

Name: Nursery and Preschool Enrollment

Short Description: Percentage of children enrolled in nursery school or pre-school.

Data Source:

- **Name:** United States Census Bureau, American Community Survey (ACS)
- **Link to Source:** <https://www.census.gov/programs-surveys/acs/data.html>

Year(s): 2017-2021 (ACS 5-year Estimates)

Source Geographic Level: Zip Code Tabulation Area (ZCTA)

Stratification: Black populations

Selection Rationale: Early childhood education (ECE), which includes nursery and pre-school, improves both child and parental mental health. It provides a context in which a child's developmental milestones are monitored,¹ and parents have greater flexibility to participate in the labor force when their children are enrolled in ECE.²

Strengths and Limitations:

- **Strengths:**
 - [Importance] ECE provides a context for early detection of mental and developmental issues in children³ and supports the development of positive mental health, self-regulation, and executive functioning.^{4,5} ECE has also been shown to improve high school completion rates and lower rates of involvement with the criminal justice system, both of which are associated with better mental health outcomes.⁶ There is a strong connection between child mental health and

¹ Centers for Disease Control and Prevention. (2019a, March 20). *What Are Childhood Mental Disorders?* <https://www.cdc.gov/childrensmentalhealth/basics.html>

² Morrissey, T. (2019). The Effects Of Early Care And Education On Children's Health. *Health Affairs*. <https://doi.org/10.1377/hpb20190325.519221>

³ Centers for Disease Control and Prevention. (2019b, July 19). *Improving Access to Children's Mental Health Care*. <https://www.cdc.gov/childrensmentalhealth/access.html>

⁴ Healthy People 2020. (2021, June 23). *Early Childhood Development and Education*. Office of Disease Prevention and Health Promotion. <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/early-childhood-development-and-education>

⁵ Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M., Espinosa, L., Gormley, W., Ludwig, J., Magnuson, K., Phillips, D., & Zaslow, M. (2013). *Investing in Our Future: The Evidence Base on Preschool Education*. Society for Research in Child Development. https://www.srkd.org/sites/default/files/file-attachments/mb_2013_10_16_investing_in_children.pdf

⁶ Friedman-Krauss, A., Barnett, W., & Nores, M. (2016). *How Much Can High-Quality Universal Pre-K Reduce Achievement Gaps?* Center for American Progress. <https://cdn.americanprogress.org/wp-content/uploads/2016/04/01115656/NIEER-AchievementGaps-report.pdf>

parent mental health.⁷ When a parent has access to childcare (e.g., ECE) they have more time to take care of themselves and their household, which cultivates an environment in which children can thrive.

- [Equity] This measure captures disparities experienced between population groups. Children in lower-income families are less likely to have access to ECE,⁸ and Black populations experience higher rates of poverty.⁹ This creates an increased risk of mental distress for both Black children and parents.
- [Scientific Soundness] ACS data provide valid and reliable estimates. This measure is advantageous because it is both simple to calculate and simple to communicate.
- [Feasibility] This measure is readily available through the United States Census Bureau's ACS, an ongoing survey that provides data in the year immediately following the year in which they are collected.

- **Limitations:**

- [Scientific Soundness] Data for the numerator and denominator of this measure come from different ACS tables that have differing age cutoffs. The table for the numerator (the number of children enrolled in nursery and pre-school) is only for children aged 3 and older (because this question is only asked for children aged 3 and older), while the table for the denominator includes all children under age 5. As a result, the values may be an undercount of the percentage enrolled in nursery and preschool given the more inclusive age range for the denominator.
- [Scientific Soundness] This measure is self-reported and depends on the accuracy of the person surveyed.
- [Equity] The ACS dataset does not provide information on the availability, quality, or affordability of nursery and pre-k programs. Data from the National Center for Education Statistics show that there are racial disparities in access to high-quality early education.¹⁰ Additional information on the quality of ECE programs would allow for more equitable and accurate measurement of potential impacts on mental health and well-being.

⁷ Centers for Disease Control and Prevention. (2021, April 23). *Mental health of children and parents —a strong connection*. <https://www.cdc.gov/childrensmentalhealth/features/mental-health-children-and-parents.html>

⁸ National Center for Education Statistics. (2021, May). *Enrollment Rates of Young Children*. Institute of Education Sciences. <https://nces.ed.gov/programs/coe/indicator/cfa>

⁹ Creamer, J. (2020, September 15). *Inequalities Persist Despite Decline in Poverty For All Major Race and Hispanic Origin Groups*. The United States Census Bureau. <https://www.census.gov/library/stories/2020/09/poverty-rates-for-blacks-and-hispanics-reached-historic-lows-in-2019.html>

¹⁰ Friedman-Krauss, A., & Barnett, S. (2020). *Access to High-Quality Early Education and Racial Equity*. National Institute for Early Education. <https://nieer.org/wp-content/uploads/2021/02/Special-Report-Access-to-High-Quality-Early-Education-and-Racial-Equity.pdf>

Calculation:

Overall Population:

$$\text{Nursery and Preschool Enrollment}_{\text{Overall}} = \frac{\text{children aged 3 and older enrolled in nursery school or preschool}}{\text{children under 5 years of age}}$$

ACS tables and variables used:

- Table B14007: School enrollment by Detailed Level of School for the Population 3 Years and Over
 - B14007_003: Estimate Total Enrolled in nursery school, preschool
- Table B01001: Sex by Age
 - B01001_003: Estimate Total Male Under 5 years
 - B01001_027: Estimate Total Female Under 5 years

Black Populations:

$$\text{Nursery and Preschool Enrollment}_{\text{Black}} = \frac{\text{Black children aged 3 and older enrolled in nursery school or preschool}}{\text{Black children under 5 years of age}}$$

ACS tables and variables used:

- Table B14007B: School enrollment by Detailed Level of School for the Population 3 Years and Over (Black or African American Alone)
 - B14007B_003: Estimate Total Enrolled in nursery school, preschool
- Table B01001B: Sex by Age (Black or African American Alone)
 - B01001B_003: Estimate Total Male Under 5 years
 - B01001B_018: Estimate Total Female Under 5 Years