# Childhood Disability in the United States: 2019

American Community Survey Briefs

By Natalie A. E. Young Issued March 2021 ACSBR-006

# INTRODUCTION

As the population of the United States ages, there has been much focus on disability among older adults. Yet, childhood disability also warrants attention: the monetary and nonmonetary costs associated with caring for children with disabilities can be substantial, and studies suggest that disability rates among the nation's children have been rising since the early 1990s.<sup>1,2,3</sup> In 2019, an estimated 2.6 million households had at least one child in the home with a disability. This represented 7.2 percent of the 36.7 million households in the United States that had children under the age of 18 in 2019.<sup>4</sup>

The concept of childhood disability encompasses children with various physical, mental, or emotional conditions that pose limitations to certain activities or tasks. Some children, for example, may have difficulty with sensory activities, such as hearing or seeing, while others may have difficulty with mobility, requiring assistive devices such as a wheelchair. Children may also have difficulty with cognitive tasks such as

<sup>4</sup> The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release. CBDRB-FY20-POP001-0002.



U.S. Department of Commerce U.S. CENSUS BUREAU census.gov

<sup>&</sup>lt;sup>1</sup> H. Stephen Kaye, Mitchell P. LaPlante, Dawn Carlson, and Barbara L. Wenger, "Trends in Disability Rates in the United States, 1970-1994," Disability Statistics Abstract, No. 17, U.S. Department of Education, National Institute on Disability and Rehabilitation Research, 1996.

<sup>&</sup>lt;sup>2</sup> Amy J. Houtrow, Kandyce Larson, Lynn M. Olson, Paul W. Newacheck, and Neal Halfon, "Changing Trends of Childhood Disability, 2001-2011," *Pediatrics*, Vol. 134, No. 3, September 2014.

<sup>&</sup>lt;sup>3</sup> Benjamin Zablotsky, Lindsey I. Black, Matthew J. Maenner, Laura A. Schieve, Melissa L. Danielson, Rebecca H. Bitsko, Stephen J. Blumberg, Michael D. Kogan, and Coleen A. Boyle. "Prevalence and Trends of Developmental Disabilities among Children in the United States, 2009–2017," *Pediatrics*, Vol. 144, No. 4, October 2019.

speaking or understanding speech, reading text, or concentrating. In some cases, childhood disability can have implications for later well-being, including the level of education one is able to obtain, the type of work one is able to undertake, and the social networks one is able to build.<sup>5, 6, 7</sup> A longitudinal study that followed a sample of individuals who displayed symptoms of attention-deficit/hyperactivity disorder (ADHD) as children, for example, found that 32 percent failed to complete high school, while less than one-quarter enrolled in college.<sup>8</sup> These school completion and college enrollment rates were far lower than rates observed among a sample of individuals without disabilities from the same community. Caring for a child with a disability may also affect a family's financial and emotional health.<sup>9,10</sup> Research suggests that families that have a child with a disability have lower rates of maternal employment, for example, a situation that may result in fewer economic

<sup>&</sup>lt;sup>5</sup> Gale M. Morrison and Merith A. Cosden, "Risk, Resilience, and Adjustment of Individuals with Learning Disabilities," *Learning Disability Quarterly*, Vol. 20, No. 1, February 1997.

<sup>&</sup>lt;sup>6</sup> Irene M. Loe and Heidi M. Feldman, "Academic and Educational Outcomes of Children With ADHD," *Journal of Pediatric Psychology,* Vol. 32, No. 6, August 2007.

<sup>&</sup>lt;sup>7</sup> H. Stephen Kaye, Lita H. Jans, and Erica C. Jones, "Why Don't Employers Hire and Retain Workers with Disabilities?" *Journal of Occupational Rehabilitation*, Vol. 21, No. 4, December 2011.

<sup>&</sup>lt;sup>8</sup> Russell A. Barkley, Mariellen Fischer, Lori Smallish, and Kenneth Fletcher, "Young Adult Outcome of Hyperactive Children: Adaptive Functioning in Major Life Activities," *Journal of the American Academy of Child & Adolescent Psychiatry*, Vol. 45, No. 2, February 2006.

<sup>&</sup>lt;sup>9</sup> Nancy E. Reichman, Hope Corman, and Kelly Noonan, "Effects of Child Health on Parents' Relationship Status," *Demography*, Vol. 41, No. 3, August 2004.

<sup>&</sup>lt;sup>10</sup> Eric Emerson, Said Shahtahmasebi, Gillian Lancaster, and Damon Berridge, "Poverty Transitions Among Families Supporting a Child With Intellectual Disability," *Journal of Intellectual & Developmental Disability*, Vol. 35, No. 4, December 2010.

# DISABILITY IN THE AMERICAN COMMUNITY SURVEY (ACS)

**Disability**—Disability is a complex process between individuals and their environment. Broadly speaking, individuals experience disability if they have difficulty with certain daily tasks due to a physical, mental, or emotional condition. Measures of disability in the ACS are based on self-reports (or proxy reports), as opposed to medical diagnoses. The ACS considers someone to have a disability if the individual is reported to have vision, hearing, cognitive, ambulatory, self-care, or independent living difficulty. For children under the age of 15, disability is reported by an adult in the household, such as a parent or guardian; individuals aged 15 and older may report for themselves, or their disability status may be reported by another member of the household.

Vision difficulty-Blindness or serious difficulty seeing, even when wearing glasses.

Hearing difficulty-Deafness or serious difficulty hearing.

**Cognitive difficulty** (aged 5 and older)—Serious difficulty concentrating, remembering, or making decisions because of a physical, mental, or emotional condition.

Ambulatory difficulty (aged 5 and older)-Serious difficulty walking or climbing stairs.

Self-care difficulty (aged 5 and older)—Difficulty dressing or bathing.

**Independent living difficulty** (aged 15 and older)—Difficulty doing errands alone, such as visiting a doctor's office or shopping.

resources.<sup>11</sup> Overall, given the potential implications of childhood disability for the child's family and later life outcomes, an important question to ask is whether certain children and households in the United States are more likely to experience childhood disability than others.

This brief uses 1-year estimates from the 2019 American Community Survey (ACS) to provide information about childhood disability in the United States. Estimates are presented for the civilian, noninstitutionalized population of the United States, which excludes children living in group homes for juveniles, residential schools for people with disabilities, treatment centers for juveniles, and correctional facilities. In addition to examining the prevalence of disability among children under the age of 18 in 2019, the brief assesses whether childhood

disability differentially affected certain children and households within the United States in 2019. That is, were certain groups of children more likely to experience disability, and were the household contexts in which children with disabilities were living different from those of other children?

Finally, the brief draws on 1-year estimates from the 2008 ACS to compare childhood disability patterns in 2019 to patterns observed 11 years prior, when the current set of disability questions in the ACS was first introduced. While we would not expect disability rates to vary much on a year-to-year basis, changes over time in the socioeconomic and environmental contexts in which children live, the public's awareness and understanding of certain disabilities (e.g., autism spectrum disorder; attention-deficit/hyperactivity disorder), and rates of medical diagnosis may have had implications for rates and patterns of childhood disability.<sup>12, 13, 14</sup> Comparing disability data from 2019 to those from 2008 may provide insight into how the landscape has shifted over time.

# **HIGHLIGHTS**

- The percentage of children with a disability in the United States increased between 2008 and 2019, from 3.9 percent to 4.3 percent (Figure 4).
- The most common type of disability among children 5 years and older in 2019 was cognitive difficulty (Figure 3).
- In 2019, disability rates in the United States were highest among American Indian and

<sup>&</sup>lt;sup>11</sup> Nancy E. Reichman, Hope Corman, and Kelly Noonan, "Impact of Child Disability on the Family," *Maternal and Child Health Journal*, Vol. 12, No. 6, November 2008.

<sup>&</sup>lt;sup>12</sup> Lorna Wing and David Potter, "The Epidemiology of Autistic Spectrum Disorders: Is the Prevalence Rising?" *Developmental Disabilities Research Reviews*, Vol. 8, No. 3, September 2002.

<sup>&</sup>lt;sup>13</sup> Stephen P. Hinshaw and Richard M. Scheffler, *The ADHD Explosion: Myths, Medication, Money, and Today's Push for Performance*, Oxford University Press, 2014.

<sup>&</sup>lt;sup>14</sup> Neal Halfon, Amy Houtrow, Kandyce Larson, and Paul W. Newacheck, "The Changing Landscape of Disability in Childhood," *The Future of Children*, Vol. 22, No. 1, Spring 2012.

Alaska Native children (5.9 percent) and lowest among Asian children (2.3 percent) (Figure 5).

- Childhood disability rates were lower among foreign-born children (3.2 percent) than among native-born children (4.2 percent) and lower among nativeborn children with one or more foreign-born parents (3.1 percent), relative to native-born children with only native-born parents (4.5 percent) (Table 2).
- While children in poverty were more likely to have a disability than children above the poverty threshold in 2008 and 2019, the prevalence of disability significantly increased for both groups over this period (Table 2).
- There were regional differences in childhood disability prevalence in 2019, with the highest rates observed in the South and the Northeast and the lowest rate observed in the West (Table 3).<sup>15</sup> These regional patterns were somewhat similar to those observed for adult disability.

# PREVALENCE OF DISABILITY AMONG CHILDREN

In 2019, over 3 million children had a disability, representing 4.3 percent of the population under the age of 18 in the United States (Figure 1). While fewer than 1 percent of children under the age of 5 had a disability in 2019, 5.5 percent of children aged 5 to 14 and 6.1 percent of children aged 15 to 17 had a disability (Figure 2). Research suggests that estimates of disability prevalence can increase as the types of disability included in the definition of



disability increase.<sup>16</sup> Thus, higher rates of disability among older children may result from differences in how disability is defined within the ACS at different ages. For children under the age of 5, only reports of difficulty seeing and difficulty hearing were used to determine disability status. In comparison, when measuring disability for children aged 5 to 14, cognitive difficulty, ambulatory difficulty, and self-care difficulty were considered, in addition to vision and hearing difficulty. Finally, a sixth type of difficulty difficulty with independent living-was incorporated into the measure of disability for children aged 15 to 17.

To better assess how disability prevalence differed by age, it is worth comparing rates of sensory disabilities by age group, since questions about difficulty hearing and seeing were asked across all age groups of children (i.e., children aged 0 to 4, 5 to 14, and 15 to 17). Compared to other groups of children, children aged 15 to 17 had the highest rate of sensory disability (Figure 2). In 2019, 1.6 percent of 15- to 17-year-olds had a sensory disability, compared to 1.2 percent of children aged 5 to 14 and 0.7 percent of children under the age of 5.

One can draw on the five disability questions that were asked across all individuals aged 5 and older to better compare disability rates among 5- to 14-year-olds and 15- to 17-year-olds (Figure 2). Using this alternative measure, disability prevalence again appeared highest among children aged 15 to 17, with 5.7 percent of children in this age group estimated to have at least one of the five disability types, compared to 5.5 percent of children aged 5 to 14. Overall, these findings provide additional evidence that disability rates were highest among the 15 to 17 age group.

<sup>&</sup>lt;sup>15</sup> Estimates of childhood disability prevalence in the South and the Northeast were not statistically different.

<sup>&</sup>lt;sup>16</sup> Thomas Hugaas Molden and Jan Tossebro, "Measuring Disability in Survey Research: Comparing Current Measurements Within One Data Set," *Alter—European Journal of Disability Research,* Vol. 4, No. 3, July 2010.



Source: U.S. Census Bureau, 2019 American Community Survey, 1-year estimates.

Certain types of disability were more prevalent among children than others. The most common disability type among children aged 5 to 17 in 2019 was cognitive difficulty (Figure 3). Roughly 4.4 percent of children aged 5 to 17 had serious difficulty concentrating, remembering, or making decisions. While the ACS does not ask respondents to report the conditions that cause difficulty, cognitive difficulty can result from a number of conditions affecting children. Difficulty concentrating, for example, is a common symptom of attention-deficit/hyperactivity disorder (ADHD).<sup>17</sup>

Although only applicable to children aged 15 to 17, independent living difficulty was the second most common disability type among children in 2019 (Figure 3). Nearly 300,000 children between the ages of 15 and 17 were estimated to have difficulty doing errands alone in 2019, or 2.4 percent of this age group (Table 1). A large number of conditions may account for difficulty with independent living, particularly conditions that affect mobility or cognition. In fact, 18.4 percent of children who had difficulty with independent living also had ambulatory difficulty, and 78.6 percent also had cognitive difficulty.

It was not uncommon for children to have multiple disability types. An estimated 1.2 percent of children aged 0 to 17 had two or more disability types (Table 1), accounting for over one-quarter of all children with a disability in 2019 (Figure 1).<sup>18</sup> Certain combinations of disability types were

particularly common. Among children with self-care difficulty, for example, 88.0 percent also had independent living difficulty, and 82.2 percent also had cognitive difficulty. In addition, the majority of children with ambulatory difficulty also had another disability type: 68.0 percent had independent living difficulty, 67.7 percent had self-care difficulty, and 65.2 percent had cognitive difficulty.<sup>19</sup> Given that some conditions associated with childhood disability pose limitations to multiple activities, these observed overlaps are not altogether surprising. As an example, studies find that some children with cerebral palsy experience not only ambulatory

<sup>&</sup>lt;sup>17</sup> Centers for Disease Control and Prevention, "Is it ADHD?" 2020, <www.cdc.gov/ncbddd/adhd/features /adhd.html>.

<sup>&</sup>lt;sup>18</sup> It was even more common for adults to report multiple disability types. In 2019, an estimated 7.5 percent of individuals aged 18 and older had at least two disability types, accounting for about one-half of all adults with a disability.

<sup>&</sup>lt;sup>19</sup> The percentage of children with ambulatory difficulty who also had independent living difficulty (68.0 percent) and the percentage who also had self-care difficulty (67.7 percent) did not significantly differ from each other. In addition, the percentage of children with ambulatory difficulty who also had independent living difficulty (68.0 percent) and the percentage who also had cognitive difficulty (65.2 percent) did not significantly differ from each other.



difficulty but also cognitive difficulty, and these limitations to mobility and cognition can make self-care and independent living difficult.<sup>20</sup>

# CHANGE IN DISABILITY PREVALENCE AMONG CHILDREN: 2008-2019

The ACS and other federal surveys introduced a new standard question set for measuring disability in 2008. The existence of a standard disability question set in the ACS allows for the comparison of childhood disability prevalence in 2008 and 2019. As shown in Figure 4, the percentage of children with any disability significantly increased between 2008 and 2019. In 2008, 2.9 million children were estimated to have a

<sup>20</sup> Francesco Craig, Rosa Savino, and Antonio Trabacca, "A Systematic Review of Comorbidity Between Cerebral Palsy, Autism Spectrum Disorders and Attention Deficit Hyperactivity Disorder," *European Journal of Paediatric Neurology*, Vol. 23, No. 1, January 2019. disability, representing 3.9 percent of the U.S. population under the age of 18 (Table 1). By 2019, the number of children with a disability had surpassed 3 million, or 4.3 percent of all children.

error, and definitions, see <www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Source: U.S. Census Bureau, 2019 American Community Survey, 1-year estimates.

Change in disability prevalence between 2008 and 2019 varied by age group (Table 1). Among children aged 15 to 17, the percentage with a disability increased from 5.6 percent to 6.1 percent, or by 0.5 percentage points. For children aged 5 to 14, the percentage with a disability increased by 0.4 percentage points during the same period, from 5.1 percent to 5.5 percent.<sup>21</sup> There was no statistically significant change in disability prevalence for children under the age of 5.

Disability types that saw an increase in prevalence among children aged 5 to 17 include cognitive difficulty (from 3.9 percent to 4.4 percent for the 5 to 14 age group and from 4.0 percent to 4.4 percent for the 15 to 17 age group) and self-care difficulty (from 0.9 percent to 1.1 percent for the 5 to 14 age group and from 0.7 percent to 0.8 percent for the 15 to 17 age group) (Table 1).22 Independent living difficulty also increased for 15to 17-year-olds. In fact, compared to other disability types, independent living difficulty saw one of the largest percentage-point increases in prevalence, with the percentage of children aged 15 to 17 who had this type of difficulty increasing by about one-half of a percentage point between 2008

<sup>&</sup>lt;sup>21</sup> Although the percentage-point increase in disability between 2008 and 2019 appears larger for the 15 to 17 age group, it does not significantly differ from the percentage-point increase for the 5 to 14 age group.

<sup>&</sup>lt;sup>22</sup> The prevalence of seeing difficulty also significantly increased between 2008 and 2019 for the 5 to 14 and 15 to 17 age groups, although the percentage of children aged 5 to 14 with a seeing difficulty rounded to 0.8 percent in both years.

Table 1.

# Change in Prevalence of Childhood Disability: 2008 and 2019

(Numbers in thousands. Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>)

(80	Margin of	error (±)	0.1	0.1	0.2 0.2	NN	0.1	T.O	NN	0.1	N	2 0.1	6	0.1	Z	0.1	Z	0.1		0.1	
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	Margin of	error (±)	Z	N	0.1	NN	1 1 1	T:0	NN	Z	NI	0.1	6	0.1	Z	Ν	N	Ν		0.1	
-	Percent	with disability	4.3	<u>Р.</u> 0	5.5 6.1	1.2	1.0 1.0	7. 1.	0.5	0.6	0.0	1.1	~ ~	+ + + +	0.6	0.7	1.1	0.8		2.4	
	Margin of	error (±)	36	7	30 16	22	16	 0 T	٥O	9	, v		90	13	10	Ŋ	14	9		10	
2019	Number	with disability	3,145	139	2,255 753	871 33	548	067	95 229	78	76	257 135	ר מ ת	539	249	81	461	96		297	
	Margin of	error (±)	33	22	5/ 18	33	37 37 18	9	22 37	18	22	5/ 18	27	18	37	18	37	18		18	
	Total number	In age group	72,840	19,400	41,080 12,360	72,840	41,080	000,21	19,400 41,080	12,360	19,400	41,080 12,360	08011	12,360	41,080	12,360	41.080	12,360		12,360	
	Margin of	error (±)	Z	Nr	0.1	NN	1 1 1	т. О	NN	Z	NI	Z	6	0.1	Z	Ν	N	Ν		0.1	
2008	Percent	with disability	3.9	0.7	5.6	1.0	1.2	0.2	0.5	0.7	0.0	0.9	0 2	4.0	0.7	0.8	6.0	0.7		1.9	
	Margin of	error (±)	29	00 <del>.</del>	12	20 2	0 <sup>1</sup> α	0	00	IJ	، ۲	9	10	10	10	IJ	11	4		ω	evel.
	Number	with disability	2,904	156	2,058 711	752	465 252	007	98 270	87	06	505 115	1 570	503	267	66	369	84		243	onfidence
	Margin of	error (±)	31	18	14	31 31	72	− +	18 25	14	18	14	о С	14	25	14	25	14		14	0 percent c
	Total number	In age group	73,790	20,900	40,1/0 12,720	73,790	40,170	TZ, / ZU	20,900 40,170	12,720	20,900	40,1/0 12,720	021.01	12,720	40,170	12,720	40.170	12,720		12,720	ero at the 9
	Disability type		Any Disability All children (under age 18)	Under 5 years old	Aged 5 to 17	Multiple Disability Types All children (under age 18) Under 5 vaars old	Aged 5 to 14		Hearing Difficulty Under 5 years old	Aged 15 to 17	Seeing Difficulty Under 5 years old	Aged 15 to 17	Cognitive Difficulty	Aged 15 to 17	Ambulatory Difficulty Aged 5 to 14	Aged 15 to 17	Self-Care Difficulty Aged 5 to 14	Aged 15 to 17	Independent Living Difficulty	Aged 15 to 17	* Statistically different from ze

Z Rounds to zero. Note: Since some children have more than one type of disability, the number (or percentage) of children with each type of disability may not sum to the total number (or percentage) of children with "any disability." Differences are calculated with unrounded numbers that may produce different results from using the rounded values in this table. Source: U.S. Census Bureau, 2008 and 2019 American Community Surveys, 1-year estimates.



Source: U.S. Census Bureau, 2008 and 2019 American Community Surveys, 1-year estimates.

and 2019 (from 1.9 percent to 2.4 percent).<sup>23</sup>

Not all disability types increased in prevalence among children. In particular, rates of ambulatory difficulty and hearing difficulty were no higher in 2019 than they were in 2008 (Figure 4). In fact, there was evidence of a small decrease in ambulatory difficulty for children over the age of 5 between 2008 and 2019 (from 0.7 percent to 0.6 percent) (Figure 4), as well as a slight decline in the percentage of children aged 5 to 14 with hearing difficulty in 2019 (from 0.7 percent to 0.6 percent) (Table 1). These changes, however, may not be indicative of a long-term decline

in the prevalence of these two disability types among children.

### CHILDHOOD DISABILITY BY RACE AND HISPANIC ORIGIN

Analysis of the ACS 1-year estimates suggests that not all racial groups were equally likely to experience childhood disability.<sup>24</sup> As shown in Figure 5, in 2019, disability prevalence was highest among American Indian and Alaska Native children (5.9 percent), followed by children of more than one race (5.2 percent), and Black children (5.1

percent).<sup>25</sup> While non-Hispanic White children (4.3 percent) were significantly less likely to have a disability than children in these three racial groups, they were more likely to have a disability than Asian children (2.3 percent) and Native Hawaiian and Other Pacific Islander children (3.2 percent). Hispanic children (4.3 percent) and children whose race was reported as "some other race" (4.1 percent) were no more or less likely to have a disability than their non-Hispanic White counterparts (4.3 percent). 26

<sup>&</sup>lt;sup>23</sup> The other disability type with a large percentage-point increase in prevalence between 2008 and 2019 was cognitive difficulty, which increased in prevalence by 0.5 percentage points among children aged 5 to 14 and 0.4 percentage points among children aged 15 to 17. There was no statistical difference between the percentage-point increase in cognitive difficulty prevalence and the increase in independent living difficulty prevalence.

<sup>&</sup>lt;sup>24</sup> Federal surveys give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group, such as Asian, may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-aloneor-in-combination concept). This brief shows data using the first approach (race alone). The use of the single-race population does not imply that it is the preferred method of presenting or analyzing the data. The Census Bureau uses a variety of approaches.

<sup>&</sup>lt;sup>25</sup> Differences in disability prevalence between Black children and children of more than one race were not statistically significant.

<sup>&</sup>lt;sup>26</sup> Because Hispanic children may be any race, data for Hispanic children overlap with data for other racial groups. While the "non-Hispanic White" group in this brief refers to people who are not Hispanic and who were reported to be White and no other race, the other racial groups in this brief include individuals of either Hispanic or non-Hispanic origin. For example, the "Asian" group includes individuals who were reported to be Asian and no other race, regardless of Hispanic origin.



Differences between racial groups in disability prevalence in 2019 were largely consistent with differences observed in the 2008 ACS data (Table 2). There were, however, a few exceptions. While Native Hawaiian and Other Pacific Islander children were less likely than non-Hispanic White children to have a disability in 2019, there was no significant difference in childhood disability prevalence observed between these two racial groups in 2008.<sup>27</sup> In addition, Hispanic children were less likely to have a disability than non-Hispanic White children in 2008, but there was no difference between these two groups in 2019.

Although differences in disability prevalence between children of different racial backgrounds did not appear to change much between 2008 and 2019, there were significant changes in disability prevalence within racial groups (Table 2). Put another way, while non-Hispanic White children were still less likely to have a disability than Black children in 2019 (as was the case in 2008), the percentage of non-Hispanic White children experiencing disability was higher in 2019 than it was in 2008. Disability prevalence also increased among Asian

children, children of more than one race, and children whose race was reported as "some other race." The percentage of children with a disability also significantly increased for those of Hispanic origin. In fact, Hispanic children saw one of the largest percentage-point changes in disability prevalence between 2008 and 2019, from 3.4 percent to 4.3 percent, a 0.9 percentagepoint increase.<sup>28</sup> In contrast, a number of racial groups experienced no change in childhood disability prevalence between 2008 and 2019, including Black children, American Indian and Alaska Native children, and

<sup>&</sup>lt;sup>27</sup> Note that the Native Hawaiian and Other Pacific Islander (NHPI) racial group is somewhat small, with an estimated 160,000 children across the entire United States falling into this racial group in 2019 (118,000 children in 2008). An even smaller number of NHPI children are estimated to have a disability. Since 1-year ACS estimates for small population subgroups may lack precision, individuals who would like additional information on disability among NHPI children should use 5-year ACS estimates instead of 1-year estimates.

<sup>&</sup>lt;sup>28</sup> Children whose race was reported as "some other race" saw a 0.8 percentagepoint change in disability prevalence between 2008 and 2019, which did not significantly differ from the percentage-point change for Hispanic children.

Table 2.

# Childhood Disability by Selected Characteristics: 2008 and 2019

(Numbers in thousands. Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>)

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Characteristic	Total number of	Margin		Margin		Maroin	Total number of	Maroin		Maroin		Margin		Margin
	children (under age 18)	error (±)	Number with any disability	error (±)	Percent with any disability	error (±)	children (under age 18)	error (±)	Number with any disability	error (±)	Percent with any disability	error (±)	Percentage- point difference	error (±)
Aace and Hispanic Origin White	51,190 41,320 10,510	56 31 31	1,969 1,638 512	21 19 13	8.44 8.04 9.02	0.1 0.1	48,510 36,450 10,170	49 45	2,043 1,550 516	29 27 17	5 4 4 5 1 2 1	0.1	*0.3 *0.3 0.2	0.1
American Indian and Alaska Native	688 2,943	14 17	39 52	44	5.7 1.8	0.5 0.1	735 3,533	15 21	43 81	4 W	5.9 2.3	0.5 0.1	*0.5	0.7 0.2
Vative Hawaiian and Other Pacific Islander Some other race wo or more races	118 4,954 3,385 16,030	5 54 37 12	164 164 543	1 8 8 1 1 8 8 1	3.3 7.3 7.8 7.8 7.4	0.1 0.1 0.1	160 4,703 5,031 18,600	10 55 13	5 193 264 793	10 10 19	8 4 7 4 7 4 7 4 7 4 7 4 7 7 4 7 7 4 7 7 4 7 7 4 7 7 4 7	0.2 0.2 0.1	0-2 0.8 40.8 9.0 9.4	1.2 0.3 0.1
<b>lativity</b> Child native-born, with only native-born parents	53,690	74	2,226	26	4.1	Ν	50,920	95	2,289	32	4.5	0.1	*0.4	0.1
at least one foreign-born parent	14,050	69	333	12	2.4	0.1	15,640	97	485	16	3.1	0.1	*0.7	0.1
unia native-born (any parental nativity) Child foreign-born	67,740 2,622	58 37	2,559 68	31 4	3.8 2.6	Z 0.2	66,560 2,328	67 43	2,775 75	32 5	4.2 3.2	0.2	*0.4 0.6	0.1 0.3
a <b>mily Poverty Status</b> lot in poverty	59,490 13,340	110 124	1,993 839	22 18	3.4 6.3	Z 0.1	59,630 12,000	118 134	2,286 784	28 19	3.8 6.5	0.2 0	*0.5 *0.2	0.1 0.2
<b>Jousehold Income Quintile</b> op 20 percent	18,050 16,680 14,330 13,280 11,450	93 97 87 95 98	405 522 553 658 767	10 124 172 172	2.2 3.1 5.0 6.7	0.1 0.0 0.1 1.0 1.0 1.0	18,470 16,430 14,190 13,180 10,570	113 109 120 97 108	511 575 620 696 743	14 15 17 20	2.8 3.5 7.3 7.0	0.1 0.1 0.2 0.2	*0.5 *0.5 *0.3 *0.3	0.1 0.2 0.2 0.2

\* Statistically different from zero at the 90 percent confidence level. Z Rounds to zero. Note: Differences are calculated with unrounded numbers that may produce different results from using the rounded values in this table. Source: U.S. Census Bureau, 2008 and 2019 American Community Surveys, 1-year estimates.

Native Hawaiian and Other Pacific Islander children.

# CHILDHOOD DISABILITY BY NATIVITY

Childhood disability rates in the United States also varied by nativity status.<sup>29</sup> In 2019, children with at least one foreign-born parent were less likely to have a disability (3.1 percent) than children with only native-born parents (4.5 percent) (Table 2).<sup>30</sup> In addition, the childhood disability rate was lower among foreign-born children than among native-born children: 3.2 percent of foreign-born children were estimated to have a disability in 2019, compared to 4.2 percent of native-born children. The same differences in disability prevalence by nativity status were observed in 2008. That is, children with at least one foreign-born parent were less likely to have a disability than children of only native-born parents (2.4 percent compared to 4.1 percent), and the childhood disability rate was lower among foreign-born children (2.6 percent) compared to native-born children (3.8 percent).

Lower rates of disability among first- and second-generation immigrant children, relative to native-born children with nativeborn parents, may be linked to a larger phenomenon known as the "immigrant health paradox."<sup>31</sup> This

<sup>30</sup> Here, we limit analysis to native-born children. Note, however, that the overall finding does not change if we include foreign-born children in the analysis (i.e., children with at least one foreign-born parent were less likely to have a disability than children with only native-born parents).

<sup>31</sup> The phrase "first-generation immigrant children" refers to children born overseas, whereas "second-generation immigrant children" refers to native-born children who have one or more foreignborn parents. term refers to a well-established research finding that immigrants to the United States and other western countries have better health, on average, than native-born residents.<sup>32</sup> Of course, differences across cultures in how disability is perceived and understood may lead to differences in disability reporting, which could account for lower disability rates among immigrant families.<sup>33, 34</sup>

# CHILDHOOD DISABILITY BY POVERTY STATUS

In 2019, 6.5 percent of children living in poverty had a disability, compared to 3.8 percent of children living in families with incomes above their poverty threshold (Table 2).<sup>35</sup> This disparity is notable, since families in poverty have even fewer financial resources at their disposal to care for a child with a disability. In some cases, a child with a disability may even contribute to a family's entry into poverty: children with disabilities may have additional caregiving needs that prevent one or more family members from seeking employment and/or remaining within the workforce, or

<sup>35</sup> This brief uses family poverty as its measure of poverty status, the same measure used for official estimates of the poverty rate in the United States. While a measure of household poverty is also available in the ACS, this measure is based on the poverty status of the householder's family. As such, it does not incorporate information on income earned by all members of the household, but only those members related to the householder. they may require the investment of more financial resources than the family can afford.<sup>36</sup>

Compared to 2008, disability rates were significantly higher in 2019 for both children in poverty and children above the poverty threshold (Table 2). Specifically, the percentage of children with a disability increased by 0.2 percentage points (from 6.3 percent to 6.5 percent) for children in poverty. The percentage of children with a disability increased even more for children in families above the poverty threshold: from 3.4 percent to 3.8 percent, or around a 0.5 percentage-point increase.

# CHILDHOOD DISABILITY BY HOUSEHOLD INCOME QUINTILE

Examining childhood disability rates by household income quintiles allows us to get a more comprehensive picture of the relationship between disability and economic resources. In 2019, children in the lowest income quintile-defined here as falling within the bottom 20 percent of the household income distribution in the United States in 2019-were more likely to experience disability than children in the highest income quintile, i.e., households within the top 20 percent of the household income distribution (Table 2). Rather than simply a story of families in the lowest income quintile being disproportionately affected by childhood disability, however, there appeared to be an income gradient in childhood disability (Figure 6). Seven percent of children in the lowest income quintile had a

<sup>&</sup>lt;sup>29</sup> In this section, we limit analysis to cases for which we have data on both the child's nativity status and parental nativity status. Around 5 percent of children are missing data on parental nativity status and, as such, are excluded from analysis.

<sup>&</sup>lt;sup>32</sup> Stacey A. Teruya and Shahrzad Bazargan-Hejazi, "The Immigrant and Hispanic Paradoxes: A Systematic Review of Their Predictions and Effects," *Hispanic Journal of Behavioral Sciences*, Vol. 35, No. 4, September 2013.

<sup>&</sup>lt;sup>33</sup> Mary T. Westbrook, Varoe Legge, and Mark Pennay, "Attitudes Towards Disabilities in a Multicultural Society," *Social Science & Medicine*, Vol. 36, No. 5, March 1993.

<sup>&</sup>lt;sup>34</sup> Tina Taylor Dyches, Lynn K. Wilder, Richard R. Sudweeks, Festus E. Obiakor, and Bob Algozzine, "Multicultural Issues in Autism," *Journal of Autism and Developmental Disorders*, Vol. 34, No. 2, April 2004.

<sup>&</sup>lt;sup>36</sup> Eric Emerson, Said Shahtahmasebi, Gillian Lancaster, and Damon Berridge, "Poverty Transitions Among Families Supporting a Child With Intellectual Disability," *Journal of Intellectual & Developmental Disability*, Vol. 35, No. 4, December 2010.

disability, followed by 5.3 percent of children in the second-lowest income quintile, 4.4 percent of children in the middle income quintile, 3.5 percent of children in the second-highest income quintile, and just 2.8 percent of children in the highest income quintile. The difference between each income quintile and its adjacent income quintile was statistically significant.

An income gradient in childhood disability was also observed in 2008 (Table 2). Children in the bottom 20 percent of the household income distribution had the highest rate of disability (6.7 percent), followed by children in the second-lowest income quintile (5.0 percent) and children in the middle income quintile (3.9 percent). Children in the top 20 percent of the household income distribution had the lowest rate of disability in 2008 (2.2 percent), followed by children in the second-highest income quintile (3.1 percent). Nevertheless, it is important to note that disability prevalence increased for children in all five income quintiles between 2008 and 2019 (Table 2), including for children in the two highest income quintiles.

# CHILDHOOD DISABILITY BY STATE

Childhood disability was more prevalent in certain areas of the country in 2019 than in others (Figure 7). Comparing disability rates by state, Vermont had one of the highest rates of childhood disability in 2019: 7.2 percent of children were estimated to have a disability, compared to the national average of 4.3 percent (Table 3). Other states with a high prevalence of childhood disability in 2019 included Maine (6.1 percent), Louisiana (6.0 percent), Kentucky



Note: Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <www.census.gov/programs-surveys /acs/technical-documentation/code-lists.html>.

Source: U.S. Census Bureau, 2019 American Community Survey, 1-year estimates.

(5.9 percent), and West Virginia (5.9 percent).<sup>37</sup> Compared to the national average, childhood disability rates were relatively low in South Dakota (2.9 percent), North Dakota (3.1 percent), California (3.3 percent), Utah (3.4 percent), and Hawaii (3.5 percent).<sup>38, 39</sup>

There also appeared to be regional patterns in childhood disability prevalence in the United States in 2019. Disability rates among children were highest in the South and the Northeast,

<sup>39</sup> While patterns of childhood disability prevalence by state were similar to patterns of adult disability prevalence by state in 2019, there were also some differences. South Dakota had one of the lowest rates of disability among children, for example, yet was close to the middle of the pack in disability rates among adults. In addition, while Vermont topped the list of states with the highest disability prevalence among children in 2019, it was not among the states with the highest rates for adult disability.

while the rate was lowest in the West (Table 3). The percentage of children with a disability ranged from 4.6 percent in the South, 4.5 percent in the Northeast, 4.3 percent in the Midwest, to 3.8 percent in the West.<sup>40</sup> These regional patterns were similar to those observed for adult disability, with one notable exception. Like childhood disability, the disability rate among individuals aged 18 and older in 2019 was particularly high in the South. Yet, the adult disability rate was relatively low in the Northeast, a region that had one of the highest rates of childhood disability in 2019.

# CONCLUSION

According to ACS 1-year estimates, childhood disability affected a larger proportion of the U.S. population in 2019, compared to 2008. This finding is in line with recent

<sup>&</sup>lt;sup>37</sup> Childhood disability rates in these four states did not significantly differ from Vermont's rate.

<sup>&</sup>lt;sup>38</sup> Childhood disability rates in these states did not significantly differ from each other.

<sup>&</sup>lt;sup>40</sup> The childhood disability rate in the Northeast did not significantly differ from the rate in the South.



# Figure 7. Percentage of Children With a Disability by State: 2019

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <www.census.gov/programs-surveys/acs /technical-documentation/code-lists.html>)



research in the United States that suggests disability rates are rising among children.<sup>41, 42</sup> Yet, disability does not appear to affect all children equally. The 2008 and 2019 ACS data suggest that the likelihood of experiencing disability in childhood may differ by race and Hispanic origin, nativity status of the child and parent(s), poverty status, and household income.

<sup>42</sup> Amy J. Houtrow, Kandyce Larson, Lynn M. Olson, Paul W. Newacheck, and Neal Halfon, "Changing Trends of Childhood Disability, 2001–2011," *Pediatrics*, Vol. 134, No. 3, September 2014. A notable caveat is that ACS disability estimates are based on self- or proxy-reports of disability. As such, it is possible that some of these observed differences reflect differences in disability reporting across groups, rather than differences in the incidence of disability across groups. In addition, some research suggests that rising rates of childhood disability in the United States are more closely linked to changes in the diagnosis, as well as public awareness, of certain disabilities than to populationlevel change in the incidence of

disability in childhood.<sup>43, 44, 45</sup> The fact that diagnoses may be more readily available to or more sought out by certain groups in the United States, relative to others, makes it even more challenging to interpret differences in disability rates by demographic and household

<sup>&</sup>lt;sup>41</sup> Benjamin Zablotsky, Lindsey I. Black, Matthew J. Maenner, Laura A. Schieve, Melissa L. Danielson, Rebecca H. Bitsko, Stephen J. Blumberg, Michael D. Kogan, and Coleen A. Boyle, "Prevalence and Trends of Developmental Disabilities among Children in the United States, 2009-2017," *Pediatrics*, Vol. 144, No. 4, October 2019.

<sup>&</sup>lt;sup>43</sup> Lorna Wing and David Potter, "The Epidemiology of Autistic Spectrum Disorders: Is the Prevalence Rising?," *Developmental Disabilities Research Reviews*, Vol. 8, No. 3, September 2002.

<sup>&</sup>lt;sup>44</sup> Marissa King and Peter Bearman, "Diagnostic Change and the Increased Prevalence of Autism," *International Journal of Epidemiology*, Vol. 38, No. 5, October 2009.

<sup>&</sup>lt;sup>45</sup> Ka-Yuet Liu, Marissa King, and Peter S. Bearman, "Social Influence and the Autism Epidemic," *American Journal of Sociology*, Vol. 115, No. 5, March 2010.

## Table 3. Childhood Disability by Region and State: 2019

(Numbers in thousands. Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>)

Region or state	Total number of children (under age 18)	Margin of error (±)	Number with any disability	Margin of error (±)	Percent with any disability	Margin of error (±)
United States	72,840	33	3,145	36	4.3	Z
REGION Northeast Midwest South West	11,460 15,300 28,400 17,670	5 14 15 7	514 658 1,304 668	15 14 25 16	4.5 4.3 4.6 3.8	0.1 0.1 0.1 0.1
STATE Alabama Alaska Arizona Arkansas California Colorado Connecticut Delaware District of Columbia Florida	1,084 180 1,637 697 8,878 1,254 727 204 128 4,222	3 <1 1 3 3 2 2 1 <1 3	44 7 69 39 297 50 32 9 5 195	4 1 6 3 10 4 4 2 1 10	4.0 3.9 4.2 5.6 3.3 4.0 4.4 4.4 4.2 4.6	0.4 0.8 0.4 0.5 0.1 0.3 0.6 1.1 1.1 0.2
Georgia Hawaii. Idaho Indiana Indiana Iowa Kansas Kentucky Louisiana Maine	2,501 300 448 2,811 1,564 720 699 999 1,084 246	4 <1 2 3 3 2 3 2 1	106 10 21 101 70 27 34 59 65 15	8 2 6 5 2 3 5 5 2	4.2 3.5 4.7 3.6 4.5 3.7 4.9 5.9 6.0 6.1	0.3 0.6 0.5 0.2 0.3 0.3 0.4 0.5 0.5 0.5
Maryland Massachusetts Michigan Minnesota Mississippi Missouri Montana Nebraska Nevada New Hampshire	1,330 1,349 2,139 1,300 697 1,368 226 474 690 256	2 2 2 2 2 2 4 2 1 1 1	55 61 97 52 38 66 9 19 27 12	5 5 4 4 2 2 3 2	4.2 4.5 4.5 4.0 5.5 4.8 4.2 4.1 3.9 4.7	0.4 0.2 0.3 0.6 0.3 0.7 0.5 0.5 0.5
New Jersey	1,932 473 4,013 2,290 176 2,571 950 862 2,625 204	1 3 3 2 3 2 2 2 1	76 24 153 102 5 130 46 43 146 10	5 3 8 7 1 6 3 4 7 2	3.9 5.1 3.8 4.4 3.1 5.0 4.8 5.0 5.6 5.1	0.3 0.7 0.2 0.3 0.6 0.2 0.3 0.5 0.3 1.1
South Carolina South Dakota Tennessee Texas. Utah Vermont. Virginia Washington. West Virginia Wisconsin Wyoming	1,109 214 1,508 7,386 928 113 1,854 1,854 1,662 358 1,263 134	2 2 4 1 1 3 3 1 2 2	48 6 76 317 31 8 80 72 21 50 6	5 1 6 13 4 1 5 3 3 3 2	4.3 2.9 5.1 4.3 3.4 7.2 4.3 4.3 5.9 4.0 4.0	0.4 0.6 0.4 0.2 0.4 1.2 0.3 0.3 0.7 0.3 1.2

< Less than.

Source: U.S. Census Bureau, 2019 American Community Survey, 1-year estimates.

characteristics.<sup>46</sup> Regardless, families have different resources at their disposal for the care of children with a disability, which likely compounds any socioeconomic and racial disparities in childhood disability.

<sup>46</sup> Maureen S. Durkin, Matthew J. Maenner, Jon Baio, Deborah Christensen, Julie Daniels, Robert Fitzgerald, Pamela Imm, Li-Ching Lee, Laura A. Schieve, Kim Van Naarden Braun, Martha S. Wingate, and Marshalyn Yeargin-Allsopp, "Autism Spectrum Disorder Among US Children (2002-2010): Socioeconomic, Racial, and Ethnic Disparities," *American Journal of Public Health*, Vol. 107, No. 11, November 2017.

# **MORE INFORMATION**

For more information about disability in the United States, refer to the U.S. Census Bureau's Web site on disability at <www.census.gov /topics/health/disability.html>.

# SOURCE AND ACCURACY

The data presented in this brief are based on people and households that responded to the ACS in 2019 and to the ACS in 2008. The estimates are subject to sampling and nonsampling error. All estimates are reported with margins of error that take sampling error into account and are significant at the 90 percent confidence level, unless otherwise noted. For more information on sampling and estimation methods, confidentiality protection, and sampling and nonsampling errors, see the 2019 ACS Accuracy of the Data document located at <www.census.gov/programs -surveys/acs/technical -documentation/code-lists.html>.

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# WHAT IS THE AMERICAN COMMUNITY SURVEY (ACS)?

The American Community Survey (ACS) is an annual, nationwide survey designed to provide communities with reliable and timely social, economic, housing, and demographic data for the nation, states, congressional districts, counties, places, and other localities. It has an annual sample size of about 3.5 million addresses across the United States and Puerto Rico and includes both housing units and group quarters (e.g., nursing facilities and prisons).<sup>1</sup> The ACS is conducted in every county throughout the nation and every municipio in Puerto Rico (the Puerto Rico Community Survey).

Beginning in 2006, ACS 1-year estimates have been released annually for geographic areas with populations of 65,000 and greater. Beginning in 2010, ACS 5-year estimates have been released annually for all geographies down to the block-group level. Beginning in 2015, ACS 1-year Supplemental Estimates have been released annually for geographic areas with populations of 20,000 and greater. ACS 1-year and 5-year estimates are all period estimates that represent data collected within particular intervals of time – 12 months and 60 months, respectively. For information on the ACS, visit <www.census.gov/acs>.

<sup>&</sup>lt;sup>1</sup> Group quarters were added in 2006, the second year of full implementation. For more information, please see American Community Survey Design and Methodology located at <www.census.gov/programs-surveys/acs/methodology/design-and -methodology.html>.