

# National Survey of Child and Adolescent Well-Being

## No. 20: Adverse Childhood Experiences in NSCAW



Findings from the NSCAW Study

research brief

### Introduction and Purpose of the Brief

Child maltreatment has been recognized as a major public health issue.<sup>1,3</sup> Prospective studies have shown that maltreatment and other adverse childhood experiences increase the risk for negative mental and physical outcomes in adulthood and place children at risk for further harm and even death.<sup>4,5</sup> The health toll associated with maltreatment and other stressful childhood experiences was the subject of a landmark research survey, the Adverse Childhood Experiences Study (ACES). The study, an ongoing collaboration between Kaiser Permanente and the U.S. Centers for Disease Control and Prevention (CDC), is a retrospective survey based on the responses of thousands of adult members of Kaiser Permanente.<sup>6</sup> In the original survey conducted in the mid-1990's, adult respondents were asked to report on 10 adverse experiences that they experienced in childhood, including abuse and neglect. This study demonstrated a significant association between cumulative adverse experiences in childhood and a host of negative adult outcomes, including physical and mental health problems, substance abuse, risky sexual behaviors, suicide attempts, aggression, cognitive difficulties, and poor work performance.<sup>6-11</sup> These adverse childhood experiences significantly increased the odds of developing some of the leading causes of death in adulthood, such as ischemic heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease.<sup>6</sup> By the time children have experienced four or more adverse experiences, the odds of having negative health outcomes in adulthood are up to 12 times that of children without such experiences.

Since the first publication from ACES appeared in 1998, many other countries have studied the association of the same list of adverse childhood events with morbidity and mortality during adulthood.<sup>12, 13</sup> Although most studies focused on adults who reported on their early experiences, researchers in the field are interested in understanding the experience of these adverse events among children who have been reported to the child welfare system (CWS). These children are

likely at heightened risk for adverse childhood experiences and, therefore, also likely at increased risk for similar negative adult outcomes. A comparison between the number of adverse childhood events adults reported in the ACES and children who have been reported for maltreatment may provide perspective on the future challenges these children may face, as well as preventive services and treatment services that may be needed.

This brief uses data from the second cohort of National Survey of Child and Adolescent Well-Being (NSCAW II) to examine the prevalence of adverse childhood experiences in a nationally representative study of children reported for maltreatment to the CWS. In addition, the brief compares the number of adverse childhood experiences among children in the CWS with the number of adverse childhood experiences reported in the CDC ACES.

### Research Methodology

This brief examines data from children involved in allegations of maltreatment. NSCAW II is a national longitudinal study of the well-being of 5,873 children who had contact with the CWS within a 14-month period starting in February 2008. The cohort included children and families with substantiated and unsubstantiated investigations of abuse or neglect, including children and families who did and did not receive services. Infants and children in out-of-home placement were oversampled to ensure adequate representation of high-risk groups. At baseline, the NSCAW II cohort of children were approximately 2 months to 17.5 years old. The data were drawn from standardized measures of child mental health and well-being, as well as from interviews of caregivers and caseworkers.

The original sample for the ACES consisted of more than 17,000 adults aged 18 years old and over, interviewed from 1995 to 1997 (for a complete description see <http://www.cdc.gov/ace/index.htm>). The goal of the ACES was to assess the impact of adverse childhood experiences on a wide variety of health behaviors and outcomes and on health care

utilization. The ACES methods are described elsewhere.<sup>6,7</sup> Major findings from the study can be found on CDC's website at <http://www.cdc.gov/ace/about.htm>.

### Measuring Adverse Childhood Experiences in ACES vs. NSCAW

Table 1 lists the ACES definitions of adverse childhood experiences, along with descriptions of how these were recreated using NSCAW II data. Every effort was made to match as closely as possible each of the ACES constructs with data available from NSCAW. NSCAW was not designed to examine adverse childhood

experiences as defined by ACES; therefore, matching ACES variables across the two studies was imperfect. In some instances, NSCAW could not always discern a given adverse experience, such as parent incarceration, which was ascertained only by asking if the child's parent was currently in jail (versus ever incarcerated—the wording used in the ACES). In other instances, NSCAW may have been better positioned to identify some adverse childhood experiences, because of its inclusion of caseworker and caregiver report as well as child self-report when the child was old enough. In comparison the ACES used only adult self-report.

**Table 1. List of ACES Definitions and NSCAW Equivalents**

ACES Construct	ACES Definition	NSCAW Equivalent
Physical Neglect	Respondents were asked whether they had enough to eat, if their parents' alcohol drinking interfered with their care, if they ever wore dirty clothes, and if someone was available to take them to the doctor.	Parent report of child neglect, <sup>a</sup> or caseworker report of failure to supervise or provide for the child.
Emotional Neglect	Respondents were asked whether their families made them feel special and loved, and were asked if their family was a source of strength, support, and protection.	Caregiver reported that, in the past 12 months, "many times were you so caught up with problems that you were not able to show or tell your child that you loved him/her?"
Physical Abuse	Sometimes, often, or very often a parent or other adult in the household pushed you, grabbed you, slapped you, threw something at you, or ever hit you so hard that you had marks or were injured.	Parent report of severe assault or caseworker report of physical abuse, such as shaking an infant or hitting an older child. <sup>a</sup>
Sexual Abuse	An adult or person at least 5 years older ever touched or fondled you in a sexual way, or had you touch their body in a sexual way, or attempted oral, anal, or vaginal intercourse with you or actually had oral, anal, or vaginal intercourse with you.	Parent or caseworker report of sexual abuse <sup>a</sup> or forced sex reported by the child.
Emotional Abuse	Often or very often a parent or other adult in the household swore at you, insulted you, or put you down and sometimes, often or very often acted in a way that made you think that you might be physically hurt.	Parent report of psychological aggression, such as threatening the child or calling him/her names. <sup>a</sup>
Mother treated violently	Mother or stepmother was sometimes, often, or very often pushed, grabbed, slapped, or had something thrown at her and/or sometimes often, or very often kicked, bitten, hit with a fist, or hit with something hard, or ever repeatedly hit over at least a few minutes or ever threatened or hurt by a knife or gun.	Caregiver or caseworker report of any domestic violence such as slapping, hitting, or kicking (includes both male and female caregivers who reported domestic violence).
Household Substance Abuse	Lived with anyone who was a problem drinker or alcoholic or lived with anyone who used street drugs.	Caseworker report of active alcohol or drug abuse by the primary or secondary caregiver, or caregiver report of current alcohol abuse. <sup>b</sup>
Household Mental Illness	A household member was depressed or mentally ill or a household member attempted suicide.	Caseworker report of a caregiver having a serious mental health problem, or caregiver elevated mental health symptoms. <sup>c,d</sup>
Parental Separation or Divorce <sup>e</sup>	Parents were ever separated or divorced.	Child was placed out of home currently or at baseline, or caseworker report of abandonment, or caregiver's current marital status is divorced or separated, or mother or father is deceased.
Incarcerated Household Member	A household member went to prison.	Caregiver reports spending time in prison as result of an arrest, or parent currently in a jail or detention center.

<sup>a</sup> Revised Conflicts Tactics Scale.<sup>14</sup>

<sup>b</sup> Assessed by the Alcohol Use Disorders Identification Test<sup>15</sup> or the Drug Abuse Screening Test.<sup>16</sup>

<sup>c</sup> NSCAW does not collect information on suicide attempts; thus, this portion of the ACES construct was not assessed.

<sup>d</sup> Mental health symptoms based on the World Health Organization Composite International Diagnostic Interview, CIDI-SF.<sup>17</sup>

<sup>e</sup> For the NSCAW sample, parental divorce or separation was broadly conceptualized as any type of family separation.

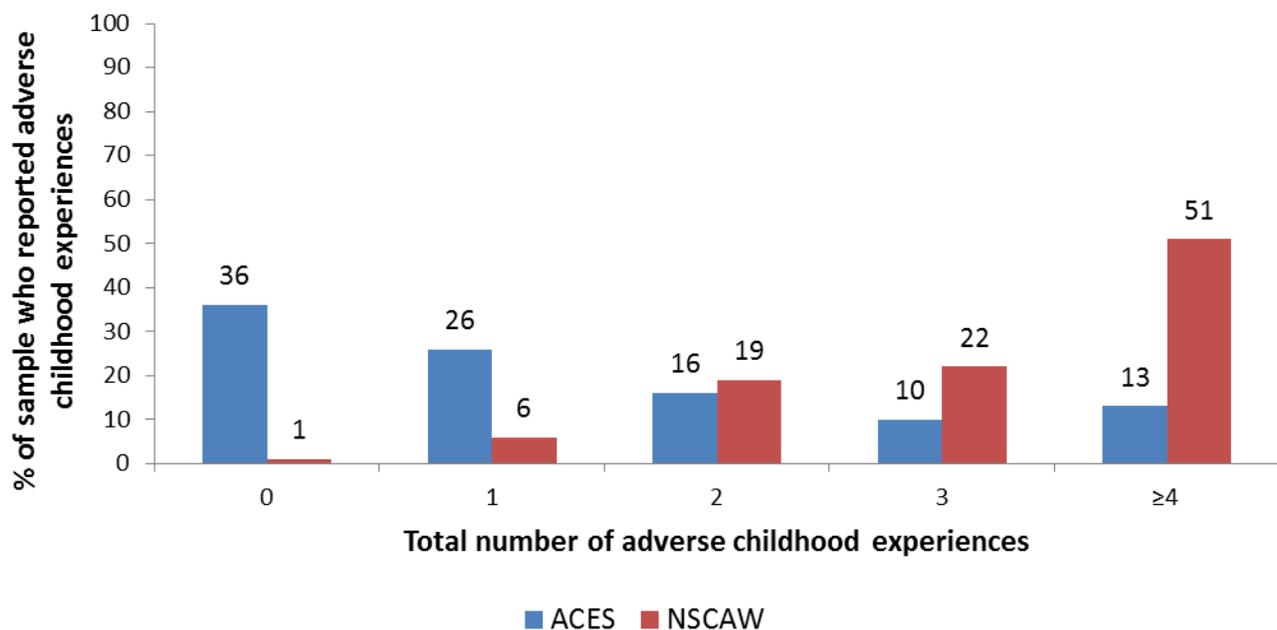
On the whole, the NSCAW sample likely underestimated adverse childhood experiences, compared with the ACES. First, because ACES data were collected by asking adults to recall their childhood experiences from 0 to 18 years, the time period for recall was much larger than that for NSCAW, where the recall time period covered only the time of the index maltreatment event (baseline). Second, children in the NSCAW II sample ranged from 0 to 17.5 years old; thus, children in the younger age ranges would have had less time to experience adverse events by virtue of their young age. Finally, caregivers were repeatedly warned in the informed consent process that abusive or neglectful behaviors would be reported to CWS because of mandated reporting laws, and this may have strengthened reluctance to disclose abusive behaviors. We conducted a comparison of the proportions of caregivers reporting psychological aggression, assault, and neglect between caregivers in the NSCAW survey and a nationally representative sample of parents of children aged 5 to 6.<sup>18</sup> This analysis indicated that the NSCAW caregivers reported somewhat lower prevalence than the general population on nearly all measures of abuse and neglect. It seems likely, therefore, that caregivers tended to withhold

information on abusive and neglectful behaviors. For these reasons, the data presented in this brief should be considered underestimates of adverse childhood experiences for NSCAW participants.

### Prevalence of Adverse Childhood Experiences in NSCAW

Figure 1 shows the percentage of respondents with a sum total of adverse childhood experiences ranging from zero to four or more. Percentages are shown separately for ACES versus NSCAW for direct comparison. More than a third of the adult ACES respondents reported no experience of any of the adverse childhood events listed in Table 1. In contrast, only 1 percent of the NSCAW sample had zero adverse childhood experiences. Note: although all NSCAW children were reported to child protective services for some type of maltreatment, the ACES does not comprehensively include all possible forms of maltreatment (e.g., exploitation). More than half of the NSCAW sample reported four or more adverse childhood experiences, compared with only 13 percent of the ACES population.

Figure 1. Adverse childhood experiences in NSCAW vs. ACES<sup>a,b</sup>



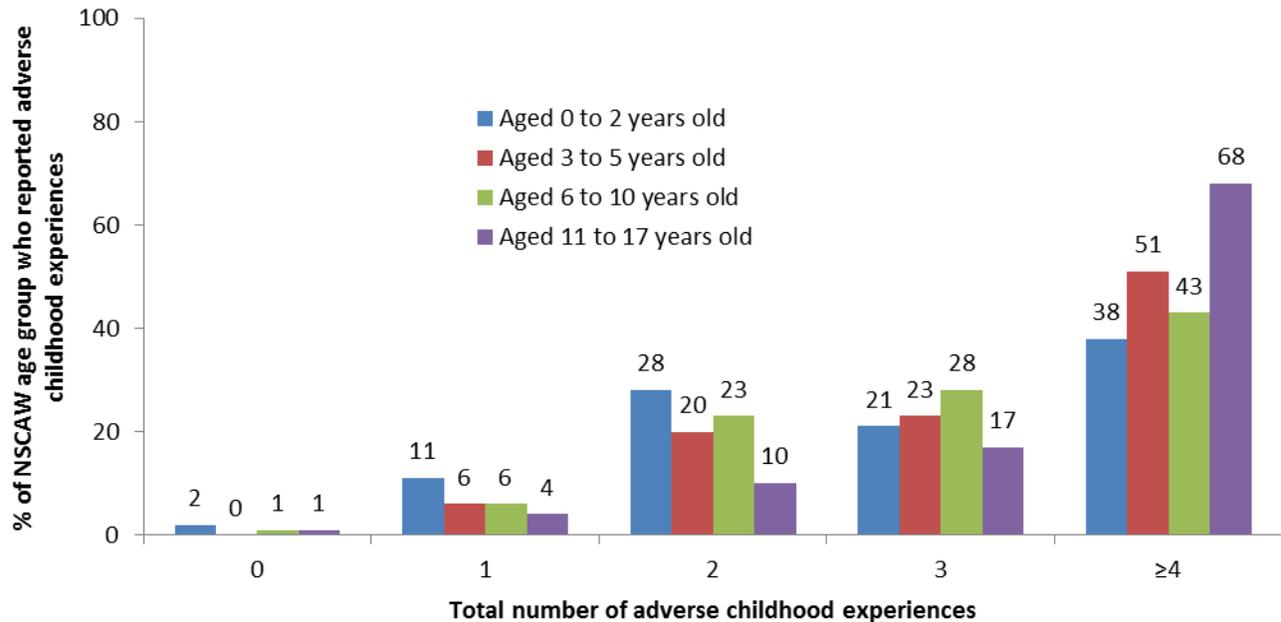
<sup>a</sup> To account for item missingness (less than 10% for all ACE variables), multiple imputation was performed using MPlus 7.<sup>19</sup> Variables entered into the imputation model included child age, child race/ethnicity, caseworker-assessed harm, caseworker-assessed risk, current placement setting, and all 10 ACE variables. The imputation results increase confidence that results are not biased by missing data.

<sup>b</sup> NSCAW respondents reporting no adverse childhood experiences included those who entered CWS due to “other” types of maltreatment that did not map onto the ACES, including abandonment and exploitation. Brief descriptive analyses showed that these children were typically young, living in-home, and had low caregiver-assessed levels of harm and risk.

Figure 2 shows the total number of adverse childhood experiences that four NSCAW age groups reported: 0 to 2 years old, 3 to 5 years old, 6 to 10 years old, and 11 to 17 years old. As expected, the older the child, the more time available for adverse childhood experiences to accumulate.

These results show that almost four out of 10 of the youngest children had already experienced four or more adverse experiences. In the oldest age group (11 to 17 years old), more than two thirds (68%) of youth had four or more adverse childhood experiences.

**Figure 2. Adverse childhood experiences by child age in NSCAW**



### Summary

More than half of all children reported for child maltreatment had experienced four or more adverse childhood experiences by the time of contact with the CWS. These levels of adverse events are extremely high. As a point of comparison, almost two thirds of the adult population of the ACES reported one or no adverse childhood experiences. Even the youngest children in the NSCAW population have already accrued more adverse childhood experiences than many of the adults interviewed for the ACES.

Given past findings that adverse childhood experiences often predict negative health and behavioral outcomes in adulthood, it is striking that a wide majority (more than 90%) of children referred to CWS have experienced multiple adverse events. Moreover, one in two children in the NSCAW sample reported four or more adverse childhood experiences, a level that has been associated with as much as a 12-fold increase in negative health outcomes in adulthood.<sup>6</sup> In the ACES, only about one in 10 people reported four or more adverse childhood experiences.

Beyond these adverse experiences, children involved with the CWS often live in a context of additional risks, including poverty, out of home placements, moving from one caregiver to the next, and limited access to services. Furthermore, the adverse experiences captured by the ACES may occur chronically for some of these children. Early intervention is critical for vulnerable children, especially those involved with the CWS, to prevent accumulation of multiple adverse childhood experiences.

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This is the twentieth in a series of NSCAW research briefs focused on children who have come in contact with the child welfare system. Additional research briefs focus on the characteristics of children in foster care, the provision of services to children and their families, the prevalence of special health care needs, use of early intervention services, and caseworker judgment in the substantiation process.