Research Brief

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ADVERSE CHILDHOOD EXPERIENCES:

NATIONAL AND STATE-LEVEL PREVALENCE

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OVERVIEW

Adverse childhood experiences (ACEs) are potentially traumatic events that can have negative, lasting effects on health and well-being.[1] These experiences range from physical, emotional, or sexual abuse to parental divorce or the incarceration of a parent or guardian. A growing body of research has sought to quantify the prevalence of adverse childhood experiences and illuminate their connection with negative behavioral and health outcomes, such as obesity, alcoholism, and depression, later in life. However, prior research has not reported on the prevalence of ACEs among children in a nationally representative, non-clinical sample.[2] In this brief, we describe the prevalence of one or more ACEs among children ages birth through 17, as reported by their parents, using nationally representative data from the 2011/12 National Survey of Children's Health (NSCH). We estimate the prevalence of eight specific ACEs for the U.S., contrasting the prevalence of specific ACEs among the states and between children of different age groups.

KEY FINDINGS

- Economic hardship is the most common adverse childhood experience (ACE) reported nationally and in almost all states, followed by divorce or separation of a parent or guardian. Only in Iowa, Michigan, and Vermont is divorce or separation more common than economic hardship; in the District of Columbia, having been the victim of or witness to violence has the second-highest prevalence, after economic hardship.
- The prevalence of ACEs increases with a child's age (parents were asked whether their child had "ever" had the experience), except for economic hardship, reported about equally for children of all ages, reflecting high levels of poverty among young families.
- Abuse of alcohol or drugs, exposure to neighborhood violence, and the occurrence of mental illness are among the most commonly-reported adverse childhood experiences in every state.
- Just under half (46 percent) of children in the U.S. have experienced at least one ACE. In 16 states, a slight majority of children have experienced at least one ACE. In Connecticut, Maryland, and New Jersey, 60 percent or more of children have never experienced an ACE.
- States vary in the pattern of specific ACEs. Connecticut and New Jersey have some of the lowest prevalence rates nationally for all ACEs, while Oklahoma has consistently high prevalence.

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MEASUREMENT OF ADVERSE CHILDHOOD EXPERIENCES

We measured the prevalence of eight adverse childhood experiences (ACEs), consisting of whether the child ever:

1. Lived with a parent or guardian who got divorced or separated;
2. Lived with a parent or guardian who died;
3. Lived with a parent or guardian who served time in jail or prison;
4. Lived with anyone who was mentally ill or suicidal, or severely depressed for more than a couple of weeks;
5. Lived with anyone who had a problem with alcohol or drugs;
6. Witnessed a parent, guardian, or other adult in the household behaving violently toward another (e.g., slapping, hitting, kicking, punching, or beating each other up);
7. Was ever the victim of violence or witnessed any violence in his or her neighborhood; and
8. Experienced economic hardship "somewhat often" or "very often" (i.e., the family found it hard to cover costs of food and housing).

State-Level Variation in the Prevalence of Adverse Childhood Experiences

Research has found that the highest levels of risk for negative outcomes are associated with having experienced multiple adverse childhood experiences (ACEs).[3,4] Table 1 shows the number of ACEs parents reported for their child, by state. Nationally, a slight majority of children have not experienced any ACEs, but in 16 states more than half of children have experienced at least one ACE. In Montana and Oklahoma, 17 percent of children have experienced three or more ACEs. Some studies suggest that the experience of four or more ACES is a threshold above which there is a particularly higher risk of negative physical and mental health outcomes.[5,6] Prevalence at this threshold is lowest in New Jersey and New York, at around three percent, and highest in Oklahoma, Montana, and West Virginia, at 10 to 12 percent (data not shown in Table).

Table 1. Among Children Aged Birth to 17, Percentage Reported to Have Had Zero, One or Two, or Three or More Adverse Childhood Experiences (ACEs), Nationally, and by State

State	Number Of Adverse Childhood Experiences		
	0	1 OR 2	3+
United States	54	35	11
Alaska	51	35	14
Alabama	48	40	12
Arkansas	45	41	14
Arizona	44	40	15
California	57	33	9
Colorado	57	33	10
Connecticut	61	32	7
District of Columbia	51	37	11
Delaware	52	35	13
Florida	49	42	9
Georgia	53	38	9
Hawaii	56	35	9
Iowa	55	33	12
Idaho	50	35	15
Illinois	59	32	9
Indiana	49	36	15
Kansas	54	34	12
Kentucky	46	37	16
Louisiana	50	38	12
Massachusetts	58	33	9
Maryland	61	31	8
Maine	48	37	15
Michigan	51	35	14
Minnesota	56	34	10
Missouri	52	35	12
Mississippi	46	39	15
Montana	48	35	17
North Carolina	52	36	12
North Dakota	58	32	10
Nebraska	56	32	11
New Hampshire	55	33	12
New Jersey	61	32	7
New Mexico	47	39	14
Nevada	47	40	13

Table 1. Among Children Aged Birth to 17, Percentage Reported to Have Had Zero, One or Two, or Three or More Adverse Childhood Experiences (ACEs), Nationally, and by State

State	NUMBER OF ADVERSE CHILDHOOD EXPERIENCES		
	0	1 OR 2	3+
New York	58	34	8
Ohio	50	36	14
Oklahoma	45	38	17
Oregon	50	35	15
Pennsylvania	54	34	12
Rhode Island	53	37	11
South Carolina	49	39	12
South Dakota	58	30	11
Tennessee	48	38	13
Texas	54	36	10
Utah	59	31	9
Virginia	58	34	8
Vermont	50	38	11
Washington	53	36	11
Wisconsin	54	35	11
West Virginia	48	36	16
Wyoming	52	34	15

Economic Hardship is the Most Common Adverse Childhood Experience

By far, the most common ACEs in all 50 states are economic hardship, and parental divorce or separation (Table 2). Nationally, just over one in four children ages birth through 17 has experienced economic hardship somewhat or very often. Only in Iowa, Michigan, and Vermont is divorce more prevalent than economic hardship (in Wyoming and Oklahoma they are equally prevalent). In most states (45), living with a parent who has an alcohol- or drug-use problem is the third-most-prevalent ACE (national prevalence is about one in ten children). Death of a parent is experienced by three percent of children nationally and is relatively rare in all states: only in the District of Columbia and Mississippi is prevalence greater than five percent (seven and six percent, respectively).

Table 2. Four Most Common Adverse Childhood Experiences (and percentage prevalence) Among Children Ages Birth through 17, Nationally, and by State

State	Highest	2nd	3rd	4th
United States	Economic Hardship (26)	Divorce (20)	Alcohol (11)	Violence (9) Mental Illness (9)
Alaska	Economic Hardship (25)	Divorce (24)	Alcohol (15)	Mental Illness (11)
Alabama	Economic Hardship (29)	Divorce (23)	Alcohol (11)	Mental Illness (10)
Arkansas	Economic Hardship (33)	Divorce (26)	Alcohol (13)	Mental Illness (11)
Arizona	Economic Hardship (34)	Divorce (24)	Alcohol (16)	Violence (11)
California	Economic Hardship (22)	Divorce (17)	Alcohol (11)	Violence (8)
Colorado	Economic Hardship (23)	Divorce (21)	Alcohol (10)	Mental Illness (9)
Connecticut	Economic Hardship (22)	Divorce (16)	Alcohol (8)	Mental Illness (8)
District of Columbia	Economic Hardship (24)	Violence (17)	Divorce (15)	Incarceration (8)
Delaware	Economic Hardship (25)	Divorce (21)	Violence (12)	Alcohol (7)
Florida	Economic Hardship (30)	Divorce (20)	Alcohol (9)	Incarceration (8)
Georgia	Economic Hardship (26)	Divorce (19)	Violence (8) Alcohol (8) Incarceration (8)	Domestic Violence (7)
Hawaii	Economic Hardship (21)	Divorce (17)	Violence (11) Alcohol (11)	Domestic Violence (8)
Iowa	Divorce (22)	Economic Hardship (22)	Alcohol (13) Mental Illness (13)	Domestic Violence (8)
Idaho	Economic Hardship (27)	Divorce (25)	Alcohol (14)	Mental Illness (13)
Illinois	Economic Hardship (23)	Divorce (16)	Alcohol (9)	Violence (8)
Indiana	Economic Hardship (28)	Divorce (24)	Alcohol (13)	Incarceration (11) Mental Illness (11)
Kansas	Economic Hardship (28)	Divorce (22)	Mental Illness (10) Alcohol (10)	Violence (8)
Kentucky	Economic Hardship (30)	Divorce (29)	Alcohol (14)	Incarceration (13)
Louisiana	Economic Hardship (27)	Divorce (23)	Mental Illness (10) Alcohol (10) Violence (10)	Incarceration (8)
Massachusetts	Economic Hardship (22)	Divorce (19)	Alcohol (11)	Mental Illness (9)
Maryland	Economic Hardship (20)	Divorce (17)	Alcohol (8) Violence (8)	Mental Illness (7)
Maine	Economic Hardship (29)	Divorce (27)	Alcohol (14)	Mental Illness (13)
Michigan	Divorce (26)	Economic Hardship (25)	Alcohol (13)	Mental Illness (11)
Minnesota	Economic Hardship (22)	Divorce (20)	Alcohol (13)	Mental Illness (9)

Table 2. Four Most Common Adverse Childhood Experiences (and percentage prevalence) among Children ages Birth through 17, Nationally, and by State

State	Highest	2nd	3rd	4th
Missouri	Economic Hardship (28)	Divorce (23)	Alcohol (11) Mental Illness (11)	Violence (8)
Mississippi	Economic Hardship (32)	Divorce (22)	Alcohol (13)	Violence (12)
Montana	Economic Hardship (28)	Divorce (26)	Alcohol (19)	Mental Illness (14)
North Carolina	Economic Hardship (27)	Divorce (21)	Mental Illness (10) Violence (10) Alcohol (10)	Domestic Violence (9)
North Dakota	Economic Hardship (22)	Divorce (20)	Alcohol (13)	Mental Illness (10)
Nebraska	Economic Hardship (22)	Divorce (21)	Alcohol (12)	Incarceration (9)
New Hampshire	Economic Hardship (23)	Divorce (22)	Alcohol (12)	Mental Illness (11)
New Jersey	Economic Hardship (22)	Divorce (15)	Alcohol (9)	Mental Illness (6)
New Mexico	Economic Hardship (28)	Divorce (25)	Alcohol (17)	Violence (12)
Nevada	Economic Hardship (30)	Divorce (23)	Alcohol (13)	Mental Illness (10)
New York	Economic Hardship (22)	Divorce (15)	Violence (10)	Domestic Violence (7)
Ohio	Economic Hardship (27)	Divorce (23)	Violence (13)	Alcohol (12)
Oklahoma	Economic Hardship (30) Divorce (30)	Alcohol (17)	Violence (13)	Mental Illness (12)
Oregon	Economic Hardship (29)	Divorce (23)	Alcohol (17)	Mental Illness (14)
Pennsylvania	Economic Hardship (25)	Divorce (19)	Alcohol (10) Mental Illness (10) Violence (10)	Domestic Violence (8)
Rhode Island	Economic Hardship (29)	Divorce (19)	Alcohol (12)	Mental Illness (11)
South Carolina	Economic Hardship (27)	Divorce (23)	Alcohol (11)	Mental Illness (10)
South Dakota	Economic Hardship (21)	Divorce (19)	Alcohol (12)	Incarceration (8)
Tennessee	Economic Hardship (31)	Divorce (25)	Alcohol (12)	Mental Illness (11)
Texas	Economic Hardship (29)	Divorce (20)	Alcohol (10)	Mental Illness (8)
Utah	Economic Hardship (24)	Divorce (17)	Mental Illness (10) Alcohol (10)	Domestic Violence (7)
Virginia	Economic Hardship (21)	Divorce (18)	Alcohol (8) Mental Illness (8)	Violence (7)
Vermont	Divorce (26)	Economic Hardship (25)	Alcohol (15)	Mental Illness (11)
Washington	Economic Hardship (25)	Divorce (21)	Alcohol (12) Mental Illness (12)	Violence (9)
Wisconsin	Economic Hardship (25)	Divorce (20)	Alcohol (10) Mental Illness (10)	Violence (8)
West Virginia	Economic Hardship (29)	Divorce (28)	Alcohol (14)	Mental Illness (12)
Wyoming	Economic Hardship (25) Divorce (25)	Alcohol (13) Mental Illness (13)	Violence (10)	Incarceration (9)

The Prevalence of Specific Adverse Childhood Experiences Varies by Age (Except for Economic Hardship)

The prevalence of most ACEs naturally increases by age, since parents were asked whether their child had "ever" had the experience. As Table 3 shows, older children are more likely than younger children to have ever experienced each of the adverse childhood experiences, except for economic hardship, which is reported for 25 to 26 percent of children regardless of age. This reflects the high rates of poverty experienced by families with young children.

Divorce is the second-most-common ACE experienced by children in each age group. About equal numbers of children ages birth to five have lived with someone who has an alcohol or drug problem, or have lived with someone with mental illness. Living with someone with an alcohol or drug-use problem is reported among 12 percent of 6- to 11-year-olds and 15 percent of 12- to 17-year-olds. One in seven 12- to 17-year-olds (14 percent) was the victim of, or witness to, neighborhood violence.

State-level rates for specific ACEs vary greatly for a given age group. For example, in the District of Columbia, 32 percent of 12- to 17-year-olds have experienced violence, compared with 14 percent nationally and 10 percent in Connecticut. In Mississippi, 15 percent of 12- to 17-year-olds, and nine percent of children under five, have witnessed domestic violence in their home, compared with national rates of ten and four percent, respectively.

Table 3. Prevalence of Specific Reported Adverse Childhood Experiences (ACEs), Total, and by Age

ACE	National Prevalence (Percentage)	Range of State-Level Prevalence (Lowest - Highest Percentage)
Somewhat or very often hard to get by on income		
All children	26	20 (MD) - 34 (AZ)
0 to 5	25	17 (ND) - 34 (AZ)
6 to 11	26	18 (HI) - 34 (NJ)
12 to 17	26	17 (VT) - 38 (AZ)
Lived with parent/guardian who separated/divorced		
All children	20	15 (DC) - 30 (OK)
0 to 5	10	6 (NY) - 18 (KY)
6 to 11	22	14 (CT) - 35 (OK)
12 to 17	28	21 (NJ) - 39 (OK)
Lived with someone with alcohol or drug problems		
All children	11	6 (NY) - 19 (MT)
0 to 5	6	1 (DC) - 14 (MT)
6 to 11	12	6 (NY) - 20 (NM)
12 to 17	15	10 (VA) - 26 (AZ)

Table 3. Prevalence of Specific Reported Adverse Childhood Experiences (ACEs), Total, and by Age

ACE	National Prevalence (Percentage)	Range of State-Level Prevalence (Lowest - Highest Percentage)
Lived with someone who was mentally ill		
All children	9	5 (CA) - 14 (MT)
0 to 5	6	2 (ND) - 10 (MI)
6 to 11	8	4 (CA) - 17 (MT)
12 to 17	12	7 (VA) - 19 (ME)
Victim or witness to violence in neighborhood		
All children	9	5 (NY) - 17 (DC)
0 to 5	3	1 (IL) - 6 (OH)
6 to 11	8	4 (NJ) - 19 (DC)
12 to 17	14	10 (CT) - 32 (DC)
Witness to domestic violence		
All children	7	5 (NJ) - 11 (OK)
0 to 5	4	2 (CO) - 9 (MS)
6 to 11	8	4 (NJ) - 13 (OK)
12 to 17	10	6 (CT) - 15 (MS)
Lived with parent/guardian who served time in jail		
All children	7	3 (NJ) – 13 (KY)
0 to 5	5	1 (HI) - 12 (KY)
6 to 11	8	2 (NY) - 16 (NM)
12 to 17	8	4 (NY) - 15 (KY)
Lived with parent/guardian who died		
All children	3	2 (CT) - 7 (DC)
0 to 5	1	0 (KS) - 4 (DC)
6 to 11	3	1 (MN) - 8 (MS)
12 to 17	5	1 (CT) - 12 (DC)

States in the Lowest and Highest Quartiles for Each Adverse Childhood Experience

Identifying which states fall into the highest and lowest quartiles of the distribution of prevalence rates provides another perspective on state-level variation. Although, as Table 3 shows, the states with the highest and lowest prevalence vary by ACE and by age group, some states stand out as having consistently high or low prevalence.

Two states–Connecticut and New Jersey–have rates in the lowest quartile for all eight ACEs, whereas Oklahoma has rates in the highest quartile for all ACEs (see Table 4). Other states have consistently high or low prevalence, relatively speaking, across most, but not all, ACEs. For example, Virginia is in the lowest quartile for all ACEs, except for the death of a parent, for which prevalence falls around the national average. Michigan is among the states with the highest prevalence for three ACES: ever lived with someone with mental illness, ever had a parent in jail, and ever lived with a parent who divorced or separated. However, Michigan is also among the states with the lowest prevalence of having witnessed domestic violence, and around the national average for all other ACEs. Policymakers may benefit from taking a closer look at the prevalence of specific adverse experiences among the children in their own state.

Table 4. States in the Lowest and Highest Quartiles for Prevalence of Reported Adverse Childhood Experience, and State Percentage Prevalence

	Economic hardship		Divorce/ Separation		Alcohol/ Drug		Mental illness		Violence		Incarceration		Death		Domestic violence	
Lowest Quartile	MD	20	DC	15	NY	6	CA	5	NJ	5	NJ	3	CT	1	NJ	5
	HI	21	NY	15	DC	7	FL	6	CT	6	NY	4	UT	2	CT	5
	VA	21	NJ	15	VA	8	GA	6	UT	6	CT	5	ME	2	VT	6
	SD	21	CT	16	GA	8	NJ	6	VA	7	RI	5	MN	2	MA	6
	MA	22	IL	16	CT	8	NY	7	NE	7	CO	5	WA	2	VA	6
	MN	22	CA	17	MD	8	IL	7	NH	7	MA	5	ND	2	IL	6
	ND	22	MD	17	IL	9	MD	7	TX	7	UT	5	NE	2	CO	6
	IA	22	HI	17	NJ	9	HI	7	ND	7	MN	5	IA	2	MD	6
	NY	22	UT	17	FL	9	DC	8	IA	7	HI	5	SD	2	RI	7
	NJ	22	VA	18	NC	10	SD	8	WI	8	NH	5	NV	2	UT	7
	CT	22	RI	19	TX	10	VA	8	FL	8	CA	5	CA	2	CA	7
	NE	22	PA	19	CO	10	CT	8	CA	8	VA	6	NJ	2	TN	7
Highest Quartile	RI	29	WY	25	IN	13	KY	11	NY	10	AR	9	NC	4	IN	8
	WV	29	NM	25	WV	14	NH	11	AK	11	WV	9	OH	4	OH	8
	TX	29	TN	25	ID	14	MI	11	IN	11	NE	9	KY	4	NC	9
	ME	29	ID	25	ME	14	WA	12	HI	11	WY	9	IN	4	AK	9
	KY	30	AR	26	KY	14	OK	12	AZ	11	AK	10	SC	4	AR	9
	NV	30	MI	26	VT	15	WV	12	WV	11	TN	10	LA	4	AZ	9
	OK	30	MT	26	AK	15	IA	13	DE	12	NM	10	NM	4	NM	9
	FL	30	VT	26	AZ	15	WY	13	MS	12	MI	10	GA	5	WV	9
	TN	31	ME	27	NM	17	ME	13	NM	12	OH	10	OK	5	KY	10
	MS	32	WV	28	OR	17	ID	13	OH	13	OK	10	AL	5	MT	10
	AR	33	KY	29	OK	17	OR	14	OK	13	IN	11	MS	6	MS	11
	AZ	34	OK	30	MT	18	MT	14	DC	17	KY	13	DC	7	OK	11

Potentially traumatic experiences are common among U.S. children, with more than one in four having been exposed to economic hardship, even in the first five years of life. One in five has experienced parental divorce or separation, and one in ten has lived in a household where an adult has an alcohol or drug problem. More troubling still, more than one in ten children nationally—and, in a few states, about one in six—has experienced three or more adverse experiences. These findings have important implications for children's health and well-being, including the need for increased attention to the early detection and treatment of children affected by trauma, as well as to the conditions in families and communities that contribute to adverse development.

About the Data Used in this Brief

The National Survey of Children's Health (NSCH) was conducted in 2003, 2007 and 2011/12 in all 50 states and the District of Columbia by the National Center for Health Statistics, with funding from the Maternal and Child Health Bureau, U.S. Department of Health and Human Services. Telephone numbers from a random sampling process are used to contact households, and one child in each household with children is randomly selected to be the focus of the study. An adult in the household knowledgeable about the child answered questions about the child and themselves. The survey is representative of children under 18 years old nationwide and also within each state. A total of 95,677 interviews were completed in 2011/12.

The prevalence of ACEs described in this brief are derived from the following questions asked of parents:

- Did [SAMPLE CHILD] ever live with a parent or guardian who got divorced or separated after [SAMPLE CHILD] was born? (Yes/No)
- Did [SAMPLE CHILD] ever live with a parent or guardian who died? (Yes/No)
- Did [SAMPLE CHILD] ever live with a parent or guardian who served time in jail or prison after [SAMPLE CHILD] was born? (Yes/No)
- Did [SAMPLE CHILD] ever see or hear any parents, guardians, or any other adults in [his/her] home slap, hit, kick, punch, or beat each other up? (Yes/No)
- Was [SAMPLE CHILD] ever the victim of violence or witnessed any violence in [his/her] neighborhood? (Yes/No)
- Did [SAMPLE CHILD] ever live with anyone who was mentally ill or suicidal, or severely depressed for more than a couple of weeks? (Yes/No)
- Did [SAMPLE CHILD] ever live with anyone who had a problem with alcohol or drugs? (Yes/No)
- Since [SAMPLE CHILD] was born, how often has it been very hard to get by on your family's income, for example, it was hard to cover the basics like food or housing? (1: Very Often, 2: Somewhat Often, 3: Not Very Often, 4: Never)

Cases were not included in the analysis if any of the questions were not answered. 1.2% of the sample answered none of the questions, while an additional 3% answered less than all of them.

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