

# Appendix B. State of Babies Yearbook: 2020

## Indicator Dictionary

### GOOD HEALTH

#### ***Income cutoff (percentage of the federal poverty line [FPL]) for Medicaid eligibility for pregnant women (as of January 2019)***

Caring well for infants and toddlers begins with prenatal care. Medicaid/Children's Health Insurance Program (CHIP) helps lower-income women 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 line.

The data here reflect Medicaid rules in effect as of January 2019, as reported by the Kaiser Family Foundation.

Source: Kaiser Family Foundation. (2019). *Where are states today? Medicaid and CHIP eligibility levels for children, pregnant women, and adults*. Retrieved from <https://www.kff.org/medicaid/fact-sheet/where-are-states-today-medicaid-and-chip/#table2>

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#### ***State adopted Medicaid expansion under the Affordable Care Act***

States with expanded Medicaid eligibility bring more children and families into the share of the population who have health insurance. Because children generally require less costly care than adults, expanding the pool of insured residents can bring down medical expenses for everyone. For example, states with expanded Medicaid coverage can offer mental health services (including depression screening treatment) to many more low-income parents. Expanded Medicaid coverage has been shown to improve children's use of preventive care,<sup>1</sup> reduce infant mortality,<sup>2</sup> lower families' out-of-pocket medical expenditures,<sup>3</sup> reduce the amount of their unpaid medical bills,<sup>4</sup> and bring down the poverty rate.<sup>5</sup>

Medicaid expansion status for each state is based on the Kaiser Family Foundation's tracking and analysis of state activity. States' decisions about adopting Medicaid expansion are as of September 2019. States that have adopted but not yet implemented Medicaid expansion are listed as Medicaid expansion states. Additional state-specific notes are provided in the source information.

Source: Kaiser Family Foundation. (2019). *Status of state Medicaid expansion decisions: Interactive map*. Retrieved from <https://www.kff.org/medicaid/issue-brief/status-of-state-medicaid-expansion-decisions-interactive-map/>

1 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), e20170953.

2 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://www.ncbi.nlm.nih.gov/pmc/articles/PMC5844390/>.

3 Brevoort, K., Grodzicki, D., & Hackmann, M. B. (2017). *Medicaid and financial health*. NBER Working Paper No. 24002. National Bureau of Economic Research.

4 Abramowitz, J. (2020). The effect of state Medicaid expansions on medical out-of-pocket expenditures. *Medical Care Research and Review*, 77(1), 19–33.

5 Remler, D. K., Korenman, S. D., & Hyson, R. T. (2017). Estimating the effects of health insurance and other social programs on poverty under the Affordable Care Act. *Health Affairs*, 36(10). <https://doi.org/10.1377/hlthaff.2017.0331>

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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. Although health insurance coverage for this age group is nearly universal, some groups of children are still uncovered, and enrolling them may require special outreach efforts to close this gap. The denominator for this indicator is the number of children ages 0–2 living below 200 percent of the FPL. The numerator is the number of these children who do not have health insurance at the time of the interview.

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 other and 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. Rural residence is defined as living in nonmetropolitan areas. Non-metropolitan areas are areas outside of metropolitan areas. Cases whose metropolitan status is indeterminable or mixed are excluded from the urbanicity subgroup analysis.

All statistical tests using ACS were conducted using person weights, without replicate weights. Though replicate weights usually increase standard errors, the difference is generally not large enough to alter the significance of coefficients (IPUMS USA, n.d.<sup>6</sup>).

Source: American Community Survey 2016, five-year estimates. Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E., Jose Pacas, J., & Sobek, M. (2019). *IPUMS USA: Version 9.0* [dataset]. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010.V9.0>

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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>7</sup> Infants who experience food insecurity are more likely to have insecure attachment relationships, and to perform poorly on tests of cognitive development.<sup>8</sup> For infants and toddlers, even mild levels of food insecurity may result in developmental deficits during this period of rapid brain growth.<sup>9</sup> Screening for food insecurity is easily accomplished within many community settings.

6 IPUMS USA (n.d.). *Replicate weights in the American Community Survey / Puerto Rican Community Survey*. Retrieved from <https://usa.ipums.org/usa/repwt.shtml>

7 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. Retrieved from [https://www.ers.usda.gov/webdocs/publications/eib113/37672\\_eib-113.pdf](https://www.ers.usda.gov/webdocs/publications/eib113/37672_eib-113.pdf)

8 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.

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

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.

Source: Current Population Survey, Food Security Supplement 2017. Flood, S., King, M., Rodgers, R., Ruggles, S., & Warren, J. R. (2017). *Integrated Public Use Microdata Series, Current Population Survey: Version 6.0* [dataset]. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D030.V6.0>

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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 mothers. Maternal health benefits include earlier return to pre-pregnancy weight, reduced rates of breast and ovarian cancers, and decreased risk of hip fractures and osteoporosis later in life. Breastfeeding mothers also report higher rates of mother-infant attachment and bonding, feelings of maternal empowerment, and confidence.<sup>10</sup> Experts recommend that babies breastfeed throughout the first year of life.

For the percentage of infants who are ever breastfed, the denominator is the number of toddlers ages 19–35 months in 2017. The numerator is the number of that group who were ever breastfed, according to mother’s report.

For the percentage of infants breastfed at 6 months, the denominator is the number of toddlers ages 19–35 months in 2017. The numerator is the number of that group who were breastfed for any amount of time at 6 months of age, according to mother’s report.

For the *State of Babies Yearbook: 2020*, we calculated data based on the National Immunization Survey, whereas for the *State of Babies Yearbook: 2019*, information was obtained from the CDC Breastfeeding Report Card. For both indicators, the 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 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. *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 2015 Census poverty thresholds. 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. (2018). *The 2017 National Immunization Survey-Child*, Centers for Disease Control and Prevention. Retrieved from <https://www.cdc.gov/vaccines/imz-managers/nis/datasets.html>

10 Child Trends DataBank. (2018). *Breastfeeding*. Retrieved from <https://www.childtrends.org/indicators/breastfeeding>

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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 services to women and children, from pregnancy through the time the child reaches the age of 5 years. 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>11</sup>

This indicator is new for *State of Babies Yearbook: 2020*. The estimates reported are from 2016. Results for U.S. territories are included in the total for the United States. The estimated coverage rates exceed 100 percent for infants in the District of Columbia, Maryland, Ohio, and Rhode Island. This is likely a result of sampling variability in the CPS-ASEC survey data used to estimate the number of eligible individuals in those states (the denominator for the rate). The lower bound of the 95-percent confidence interval surrounding these rates is less than 100 percent.

Source: USDA Food and Nutrition Service (2019). *WIC 2016 eligibility and coverage rates*. Retrieved from <https://www.fns.usda.gov/wic/wic-2016-eligibility-and-coverage-rates>

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

Although 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>12</sup> The American Academy of Pediatrics recommends using the weight-for-length growth standards to assess the nutritional status of children younger than 2.<sup>13</sup> These standards have been recognized internationally in efforts to prevent child malnutrition and obesity.<sup>14</sup>

This indicator is new for *State of Babies Yearbook: 2020*. The estimates are from 2016. 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 (45–110 cm) in the WHO growth standards were excluded. In addition, children with biological 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 non-Hispanic White, non-Hispanic Black, Hispanic, Asian/Pacific Islander, and American Indian/Alaska native.

Source: Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion, Division of Nutrition, Physical Activity, and Obesity. (2019). *Data, trend and maps* [on-line]. Retrieved from <https://www.cdc.gov/nccdphp/dnpao/data-trends-maps/index.html>

11 Black, M. M., Cutts, D. B., Frank, D. A., Geppert, J., Skalicky, A., Levenson, S., ... & Meyers, A. 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.

12 Center for Disease Control and Prevention: Division of Nutrition, Physical Activity, and Obesity. Growth Chart Training: Using WHO Growth Charts. Retrieved from: [https://www.cdc.gov/nccdphp/dnpao/growthcharts/who/using/assessing\\_growth.htm](https://www.cdc.gov/nccdphp/dnpao/growthcharts/who/using/assessing_growth.htm)

13 Daniels, S. R., & Hassink, S. G. (2015). The role of the pediatrician in primary prevention of obesity. *Pediatrics*, *136* (1), e275–e292.

14 De Onis, M., & Nyango, A. W. (2008). WHO child growth standards. *Lancet*, *371*(9608), 204–204.

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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 mother that takes place during pregnancy, childbirth, or post-partum.<sup>15</sup> A mother's death is detrimental to the development of the newborn child and poses a great hardship to the affected household.

This indicator is new for *State of Babies Yearbook: 2020*. Data reflect 2015–16. Maternal mortality is reported at the national level only, as the CDC does not recommend comparing state-level estimates.

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

Source: Petersen, E. E., Davis, N. L., Goodman, D., Cox, S., Syverson, C., Seed, K., ... Barfield, W. (2019). Racial/ethnic disparities in pregnancy-related deaths—United States, 2007–2016. *Morbidity and Mortality Weekly Report*, 68, 762–765. DOI: <http://dx.doi.org/10.15585/mmwr.mm6835a3>

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### **Percentage of women receiving late or no prenatal care**

Women 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. Mothers 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>16</sup> However, it is important that prenatal care starts early, and that the care follows guidelines for frequency and timing, so that medical professionals can respond effectively to specific maternal risk factors.<sup>17</sup>

Data for this indicator for the *State of Babies Yearbook: 2019* came from a report published by the National Center for Health Statistics, *Timing and Adequacy of Prenatal Care in the United States, 2016*. This report had not been updated at the time of publication of the *State of Babies Yearbook: 2020*. Data for the 2020 edition come directly from the CDC Wonder database. The indicator denominator is the total number of births with non-missing prenatal care information. The numerator is the number of those births where prenatal care began during the third trimester of pregnancy or not at all.

This indicator can be disaggregated by mother's race/ethnicity and urbanicity. *Race/ethnicity*: The included subgroups are Non-Hispanic Black, Non-Hispanic White, and Hispanic of all races. *Urbanicity*: CDC Wonder classifies each mother as living in a metro or non-metro area according to 2013 designations. The metro (urban) group includes counties in these categories: large central metro, large fringe metro, medium metro, and small metro. The non-metro (rural) group includes counties in these categories: micropolitan (non-metro) and noncore (non-metro).

SOURCE: United States Department of Health and Human Services (U.S. DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Natality public-use data 2018, on CDC WONDER Online Database, September 2019. Retrieved from <http://wonder.cdc.gov/natality-expanded-current.html>

15 MacDorman, M. F., Declercq, E., Cabral, H., & Morton, C. (2016). Is the United States maternal mortality rate increasing? Disentangling trends from measurement issues Short title: US Maternal Mortality Trends. *Obstetrics and Gynecology*, 128 (3), 447.

16 Maternal and Child Health Bureau, Health Resources and Services Administration, U.S. Department of Health and Human Services. (undated). *Prenatal services*. Retrieved from <http://www.mchb.hrsa.gov/programs/womeninfants/prenatal.htm>

17 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), 306–316.

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

A young child's visit for pediatric care is 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>18</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 Healthy Policy's website states that this information is based on state Medicaid websites and direct communication with state Medicaid officials, as of September 2018. These data were not updated for *State of Babies Yearbook: 2020*, as new data were not available.

Source: National Academy for State Health Policy. (2018). *Medicaid fee for service policies for maternal depression screening in a well-child visit* [Interactive Map]. Retrieved from <https://healthychild.nashp.org/screening/maternal-depression-screening/#toggle-id-1>

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

The links between parental mental health—depression, particularly—and child well-being are well established in research.<sup>19</sup> The negative effects of maternal depression can begin prenatally.<sup>20</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>21</sup> Untreated depression in mothers or fathers is also associated with greater risk for delays in cognitive and motor development,<sup>22</sup> child maltreatment,<sup>23</sup> and neglectful parenting practices.<sup>24</sup> Several intervention models are effective in treating parents' depression.<sup>25</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*:

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

19 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. Retrieved from <https://ccf.georgetown.edu/wp-content/uploads/2016/07/Maternal-Depression-4.pdf>

20 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.

21 Hops, H. (1995). Age- and gender-specific effects of parental depression: A commentary. *Developmental Psychology*, *31*(3), 428–431.

22 Petterson, S. M. & Albers, A. B. (2001). Effects of poverty and maternal depression on early child development. *Child Development*, *72*(6), 1794–1813.

23 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. Retrieved from [www.acf.hhs.gov/programs/opre/abuse\\_neglect/nscaw/reports/depression\\_caregivers/depression\\_caregivers.pdf](http://www.acf.hhs.gov/programs/opre/abuse_neglect/nscaw/reports/depression_caregivers/depression_caregivers.pdf)

24 Chung, E. K., McCollum, K. F., Elo, I. T., & Culhane, J. F. (2004). Maternal depressive symptoms and infant health practices among low-income women. Electronic article. *Pediatrics*, *113*(6), e523–e529.

25 Goodman, S. H. & Garber, J. (2017). Evidence-based interventions for depressed mothers and their young children. *Child Development*, *88* (2), 368–377.



2020 are based on the 2016–17 combined sample of the National Survey of Children’s Health (NSCH). These results are more reliable than the results presented in the 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.

This indicator can be disaggregated by household income. NSCH derives household income-to-poverty ratios based on family income. Missing values were imputed by Census, and we use the single imputation version provided in the combined 2016–2017 data file. Households with incomes less than 200 percent of the FPL are classified as low-income. Households with incomes at or above 200 percent of the FPL 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). Retrieved from [www.childhealthdata.org](http://www.childhealthdata.org)

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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 poor access to prenatal care, violent neighborhoods, or inadequate child supervision. They can also highlight inequities: for example, 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>26</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 estimates here are for 2017.

This indicator can be disaggregated by mother’s race/ethnicity. Subgroup data reflect 2015–17. The included subgroups are non-Hispanic White, non-Hispanic Black, American Indian or Alaska Native, Asian or Pacific Islander, and Hispanics of all races.

Source: Centers for Disease Control and Prevention. (2019). *Infant mortality rates by state* [Interactive Map]. Retrieved September 2019 from [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. (2018). *Stats of the District of Columbia*. Retrieved from <https://www.cdc.gov/nchs/pressroom/states/dc/dc.htm>

Subgroup source: Centers for Disease Control and Prevention. (2019). Infant mortality in the United States, 2017: Data from the period linked birth/infant death file. *National Vital Statistics Reports 68* (10). Retrieved from [https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68\\_10\\_tables-508.pdf](https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_10_tables-508.pdf)

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26 Kochanek, K. D., Murphy, S. L., Xu, J., & Tejada-Vera, B. (2016). Deaths: Final data for 2014. *National Vital Statistics Reports, 65*(4). National Center for Health Statistics. Tables 3-4. Available at [http://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65\\_04.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65_04.pdf)

### **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>27</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; mother's low weight gain during pregnancy, or low pre-pregnancy weight; and mother's stress during pregnancy.<sup>28</sup>

The National Center for Health Statistics defines low birthweight as a weight of less than 2,500 grams, or 5 pounds and 8 ounces. Data for the *State of Babies Yearbook: 2020* were calculated using data from CDC Wonder, whereas data from the inaugural yearbook came from a published report. 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 mother's race/ethnicity and urbanicity. *Race/ethnicity:* The included subgroups are Non-Hispanic Black, Non-Hispanic White, and Hispanic of all races. *Urbanicity:* CDC Wonder classifies mothers 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 noncore (non-metro).

Source: United States Department of Health and Human Services (U.S. DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Natality public-use data 2018, on CDC WONDER On-Line Database, *About natality, 2016–2018 expanded*. Retrieved from <http://wonder.cdc.gov/natality-expanded-current.html>

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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>29</sup> The percentage of babies born preterm can be reduced through early intervention with mothers before and after pregnancy. However, the interventions most effective in improving infant survival rates are those that support the mother right before, during, and after the pregnancy. These can ensure that complications often associated with preterm delivery, such as infection, neurological challenges, and lung immaturity, are treated early.<sup>30</sup>

This indicator is new for *State of Babies Yearbook: 2020*. The 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 gestation duration is known.

This indicator can be disaggregated by mother's race/ethnicity and urbanicity. *Race/ethnicity:* The included subgroups are Non-Hispanic Black, Non-Hispanic White, and Hispanic of all races. *Urbanicity:* CDC Wonder classifies each mother as living in a metro (urban) or non-metro area

27 Reichman, N. (2005). Low birthweight and school readiness. In school readiness: Closing racial and ethnic gaps. *The Future of Children*, 15(1), 91–116. Retrieved from [https://www.princeton.edu/futureofchildren/publications/docs/15\\_01\\_FullJournal.pdf](https://www.princeton.edu/futureofchildren/publications/docs/15_01_FullJournal.pdf)

28 Ricketts, S. A., Murray, E. K., & Schwalberg, R. (2005). Reducing low birthweight by resolving risks: Results from Colorado's Prenatal Plus Program. *American Journal Public Health*, 57(11), 1952–1957.

29 World Health Organization. (2015). *WHO recommendations on interventions to improve preterm birth outcomes*.

30 Ibid.



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).

Source: United States Department of Health and Human Services (U.S. DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Natality public-use data 2018, on CDC WONDER On-Line Database, *About natality, 2016–2018 expanded*. Retrieved October 2019 from <http://wonder.cdc.gov/natality-expanded-current.html>

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### **Percentage of infants/toddlers who had a preventive medical care visit in the past year (medical/dental)**

Preventive medical care (also known as “well-child care”) is a critical opportunity to detect a developmental delay or disability, so early treatment can reduce its effect on both the child and family.<sup>31</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>32</sup>

For the medical care indicator, 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. For the dental care indicator, the denominator is children ages 1–2, and the numerator is those children who ever had one or more preventive dental visits.

Estimates in the *State of Babies Yearbook: 2020* 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 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.

This indicator can be disaggregated by household income. NSCH derives household income-to-poverty ratios based on family income. Missing values were imputed by Census, and we use the single imputation version provided in the combined 2016–2017 data file. Households with incomes less than 200 percent of the FPL are classified as low-income. Households with incomes at or above 200 percent of the FPL 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). Retrieved from [www.childhealthdata.org](http://www.childhealthdata.org)

31 American Academy of Pediatrics. (2002). Developmental surveillance and screening of infants and young children. *Pediatrics*, 109(1), 144–145.

32 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.

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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 through 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 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 2017. 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>.

This indicator can be disaggregated by race/ethnicity and income, when data are analyzed from the National Immunization Survey. *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. *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 2015 Census poverty thresholds. 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: Centers for Disease Control and Prevention, National Center for Immunization and Respiratory Diseases. (2018). *Combined 7-vaccine series coverage among children 19-35 months by state, HHS region, and the United States, National Immunization Survey-Child (NIS-Child), 2017*. Retrieved from <https://www.cdc.gov/vaccines/imz-managers/coverage/child-vaxview/data-reports/7-series/trend/index.html>.

Subgroup source: U.S. Department of Health and Human Services (DHHS), National Center for Immunization and Respiratory Diseases. (2018). *The 2017 National Immunization Survey-Child*. Centers for Disease Control and Prevention. Retrieved from <https://www.cdc.gov/vaccines/imz-managers/nis/datasets.html>

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### **State Medicaid plan covers social-emotional screening for young children (from birth through 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. Health care providers should use an instrument that identifies young children at risk of behavioral health problems, specifically, 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 years with a tool specifically designed for the purpose of identifying young children who may need further evaluation for social-emotional and behavioral difficulties. The estimates used here are from 2018.

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)*. Retrieved from [http://www.nccp.org/publications/pdf/text\\_1211.pdf](http://www.nccp.org/publications/pdf/text_1211.pdf)

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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. Low-income families may not be able to afford these services unless they are covered by Medicaid. Ideally, a state's Medicaid plan covers infant and early childhood mental health (IECMH) 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 Medicaid officials if the state's Medicaid plan covers services to address a child's mental health needs in the child's home, early care and education settings, and pediatric or family medicine settings. The estimates used here are from 2018. Georgia's Medicaid only covers mental health services for children ages 4 and older.

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)*. Retrieved from [http://www.nccp.org/publications/pdf/text\\_1211.pdf](http://www.nccp.org/publications/pdf/text_1211.pdf)

## **STRONG FAMILIES**

### **Percentage of families with infants/toddlers living below 100 percent of the FPL that receive TANF benefits**

The Temporary Aid to Needy Families program (TANF) was designed to help poor 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 (for example, administrative costs, child care and pre-K programs, child welfare services, and work support activities) besides directly supporting families. Nationwide, only about one in four families living in poverty receives any TANF benefits, and the amount those families receive is often insufficient to lift them out of poverty.<sup>33</sup> Families living in poverty with an infant or toddler often are the least likely to have economic security.

The numerator for this indicator is the number of TANF-receiving families whose youngest child was younger than 3 in Fiscal Year 2018. The denominator is the number of families whose youngest child is younger than 3, and have incomes below the FPL, based on estimates from the 2019 Current Population Survey, which spans from March 2018- February 2019.

Sources: U.S. Department of Health and Human Services Administration for Children & Families Office of Family Assistance. (2019). *Characteristics and financial circumstances of TANF recipients, fiscal year 2018* [Tables]. Retrieved from <https://www.acf.hhs.gov/ofa/resource/characteristics-and-financial-circumstances-of-tanf-recipients-fiscal-year-2018>

Current Population Survey 2019. Flood, S., King, M., Rodgers, R., Ruggles, S., & Warren, J. R. (2019). *Integrated public use microdata series, current population survey: Version 6.0* [dataset]. Minneapolis, MN: IPUMS. Retrieved from <https://doi.org/10.18128/D030.V6.0>

<sup>33</sup> Floyd, I., Pavetti, L., & Schott, L. (2017). *TANF reaching few poor families*. Center on Budget and Policy Priorities. Retrieved from <https://www.cbpp.org/research/family-income-support/tanf-reaching-few-poor-families>

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### ***Housing insecurity (percentage of infants/toddlers who have moved three or more times since birth, and percentage of infants/toddlers who live in crowded housing)***

The physical environment, and, in particular, housing quality has marked effects on development—perhaps especially so for the youngest children, since they lack independent mobility. In addition, 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. Overcrowded living conditions can also be associated with negative outcomes. In homes where families are crowded, parents may be less responsive to infants and toddlers, and more likely to use punitive discipline.<sup>34</sup> Crowding has also been associated with children’s health problems, including respiratory conditions, injuries, and infectious diseases, and with young children’s food insecurity.<sup>35</sup>

For the percentage of infants/toddlers who have moved three or more times since birth, the indicator 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: 2020* 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 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.

This indicator can be disaggregated by household income. NSCH derives household income-to-poverty ratios based on family income. Missing values were imputed by Census, and we use the single imputation version provided in the combined 2016–2017 data file. Households with incomes less than 200 percent of the FPL are classified as low-income. Households with incomes at or above 200 percent of the FPL 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). Retrieved from [www.childhealthdata.org](http://www.childhealthdata.org)

For the percentage of infants/toddlers who live in crowded housing, the indicator 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 2013–2017.

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

34 Evans, G. (2006). Child development and the physical environment. *Annual Review of Psychology*, 57, 423–451.

35 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.

remaining non-Hispanic respondents into the following race categories for analyses: non-Hispanic White, non-Hispanic Black, non-Hispanic other, and multiple races. *Income*: ACS reports family income as a percentage of poverty thresholds. The poverty threshold is based on both total family income and 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*: Metropolitan (urban) areas include central/principal cities, metro areas outside of central/principal cities, and metro areas with central/principal city status indeterminable. Non-metropolitan (rural) areas are areas outside of metropolitan areas. Cases whose metropolitan status is indeterminable or mixed are excluded from the urbanicity subgroup analysis.

All statistical tests using ACS were conducted using person weights, without replicate weights. Though replicate weights usually increase standard errors, the difference is generally not large enough to alter the significance of coefficients (IPUMS USA, n.d.<sup>36</sup>).

Source: American Community Survey 2017, five-year estimates. Ruggles, S., Flood, S., Goeken, R., Grover, J., Meyer, E., Pacas, J., & Sobek, M. (2019). *IPUMS USA: Version 9.0* [dataset]. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010.V9.0>

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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>37</sup> Parents in these neighborhoods may restrict children's opportunities for outdoor play.<sup>38</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: 2020* 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 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.

This indicator can be disaggregated by income. NSCH derives household poverty levels based on family income. Missing values were imputed by Census, and we use the single imputation version provided in the combined 2016–17 data file. Households with incomes less than 200 percent of the FPL are classified as low-income. Households with incomes at or above 200 percent of the FPL are classified as not low-income.

36 IPUMS USA. (n.d.). *Replicate weights in the American Community Survey / Puerto Rican Community Survey*. Retrieved from <https://usa.ipums.org/usa/repwt.shtml>

37 To, T., Cadarette, S. M., & Liu, Y. (2001). Biological, social, and environmental correlates of preschool development. *Child Care Health & Development*, 27(2), 187–200.

38 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.

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). Retrieved from [www.childhealthdata.org](http://www.childhealthdata.org)

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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 that families can solve problems together, participate in decision making, and reduce conflict gain valuable skills related to planning, communication, managing emotions, and optimism that can improve their chances of being resilient when encountering their own challenges.<sup>39</sup>

The indicator denominator is the number of children ages 0–2. The numerator is those children whose parent responded “most of the time” or “all of the time” to all four family resilience items: “When your family faces problems, how often are you likely to do each of the following?” 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: 2020* 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 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.

This indicator can be disaggregated by income. NSCH derives household poverty levels based on family income. Missing values were imputed by Census, and we use the single imputation version provided in the combined 2016–2017 data file. Households with incomes less than 200 percent of the FPL are classified as low-income. Households with incomes at or above 200 percent of the FPL 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). Retrieved from [www.childhealthdata.org](http://www.childhealthdata.org)

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### **Percentage of infants/toddlers who have experienced one adverse childhood experiences; 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>40</sup> Survey items asked parents to indicate whether their child had ever expe-

39 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*. Retrieved from <https://www.childtrends.org/wp-content/uploads/2017/03/2017-16FlourishingFromTheStart-1.pdf>

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



rienced one or more of the following: economic hardship, divorce/separation of parent, death of a parent, a parent who served time in jail, witness to domestic violence, victim of or witness to neighborhood violence, lived with someone who was mentally ill or suicidal, lived with someone with an alcohol/drug problem, or was treated or judged unfairly because of race/ethnicity.

The denominator is children ages 0–2. The numerators are all children ages 0–2 whose parent reports one adverse experience or two or more adverse childhood experiences (ACEs), respectively. There are nine ACEs items: (a) hard to get by on family’s income; (b) parent or guardian divorced or separated; (c) parent or guardian died; (d) parent or guardian served time in jail; (e) saw or heard parents or adults slap, hit, kick, punch one another in the home; (f) was a victim of violence or witnessed violence in neighborhood; (g) lived with anyone who was mentally ill, suicidal, or severely depressed; (h) lived with anyone who had a problem with alcohol or drugs; and (i) treated or judged unfairly because of 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.

Estimates in the *State of Babies Yearbook: 2020* 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 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.

This indicator can be disaggregated by income. NSCH derives household poverty levels based on family income. Missing values were imputed by Census, and we use the single imputation version provided in the combined 2016–2017 data file. Households with incomes less than 200 percent of the FPL are classified as low-income. Households with incomes at or above 200 percent of the FPL 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). Retrieved from [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 a quarter of all substantiated incidents.<sup>41</sup> By far, the most prevalent form of maltreatment is neglect: “the absence of sufficient attention, responsiveness, and protection that are appropriate to the ages and needs of a child.”<sup>42</sup> Child maltreatment is influenced by a number of factors, including poor knowledge of 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

41 U.S. Department of Health and Human Services, Administration on Children, Youth and Families. (2018). *Child maltreatment 2016*. U.S. Government Printing Office. Retrieved from <http://www.acf.hhs.gov/programs/cb/resource/child-maltreatment-2016>

42 National Center on the Developing Child. (2012). *The science of neglect: The persistent absence of responsive care disrupts the developing brain*. Working Paper 12. Retrieved from <http://www.developingchild.harvard.edu>

than in families with higher incomes.<sup>43</sup> Note that the data source for this indicator is agency-confirmed reports, which are likely to underestimate the actual prevalence of maltreatment.

The indicator numerator is the number of unique maltreatment victims ages 0–2 (substantiated or indicated), as reported in the *Child Maltreatment 2017* report. The denominator is the total number of children ages 0–2 in 2017, according to the *Child Maltreatment 2017* report. For the *State of Babies Yearbook: 2019*, information on the total number of children ages 0–2 was based on Census Bureau population estimates rather than data in the *Child Maltreatment* report.

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

Sources: U.S. Department of Health & Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2019). *Child maltreatment 2017*. U.S. Government Printing Office. Retrieved from <https://www.acf.hhs.gov/cb/research-data-technology/statistics-research/child-maltreatment>

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

Unstable conditions at home can cause infants and toddlers to be placed in out-of-home care. 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 a placement with a non-relative legal guardian(s).<sup>44</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.

This indicator is new for *State of Babies Yearbook: 2020*. The denominator is all infants and toddlers ages 0–2 who entered care in 2016, and who either left care by 2017 or were also in the dataset for 2017. The numerator is the number of infants and toddlers in this cohort who exited care after 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 White, non-Hispanic Black, and Hispanic (of any race), and non-Hispanic other and multiple races. The non-Hispanic other and multiple races category includes non-Hispanic American Indian/Alaska native, non-Hispanic Hawaiian/other Pacific Islander, and non-Hispanic more than one race.

Source: Adoption & Foster Care Analysis Reporting System (2016–17). <https://www.acf.hhs.gov/cb/research-data-technology/reporting-systems/afcars>

43 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.

44 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*. Retrieved from <http://www.acf.hhs.gov/programs/cb/pubs/cwo05/index.htm>.

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### **Percentage of infants/toddlers exiting foster care who achieve permanency**

Young children fare best when they experience stable and consistent caregiving. Most often, that is with their own parents; other relatives may be a next-best alternative. If care by a relative is not feasible, then loving adoptive parents can provide a permanent home. Multiple temporary placements, by contrast, can disrupt a young child's sense of trust and security and contribute to emotional and behavioral problems.<sup>45</sup>

For this indicator, the denominator is children exiting foster care during the fiscal year who are ages 0–2 at the time of exit. The numerator is those children of that group who achieve permanency. Permanency is defined as reunification with the parent, termination of parental rights (TPR) and adoption, guardianship with a permanent guardian, or guardianship with a “fit and willing relative” while remaining in the legal custody of the state.

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

Source: Adoption & Foster Care Analysis Reporting System (2017). <https://www.acf.hhs.gov/cb/research-data-technology/reporting-systems/afcars>

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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, and they 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>46</sup> Yet, in most communities, the need for home visiting services far outpaces current capacity.<sup>47</sup>

The denominator is the number of children ages 0–2 who could benefit from home visiting according to the source document, which the National Home Visiting Resource Center defines as all children ages 0–2. Estimates are based on the American Community Survey. The numerator is calculated by multiplying the total number of children who received home visiting by the percentage these who are ages 0–2. Data reflect 2017.

Source: National Home Visiting Resource Center. (2018). *Data supplement to the 2017 home visiting yearbook*. James Bell Associates and the Urban Institute. Retrieved from [https://www.nhvc.org/wp-content/uploads/NHVC\\_Yearbook\\_2018\\_FINAL.pdf](https://www.nhvc.org/wp-content/uploads/NHVC_Yearbook_2018_FINAL.pdf)

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45 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. Retrieved from [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)

46 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. Retrieved from [https://www.acf.hhs.gov/sites/default/files/opre/homvee\\_executive\\_summary\\_2018\\_508.pdf](https://www.acf.hhs.gov/sites/default/files/opre/homvee_executive_summary_2018_508.pdf)

47 National Home Visiting Resource Center. (2017). *2017 Home visiting yearbook*. Retrieved from [https://www.nhvc.org/wp-content/uploads/NHVC\\_Yearbook\\_2017\\_Final.pdf](https://www.nhvc.org/wp-content/uploads/NHVC_Yearbook_2017_Final.pdf)

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

Parents should not have to give up pay to care for a sick child. To attract and retain a capable workforce, employers need to acknowledge that their employees have multiple responsibilities. When parents cannot stay home with a child who is ill, the child may attend a group care setting where others can become sick, affecting multiple families. Employee productivity also suffers when parents must make stopgap arrangements for their child's care.

This indicator reports whether or not 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.

Source: National Partnership for Women and Families. *Paid sick day—state and district statutes*. (2019). Retrieved from <http://www.nationalpartnership.org/research-library/work-family/psd/paid-sick-days-statutes.pdf>

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### **State has a paid family leave program**

Nearly alone among all the world's nations, the United States has no federal paid family leave policy. Therefore, states must lead the way. 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, can increase the likelihood of breastfeeding, can 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>48</sup>

The National Partnership for Women and Families (NPWF) produced a table summarizing state paid family and medical leave insurance laws as of August 2019. NPWF uses 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. States that have enacted a policy, but whose policy has not yet taken effect are counted as having a policy. Oregon signed a paid family leave policy into law in August 2019, after data were collected for this indicator. The indicator has been updated, but rankings do not reflect this update.

Source: National Partnership for Women and Families. (2019) *State paid family and medical leave insurance laws*. Retrieved from <http://www.nationalpartnership.org/research-library/work-family/paid-leave/state-paid-family-leave-laws.pdf>

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### **TANF work exemption for single parents of infants**

The Temporary Aid to Needy Families program (TANF) was designed to help poor 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 (for example, administrative costs, child care and pre-K programs, child welfare services, and work support activities) besides directly supporting families.

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

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>49</sup> States can determine exemptions that can be made for single-parent unit households with different household circumstances.

This indicator is new for *State of Babies Yearbook: 2020*. It documents, as of July 2018, 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. The source document contains details about the duration and conditions for exemptions. A superscript indicates that the exemption is only valid for a single child.

Source: 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. Retrieved from [https://www.acf.hhs.gov/sites/default/files/opre/2018\\_welfare\\_rules\\_databook\\_final\\_08\\_07\\_2019\\_508.pdf](https://www.acf.hhs.gov/sites/default/files/opre/2018_welfare_rules_databook_final_08_07_2019_508.pdf)

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

The Child Tax Credit (CTC) is a federal program for parents with low and moderate earnings.<sup>50</sup> 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). By providing families up to \$1,000 for each child under 17, and by raising the amount of the credit as earnings increase (up to a threshold), the CTC helps to pay for the cost of raising children.<sup>51</sup> Research suggests that families receiving more refundable tax credit do better in school, have a higher chance of going to a university, and will likely earn more as adults.<sup>52</sup> Some states have also implemented a child tax credit to complement the federal CTC.

This indicator is new for *State of Babies Yearbook: 2020* and documents whether a state offers a child tax credit. 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. (2018). *State tax credits*. Retrieved from <http://www.taxcreditsforworkersandfamilies.org/state-tax-credits>

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### **State offers an earned income tax credit**

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

49 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. Retrieved from [https://www.acf.hhs.gov/sites/default/files/opre/2018\\_welfare\\_rules\\_databook\\_final\\_08\\_07\\_2019\\_508.pdf](https://www.acf.hhs.gov/sites/default/files/opre/2018_welfare_rules_databook_final_08_07_2019_508.pdf)

50 Tax Credits for Workers and Their Families. (2018). *State tax credits*. Retrieved from <http://www.taxcreditsforworkersandfamilies.org/state-tax-credits>

51 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.

52 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. Retrieved from <https://www.cbpp.org/sites/default/files/atoms/files/6-26-12tax.pdf>

income.<sup>53</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>54</sup> Several states, such as California, Louisiana, Maryland, New Jersey, and others, have recently increased the amount of their credits and/or extended eligibility to a greater pool of people to provide support and access to more families.<sup>55</sup>

Research has found that children who are beneficiaries of greater state or federal EITCs obtain better test scores, compared to similar families who are receiving lesser amounts. Additionally, college enrollment was greater in states that offered refundable tax credits similar to the federal program.<sup>56</sup>

This indicator is new for *State of Babies Yearbook: 2020* and documents whether a state offers an EITC. States that have enacted a law regarding EITC that has not yet gone into effect are counted as having the policy.

Source: Tax Credits for Workers and Their Families. (2018). *State tax credits*. Retrieved from <http://www.taxcreditsforworkersandfamilies.org/state-tax-credits/>

## POSITIVE EARLY LEARNING EXPERIENCES

### *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>57</sup> Because 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>58</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>59</sup>

53 Tax Credits for Workers and Their Families. (2018). *State tax credits*. Tax Credits for Workers and Their Families. Retrieved from <http://www.taxcreditsforworkersandfamilies.org/state-tax-credits/>

54 National Conference of State Legislatures. (2019). *Tax credits for working families: Earned income tax credit (EITC)*. National Conference of State Legislatures. Retrieved from <https://www.ncsl.org/research/labor-and-employment/earned-income-tax-credits-for-working-families.aspx>

55 Williams, E., & Waxman, S. (2019). *States can adopt or expand earned income tax credits to build a stronger future economy*. Center on Budget and Policy Priorities. Retrieved from <https://www.cbpp.org/research/state-budget-and-tax/states-can-adopt-or-expand-earned-income-tax-credits-to-build-a?fa=view&id=4084>

56 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. Retrieved from <https://www.cbpp.org/sites/default/files/atoms/files/6-26-12tax.pdf>

57 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>

58 Raikes, H., Pan, B. A., Luze, G. J., Tamis-LeMonda, C. S., Brooks-Gunn, J., Constantine, J., ... 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.

59 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.



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

Estimates in the *State of Babies Yearbook: 2020* 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 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.

This indicator can be disaggregated by income. NSCH derives household poverty levels based on family income. Missing values were imputed by Census, and we use the single imputation version provided in the combined 2016–2017 data file. Households with incomes less than 200 percent of the FPL are classified as low-income. Households with incomes at or above 200 percent of the FPL 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). Retrieved from [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 those whose family members report singing or telling stories to them every day.

Estimates in the *State of Babies Yearbook: 2020* 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 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.

This indicator can be disaggregated by income. NSCH derives household poverty levels based on family income. Missing values were imputed by Census, and we use the single imputation version provided in the combined 2016–2017 data file. Households with incomes less than 200percent of the FPL are classified as low-income. Households with incomes at or above 200percent of the FPL 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). Retrieved from [www.childhealthdata.org](http://www.childhealthdata.org)

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### **Percentage of infants/toddlers below 100 percent of the FPL 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 poor families. 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>60</sup> A recent study found that, among families participating in EHS, children had enhanced cognitive development, attention, and engagement; their parents had less stress and family conflict; and they 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>61</sup>

The National Head Start Association reports the percentage of eligible children ages 0–2 who had access to EHS during 2019 fiscal year. The denominator for this indicator is the number of children ages 0–2 below 100 percent of the FPL, according to the 2018 U.S. Census Bureau’s Current Population Survey, Annual Social and Economic Supplement. The numerator is total cumulative enrollment, based on the 2019 Head Start Program Information Report. This percentage does not account for eligibility criteria beyond income.

Source: National Head Start Association. (2019). *Access to Head Start in the United States state-by-state fact sheets*. Retrieved from <https://nhsa.app.box.com/s/rbuxmgf0fun72qr1r5akm8q65qj40ufo>

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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. The amount parents pay for care is generally less than the total cost of providing care; still, parents can pay more than \$23,000 per year for center-based infant care, depending on where they live. The new federal standard is that families should spend no more than 7 percent of their income for child care.<sup>62</sup>

The average cost of care for single parents has not been updated since *State of Babies Yearbook: 2019*, as updated data are not available. The indicator denominator is the median income for single-parent families based on the 2015 U.S. Census Bureau’s American Community Survey, 5-year estimates. The numerator is the 2016 annual cost of center-based infant care, based on the Child Care Aware of America’s February 2017 survey of Child Care Resource and Referral State Networks. Because of data availability, the numerator for South Dakota is based on Child Care Aware of America’s 2016 State Fact Sheets report.

The calculation of cost of care for married parents is consistent with *State of Babies Yearbook: 2019* but relies on more recent data. The denominator is the median income for married-couple families based on the 2017 U.S. Census Bureau’s American Community Survey, 5-year estimates.

60 Early Childhood Learning & Knowledge Center. (2018) Early Head Start Program Options. U.S. Department of Health & Human Services, Administration for Children & Families. Retrieved from <https://eclkc.ohs.acf.hhs.gov/programs/article/early-head-start-program-options>

61 Green, B. L., Ayoub, C., Bartlett, J. D., Furrer, C., Cohen, R. C., Buttita, K., ... Sanders, M. B. (2018). *How Early Head Start prevents child maltreatment*. Child Trends. Retrieved from <https://www.childtrends.org/publications/how-early-head-start-prevents-child-maltreatment>

62 Child Care Aware of America. (2018). *The U.S. and the high cost of child care*. Retrieved from <http://usa.childcareaware.org/advocacy-public-policy/resources/research/costofcare/>

The numerator is the 2018 annual cost of center-based infant care, based on the Child Care Aware of America's January 2019 survey of Child Care Resource and Referral State Networks. Because of availability gaps, data for Florida, Illinois, Louisiana, Montana, North Carolina, South Carolina, and South Dakota, are based on Child Care Aware of America's 2016 State Fact Sheets report. Additionally, in the 2019 state fact sheets, the data for Alabama, New Jersey, and Wyoming are from 2017, and the data for Pennsylvania are from 2016.

Sources: Child Care Aware of America. (2016). *2017 Appendices: Parents and the high cost of child care*. Retrieved from [http://usa.childcareaware.org/wp-content/uploads/2018/01/2017\\_CCA\\_High\\_Cost\\_Appendices\\_FINAL\\_180112\\_small.pdf](http://usa.childcareaware.org/wp-content/uploads/2018/01/2017_CCA_High_Cost_Appendices_FINAL_180112_small.pdf)

Child Care Aware of America. (2019). *Child Care in America: 2019 state fact sheets*. Retrieved from <https://usa.childcareaware.org/advocacy-public-policy/resources/research/statefactsheets>

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### **Income eligibility level for child care subsidy is at or above 200 percent of the FPL**

According to reputable estimates, families in every state need an income at least twice the FPL 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 care without sacrificing other essentials.<sup>63</sup>

The National Women's Law Center reports the income eligibility limits for a child care subsidy as a percentage of the 2018 FPL for a family of three, or \$20,780 a year. Eligibility limits that are equal to or above 200 percent of the FPL are coded as "yes," and eligibility limits that are less than 200 percent of the FPL are coded as "no." Data reflect policies as of 2018.

Colorado, Texas, and Virginia set different income limits, by region, so it is not possible to compute this indicator for these states.

Source: Schulman, K. (2018). *Overdue for investment: State child care assistance policies 2018*. National Women's Law Center. Retrieved from <https://nwlc-ciw49tixgw5lbab.stackpathdns.com/wp-content/uploads/2018/11/NWLC-State-Child-Care-Assistance-Policies-2018.pdf>

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### **Percent 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. States set their own eligibility requirements. Even in the most generous states, however, various barriers (including waiting lists or frozen intake, high family copayments, and low reimbursement rates for care providers) restrict access to these programs.<sup>64</sup>

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 used the following steps: (a) obtained the state median incomes for four-person families, by state,

63 Schulman, K. (2018). *Overdue for investment: State child care assistance policies, 2018*. National Women's Law Center. Retrieved from <https://nwlc-ciw49tixgw5lbab.stackpathdns.com/wp-content/uploads/2018/11/NWLC-State-Child-Care-Assistance-Policies-2018.pdf>

64 Ibid.

from the Federal Register; (b) multiplied those numbers by 1.5 to get 150 percent of the state median income for 4-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 Federal Register; (d) applied to each respondent in the 2017 1-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; (f) exported the number of children ages 0–2 with these flags. The numerator is the number of children ages 0–2 who received CCDF-funded care in Fiscal Year 2017 (based on estimates from the Administration for Children and Families Office of Child Care).

Sources: Administration for Children and Families, Office of Child Care, FY 2017 CCDF Data Tables (Preliminary). Retrieved from <https://www.acf.hhs.gov/occ/resource/preliminary-fy2017>

Administration for Children and Families, Office of Community Services. The Low-Income Home Energy Assistance Program IM 2017-3. *State Median Income Estimates for Optional Use in FY 2017 LIHEAP Programs and Mandatory Use in FY 2018*. Retrieved from <https://www.acf.hhs.gov/ocs/resource/liheap-im2017-03>

American Community Survey 2017, one-year estimates. Ruggles, S., Flood, S., Goeken, R., Grover, J., Meyer, E., Pacas, J., & Sobek, M. (2019). *IPUMS USA: Version 9.0* [dataset]. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010.V9.0>

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### **State allocated new Child Care and Development Block Grant (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. The CCDF is the primary federal funding source dedicated to helping low-income families pay for child care, while also setting new requirements to improve child care quality across the country. Improving school readiness and promoting healthy child development are two of the key purposes of the CCDBG Act.<sup>65</sup> With the reauthorization taking place in 2014, new requirements were set in place for states to expand access to child care to at-risk families, expand education to families around child development and other financial assistance programs, enhance health and safety practices to all the providers under the grant, and several other requirements.<sup>66</sup> Many states found themselves struggling to meet the new requirements that were set in place with the new reauthorization, prompting Congress to respond to these concerns by providing a national increase by \$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>67</sup>

This indicator is new for *State of Babies Yearbook: 2020*. States that allocated increased CCDBG funding to improve access to child care services, and specified increasing the number of slots for infants and toddlers, are indicated as having allocated new CCDBG funds to invest in infant/toddler care. Data are current as of August 2019.

65 An Office of the Administration for Children & Families: Office of Child Care. (2015). *CCDF reauthorization frequently asked questions—ARCHIVED*. Retrieved from <https://www.acf.hhs.gov/occ/resource/ccdf-reauthorization-faq-archived>

66 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. Retrieved from <https://www.childtrends.org/publications/states-use-of-the-child-care-and-development-block-grant-funding-increase>

67 Ibid.

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. Retrieved from <https://www.childtrends.org/publications/states-use-of-the-child-care-and-development-block-grant-funding-increase>

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

The reauthorized Child Care Development Fund (CCDF) 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 & 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>68</sup>

The Early Head Start (EHS) standard for group size for children ages 0 to 3 years old is eight children.<sup>69</sup> This indicator, which is new for *State of Babies Yearbook: 2020*, 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. 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)*. Retrieved from <https://www.acf.hhs.gov/occ/resource/state-plans>

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

The reauthorized Child Care Development Fund (CCDF) 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 & 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 promotes improved quality of caregiving and improved verbal interactions between the provider and the child. Additionally, children's safety and sanitation could get compromised if the providers are busy meeting the needs of all the other children.<sup>70</sup>

The Early Head Start (EHS) standard for adult-to-child ratio for children ages 0 to 3 years old is one teacher for every four children.<sup>71</sup> This indicator is a count of whether the state's ratio requirements

68 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, 3rd Edition*. Retrieved from [https://nrckids.org/files/CFOC3\\_updated\\_final.pdf](https://nrckids.org/files/CFOC3_updated_final.pdf)

69 Early Childhood Learning & Knowledge Center. (n.d.) Head Start policy and regulations: 1302.21 center-based option. Retrieved from: <https://eclkc.ohs.acf.hhs.gov/policy/45-cfr-chap-xiii/1302-21-center-based-option>

70 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, 3rd edition*. Retrieved from [https://nrckids.org/files/CFOC3\\_updated\\_final.pdf](https://nrckids.org/files/CFOC3_updated_final.pdf)

71 Early Childhood Learning & Knowledge Center. (n.d.) *Head Start policy and regulations: 1302.21 center-based option*. Retrieved from: <https://eclkc.ohs.acf.hhs.gov/policy/45-cfr-chap-xiii/1302-21-center-based-option>

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. 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)*. Retrieved from <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 development is the care setting they are exposed to. Well-trained and qualified teachers are more likely to succeed in promoting classroom skills.<sup>72</sup> The federal grant does not set specific requirements around teacher qualifications but does require states to develop a system for continuing professional development for teachers. Additionally, each state sets its own requirements around teacher qualifications.

Studies have shown that teachers who have received formal education from an accredited university provide a better quality of care and education to the children they serve. Similarly, teachers holding a 4-year degree from a university are more likely to demonstrate optimal teaching and contribute to positive child outcomes to the children in the classroom.<sup>73</sup>

This indicator, new for *State of Babies Yearbook: 2020*, documents states' required qualifications for teachers of infants and toddlers, as reported in their CCDF plans. Teacher qualifications were classified into five categories: (a) no credential beyond a high school diploma; (b) Child Development Associate (CDA) or state equivalent credential; (c) specific infant/toddler credential or CDA with an infant/toddler credential; (d) associate's degree; and (e) bachelor's degree.

Most states did not further differentiate requirements by child age within the category of infants and toddlers. When requirements did vary by age, the lowest qualifications are reported. 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)*. Retrieved from <https://www.acf.hhs.gov/occ/resource/state-plans>

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### **The 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>74</sup>

This indicator is new for *State of Babies Yearbook: 2020* and denotes whether a state has adopted a professional credential for infant and toddler teachers. Note that there is not a consensus

72 An Office of the Administration for Children & Families: Office of Child Care. (2015). *CCDF reauthorization frequently asked questions—ARCHIVED*. Retrieved from: <https://www.acf.hhs.gov/occ/resource/ccdf-reauthorization-faq-archived>

73 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, 3rd edition*. Retrieved from [https://nrckids.org/files/CFOC3\\_updated\\_final.pdf](https://nrckids.org/files/CFOC3_updated_final.pdf)

74 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.



definition of appropriate 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*. Retrieved from <https://www.zerotothree.org/resources/360-state-policy-tracker#downloads>

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### **State 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 more in promoting positive child development outcomes than their more affluent peers.<sup>75</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 at or above the 75<sup>th</sup> percentile of the current market rates.

Increasing the state reimbursement percentile allows more families to access higher-quality child care. Additionally, higher reimbursement rates allow providers to serve more families receiving subsidy, since the cost for serving those families is covered.<sup>76</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 for 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 February 2018.

Source: Schulman, K. (2018). *Overdue for investment: State child care assistance policies 2018*. National Women’s Law Center. Retrieved from <https://nwlc.org/resources/overdue-for-investment-state-child-care-assistance-policies-2018>

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### **Percentage of infants/toddlers, ages 9 through 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>77</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>78</sup> The American Academy of Pediatrics recommends that children receive developmental screening from their physicians at least three times before their third birthday.<sup>79</sup>

75 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. Retrieved from [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)

76 Child Care Aware of America. (2019). *2019 CCDBG state snapshots*. Retrieved from <https://info.childcareaware.org/ccdbg-2019-state-snapshots>

77 Glascoe, F. P. (2000). Early detection of developmental and behavioral problems. *Pediatrics in Review*, 21 (8), 272–280.

78 Guevara, J. P., Gerdes, M., Localio, R., Huang, Y. V., Pinto-Martin, J., Minkovitz, C. S., ... Pati, S. (2012). Effectiveness of developmental screening in an urban setting. *Pediatrics*, 131(1), 30–37. DOI: [10.1542/peds.2012-0765](https://doi.org/10.1542/peds.2012-0765)

79 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.

The denominator for this indicator is all children ages 9 through 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: 2020* 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 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.

This indicator can be disaggregated by income. NSCH derives household poverty levels based on family income. Missing values were imputed by Census, and we use the single imputation version provided in the combined 2016–17 data file. Households with incomes less than 200 percent of the FPL are classified as low-income. Households with incomes at or above 200 percent of the FPL 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). Retrieved September 10, 2019 from [www.childhealthdata.org](http://www.childhealthdata.org).

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### **Percentage of infants/toddlers with moderate/severe developmental delay**

Developmental delays among young children can signal the presence of serious physical or social-emotional problems, as well as problems with vision or hearing that, if untreated, can negatively affect learning. Screenings can help identify children who are not meeting expected milestones of development,<sup>80</sup> and should lead to more detailed assessment and appropriate treatment and guidance for parents.

The indicator denominator is all children ages 0–2. The numerator is those whose parents respond “yes” to the question: “Has a doctor, other health care provider, or educator ever told you that this child has developmental delays?” and report that their child currently has a moderate/severe developmental delay.

Estimates in the *State of Babies Yearbook: 2020* are based on the 2016–17 combined NSCH. These results are more reliable than the results presented in the 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.

Use caution when interpreting this indicator. Because this indicator is based on parent reports of doctor’s diagnoses, it likely underestimates the prevalence of developmental delays.

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). Retrieved from [www.childhealthdata.org](http://www.childhealthdata.org)

80 Glascoe, F. P. (2000). Early detection of developmental and behavioral problems. *Pediatrics in Review*, 21(8), 272–280.

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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 that aids states' provision of early intervention services for infants and toddlers with disabilities, ages birth through 2 years.<sup>81</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>82</sup> States vary in their eligibility criteria for Part C services, and in 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.

This indicator is new for *State of Babies Yearbook: 2020*. States reported whether their Part C eligibility criteria include infants and toddlers who are at risk of having substantial developmental delays (or "at-risk infants and toddlers") under IDEA section 632(5)(B)(i) in their Annual Progress Reports for fiscal year 2017.

Source: The Office of Special Education Programs (OSEP). (n.d.). *Final SSP/APR: Part C, FFY 2017*. Retrieved from <https://osep.grads360.org/#report/apr/publicView>

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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>83</sup> In some states, eligibility extends to those who are at risk for developing a disability. States' eligibility criteria for early intervention services vary, as do the services they offer.

The way this indicator was calculated changed for *State of Babies Yearbook: 2020*. The numerator is the cumulative number of infants and toddlers with disabilities ages birth through 2 who received early intervention services under IDEA, Part C during the most recent 12-month period for which data are available. This is a cumulative count, whereas we used a snapshot in *State of Babies Yearbook: 2019*. The denominator is the total number of children ages birth through 2 years, as provided by the source. Data reflect 2017.

Source: U.S. Department of Education (2017). *IDEA Section 618 data products: Static tables. Part C child count and settings*. Retrieved from <https://www2.ed.gov/programs/osepidea/618-data/static-tables/index.html#partc-cc>

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### **Timeliness of Part C services**

Individualized Family Service Plans (IFSPs) are early intervention plans for children, ages birth to 3, who qualify under IDEA. The IFSP is unique in that it uses a family-focused lens. This approach

81 Early Childhood Technical Assistance Center. *Part C of IDEA*. Retrieved from: <https://ectacenter.org/partc/partc.asp>

82 Shackelford, J. (2002). *State and jurisdictional eligibility definitions for infants and toddlers with disabilities under IDEA*. NECTAC Notes. Retrieved from <https://files.eric.ed.gov/fulltext/ED471884.pdf>

83 Early Childhood Technical Assistance Center. *Part C of IDEA*. <http://ectacenter.org/partc/partc.asp#overview>

requires a partnership between the family and professionals, to create an early intervention that is respectful of the child and family's values and practices.<sup>84</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>85</sup>

The denominator for this indicator is the total number of eligible infants and toddlers evaluated and assessed, for whom an initial IFSP meeting was required. The numerator is the number of those with IFSPs for whom an initial evaluation and assessment and an initial IFSP meeting were conducted within Part C's 45-day requirement, plus the number of documented delays attributable to exceptional family circumstances.

Source: The Office of Special Education Programs (OSEP). (n.d.). *Final SSP/APR: Part C, FFY 2017*. Retrieved from <https://osep.grads360.org/#report/apr/publicView>

## DEMOGRAPHICS

### **Number of infants/toddlers**

These are vintage 2018 population estimates. Estimates are produced using a cohort component method, based on the 2010 Census, and births, deaths, and migration occurring since. For more information, see the Census Bureau's documentation: <https://www2.census.gov/programs-surveys/popest/technical-documentation/methodology/2010-2018/2018-natstcopr-meth.pdf>

Source: U.S. Census Bureau, Population Division. (2019). *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, 2018*. Retrieved from <https://www.census.gov/programs-surveys/popest/data/tables.html>

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### **Percentage of infant/toddler population**

The denominator is the total population, based on the Census Bureau's vintage 2018 population estimates. The numerator is the population ages 0–2. Estimates are produced using a cohort component method, based on the 2010 Census, and births, deaths, and migration occurring since. For more information, see the Census Bureau's documentation: <https://www2.census.gov/programs-surveys/popest/technical-documentation/methodology/2010-2018/2018-natstcopr-meth.pdf>

Source: U.S. Census Bureau, Population Division. (2019). *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, 2018*. Retrieved from <https://www.census.gov/programs-surveys/popest/data/tables.html>

84 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.

85 Individuals with Disabilities Education Act. *Sec. 303.310 Post-referral timeline (45 days)*. Retrieved from: <https://sites.ed.gov/idea/regs/c/d/303.310>

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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 2018 population estimates. The numerator is those of Hispanic origin. Hispanic origin is considered an ethnicity, not a race, and Hispanics may be of any race. Estimates are produced using a cohort component method, based on the 2010 Census, and births, deaths, and migration occurring since. For more information, see the Census Bureau’s documentation: <https://www2.census.gov/programs-surveys/popest/technical-documentation/methodology/2010-2018/2018-natstcopr-meth.pdf>

Source: U.S. Census Bureau, Population Division. (2019). *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, 2018*. Retrieved from <https://www.census.gov/programs-surveys/popest/data/tables.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 2018 population estimates. The numerator is those who are non-Hispanic White. Hispanic origin is considered an ethnicity, not a race, and Hispanics may be of any race. Estimates are produced using a cohort component method, based on the 2010 Census, and births, deaths, and migration occurring since. For more information, see the Census Bureau’s documentation: <https://www2.census.gov/programs-surveys/popest/technical-documentation/methodology/2010-2018/2018-natstcopr-meth.pdf>

Source: U.S. Census Bureau, Population Division. (2019). *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, 2018*. Retrieved from <https://www.census.gov/programs-surveys/popest/data/tables.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 2018 population estimates. The numerator is those who are non-Hispanic Black. Hispanic origin is considered an ethnicity, not a race, and Hispanics may be of any race. Estimates are produced using a cohort component method, based on the 2010 Census, and births, deaths, and migration occurring since. For more information, see the Census Bureau’s documentation: <https://www2.census.gov/programs-surveys/popest/technical-documentation/methodology/2010-2018/2018-natstcopr-meth.pdf>

Source: U.S. Census Bureau, Population Division. (2019). *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, 2018*. Retrieved from <https://www.census.gov/programs-surveys/popest/data/tables.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 2018 population estimates. The numerator is those who are non-Hispanic Asian. Hispanic origin is considered an ethnicity, not a race, and Hispanics may be of any race. Estimates are produced using a cohort component method, based on the 2010 Census, and births, deaths, and migration occurring since. For more information, see the Census Bureau’s documentation: <https://www2.census.gov/programs-surveys/popest/technical-documentation/methodology/2010-2018/2018-natstcopr-meth.pdf>

Source: U.S. Census Bureau, Population Division. (2019). *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, 2018*. Retrieved from <https://www.census.gov/programs-surveys/popest/data/tables.html>

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#### **Percentage of infants/toddlers who are non-Hispanic American Indian or Alaskan Native**

The denominator is the total population ages 0–2, based on the Census Bureau’s vintage 2018 population estimates. The numerator is those who are non-Hispanic American Indian and Alaska Native. Hispanic origin is considered an ethnicity, not a race, and Hispanics may be of any race. Estimates are produced using a cohort component method, based on the 2010 Census, and births, deaths, and migration occurring since. For more information, see the Census Bureau’s documentation: <https://www2.census.gov/programs-surveys/popest/technical-documentation/methodology/2010-2018/2018-natstcopr-meth.pdf>

Source: U.S. Census Bureau, Population Division. (2019). *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, 2018*. Retrieved from <https://www.census.gov/programs-surveys/popest/data/tables.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 2018 population estimates. The numerator is those who are non-Hispanic Native Hawaiian and other Pacific Islander. Hispanic origin is considered an ethnicity, not a race, and Hispanics may be of any race. Estimates are produced using a cohort component method, based on the 2010 Census, and births, deaths, and migration occurring since. For more information, see the Census Bureau’s documentation: <https://www2.census.gov/programs-surveys/popest/technical-documentation/methodology/2010-2018/2018-natstcopr-meth.pdf>

Source: U.S. Census Bureau, Population Division. (2019). *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, 2018*. Retrieved from <https://www.census.gov/programs-surveys/popest/data/tables.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 2018 population estimates. The numerator is those who are non-Hispanic of multiple races. Hispanic origin is considered an ethnicity, not a race, and Hispanics may be of any race. Estimates are produced using a cohort component method, based on the 2010 Census, and births, deaths, and migration occurring since. For more information, see the Census Bureau’s documentation: <https://www2.census.gov/programs-surveys/popest/technical-documentation/methodology/2010-2018/2018-natstcopr-meth.pdf>

Source: U.S. Census Bureau, Population Division. (2019). *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, 2018*. Retrieved from <https://www.census.gov/programs-surveys/popest/data/tables.html>



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### **Percentage of infants/toddlers who are non-Hispanic Native Hawaiian, other Pacific Islander or multiple race categories**

This is an alternative, nonmutually exclusive race/ethnicity category. The denominator is the total population ages 0–2, based on the Census Bureau’s vintage 2018 population estimates. The numerator is the non-Hispanic population ages 0–2 who are Native Hawaiian and other Pacific Islander, or multiple race categories. Hispanic origin is considered an ethnicity, not a race, and Hispanics may be of any race. Estimates are produced using a cohort component method, based on the 2010 Census, and births, deaths, and migration occurring since. For more information, see the Census Bureau’s documentation: <https://www2.census.gov/programs-surveys/popest/technical-documentation/methodology/2010-2018/2018-natstcopr-meth.pdf>

Source: U.S. Census Bureau, Population Division. (2019). *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, 2018*. Retrieved from <https://www.census.gov/programs-surveys/popest/data/tables.html>

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### **Percentage of infants/toddlers who are non-Hispanic American Indian, Alaskan Native, Native Hawaiian, other Pacific Islander or multiple race categories**

This is an alternative, nonmutually exclusive race/ethnicity category. The denominator is the total population ages 0–2 based on the Census Bureau’s vintage 2018 population estimates. The numerator is the non-Hispanic population ages 0–2 who are American Indian Alaska Native, Native Hawaiian and other Pacific Islander, or multiple race categories. Hispanic origin is considered an ethnicity, not a race, and Hispanics may be of any race. Estimates are produced using a cohort component method, based on the 2010 Census, and births, deaths, and migration occurring since. For more information, see the Census Bureau’s documentation: <https://www2.census.gov/programs-surveys/popest/technical-documentation/methodology/2010-2018/2018-natstcopr-meth.pdf>

Source: U.S. Census Bureau, Population Division. (2019). *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, 2018*. Retrieved from <https://www.census.gov/programs-surveys/popest/data/tables.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 income and urbanicity. *Income*: Income is asked only on the March 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 FPL. 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 FPL. *Urbanicity*: Metropolitan (urban) areas include central cities, metro area outside of central cities, and metro areas with central city status unknown. Non-metropolitan (rural) areas are areas outside of metropolitan areas.

Source: Current Population Survey 2018. Flood, S., King, M., Rodgers, R., Ruggles, S., & Warren, J. R. (2018). *Integrated public use microdata series, current population survey: Version 6.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D030.V6.0>

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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 those 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 income and urbanicity. *Income:* Income is asked only on the March 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 FPL. 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 FPL. *Urbanicity:* Metropolitan (urban) areas include central cities, metro area outside of central cities, and metro areas with central city status unknown. Non-metropolitan (rural) areas are areas outside of metropolitan areas.

Source: Current Population Survey 2018. Flood, S., King, M., Rodgers, R., Ruggles, S., & Warren, J. R. (2018). *Integrated public use microdata series, current population survey: Version 6.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D030.V6.0>

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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 income and urbanicity. *Income:* Income is asked only on the March 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 FPL. 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 FPL. *Urbanicity:* Metropolitan (urban) areas include central cities, metro area outside of central cities, and metro areas with central city status unknown. Non-metropolitan (rural) areas are areas outside of metropolitan areas.

Source: Current Population Survey 2018. Flood, S., King, M., Rodgers, R., Ruggles, S., & Warren, J. R. (2018). *Integrated public use microdata series, current population survey: Version 6.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D030.V6.0>

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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 income and urbanicity. *Income:* Income is asked only on the March 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 FPL. 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 FPL. *Urbanicity:* Metropolitan (urban) areas include central cities, metro area outside of central cities, and metro areas with central city status unknown. Non-metropolitan (rural) areas are areas outside of metropolitan areas.

Source: Current Population Survey 2018. Flood, S., King, M., Rodgers, R., Ruggles, S., & Warren, J. R. (2018). *Integrated public use microdata series, current population survey: Version 6.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D030.V6.0>

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### **Percentage of infants/toddlers that 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.

This indicator can be disaggregated by income and urbanicity. *Income*: Income is asked only on the March 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 FPL. 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 FPL. *Urbanicity*: Metropolitan (urban) areas include central cities, metro area outside of central cities, and metro areas with central city status unknown. Non-metropolitan (rural) areas are areas outside of metropolitan areas.

Source: Current Population Survey 2018. Flood, S., King, M., Rodgers, R., Ruggles, S., & Warren, J. R. (2018). *Integrated public use microdata series, current population survey: Version 6.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D030.V6.0>

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### **Percentage of infants/toddlers living in families with incomes below 100 percent of the FPL**

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 FPL. Note that this poverty rate does not match onto the rates published by the Census Bureau, because the public-use version of the American Community Survey is not complete.

Source: American Community Survey 2018, one-year estimates. Ruggles, S., Flood, S., Goeken, R., Grover, J., Meyer, E., Pacas, J., & Sobek, M. (2019). *IPUMS USA: Version 9.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010.V9.0>

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### **Percentage of infants/toddlers living in families with incomes between 100-199 percent of the FPL**

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 FPL. Note that this poverty rate does not match onto the rates published by the Census Bureau, because the public use version of the American Community Survey is not complete.

Source: American Community Survey 2018, one-year estimates. Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E. Jose Pacas, J. & Sobek, M. (2019). *IPUMS USA: Version 9.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010.V9.0>

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### **Percentage of infants/toddlers living in families with incomes at or above 200 percent of the FPL**

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 FPL. Note that this poverty rate does not match onto the rates published by the Census Bureau, because the public use version of the American Community Survey is not complete.

Source: American Community Survey 2018, one-year estimates. Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E. Jose Pacas, J. & Sobek, M. (2019). *IPUMS USA: Version 9.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010V9.0>

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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. All geographic areas not considered part of a metro area are considered rural.

Source: American Community Survey 2018, one-year estimates. Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E. Jose Pacas, J. & Sobek, M. (2019). *IPUMS USA: Version 9.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010V9.0>

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### **Percentage of non-Hispanic White infants/toddlers living in families with incomes below 100 percent of the FPL**

The denominator is the total number of children ages 0–2 in the racial/ethnic group. The numerator is those in the racial/ethnic group who live in families with incomes below 100 percent of the FPL. Some states have very small cell sizes and estimates may be unreliable.

Source: American Community Survey 2018, one-year estimates. Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E. Jose Pacas, J. & Sobek, M. (2019). *IPUMS USA: Version 9.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010V9.0>

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### **Percentage of non-Hispanic Black infants/toddlers living in families with incomes below 100 percent of the FPL**

The denominator is the total number of children ages 0–2 in the racial/ethnic group. The numerator is those in the racial/ethnic group who live in families with incomes below 100 percent of the FPL. Some states have very small cell sizes and estimates may be unreliable.

Source: American Community Survey 2018, one-year estimates. Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E. Jose Pacas, J. & Sobek, M. (2019). *IPUMS USA: Version 9.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010V9.0>

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### **Percentage of non-Hispanic infants/toddlers of races other than White or Black, or of multiple races, living in families with incomes below 100 percent of the FPL**

The denominator is the total number of children ages 0–2 in the racial/ethnic group. The numerator is those who live in families with incomes below 100 percent of the FPL. Some states have very small cell sizes and estimates may be unreliable.

Source: American Community Survey 2018, one-year estimates. Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E. Jose Pacas, J. & Sobek, M. (2019). *IPUMS USA: Version 9.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010V9.0>

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### **Percentage of Hispanic infants/toddlers living in families with incomes below 100 percent of the FPL**

The denominator is the total number of children ages 0–2 in the racial/ethnic group. The numerator is the number of those who live in families with incomes below 100 percent of the FPL. Some states have very small cell sizes and estimates may be unreliable.

Source: American Community Survey 2018, one-year estimates. Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E. Jose Pacas, J. & Sobek, M. (2019). *IPUMS USA: Version 9.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010.V9.0>

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***Percentage of non-Hispanic White infants/toddlers living in families with incomes between 100–199 percent of the FPL***

The denominator is the total number of children ages 0–2 in the racial/ethnic group. The numerator is the number of those in families with incomes at or above 100 percent and below 200 percent of the FPL. Some states have very small cell sizes and estimates may be unreliable.

Source: American Community Survey 2018, one-year estimates. Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E. Jose Pacas, J. & Sobek, M. (2019). *IPUMS USA: Version 9.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010.V9.0>

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***Percentage of non-Hispanic Black infants/toddlers living in families with incomes between 100–199 percent of the FPL***

The denominator is the total number of children ages 0–2 in the racial/ethnic group. The numerator is the number of those who live in families with incomes at or above 100 percent and below 200 percent of the FPL. Some states have very small cell sizes and estimates may be unreliable.

Source: American Community Survey 2018, one-year estimates. Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E. Jose Pacas, J. & Sobek, M. (2019). *IPUMS USA: Version 9.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010.V9.0>

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***Percentage of non-Hispanic infants/toddlers of races other than White or Black, or of multiple races, living in families with incomes between 100–199 percent of the FPL***

The denominator is the total number of children ages 0–2 in the racial/ethnic group. The numerator is the number of those who live in families with incomes at or above 100 percent and below 200 percent of the FPL. Some states have very small cell sizes and estimates may be unreliable.

Source: American Community Survey 2018, one-year estimates. Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E. Jose Pacas, J. & Sobek, M. (2019). *IPUMS USA: Version 9.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010.V9.0>

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***Percentage of Hispanic infants/toddlers living in families with incomes between 100–199 percent of the FPL***

The denominator is the total number of children ages 0–2 in the racial/ethnic group. The numerator is the number of children those who live in families with incomes at or above 100 percent and below 200 percent of the FPL. Some states have very small cell sizes and estimates may be unreliable.

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***Percentage of non-Hispanic White infants/toddlers living in families with incomes at or above 200 percent of the FPL***

The denominator is the total number of children ages 0–2 in the racial/ethnic group. The numerator is the number of those who live in families with incomes at or above 200 percent of the FPL. Some states have very small cell sizes and estimates may be unreliable.

Source: American Community Survey 2018, one-year estimates. Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E. Jose Pacas, J. & Sobek, M. (2019). *IPUMS USA: Version 9.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010.V9.0>

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***Percentage of non-Hispanic Black infants/toddlers living in families with incomes at or above 200 percent of the FPL***

The denominator is the total number of children ages 0–2 in the racial/ethnic group. The numerator is the number of those who live in families with incomes at or above 200 percent of the FPL. Some states have very small cell sizes and estimates may be unreliable.

Source: American Community Survey 2018, one-year estimates. Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E. Jose Pacas, J. & Sobek, M. (2019). *IPUMS USA: Version 9.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010.V9.0>

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***Percentage of non-Hispanic infants/toddlers of races other than White or Black, or of multiple races, living in families with incomes at or above 200 percent of the FPL***

The denominator is the total number of children ages 0–2 in the racial/ethnic group. The numerator is the number of those who live in families with incomes at or above 200 percent of the FPL. Some states have very small cell sizes and estimates may be unreliable.

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***Percentage of Hispanic infants/toddlers living in families with incomes at or above 200 percent of the FPL***

The denominator is the total number of children ages 0–2 in the racial/ethnic group. The numerator is the number of those who live in families with incomes at or above 200 percent of the FPL. Some states have very small cell sizes and estimates may be unreliable.

Source: American Community Survey 2018, one-year estimates. Ruggles, S., Flood, S., Goeken, R., Grover, J., Erin Meyer, E. Jose Pacas, J. and Sobek, M. (2019). *IPUMS USA: Version 9.0 [dataset]*. Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010.V9.0>