41</sup>

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](http://www.childhealthdata.org)

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### **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

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### **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.<sup>42</sup> Families with low incomes may not be able to afford these services unless they are 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>

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### **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.<sup>43</sup> 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](https://www.nccp.org/wp-content/uploads/2018/11/text_1211.pdf)

## **STRONG FAMILIES**

### **Basic Needs**

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#### **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.<sup>44</sup>

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](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>

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### **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](http://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](http://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](http://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](http://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.<sup>45</sup> 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.<sup>46</sup>

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., Shouweiller, 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>

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### 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.<sup>47</sup> Parents in these neighborhoods may restrict children’s opportunities for outdoor play out of concern for safety.<sup>48</sup>

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](http://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](http://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](http://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](http://www.childhealthdata.org)

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### **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.<sup>49</sup> Infants who experience food insecurity are more likely to perform poorly on tests of cognitive development.<sup>50</sup> For infants and toddlers, even mild levels of food insecurity may result in developmental deficits during this period of rapid brain growth.<sup>51</sup>

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**

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### **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.<sup>52</sup>

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](http://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](http://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](http://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](http://www.childhealthdata.org)

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### **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.<sup>53</sup> 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.<sup>54</sup> 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](http://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](http://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](http://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](http://www.childhealthdata.org)

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### **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.<sup>55</sup> 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.”<sup>56</sup> 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.<sup>57</sup> 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."<sup>58</sup> Multiple temporary placements, by contrast, can disrupt a young child's sense of trust and security and contribute to emotional and behavioral problems.<sup>59</sup> 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://fda.chapinhall.org/wp-content/uploads/2012/10/2011\\_infants\\_issue-brief.pdf](https://fda.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>

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### **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>

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### **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).<sup>60</sup> Stability and permanency are crucial for children's well-being.<sup>61</sup> 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.<sup>62</sup>

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](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](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>

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### **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.<sup>63</sup> Yet, in most communities, the need for home visiting services far outpaces current capacity.<sup>64</sup>

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](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](https://www.nhvrc.org/wp-content/uploads/NHVRC_Yearbook_2017_Final.pdf)

## Supportive Policies

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### **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.<sup>65</sup>

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>

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### **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,<sup>66</sup> 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.<sup>67</sup>

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>

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### **State offers a child tax credit**

The federal Child Tax Credit (CTC) is a federal program for parents with low and moderate earnings.<sup>68</sup>

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.<sup>69</sup> 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.<sup>70</sup> 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/>

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### **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.<sup>71</sup> 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>

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### **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.<sup>72</sup> 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.<sup>73</sup>

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.<sup>74</sup>

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.<sup>75</sup>

The Early Head Start (EHS) standard for adult-to-child ratio for children ages 0–3 is one teacher for every four children.<sup>76</sup> 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/CFQC3\\_updated\\_final.pdf](https://nrckids.org/files/CFQC3_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>

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### **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.<sup>77</sup>

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>

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### **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.<sup>78</sup>

The Early Head Start (EHS) standard for group size for children ages 0–3 is eight children.<sup>79</sup> 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>

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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](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>

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### **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.<sup>80</sup>

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>

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## **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.<sup>81</sup> 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.<sup>82</sup> 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.<sup>83</sup>

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](http://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](http://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](http://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](http://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](http://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](http://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](http://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](http://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.<sup>84,85</sup> 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.<sup>86</sup>

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>

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### **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.<sup>87</sup>

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>

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### **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.<sup>88</sup> 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.<sup>89</sup> 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., Regalbutto, 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\(OR%20FINAL%20RULE\)](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.<sup>90</sup>

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>

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### **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.<sup>91</sup> 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.<sup>92</sup>

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>

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### **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](https://www.childtrends.org/publications/states-use-of-the-child-care-and-development-block-grant-funding-increase)

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](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.<sup>93</sup> 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>

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### **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.<sup>94</sup> The new federal standard is that families should spend no more than 7 percent of their income for child care.<sup>95</sup>

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.abdbe2aa1098f4ba8bffad2689acb4371602611682546.1605025891932.1605543695491.6&\\_\\_hsfp=3629513924&hsCtaTracking=b84e60b8-da54-4971-9364-7d5667e1a1b7%7C0be5fe22-5bef-4e54-908a-f95a653d2b14](https://cdn2.hubspot.net/hubfs/3957809/2019%20Price%20of%20Care%20State%20Sheets/Final-TheUSandtheHighPriceofChildCare-Appendices.pdf?__hssc=122076244.2.1605543695491&__hstc=122076244.abdbe2aa1098f4ba8bffad2689acb4371602611682546.1605025891932.1605543695491.6&__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.<sup>96</sup> Children who get screened are more likely to have delays identified, be referred for early intervention, and be determined eligible for early intervention services.<sup>97</sup> The American Academy of Pediatrics recommends that children receive developmental screening from their physicians at least three times before their third birthday.<sup>98</sup>

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.

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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*, 131(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](http://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](http://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](http://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](http://www.childhealthdata.org)

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### **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.<sup>99</sup>

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.<sup>100</sup> 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.<sup>101</sup> 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.<sup>102</sup>

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.<sup>103</sup>

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>

## **DEMOGRAPHICS**

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>

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### **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>

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### **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>

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### **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>

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### **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>

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### **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>

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### **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>

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### **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>

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### **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>

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### **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>

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### **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>

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### **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>

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### **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>

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### **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>

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### **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>

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### **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>

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### **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>

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### **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>

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### **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>