

Overview of Adverse Child and Family Experiences among North Dakota Children

Adverse childhood experiences (ACEs) can have profound effects on the lifelong health of adults.¹⁻³ Many studies on ACEs have been retrospective in nature, asking adults to recall their childhood experiences and then examining the prevalence of various chronic conditions and economic outcomes. The recent 2011/2012 National Survey of Children's Health (NSCH) provides cross-sectional, parent-reported data on nine ACEs among U.S. children age 0 through 17 (Table 1). Nearly half (43.7%) of North Dakota (N.D.) children age 0 through 17 experienced one or more of the nine ACEs asked about in this survey (Figure 1). This translates into an estimated 65,000 children in N.D.

The prevalence of ACEs varies among child subgroups (Figure 2) and by state (Figure 3). The prevalence of two or more of the nine ACEs among children age 0 through 17 ranges across states from a low of 16.3 percent in New Jersey to a high of 32.9 percent in Oklahoma. In N.D., 21.3 percent of children have two or more ACEs. Variation exists within high or low ACEs prevalence states according to subgroups. In N.D. older children and children from lower income families were more likely to have adverse child and family experiences (Figure 2)⁴. The prevalence of ACEs in N.D. is lower than the U.S. (22.6%), but is not statistically different.

Table 1. Prevalence of Adverse Child or Family Experiences Based on the 2011/2012 NSCH in North Dakota

Adverse Child or Family Experiences	N.D. Prevalence	State Range
Child had ≥ 1 adverse child/family experience	43.7%	40.6% (CT) – 57.5% (AZ)
Child had ≥ 2 adverse child/family experiences	21.3%	16.3% (NJ) – 32.9% (OK)
Socioeconomic hardship	21.4%	20.1% (MD) – 34.3% (AZ)
Divorce/parental separation	20.2%	15.2% (DC) – 29.5% (OK)
Lived with someone who had an alcohol or drug problem	13.0%	6.4% (NY) – 18.5% (MT)
Victim or witness of neighborhood violence	7.3%	5.2% (NJ) – 16.6% (DC)
Lived with someone who was mentally ill or suicidal	9.8%	5.4% (CA) – 14.1% (MT)
Domestic violence witness	7.4%	5.0% (CT) – 11.1% (OK)
Parent served time in jail	6.6%	3.2% (NJ) – 13.2% (KY)
Treated or judged unfairly due to race/ethnicity	5.1%	1.8% (VT) – 6.5% (AZ)
Death of parent	1.9%	1.4% (CT) – 7.1% (DC)

Figure 2. Prevalence of Adverse Child and Family Experiences in N.D. by Age and Household Income

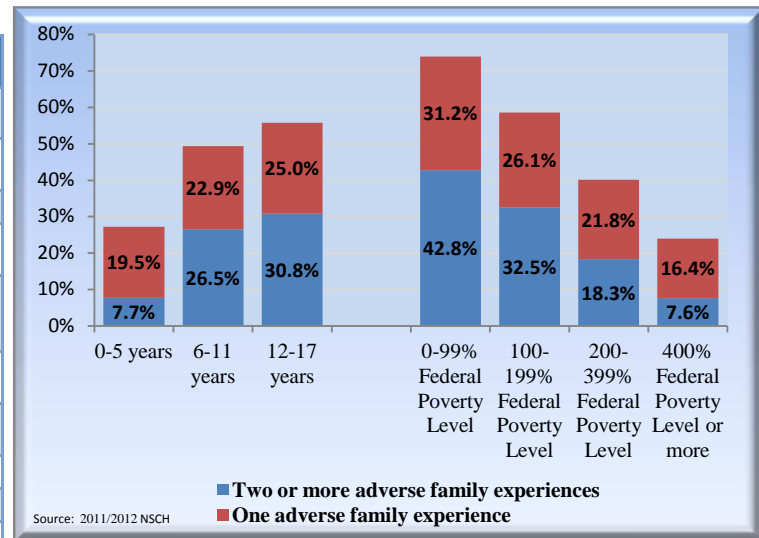


Figure 1. Prevalence of Adverse Child and Family Experience Among N.D. Children Age 0-17

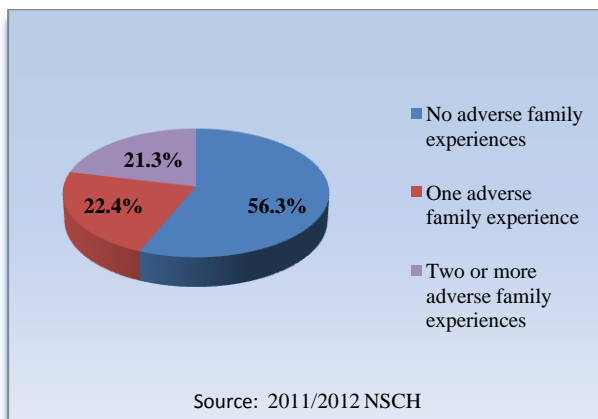
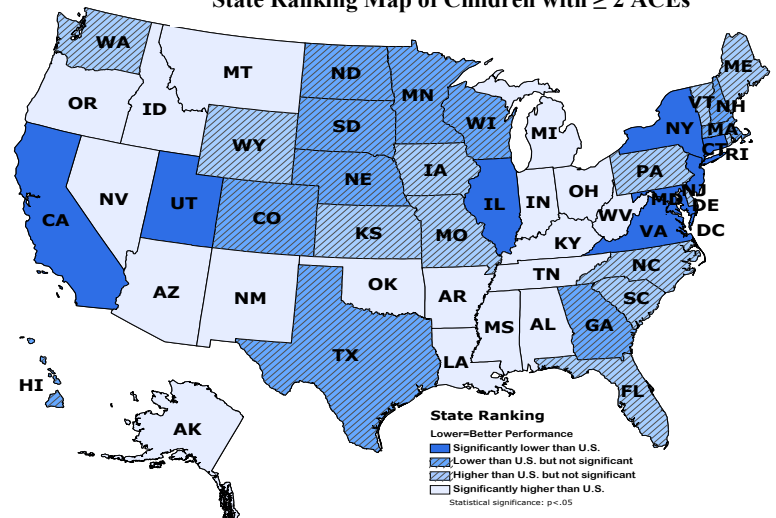


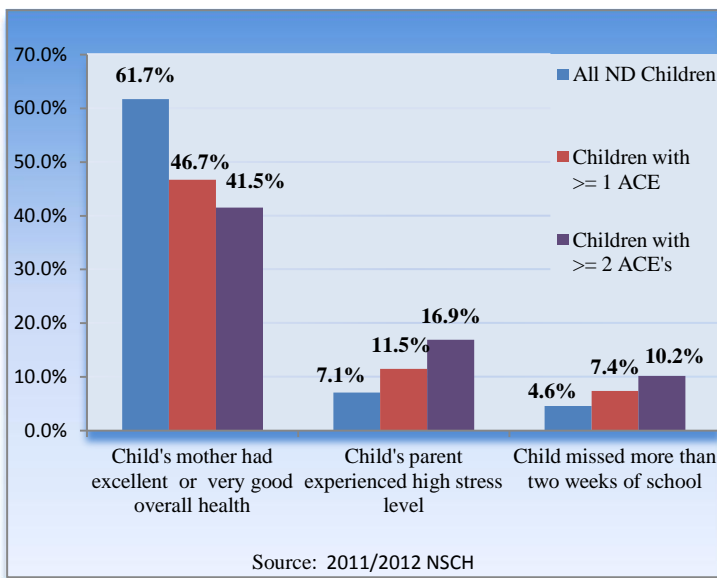
Figure 3. Exploring Disparities Between States: State Ranking Map of Children with ≥ 2 ACEs



Associations between Adverse Child and Family Experiences and Health Status

Adverse child and family experiences may have deleterious health outcomes. Figure 4 demonstrates the additive effect that experiencing multiple ACEs may have in relation to child health as well as parental health and stress levels in N.D.

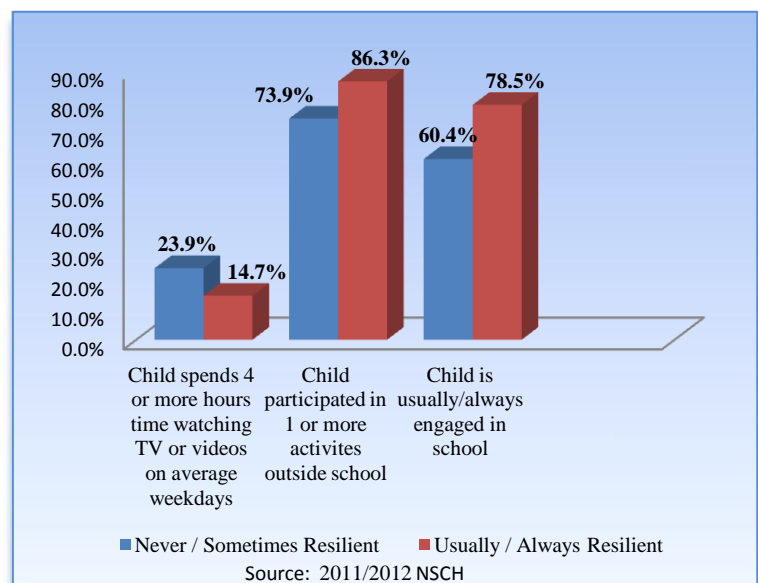
Figure 4. Association Between ACEs and Child and Parent Health in North Dakota



The Influence of Resiliency on Children With ≥ 2 ACEs

Associations exist between those contexts children are surrounded by and the number of ACEs that they encounter. Therefore, certain factors inherent in these environments may have the potential to promote their health and wellness. For example, among children age 6 through 17 that experienced ≥ 2 ACEs, those who were usually/always resilient (e.g. stayed calm and in control when faced with a challenge) were less likely to have watched four or more hours of TV or videos on average weekdays, more likely to participate in activities outside school and more likely to be usually/always engaged in school (Figure 5).

Figure 5. Association Between Resiliency and Time Spent Watching TV, Participation in Outside School Activities, and School Engagement Among N.D. Children age 6-17 with ≥ 2 ACEs



References

¹Felitti VJ, Anda RF, Nordenberg D, et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: the Adverse Childhood Experiences (ACE) Study. *Am J Prev Med.* 1998;14(4):245-258.

²Centers for Disease Control and Prevention. Adverse Childhood Experiences (ACE) Study: major findings by publication year. <http://www.cdc.gov/ace/year.htm>. Accessed May 7, 2013.

³Anda RF, Felitti VJ, Bremner JD, et al. The enduring effects of abuse and related adverse experiences in childhood: a convergence of evidence from neurobiology and epidemiology. *Eur Arch Psychiatry Clin Neurosci.* 2006;256(3):174-186.

⁴US Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. 2013 Poverty Guidelines. <http://aspe.hhs.gov/poverty/13poverty.cfm> Accessed May 10, 2013.