



A national and across-state profile on Adverse Childhood Experiences among U.S. children and possibilities to heal and thrive

This issue brief offers hope and a way forward so that all children and their families can attain optimal physical, social, and emotional development and well-being. Presented are the latest data documenting the prevalence of Adverse Childhood Experiences (ACEs) among children in the United States. ACEs include a range of experiences that can lead to trauma and toxic stress and impact children’s brain development and physical, social, mental, emotional, and behavioral health and well-being (Table 1).^{1,2} There is growing evidence that it is the general experience of multiple ACEs, rather than the specific individual impact of any one experience, that matters.^{3,4} The impact of ACEs extends beyond children and can have far-reaching consequences for entire communities;⁵ consequently, this brief also points to strategies that families, caregivers, providers, and communities can implement to reduce the negative health effects associated with ACEs, heal, and help children thrive in the face of adversity.⁵⁻⁹

About the Study

All findings reported here are based on analysis of data from the 2016 National Survey of Children’s Health (NSCH). This brief includes U.S. maps and a table of findings across U.S. states on key topics. All comparisons by ACE status are statistically significant unless otherwise noted. Most findings replicate those also found and published using the 2011–12 NSCH. See methods notes for more details.

TABLE 1: National and Across-State Prevalence of ACEs among Children and Youth

Adverse Childhood Experiences (ACEs)	National Prevalence, by Age of Child				Range Across States
	All Children	Age 0-5	Age 6-11	Age 12-17	
Child had ≥ 1 Adverse Childhood Experience	46.3%	35.0%	47.6%	55.7%	38.1% (MN) – 55.9% (AR)
Child had ≥ 2 Adverse Childhood Experiences	21.7%	12.1%	22.6%	29.9%	15.0% (NY) – 30.6% (AZ)
Nine assessed on the 2016 NSCH¹					% with 1+ Additional ACEs
Somewhat often/very often hard to get by on income*	25.5%	24.1%	25.7%	26.5%	54.4%
Parent/guardian divorced or separated	25.0%	12.8%	27.5%	34.2%	68.0%
Parent/guardian died	3.3%	1.2%	2.9%	5.9%	74.7%
Parent/guardian served time in jail	8.2%	4.5%	9.2%	10.6%	90.6%
Saw or heard violence in the home	5.7%	3.0%	6.1%	8.0%	95.4%
Victim of violence or witnessed neighborhood violence	3.9%	1.2%	3.7%	6.5%	92.1%
Lived with anyone mentally ill, suicidal, or depressed	7.8%	4.4%	8.6%	10.3%	82.4%
Lived with anyone with alcohol or drug problem	9.0%	5.0%	9.3%	12.7%	90.7%
Often treated or judged unfairly due to race/ethnicity**	3.7%	1.2%	4.1%	5.7%	75.3%

*47% of children in households with poverty level incomes have parents who reported “often hard to get by on income”. **1 in 10 black and “other” race/ethnicity children had parents who reported their children often were treated or judged unfairly. 4.4% of Hispanic and Asian/Non-Hispanic children had parents who reported this (1% for white children)

The importance of a population-wide, multi-systems approach

In 2016, 34 million children, nearly half of all U.S. children ages 0-17, had at least one of nine ACEs, and more than 20 percent experienced two or more (Table 1). These findings are similar to those reported for the 2011-12 NSCH.¹¹ ACEs are common among all children; and most who have experienced one often experience at least one other.¹⁰

KEY FINDINGS

- The rate of children across U.S. states with one or more of nine ACEs assessed varies from 38.1 percent to 55.9 percent. Those with two or more ACEs varies from 15.0 percent to 30.6 percent. Most children with any one ACE had at least one other, ranging from 54.4 percent to 95.4 percent.
- ACEs are prevalent among children with both public and private health insurance coverage. Nearly two-thirds of publicly insured children have ACEs (65.2 percent), yet they represent 45 percent of children with ACEs.
- ACEs are also common across all income groups, though 58 percent of U.S. children with ACEs live in homes with incomes less than 200 percent of the federal poverty level (Table 2).
- Black children are disproportionately represented among children with ACEs. Six in 10 have ACEs and represent 17.4 percent of all children in the United States with ACEs (Table 2).

TABLE 2: Prevalence of ACEs by Race/Ethnicity and Income

	All Children	White, NH*	Hispanic	Black, NH*	Asian, NH*	Other, NH*
% of all US children		51.9%	24.5%	12.7%	4.5%	6.3%
% 1+ ACEs	46.3%	40.9%	51.4%	63.7%	25.0%	51.5%
% 2+ ACEs	21.7%	19.2%	21.9%	33.8%	6.4%	28.3%
% among children with 1+ ACEs		46.0%	27.0%	17.4%	2.4%	7.1%
Income < 200% of Federal Poverty Level (43.7% of all US children; 58% of children with 1+ ACEs)						
% 1+ ACEs	61.9%	63.3%	57.0%	70.5%	36.4%	70.6%
% 2+ ACEs	31.9%	34.7%	25.1%	39.9%	9.0%	44.4%
Income 200-399% of Federal Poverty Level (26.8% of all US Children; 25.1% of children with 1+ ACEs)						
% 1+ ACEs	43.2%	39.7%	46.8%	59.1%	24.8%	50.7%
% 2+ ACEs	19.0%	17.2%	19.8%	29.4%	7.0%	24.5%
Income ≥ 400% of Federal Poverty Level (29.5% of all US Children; 17.0% of children with 1+ ACEs)						
% 1+ ACEs	26.4%	24.4%	35.5%	41.2%	14.3%	27.3%
% 2+ ACEs	9.2%	8.6%	12.1%	14.1%	3.6%	10.5%

*NH=Non-Hispanic

ACEs impact not just the individual child who has them, but their friends, families, neighbors, and entire communities. Three factors support a population-wide, multi-systems approach to ACEs in the United States: (1) high rates for all children as well as among the adults that care for them; (2) similar risks to children's health status and school engagement once ACEs do occur; and (3) the intergenerational and cascading effects of ACEs for all children and the communities they live in.

Recognizing the lifelong impact from childhood trauma

Social and emotional skills, along with school attendance and engagement, are important predictors of lifelong health and well-being for children. Most children will experience a social, emotional, or school engagement challenge at some point. Yet those with ACEs face greater risks and challenges. Knowing this changes how we support children with challenges.

SOCIAL AND EMOTIONAL CHALLENGES COMPOUNDED

- Compared to those with no ACEs, children ages 3-5 with 2+ ACEs are over four times more likely to have three or more of the six social and emotional challenges that can impact learning listed in Figure 1.
- About two-thirds of children ages 6-17 who bully, pick on, or exclude other children—or are themselves bullied, picked on, or excluded—have ACEs.¹¹

SCHOOL SUCCESS IMPACTED

- More than three in four (76.3 percent) U.S. children ages 3-5 who were expelled (“asked to stay home”) from preschool had ACEs.
- Children ages 6-17 with no ACEs are half as likely to be disengaged in school compared to those with 2+ ACEs (24.1 percent vs. 49.0 percent).¹¹

FIGURE 1: Prevalence of Social and Emotional Skills and Challenges of Children and Youth, by ACEs

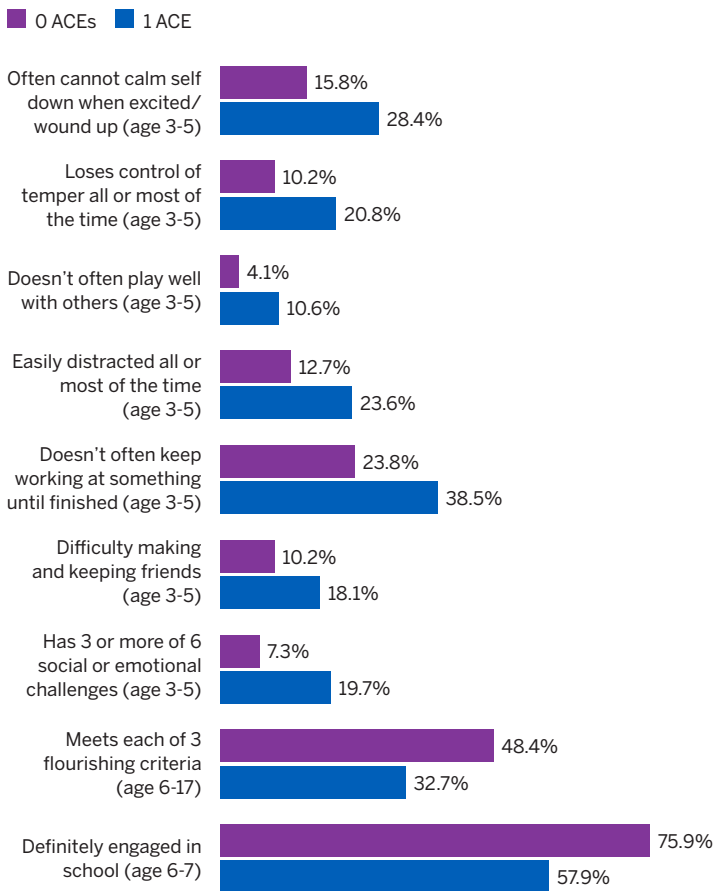


TABLE 3: Prevalence of all children with 2+ ACEs whose families practice resilience when facing problems and practice protective routines and habits, by experiences during health care visits

	Family often practices 4 qualities of resilience when facing problems	3 or more of 5 protective family routines and habits practiced
How often providers spend enough time*		
Always	73.1%	74.7%
Sometimes/Never	47.9%	53.6%
How often providers listen carefully to parents*		
Always	71.0%	72.6%
Sometimes/Never	46.1%	56.0%
How often specific information needed is provided*		
Always	70.7%	72.5%
Sometimes/Never	45.9%	51.9%

*Odds ratios adjusted for income/FPL and race/ethnicity all significant: With "always" responses to each experience of health care factors, odds are 2.68-2.79 greater that families often practice 4 resilience qualities than with "sometimes/never" (1.46-1.54 for "usually"). Odds .41-.50 less for practicing 2 or fewer (vs. 3-5) protective family routines and habits with "always" responses compared to "sometimes/never" ("usually" responses did not differ from "sometimes/never").

Resilience and supporting family relationships are the key

Teaching resilience and promoting positive family communication, routines, and habits are important for all children and are powerful protective and healing factors for children with ACEs. Children and families with ACEs can become among the most resilient and healthiest when they learn to cope and heal from the physical, emotional, and social effects of trauma and toxic stress associated with ACEs. The most effective ways to address trauma and toxic stress require full engagement of children and families to practice resilience skills and community environments that help them do so.

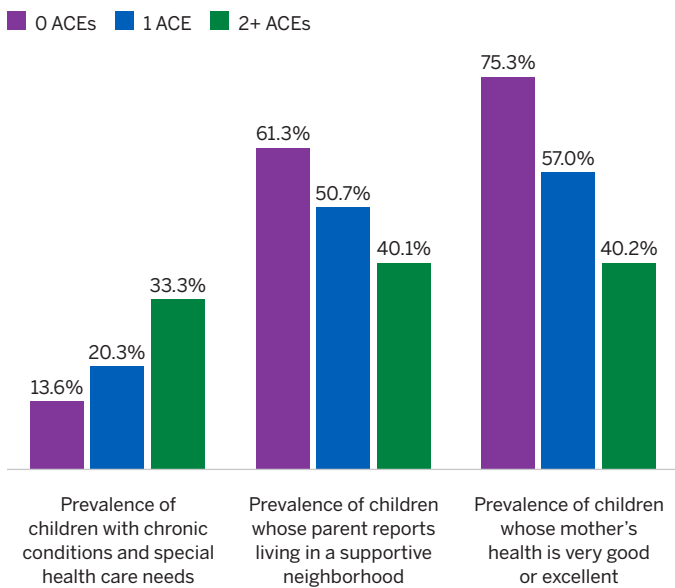
- Children age 6-17 with 2+ ACEs who learn to stay calm and in control when faced with challenges are over three times more likely to be engaged in school compared to children who have not learned these skills (71.4 percent vs. 19.2 percent).¹¹
- Children with 2+ ACEs are nearly six times more likely to have learned this resilience skill when parents do very well in sharing ideas and about things that matter with their child versus not well.¹²

Consistently trusting and respectful relationships matter

Research shows that patients with trusting and respectful relationships with their health care providers are more likely to discuss potentially sensitive issues like ACEs, and have better health outcomes.¹³ Consistently positive communication between parents and their children's health care providers is linked to stronger family resilience and a higher number of nationally recommended family routines and habits. For children ages 0-5, recommended family routines and habits include limiting TV/screen time, ensuring no tobacco use in the home, reading to children daily, breastfeeding, and sharing family meals (Table 3).¹⁴

- Children with 2+ ACEs whose parents report that their child's health care providers "always" listen, spend needed time, and give needed information are over 1.5 times more likely to live in families that practice four basic resilience skills when they face problems.
- Children whose parents report "always" having positive communication with their child's health care providers are over 1.5 times more likely to practice three or more (of five) recommended protective family routines and habits.

FIGURE 2: Child and Parent Health and Neighborhood Support, by ACEs



A pivotal role for health care, social, and community services

Children who have ACEs are more likely to have a chronic condition that requires above routine health care services and mothers who are not in very good physical and mental health.¹¹ As a result, health care providers and services can play an especially important role in their direct patient interactions, to learn about ACEs and by ensuring families connect with other supports and resources in their communities.¹³ Addressing ACEs can also reduce health care costs by addressing the roots of many health problems.¹⁵

Because children with ACEs are also less likely to live in neighborhoods described by parents as “supportive” (see methods notes), it follows that the families requiring the greatest community supports and services are least likely to have them (Figure 2). Building the resilience of entire communities is pivotal in addressing ACEs.¹⁶⁻¹⁹

- Nearly three in four children with chronic conditions involving emotional, mental or behavioral (EMB) problems have ACEs.¹¹
- Children with 2+ ACEs are 2.76 times more likely to live in families where parents had to cut back on or stop working due to their child’s health.¹¹

Creating “through any door” coping and healing supports

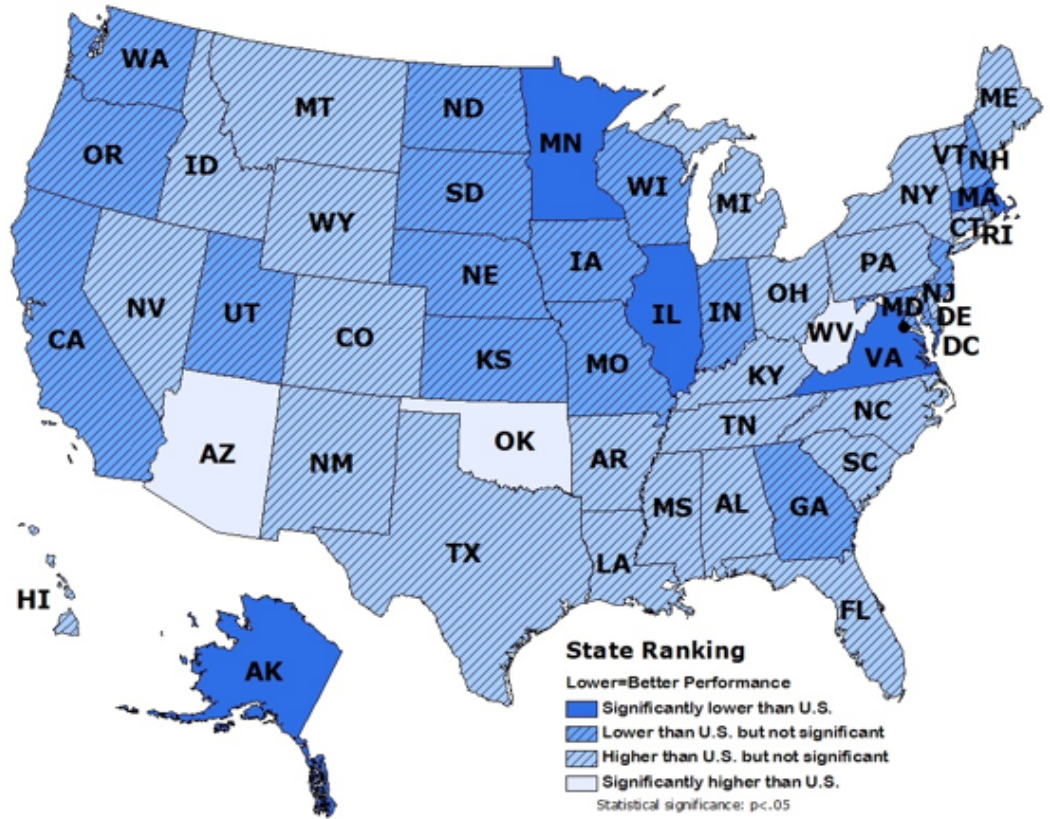
A strong family unit is essential when it comes to addressing ACEs, but broader community support is critical to strengthen families. Health care providers, early child care professionals, teachers, home visitors, and community health workers all play a pivotal role. The relational skills of those who work with children is especially important.^{20,21} Importantly, research shows that professionals who practice mindfulness skills, like being open, calm, mentally and emotionally present, flexible, and responsive during interactions with children—and encourage families to practice similar skills—helps children.²² These skills and practical tools to effectively engage and coach families to reflect and identify strengths, needs, and priorities for well-visits, for example, have been shown to increase conversations about a child’s social and emotional well-being and family and household issues that can impact children.^{23,24}

Building a Culture of Health for children and families

All children need nurturing environments to grow up healthy, and all families should have the opportunity to provide those environments for their children. A child’s physical, social, and emotional well-being are inextricably linked. A child’s experiences can determine health and well-being throughout life. This brief demonstrates that despite the significant prevalence of ACEs, policymakers, families, community leaders, and health care service providers can create environments where children can flourish and thrive.²⁵ The earlier we nurture children’s well-being—beginning while they are in utero—the more likely that they will have the love and support needed for lifelong health and happiness.

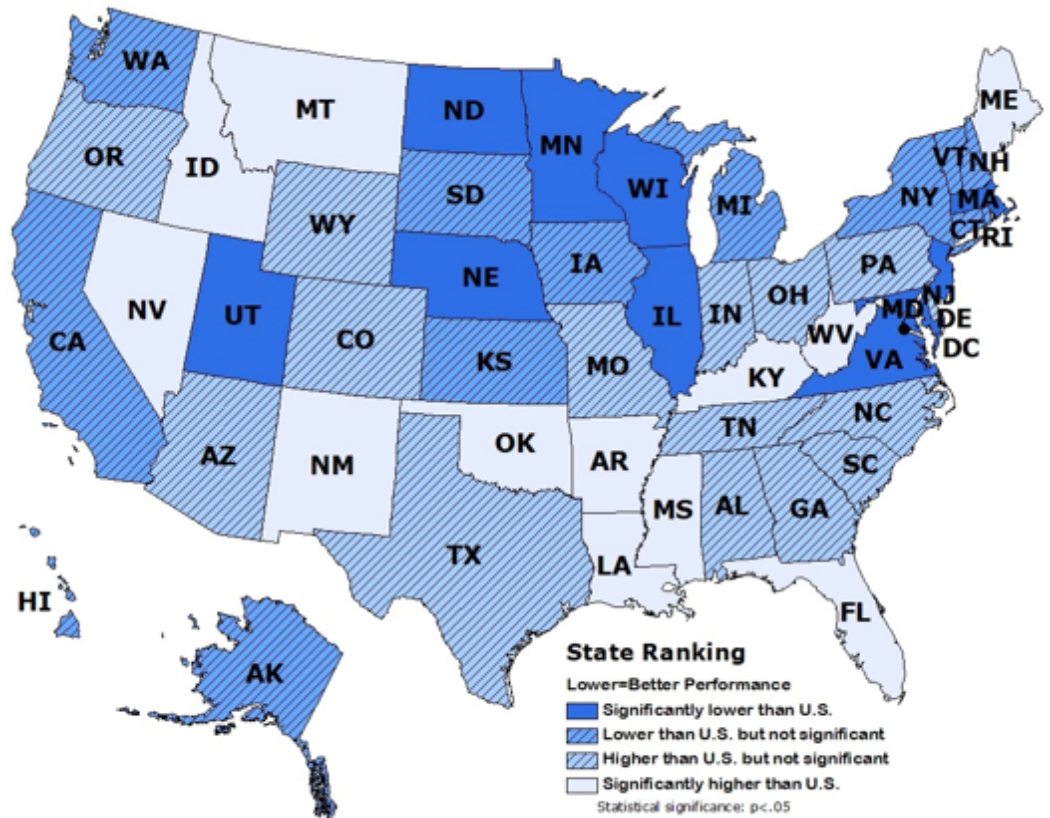
Percent of Children Age 0-5 with One or More Adverse Childhood Experiences in the US

Nationwide: 35.0%
State Range: 23.1%–49.1%



Percent of Children Age 0-17 with One or More Adverse Childhood Experiences in the US

Nationwide: 46.3%
State Range: 38.1%–55.9%



Percent of Children Age 0-17 or with Two More Adverse Childhood Experiences in the US

Nationwide: 21.7%
State Range: 15.0%–30.6%

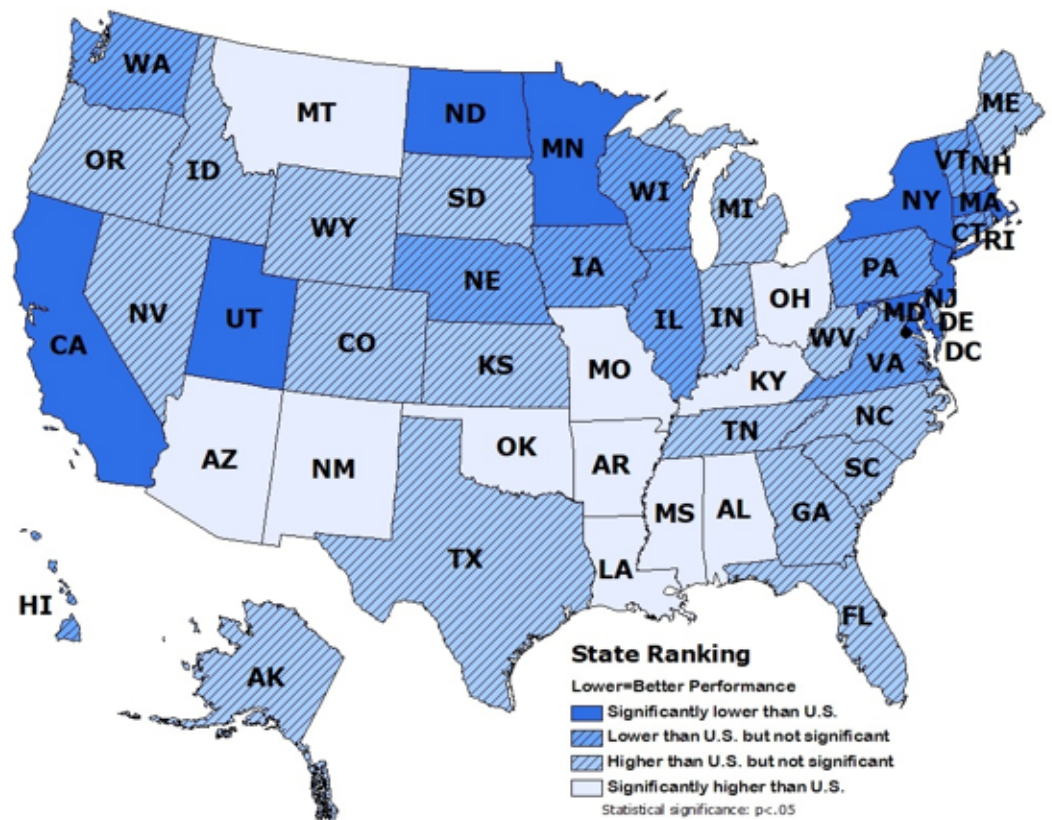


TABLE 4. Description of the Measures Presented in Table 5

Measure Labels	Description of the Measures		
1+ ACEs, 0-17 years	Prevalence of children with one or more adverse childhood experiences (ACEs), age 0-17 years. The NSCH includes nine ACEs items: <ul style="list-style-type: none"> • Hard to get by on income (somewhat or very often) • Parent/guardian divorced or separated • Parent/guardian died • Parent/guardian served time in jail • Saw or heard violence in the home • Victim/witness of neighborhood violence • Lived with anyone mentally ill, suicidal, or depressed • Lived with anyone with alcohol or drug problem • Often treated or judged unfairly due to race/ethnicity For more information about the methods to assess ACEs click here .		
2+ ACEs, 0-17 years	Prevalence of children with two or more ACEs, age 0-17 years.		
1+ ACEs, 0-5 years	Prevalence of children with one or more ACEs, age 0-5 years.		
Chronic Health Condition	Prevalence of children with chronic health conditions identified by the Children with Special Health Care Needs (CSHCN) Screener, among children age 0-17 years with one or more ACEs. To learn about the CSHCN Screener click here .		
CSHCN with EMB Conditions	Prevalence of CSHCN with ongoing emotional, developmental and/or behavioral (EBD) health conditions identified by the CSHCN Screener, among children age 0-17 years with one or more ACEs.		
Mother's Health	Prevalence of children whose mother's physical and mental health are both either excellent or very good, among children age 0-17 years with one or more ACEs.		
Parent Coping	Prevalence of children whose parents reported that they handle the day-to-day demands of raising children very well, among children age 0-17 years with one or more ACEs.		
School Engagement	Prevalence of children definitely engaged in school, among children age 6-17 years with one or more ACEs. In the 2016 NSCH, children are considered to be engaged in school if their parents reported "definitely true" to both of the following: their child cares about doing well in school and their child does all required homework.		
Resilience, 6-17 years	Prevalence of children demonstrating resilience, among children age 6-17 years with one or more ACEs. In the 2016 NSCH, resilience is defined as definitely staying calm and in control when faced with a challenge.		
Supportive Neighborhood	Prevalence of children who live in supportive neighborhoods, among children age 0-17 years with one or more ACEs. In the 2016 NSCH, children are considered to live in supportive neighborhoods if their parents reported "definitely agree" to at least one of the items below and "somewhat agree" or "definitely agree" to the other two: People in my neighborhood help each other out; we watch out for each other's children in this neighborhood; when we encounter difficulties, we know where to go for help in our community.		
Cut Back or Stopped Working	Prevalence of children whose parents either cut back on their work hours or stopped working because of their child's health or health conditions, among children age 0-17 years with one or more ACEs.		
Family Routines and Habits	Prevalence of children who live in families with fewer than 3 out of 5 family routines and habits, among children age 0-17 years with one or more ACEs. The 5 family routines and habits for different age groups are: <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top;"> Children age 0-5: <ul style="list-style-type: none"> • No tobacco use in the home • Family shares a meal at least 4 days/week • Child has no more than 2 hours of screen time/day • Child is read to every day • Child was ever fed breast milk </td> <td style="vertical-align: top;"> Children age 6-17: <ul style="list-style-type: none"> • No tobacco use in the home • Family shares a meal at least 4 days/week • Child has no more than 2 hours of screen time/day • Child does required homework • Parents participate in their child's events/activities </td> </tr> </table>	Children age 0-5: <ul style="list-style-type: none"> • No tobacco use in the home • Family shares a meal at least 4 days/week • Child has no more than 2 hours of screen time/day • Child is read to every day • Child was ever fed breast milk 	Children age 6-17: <ul style="list-style-type: none"> • No tobacco use in the home • Family shares a meal at least 4 days/week • Child has no more than 2 hours of screen time/day • Child does required homework • Parents participate in their child's events/activities
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Citation: Bethell, CD, Davis, MB, Gombojav, N, Stumbo, S, Powers, K. Issue Brief: A national and across state profile on adverse childhood experiences among children and possibilities to heal and thrive. Johns Hopkins Bloomberg School of Public Health, October 2017. <http://www.cahmi.org/projects/adverse-childhood-experiences-aces/>

TABLE 5. Across State Multiple Indicator Table: Percent of Children who Experienced Adverse Childhood Experiences (ACEs) and Prevalence of Selected Child and Family Health Measures^ among Children Who Experienced One or More ACEs

State	2+ ACEs, 0-17 years*	1+ ACEs, 0-17 years*	1+ ACEs, 0-5 years*	Among Children with One or More Adverse Childhood Experiences								
				Chronic Health Condition*	Children with EBD conditions*	Cut Back or Stopped Working*	Family Routines and Habits*	Mother's Health**	Parent Coping**	School Engagement, 6-17 years**	Resilience, 6-17 years**	Supportive Neighborhood**
Nation	21.7	46.3	35.0	26.4	12.8	7.4	27.4	49.6	61.5	57.9	43.0	44.2
State Range	15.0–30.6	38.1–55.9	23.1–49.1	17.2–33.9	8.6–20.2	4.4–12.0	16.6–34.8	38.6–61.0	48.6–75.0	45.9–68.5	24.1–53.6	29.5–63.8
Alaska	23.8	44.3	23.1	23.0	13.4	6.2†	23.8	45.6	58.5	49.2	40.3	50.0
Alabama	27.7	50.1	37.0	29.2	13.4	5.1†	30.8	46.1	61.8	58.9	40.0	52.3
Arkansas	29.6	55.9	40.6	29.8	14.0	6.2†	28.9	42.8	63.0	50.8	39.8	50.7
Arizona	30.6	49.4	44.4	26.3	12.9	7.3	34.8	40.9	54.0	50.1	44.2	40.3
California	16.4	42.1	33.1	24.0	11.7	8.0	28.8	52.8	59.7	58.9	45.0	37.6
Colorado	22.3	46.3	36.0	24.2	11.5	10.2	21.2	49.9	56.9	51.4	47.5	44.1
Connecticut	19.4	42.2	38.3	29.5	18.0	6.7	29.4	58.4	65.3	64.5	45.3	44.9
District of Columbia	21.8	47.1	32.3	25.2	12.6	5.6	21.5	60.6	67.2	65.1	51.5	38.9
Delaware	22.6	48.3	37.1	30.6	15.1	6.0	32.8	47.7	68.3	60.0	38.4	46.1
Florida	24.8	52.0	36.9	25.8	12.1	7.3	25.7	57.3	70.6	68.2	50.5	43.7
Georgia	25.0	47.7	29.3	27.1	14.5	5.0†	27.3	43.1	70.3	54.8	39.2	43.7
Hawaii	21.4	43.2	37.1	17.2	9.1	6.8	22.7	55.3	51.8	57.0	43.8	45.6
Iowa	20.0	43.8	34.4	25.6	14.1	6.9	22.5	51.5	63.2	54.8	41.9	54.6
Idaho	23.4	50.9	38.4	24.2	15.6	6.2	20.3	48.7	53.5	54.0	39.0	51.4
Illinois	19.5	39.7	24.9	26.4	14.2	8.8	25.2	46.3	56.7	68.5	45.1	43.5
Indiana	24.2	47.3	33.6	33.9	19.8	12.0	28.5	45.2	60.6	54.0	42.1	54.9
Kansas	21.7	45.2	31.0	25.3	13.5	7.2	26.3	50.1	55.7	50.2	42.7	49.6
Kentucky	26.9	53.1	42.5	32.1	15.8	4.4	33.4	43.2	70.4	51.1	31.6	47.7
Louisiana	28.2	53.7	36.7	30.3	13.7	6.9	27.8	51.6	63.7	60.1	43.1	51.3
Massachusetts	15.9	38.8	27.3	28.0	20.2	11.3	27.9	53.2	61.7	58.1	41.8	48.8
Maryland	15.4	41.0	27.5	29.2	15.4	5.1†	28.7	55.6	75.0	59.5	53.6	47.3
Maine	24.6	51.7	39.9	33.1	17.3	9.4	20.5	42.6	60.7	51.9	36.0	46.9
Michigan	21.8	46.2	36.4	25.8	11.0	4.7	29.1	50.2	64.8	59.3	42.7	43.1
Minnesota	16.8	38.1	26.2	25.8	15.4	4.7†	27.9	52.0	60.2	56.4	39.7	51.6
Missouri	27.2	47.8	34.1	31.6	14.3	4.8	27.3	41.3	59.3	55.7	38.0	49.7
Mississippi	27.2	53.4	35.5	32.3	18.6	7.9	25.4	46.1	65.6	51.5	28.5	47.6
Montana	26.1	50.7	37.2	26.9	16.2	6.6	19.1	42.0	56.1	53.2	35.1	53.5
North Carolina	23.8	49.6	41.7	26.2	11.1	8.6	31.8	44.2	55.6	55.6	44.5	44.1
North Dakota	15.8	39.9	32.5	26.8	12.7	6.5	18.4	46.6	61.2	59.3	37.4	63.8
Nebraska	19.9	42.1	34.0	25.9	12.6	7.3	25.0	44.5	57.0	62.6	43.0	49.8
New Hampshire	19.7	42.5	31.1	26.4	14.0	6.7	19.5	45.7	57.6	57.5	37.0	54.7
New Jersey	18.1	41.4	33.1	22.4	12.4	7.8	25.0	61.0	58.1	68.0	49.6	42.7
New Mexico	27.8	53.3	38.2	25.3	14.7	10.1	18.4	38.6	61.2	51.9	40.7	44.2
Nevada	25.0	52.4	40.4	20.2	11.6	10.9	31.0	47.5	54.3	54.1	43.2	29.5
New York	15.0	45.3	38.7	19.9	8.6	7.6	27.1	60.6	68.3	58.4	40.6	40.0
Ohio	27.1	49.5	37.3	30.6	11.9	5.6	29.7	44.7	62.8	57.6	45.5	46.6
Oklahoma	26.6	53.7	49.1	26.4	12.0	6.6	27.4	39.6	55.3	50.4	38.9	47.5
Oregon	22.4	47.3	32.8	25.6	13.9	10.3	21.3	44.0	53.4	45.9	41.4	44.8
Pennsylvania	21.2	47.1	37.3	25.8	13.5	4.9†	29.2	50.3	62.6	58.6	41.9	50.7
Rhode Island	21.5	45.8	39.0	29.1	16.7	9.7	24.4	45.0	64.5	56.4	37.1	41.5
South Carolina	25.3	48.3	36.2	27.5	13.3	5.8	28.0	41.5	62.3	54.0	40.3	42.7
South Dakota	22.0	45.6	33.2	21.7	9.0	4.6	20.3	57.7	64.5	49.9	38.4	55.2
Tennessee	24.6	48.1	36.1	25.7	12.7	7.2	28.2	49.9	66.7	58.9	44.5	40.4
Texas	23.9	49.7	35.3	26.0	10.0	9.0	27.4	50.2	56.2	59.7	41.6	37.4
Utah	16.9	41.0	34.2	23.0	13.8	6.8	23.3	45.6	48.6	46.5	32.2	55.7
Virginia	19.3	41.2	27.9	29.7	13.8	9.5	25.2	48.4	62.9	57.2	48.1	50.3
Vermont	19.9	45.0	35.2	31.7	18.6	7.7	16.6	43.9	60.5	57.8	41.3	53.8
Washington	19.3	42.5	33.7	28.6	13.4	7.9	25.7	44.6	58.7	48.3	41.6	42.2
Wisconsin	20.3	41.4	31.6	28.2	15.6	4.9†	23.5	47.1	63.4	58.3	44.2	49.5
West Virginia	26.1	52.4	45.1	29.0	14.2	5.0	29.0	38.6	66.7	53.7	39.3	51.1
Wyoming	26.0	46.7	35.1	30.8	15.0	9.4	21.3	48.4	62.5	47.2	24.1	50.6

^See Table 2 for more information on individual measures *Lower percentage indicates better performance **Higher percentage indicates better performance †Relative confidence interval width is greater than 120%

□ Significantly lower than nation □ Lower than nation, but not statistically significant □ Higher than nation, but not statistically significant ■ Significantly higher than nation

ADDITIONAL INFORMATION ON VARIABLES

Definitions of selected variables referenced in this issue brief are provided below. See Table 5 for more information or go to the [NSCH Learn about the Survey](#) link.

CSHCN: Prevalence of children with chronic health conditions identified by the Children with Special Health Care Needs (CSHCN) Screener, among children ages 0-17 with one or more ACEs.

Engaged in School: Prevalence of children definitely engaged in school, among children ages 6-17 with one or more ACEs. In the 2016 NSCH, children are considered to be engaged in school if their parents reported “definitely true” to both of the following: their child cares about doing well in school and their child does all required homework.

Supportive Neighborhood: Prevalence of children who live in supportive neighborhoods, among children ages 0-17 with one or more ACEs. In the 2016 NSCH, children are considered to live in supportive neighborhoods if their parents reported “definitely agree” to at least one of the items below and “somewhat agree” or “definitely agree” to the other two: 1. People in my neighborhood help each other out; 2. We watch out for each other’s children in this neighborhood; 3. When we encounter difficulties, we know where to go for help in our community.

Protective Family Routines and Habits: Prevalence of children who live in families with fewer than three out of five family routines and habits, among children ages 0-17 with one or more ACEs. The five family routines and habits for different age groups are: Children ages 0-5: No tobacco use in the home; Family shares a meal at least four days/week; Child has no more than two hours of screen time/day; Child is read to every day; Child was ever fed breast milk. Children ages 6-17: No tobacco use in the home; Family shares a meal at least four days/week; Child has no more than two hours of screen time/day; Child does required homework; Parents participate in their child’s events/activities.

Flourishing (ages 6-17): Prevalence of school-age children whose parents report they observe each of three qualities of flourishing in their child: (1) is curious and interested in learning new things; (2) can usually stay calm and in control when faced with a challenge; (3) can usually focus and complete tasks they have begun.

Family Resilience Practices: Prevalence of children whose parent reports often practicing each of four family communication and belief habits that build resilience when they face family problems. These are: 1. Talk about what to do; 2. Work together to solve their problems; 3. Know they have strengths to draw on; 4. Stay hopeful even in difficult times.

REFERENCES

1. Shonkoff, et al: <https://www.ncbi.nlm.nih.gov/pubmed/22201156>
2. Jones, et al: <http://doi.org/10.2105/AJPH.2015.302630>
3. Arkin, et al: <https://www.rwjf.org/content/dam/farm/reports/reports/2014/rwjf409002#page=44>
4. RWJF Commission: <http://www.commissiononhealth.org/Recommendations.aspx>
5. National Child Traumatic Stress Network: <http://www.nctsn.org/resources>
6. Sesame Street In Communities: <https://sesamestreetcommunities.org/>
7. Provider Resources: http://www.cahmi.org/wp-content/uploads/2015/01/ACEs-Resource-Packet_all-pages_12_06-16.pdf
8. Academic Pediatrics, 17(7S): S51-S69. Academic Pediatrics supplement, Sept/Oct 2017 – Child Well-being and Adverse Childhood Experiences in the US: [http://www.academicpediatrics.net/issue/S1876-2859\(17\)X0002-8](http://www.academicpediatrics.net/issue/S1876-2859(17)X0002-8)
9. Sege, et al: [http://www.academicpediatrics.net/article/S1876-2859\(17\)30107-9/pdf](http://www.academicpediatrics.net/article/S1876-2859(17)30107-9/pdf)
10. NSCH ACEs Measure: [http://www.academicpediatrics.net/article/S1876-2859\(17\)30324-8/pdf](http://www.academicpediatrics.net/article/S1876-2859(17)30324-8/pdf)
11. Bethell, et al: <https://www.ncbi.nlm.nih.gov/pubmed/25489028>
12. Bethell, et al: <https://www.ncbi.nlm.nih.gov/pubmed/26980120>
13. Szilagyi, et al: <https://www.ncbi.nlm.nih.gov/pubmed/27157045>
14. Bright Futures Guidelines: <https://brightfutures.aap.org/materials-and-tools/guidelines-and-pocketguide/Pages/default.aspx>
15. Bellis, et al: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5549819/>
16. Porter, et al: [http://www.academicpediatrics.net/article/S1876-2859\(16\)30496-X/pdf](http://www.academicpediatrics.net/article/S1876-2859(16)30496-X/pdf)
17. Pachter, et al: [http://www.academicpediatrics.net/article/S1876-2859\(17\)30168-7/pdf](http://www.academicpediatrics.net/article/S1876-2859(17)30168-7/pdf)
18. Bruner, et al: [http://www.academicpediatrics.net/article/S1876-2859\(17\)30352-2/pdf](http://www.academicpediatrics.net/article/S1876-2859(17)30352-2/pdf)
19. Ellis, et al: [http://www.academicpediatrics.net/article/S1876-2859\(16\)30552-6/pdf](http://www.academicpediatrics.net/article/S1876-2859(16)30552-6/pdf)
20. Bruner, et al: [http://www.academicpediatrics.net/article/S1876-2859\(17\)30352-2/pdf](http://www.academicpediatrics.net/article/S1876-2859(17)30352-2/pdf)
21. Brown, et al: [http://www.academicpediatrics.net/article/S1876-2859\(17\)30015-3/pdf](http://www.academicpediatrics.net/article/S1876-2859(17)30015-3/pdf)
22. Becker, et al: <https://link.springer.com/article/10.1007/s10826-015-0352-y>
23. Magen, et al: [http://www.academicpediatrics.net/article/S1876-2859\(17\)30106-7/pdf](http://www.academicpediatrics.net/article/S1876-2859(17)30106-7/pdf)
24. Cocker, et al: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4771128>
25. Head Start Tool: <https://eclkc.ohs.acf.hhs.gov/webinar/introducing-well-visit-planner-tool-family-engagement-head-start-early-head-start-centers>
26. National Agenda: [http://www.academicpediatrics.net/article/S1876-2859\(17\)30354-6/pdf](http://www.academicpediatrics.net/article/S1876-2859(17)30354-6/pdf)

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ABOUT THE DATA

The 2016 NSCH surveyed a representative sample of children ages 0–17 (50, 212 children, with representative samples per state). Child level household surveys were conducted with parents or guardians under the leadership of the Maternal and Child Health Bureau (MCHB) and implemented through the U.S. Bureau of the Census. Data were weighted to represent the population of noninstitutionalized children ages 0–17 nationally and in each state. With funding from MCHB, the Child and Adolescent Health Measurement Initiative (CAHMI), a national initiative based in the Johns Hopkins Bloomberg School of Public Health, partners with MCHB and the US Bureau of the Census to develop the NSCH and disseminates data files, variable coding and micro-data findings on its Data Resource Center website (www.childhealthdata.org). See the CAHMI Data Resource Center website’s [NSCH Learn About the Survey](#) information on the sampling, administration and content for the 2016 NSCH.

ABOUT THE STUDY

CAHMI used 2016 NSCH public use files to construct variables and conduct analysis and statistical tests for this study. The national and across state profile of adverse childhood experiences and opportunities to promoting healing and thriving largely represented updated results on previously published peer reviewed publications led by CAHMI using the 2011-12 NSCH. See references noted throughout this Issue Brief. Note that all differences in key variables by a child’s ACEs status reported here are statistically significant using standard tests of differences or regression analysis.

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