

# Adverse Experiences

INDICATORS ON CHILDREN AND YOUTH



Nearly one in eight children (12 percent) have had three or more negative life experiences associated with levels of stress that can harm their health and development.

## Importance

The experience of events or conditions that cause inordinate stress to the maturing brain (and the associated neurological, immune-response, and hormone systems) can negatively affect development in childhood. Although stress exists on a continuum, and varies across individuals, situations, and ages, certain life experiences are typically accompanied by levels of biological stress that research has shown can be “toxic.”<sup>1</sup>

These experiences include abuse or neglect, the death of a parent, parental divorce or separation, witnessing domestic violence, living with someone who has a mental illness or substance abuse problem, and the incarceration of a household member.<sup>2</sup> Recently, researchers have proposed adding chronic economic hardship<sup>3</sup>, and social exclusion by peers.<sup>4</sup> More than the experience of any one of these traumas, the cumulative burden over time of these threats is particularly damaging to physical and mental health.<sup>5</sup>

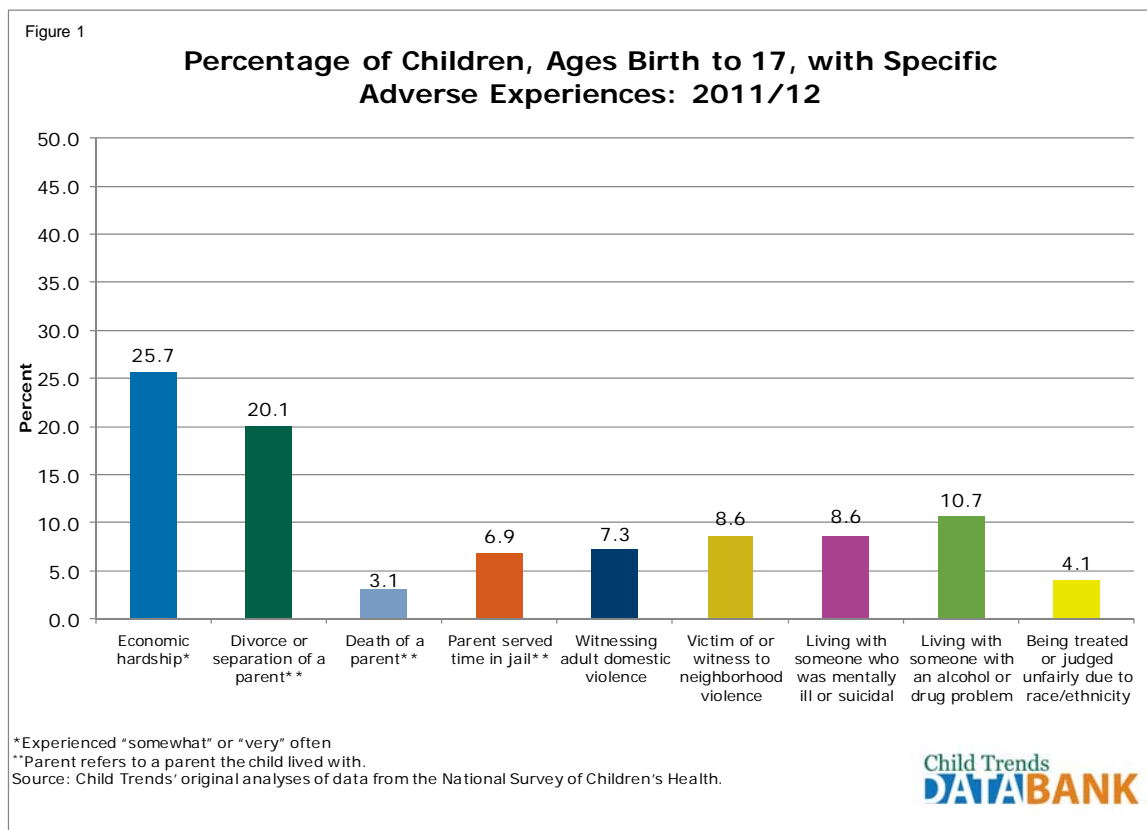
The early research on adverse childhood experiences (ACEs) was based on adults’ retrospective reporting. It found a significant “dosage” effect between the number of such experiences reported and increased risk, in adulthood, for cardiovascular, lung, and liver disease; depression; smoking; drug and alcohol abuse; obesity; risky sexual behaviors; and early mortality.<sup>6</sup> Subsequent research finds that detrimental health effects of ACEs—including greater risk of illness,<sup>7</sup> and interpersonal and self-directed violence<sup>8</sup>--are evident in childhood and adolescence, as well. As one group of researchers put it, “early experiences and environmental influences can leave a lasting signature on the genetic predispositions that affect emerging brain architecture and long-term health.”<sup>9</sup>

## Trends

This indicator uses a list of nine adverse experiences, developed for the 2011/12 National Survey of Children's Health. (Appendix 2)

In 2011/12, 53 percent of children had been exposed to no adverse experiences, whereas 12 percent had been exposed to three or more. (Appendix 1) No trend data are available for this indicator at this time.

Some experiences on the list were much more common than others. One in four children had experienced frequent economic hardship (26 percent). One in five (20 percent) had experienced parental divorce or separation, and one in nine had lived with someone with a substance abuse problem (11 percent). Nine percent had witnessed or experienced violence in their neighborhood, and nine percent had lived with someone who was mentally ill or suicidal. Seven percent had witnessed adult domestic violence, and seven percent had had a resident parent go to prison. While uncommon, four percent had experienced racial or ethnic discrimination, and three percent had experienced the death of a parent. (Figure 1)

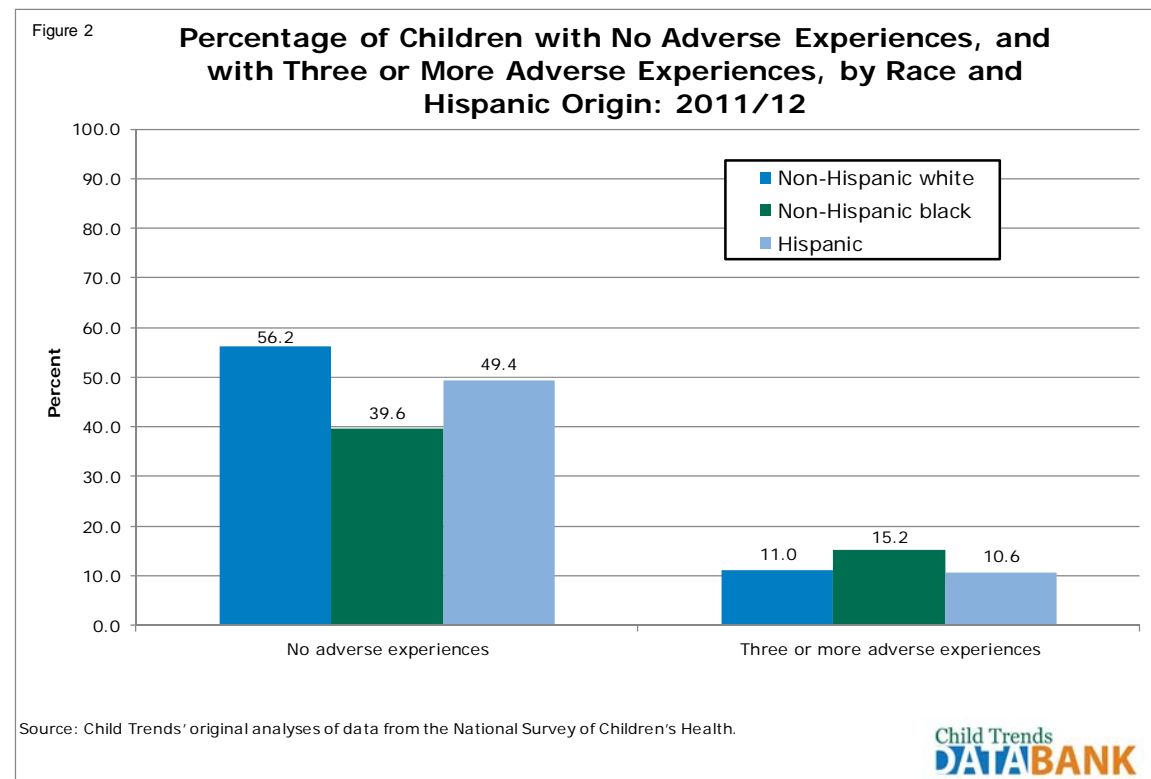


## Differences by Age

As would be expected, the likelihood of having no adverse experiences decreases with age, while the likelihood of having three or more increases, as children accumulate experiences both good and bad. Among 15- to 17-year-olds, 42 percent had no adverse experiences in 2011/12, compared with 64 percent of children under age six. Eighteen percent of the older group had three or more adverse experiences, compared with five percent of children under age six. (Appendix 1)

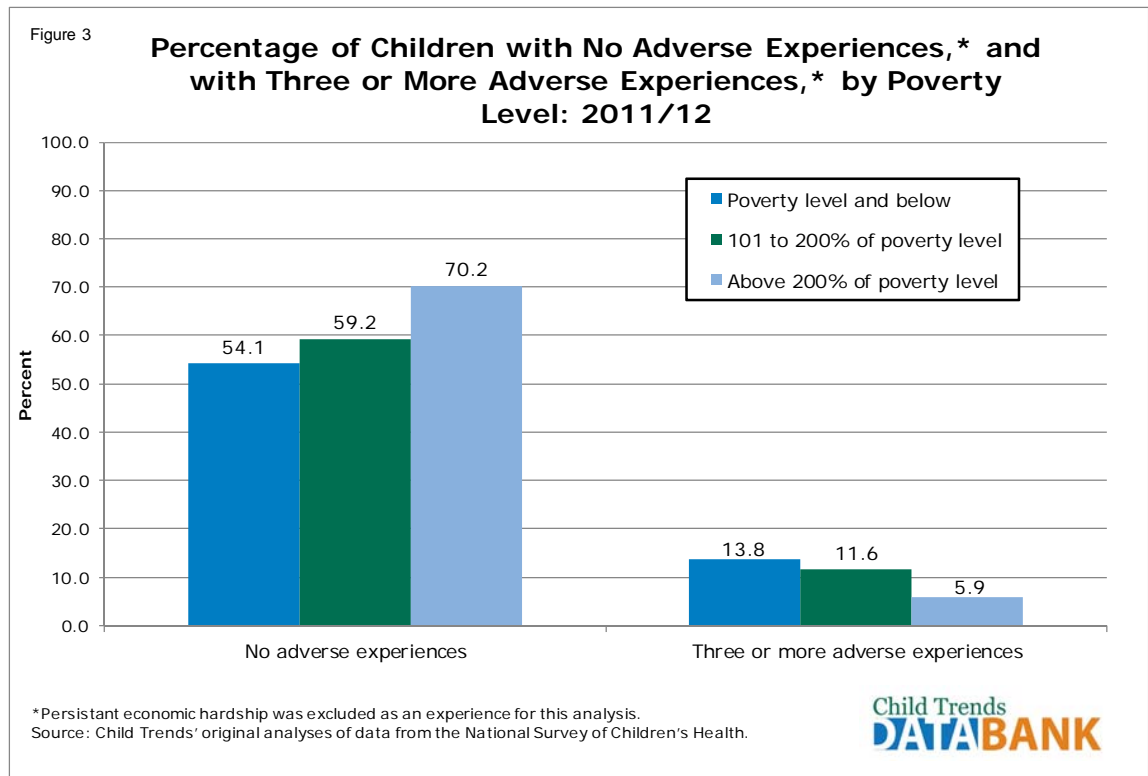
## Differences by Race and Hispanic Origin<sup>10</sup>

Black children and youth are more likely than their white and Hispanic peers to have had three or more adverse experiences (15 percent, compared with 11 percent, each). White children and youth are the most likely to have had no adverse experiences (56 percent), followed by Hispanic children and youth (49 percent,) and black children and youth (40 percent). (Figure 2)



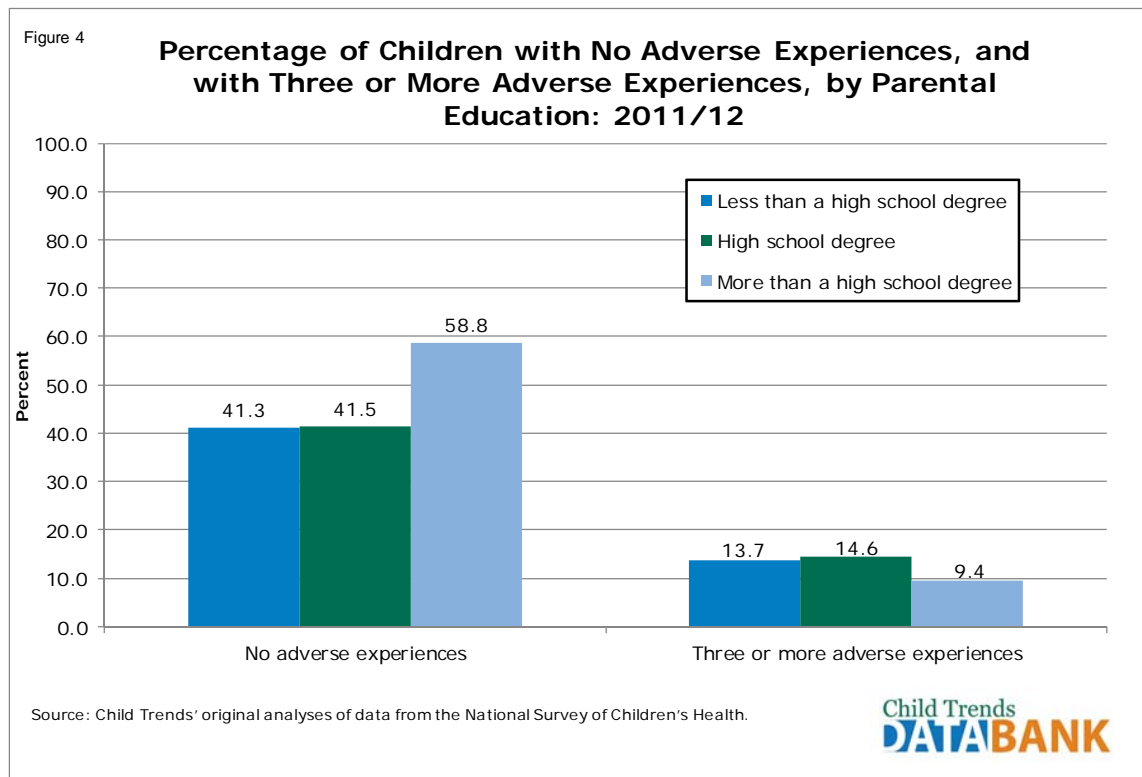
## Differences by Poverty Level<sup>11</sup>

Excluding persistent economic hardship as an adverse experience, poor children and near-poor children are more than twice as likely as their more affluent peers to have had three or more other adverse experiences. Fourteen percent of children living at the poverty level or below had three or more adverse experiences, compared with 12 percent among children with family incomes between 101 and 200 percent of the poverty level, and six percent among children living at more than twice the poverty level. Similarly, among children at poverty level or below, 54 percent had no adverse experiences, compared with 59 percent among children with family incomes between 101 and 200 percent of the poverty level, and 70 percent among children living at more than twice the poverty level, in 2011/12. (Figure 3)



## Differences by Parental Education

Nine percent of children and youth with a parent with schooling beyond high school had three or more adverse experiences. This compares with 15 and 14 percent, respectively, among children whose parents completed high school only, and those whose parents did not finish high school. Similarly, children whose parents who have education beyond high school are more likely than their peers with less-educated parents to have no adverse experiences. Among children with a parent with schooling beyond high school in 2011/12, 59 percent had no adverse experiences, compared with 42 and 41 percent, respectively, among children whose parents completed high school only, and those whose parents lacked a high school education. (Figure 4)



## State and Local Estimates

2011/12 state estimates for children and youth who experienced none, one, and two or more adverse experiences are available from the National Survey of Children's Health at the [Data Resource Center for Child & Adolescent Health](#).



## International Estimates

None available.

## National Goals

None.

## What Works to Make Progress on this Indicator

Given that the types of adverse experiences are various, effective interventions cannot be easily summarized here; see the related indicators, below, for more detail on “what works” for preventing or responding to specific kinds of adversity. In general, research shows that the presence of responsive, caring adults can act as a buffer against the most harmful effects of toxic stress.<sup>12,13</sup>

## Related Indicators

- Child Poverty: [www.childtrends.org/?indicators=children-in-poverty](http://www.childtrends.org/?indicators=children-in-poverty)
- Child Maltreatment: [www.childtrends.org/?indicators=child-maltreatment](http://www.childtrends.org/?indicators=child-maltreatment)
- Children’s Exposure to Violence: [www.childtrends.org/?indicators=childrens-exposure-to-violence](http://www.childtrends.org/?indicators=childrens-exposure-to-violence)
- Violent Crime Victimization: [www.childtrends.org/?indicators=violent-crime-victimization](http://www.childtrends.org/?indicators=violent-crime-victimization)
- Parental Depression: [www.childtrends.org/?indicators=parental-depression](http://www.childtrends.org/?indicators=parental-depression)
- Heavy Drinking Among Parents: [www.childtrends.org/?indicators=heavy-drinking-among-parents](http://www.childtrends.org/?indicators=heavy-drinking-among-parents)



## Definition

Nine adverse experiences are included in this indicator. These were adapted from the earlier ACEs research<sup>14</sup> for use in a telephone survey where parents are the reporters about their child.

1. Economic hardship (if experienced “somewhat” or “very” often)
2. Divorce/separation of a parent
3. Death of a parent
4. A parent served time in jail
5. Witness to adult domestic violence
6. Victim of or witness to neighborhood violence
7. Living with someone who was mentally ill or suicidal
8. Living with someone who had an alcohol or drug problem
9. Being treated or judged unfairly due to race/ethnicity

All references to parents refer exclusively to parents who lived with the child. Economic hardship was excluded in comparisons based on poverty level.

## Data Source

Child Trends’ original analyses of data from the 2011/12 National Survey of Children’s Health.

## Raw Data Source

National Survey of Children’s Health.

<http://www.childhealthdata.org>





## Appendix 1 - Percentage of Children, Ages Birth through 17, with No Adverse Experiences, and with Three or More Adverse Experiences, 2011/12

	No adverse experiences	Three or more adverse experiences
<b>Total</b>	<b>52.5</b>	<b>11.7</b>
<b>Age</b>		
0 to 5	63.7	5.2
6 to 11	50.1	13.0
12 to 14	45.3	15.3
15 to 17	42.4	18.0
<b>Race and Hispanic Origin</b>		
Non-Hispanic white	56.2	11.0
Non-Hispanic black	39.6	15.2
Hispanic	49.4	10.6
Other	55.7	13.2
<b>Poverty level<sup>1</sup></b>		
Poverty level and below	54.1	13.8
101 to 200% of poverty level	59.2	11.6
Above 200% of the poverty level	70.2	5.9
<b>Parental Education</b>		
Less than a high school degree	41.3	13.7
High school degree	41.5	14.6
More than a high school degree	58.8	9.4

Note: estimates exclude cases where the respondent did not answer all adverse experience questions. Because of this, the measure may differ from estimates taken from other sources.

<sup>1</sup> Estimates by poverty exclude the experience of economic hardship

Source: Child Trends' original analyses of data from the National Survey of Children's Health.



## Appendix 2: Percentage of Children, Ages Birth to 17, with Specific Adverse Experiences, 2011/12

	2011/12
Economic hardship <sup>1</sup>	25.7
Divorce or separation of a parent <sup>2</sup>	20.1
Death of a parent <sup>2</sup>	3.1
Parent served time in jail <sup>2</sup>	6.9
Witnessing adult domestic violence	7.3
Victim of or witness to neighborhood violence	8.6
Living with someone who was mentally ill or suicidal	8.6
Living with someone with an alcohol or drug problem	10.7
Being treated or judged unfairly due to race/ethnicity	4.1

<sup>1</sup> Experienced "somewhat" or "very" often.

<sup>2</sup> Parent refers to a parent the child lived with.

Source: Child Trends' original analyses of data from the National Survey of Children's Health.



## Endnotes

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- <sup>1</sup> Middlebrooks, J. S. & Audage, N.C. (2008). *The effects of childhood stress on health across the lifespan*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control.
- <sup>2</sup> Anda, R. F., Felitti, V. J., Bremner, J. D., Walker, J. D., Whitfield, C., Perry, B. D., Dube, S. R., & Giles, W. H. (2006). The enduring effects of abuse and related adverse experiences in childhood. *European Archives of Psychiatry and Clinical Neuroscience*, 256, 174-186.
- <sup>3</sup> Evans, G. W. & Schamberg, M. A. (2009). Childhood poverty, chronic stress, and adult working memory. *PNAS*, 106(16), 6545-6549.
- <sup>4</sup> Finkelhor, D., Shattuck, A., Turner, H., & Hamby, S. (2013). Improving the Adverse Childhood Experiences Study scale. *Archives of Pediatric & Adolescent Medicine*, 167(1), 70-75.
- <sup>5</sup> Middlebrooks, J. S. & Audage, N.C. (2008). Op. cit.
- <sup>6</sup> Anda, R. F., et al. (2006). Op. cit.
- <sup>7</sup> Flaherty, E. G., Thompson, R., Litrownik, A. J., Theodore, A., English, D. J., Black, M. M., Wike, T., Whimper, L., Runyan, D. K., & Dubowitz, H. (2006). Effect of early childhood adversity on child health. *Archives of Pediatrics & Adolescent Medicine*, 160(12), 1232-1238.
- <sup>8</sup> Duke, N. N., Pettingill, S. L., McMorris, B. J., & Borowsky, I. W. (2010). Adolescent violence perpetration: Associations with multiple types of adverse childhood experiences. *Pediatrics*, 25(4), e778-e786.
- <sup>9</sup> Shonkoff, J. P. & Garner, A. S. (2012). The lifelong effects of early childhood adversity and toxic stress. Technical Report. *Pediatrics*, 129(1), e232-e246. P. e232.
- <sup>10</sup> Hispanics may be any race. Estimates for whites and blacks do not include Hispanics.
- <sup>11</sup> When comparing adverse experiences by poverty level, frequent economic hardship is excluded as an adverse experience, to compare children independent of that hardship.
- <sup>12</sup> Middlebrooks, J. S. & Audage, N.C. (2008). Op. cit.
- <sup>13</sup> National Scientific Council on the Developing Child. (2012). *The science of neglect: The persistent absence of responsive care disrupts the developing brain*. Working Paper 12. Retrieved from <http://www.developingchild.harvard.edu>
- <sup>14</sup> Anda, R. F., et al. (2006). Op. cit.