

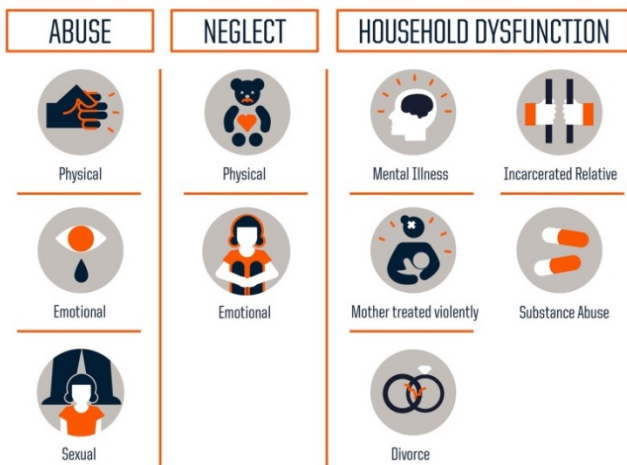
# Adverse Childhood Experiences (ACEs): California Update, 2011-2013 Data

## What are ACEs?

Adverse Childhood Experiences (ACEs) is a term used to describe a range of traumatic experiences that may occur during a person's first 17 years of life, including child abuse, neglect, and other household dysfunctions. The Centers for Disease Control and Prevention (CDC) and Kaiser Permanente collaborated on the original ACE study from 1995 to 1997 which examined the association between these traumatic experiences and lifelong health and well-being.<sup>i</sup>

## Types of ACEs

Based on the original ACE study, there are ten individual ACEs items which fall under the categories of abuse, neglect, and household dysfunction.



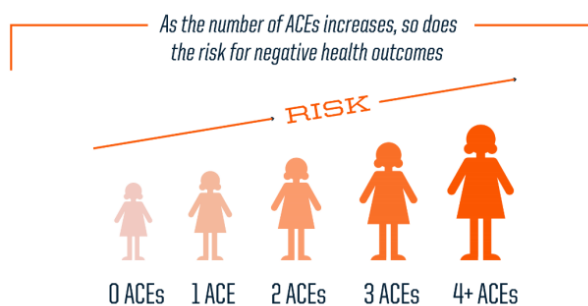
Credit: Robert Wood Johnson Foundation

There are other ways of measuring early childhood adversity including recent work that expands the range of traumatic experiences to include community level stressors. The California Maternal Infant Health Assessment (MIHA) includes measures of childhood hardship such as family food insecurity and problems paying rent.<sup>ii</sup> The National Survey of Children's Health includes measures of neighborhood violence and experienced racial/ethnic discrimination.<sup>iii</sup>

This fact sheet uses data from the CDC Behavioral Risk Factor Surveillance System (BRFSS) ACE Module which uses the traditional ACEs categories.

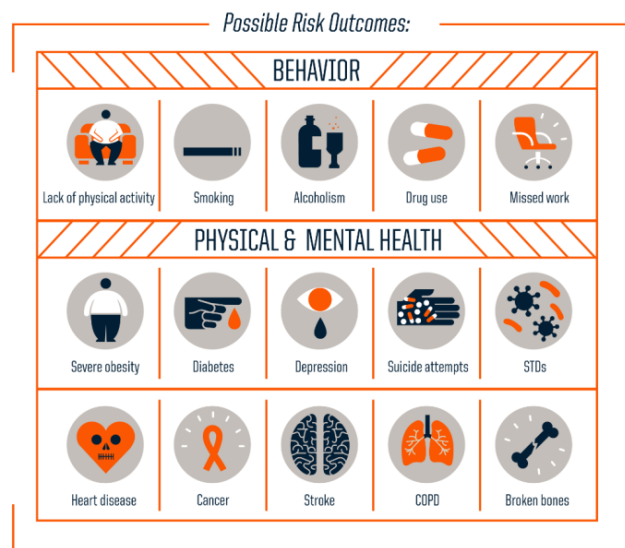
## How do ACEs affect health?

The original ACE study found a strong relationship between exposure to ACEs and subsequent negative health behaviors and outcomes later as adults. Since the original ACE study, a growing body of scientific evidence has consistently confirmed this negative relationship between ACEs and diminished health outcomes.<sup>iv</sup> Additionally this relationship displays a graded dose-response; the more ACEs an individual is exposed to, the higher the risk for adverse health outcomes.<sup>v</sup>



Credit: Robert Wood Johnson Foundation

Findings suggest that ACEs are a risk factor for a wide range of diseases and premature death. ACEs have been associated with multiple risky behaviors, health conditions and diseases including: smoking, unintended pregnancies, alcoholism, illicit drug use, depression, suicide attempts, chronic obstructive pulmonary disease (COPD), ischemic heart disease and liver disease.<sup>vi</sup>



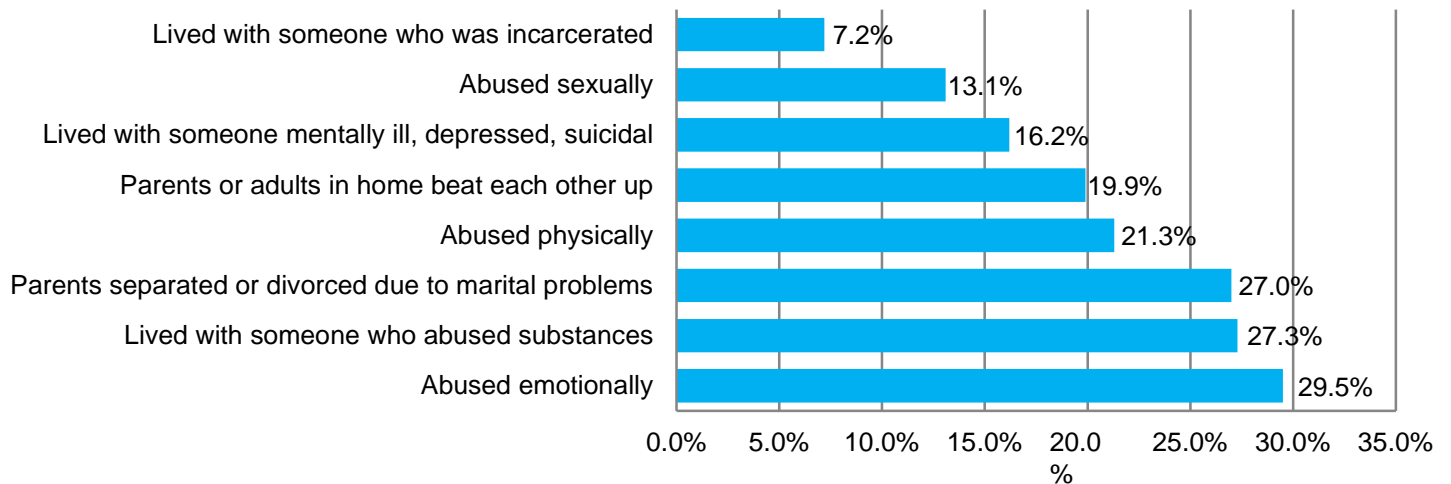
Credit: Robert Wood Johnson Foundation

The Behavioral Risk Factor Surveillance System (BRFSS) is a health-related telephone survey that collects state data about United States (U.S.) residents. Survey participants answer questions about health-related risk behaviors, chronic health conditions, and use of preventive services. California is among 32 states that collect ACEs data via the ACE module on BRFSS. This fact sheet combines data from the years 2011 and 2013 as the data from these two years are based on the same ACE module questions.<sup>vii</sup>

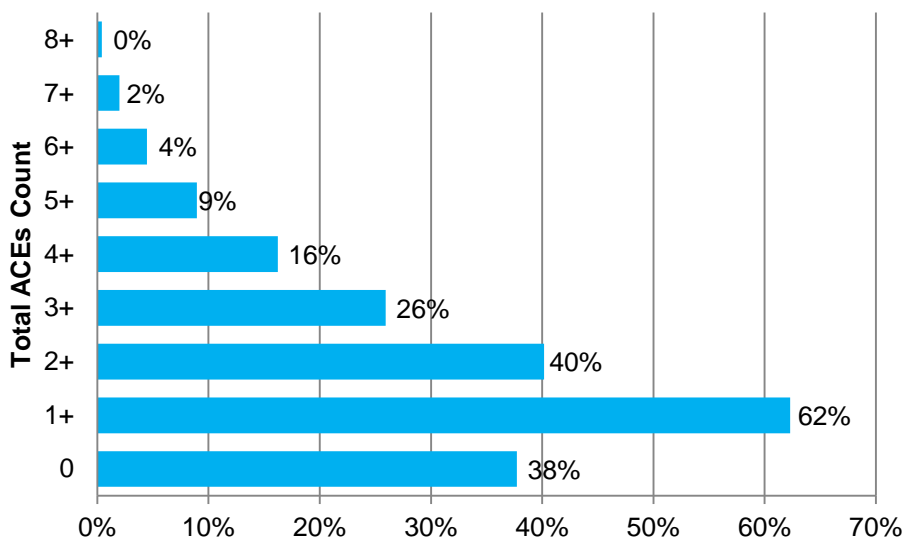
The total ACEs score used in this analysis ranges from zero to eight. The BRFSS ACE module includes 12 questions with three questions on sexual abuse and separate questions on alcohol and illicit drug use. The three questions about sexual abuse have been combined in this analysis. The questions about alcohol and illicit drug use have also been combined. Neglect was not used to calculate the ACEs score as the neglect question was only included on the ACE module in 2013.

## Update on California ACEs Status – 2011-2013

### Prevalence of Individual ACE Items



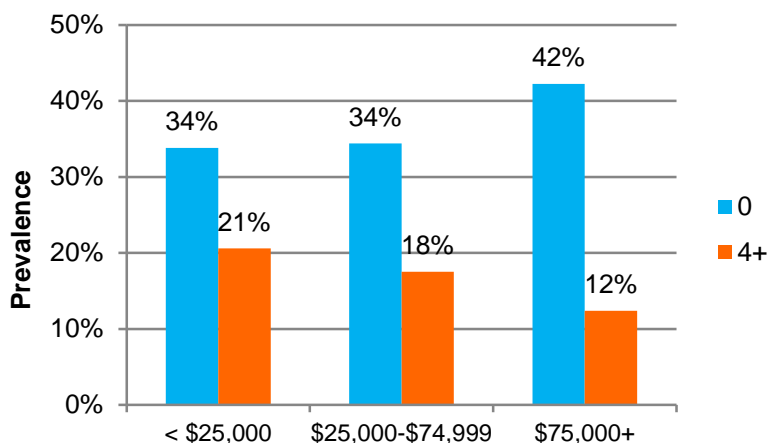
### Distribution of Total ACEs Score



ACEs are very common in California, as they are across the U.S. The prevalence of individual ACEs ranges from 7% for people who had a family member incarcerated to nearly 30% for people who experienced some form of verbal or emotional abuse during childhood.

Over 60% of Californians report experiencing at least one ACE before age 18. Approximately one in four Californians reported having three or more ACEs.

Distribution of Total ACEs Score by Income



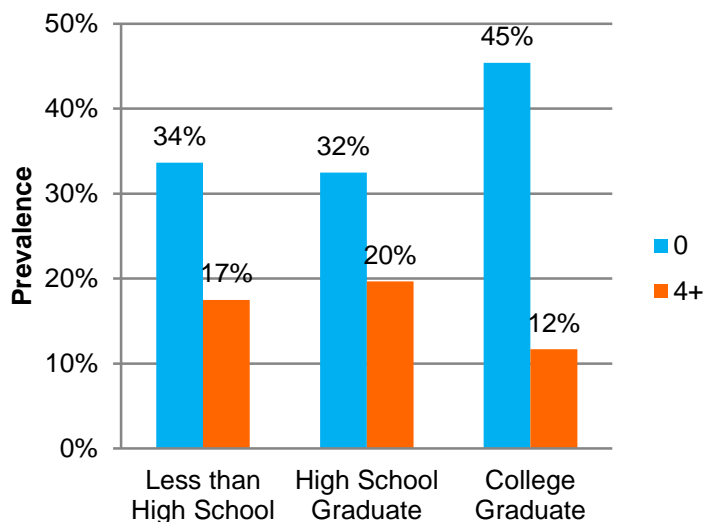
ACEs are not evenly distributed across the population. There are significant disparities in prevalence of ACEs across different socioeconomic groups.

Respondents with a higher number of ACEs are more likely to be in lower versus higher adult income groups.<sup>1</sup>

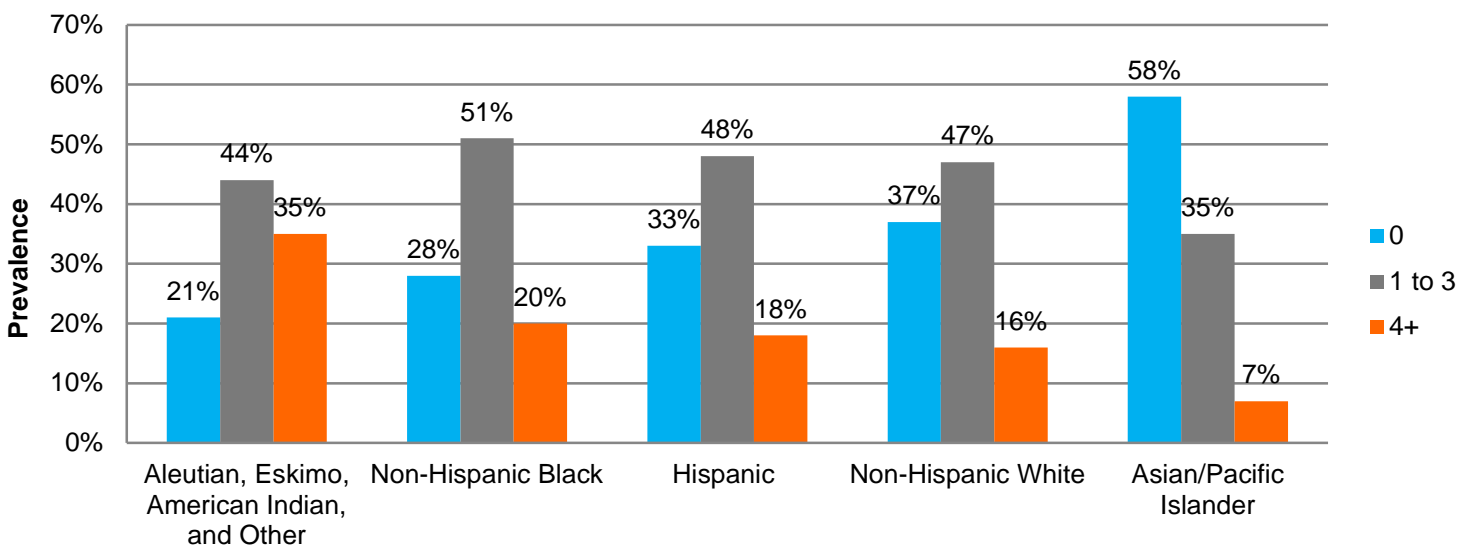
The distribution of ACEs score by education shows a similar trend to the distribution by income. Individuals with four or more ACEs tended to have less education.<sup>1</sup>

There were also significant differences between racial/ethnic groups in California in how ACEs are distributed. The Aleutian, Eskimo, and American Indian subgroup had the highest prevalence of four or more ACEs while the Asian/Pacific Islander subgroup reported the lowest number of ACEs.<sup>1</sup>

Distribution of Total ACEs Score by Education



Distribution of Total ACE Score by Race/Ethnicity



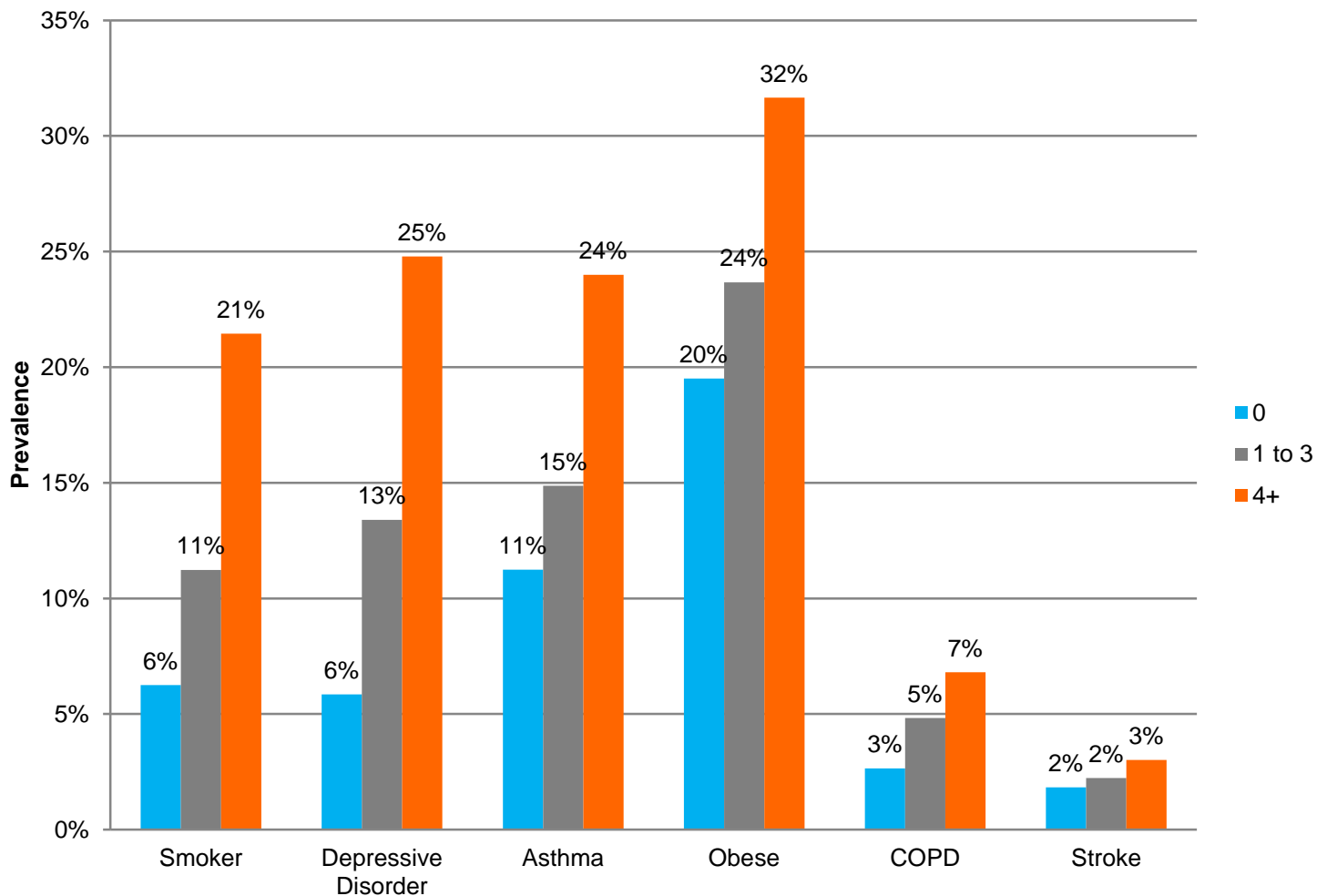
<sup>1</sup> Differences in income, education, and race by total ACE score are significant at 0.05 level.

Not only are ACEs differentially distributed, the cumulative impact of multiple early childhood traumas has been shown to have a life-long and direct impact on both behavior and disease. There is consistent dose response relationship between number of ACEs and risky health behaviors, mental health disorders, health conditions, and disease.

The graph below highlights several of these behavioral, emotional and health consequences, which are much more common among Californians with ACEs. Adjusting for race, sex, and gender, individuals with four or more ACEs are:

- 3x more likely to be current smokers**
- 4x more likely to have a depressive disorder**
- 2x more likely to have asthma**
- 2x more likely to be obese**
- 4x more likely to have COPD**
- 3x more likely to have a stroke**

Prevalence of Health Behaviors, Health Conditions, and Disease by Total ACEs Score



This BRFSS survey shows how the cumulative experiences of child trauma often lead to life-long behavioral, emotional, and health consequences. If risk factors in a child's early years are eliminated or reduced and additional protective factors are introduced, a child's mental and physical development can be redirected in a more positive direction. There are many innovative and effective statewide activities working to create safe, stable, nurturing relationships and environments for California's children and families:

- **Let's Get Healthy – California (Healthy Beginnings)**  
 Let's Get Healthy California is a Task Force of the California Health and Human Services Agency with the vision to make California the healthiest state in the nation by focusing on health across the lifespan as well as pathways to health. "Healthy Beginnings" is one of the six project goals of Let's Get Healthy. Healthy Beginnings aims to lay the foundation for health and well-being for a person's entire life by tracking indicators of the health of Californian children as well as pregnant women to ensure children have the opportunity to thrive and reach their full potential.<sup>viii</sup>  
<https://letsgethealthy.ca.gov/>
- **California Home Visiting Program (CHVP)**  
 The CHVP is a positive parenting program to help vulnerable families independently raise their children. CHVP was created as a result of the Patient Protection and Affordable Care Act of 2010. The program provides comprehensive, coordinated in-home services to support positive parenting, and to improve outcomes for families residing in identified at-risk communities. Currently 26 sites are funded to provide services using one of two nationally recognized home visiting models, Healthy Families America and Nurse-Family Partnership. CHVP seeks to improve maternal and child health, prevent child injuries, child abuse and maltreatment, and reduce emergency department visits, improve school readiness and achievement, reduce crime and domestic violence, improve family economic self-sufficiency, and improve the coordination and referrals for other community resources and supports.<sup>ix</sup>  
<http://www.cdph.ca.gov/programs/mcah/Pages/HVP-HomePage.aspx>
- **California Essentials for Childhood Initiative**  
 The California Essentials for Childhood Initiative addresses child maltreatment as a public health issue. The CDC awarded a five-year grant to the California Department of Public Health to collaborate with the California Department of Social Services to support a collective impact approach to build upon, align, enhance, and collaborate with existing efforts to promote safe, stable, nurturing relationships and environments, prevent child maltreatment, and assure that children reach their full potential.<sup>x</sup>  
<http://www.cdph.ca.gov/programs/Pages/ChildMaltreatmentPrevention.aspx>
- **First 5 California and County First 5 Commissions**  
 First 5 California, also known as the California Children and Families Commission, is dedicated to improving the lives of California's young children and their families through a comprehensive system of education, health services, childcare, and other crucial programs. First 5 California distributes funds from Proposition 10 (a 50-cent tax to each pack of cigarettes) to local communities through the state's 58 individual counties, all of which have created their own local First 5 County Commissions to implement local policies and programs to support the specific needs of local children and families and improve the well-being of families and children. Since 1998, First 5 has invested millions of dollars to design comprehensive programs that address the needs of children ages 0 to 5 and their families. Currently programs are centered on the child, parent, and teacher to improve early childhood outcomes in the areas of health, nutrition, early literacy, language development, quality child care, and smoking cessation.<sup>xi</sup>  
<http://www.cfc.ca.gov/> and <http://first5association.org/>
- **ACEs Connection**  
 ACEs Connection is a social network that accelerates the global movement toward recognizing the impact of adverse childhood experiences in shaping adult behavior and health. The network aims to create a safe place and trusted source where members can share information, explore resources, and access tools that help them work together to create resilient families, systems, and communities.<sup>xii</sup>  
<http://www.acesconnection.com/home> and <https://acestoohigh.com/>



- California Department of Justice's Defending Childhood Initiative  
Led by the U.S. Bureau of Children's Justice, the Defending Childhood Initiative is a federal initiative based on the Attorney General's National Task Force on Children Exposed to Violence Report (2012).<sup>xiii</sup> California's Defending Childhood Initiative aims to align, integrate, and mobilize multi-sectoral resources to equitably prevent, identify, and heal the impacts of violence and trauma on children and youth. It intends to establish cross-sector teams of state agency leaders dedicated to crafting a common agenda to prevent and address children's exposure to violence and identify policy recommendations and actions to more effectively prevent and address the damage caused by children's exposure to violence and trauma.<sup>xiv</sup>  
<http://www.defendingchildhood.org/>
- The Center for Youth Wellness (CYW)  
The CYW is a health organization within a pediatric home that serves children and families in the Bayview Hunters Point neighborhood of San Francisco. The CYW aims to revolutionize pediatric medicine and transform the way society responds to kids exposed to significant ACEs and toxic stress by screening for ACEs, leading pilots for treatments for toxic stress, and raising awareness among groups ranging from parents and pediatricians to policy makers.<sup>xv</sup>  
<http://www.centerforyouthwellness.org/adverse-childhood-experiences-aces/>

## Additional Resources

Centers for Disease Control and Prevention  
<http://www.cdc.gov/violenceprevention/acestudy/index.html>

Harvard University Center on the Developing Child  
<http://developingchild.harvard.edu/>

## Acknowledgements

Fact sheet produced by the Safe and Active Communities Branch, California Department of Public Health

Funding source:

- Essentials for Childhood Initiative, Centers for Disease Control and Prevention Grant #5H28CE002363 and Preventive Health Services Block Grant #2B01OT009006
- Fatal Child Abuse and Neglect Surveillance Program, Health and Human Services Agency, Maternal Child Health Title V Block Grant #B04MC29335

## References

- <sup>i</sup> Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., ... & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, 14(4), 245-258.
- <sup>ii</sup> MIHA Snapshots (n.d.). Retrieved May 16, 2016, from [http://www.cdph.ca.gov/data/surveys/MIHA/Pages/MaternalandInfantHealthAssessment\(MIHA\)survey.aspx](http://www.cdph.ca.gov/data/surveys/MIHA/Pages/MaternalandInfantHealthAssessment(MIHA)survey.aspx)
- <sup>iii</sup> National Survey of Children's Health - Data Resource Center for Child and Adolescent Health (n.d.). Retrieved May 16, 2016, from <http://childhealthdata.org/learn/NSCH>
- <sup>iv</sup> Adverse Childhood Experiences Journal Articles by Topic Area (2016). Retrieved May 16, 2016, from <http://www.cdc.gov/violenceprevention/acestudy/journal.html>
- <sup>v</sup> About the CDC-Kaiser ACE Study (2016). Retrieved May 16, 2016, from <http://www.cdc.gov/violenceprevention/acestudy/about.html>
- <sup>vi</sup> About Behavioral Risk Factor Surveillance System ACE Data (2016). Retrieved May 16, 2016, from [http://www.cdc.gov/violenceprevention/acestudy/ace\\_brfss.html](http://www.cdc.gov/violenceprevention/acestudy/ace_brfss.html)
- <sup>vii</sup> Behavioral Risk Factor Surveillance System. (2016). Retrieved May 16, 2016, from <http://www.cdc.gov/brfss/index.html>
- <sup>viii</sup> Let's Get Healthy California Final Report (Rep.) (2012). California.
- <sup>ix</sup> California Home Visiting Program (n.d.). Retrieved May 16, 2016, from <http://www.cdph.ca.gov/programs/mcah/Pages/HVP-HomePage.aspx>
- <sup>x</sup> Essentials for Childhood Initiative: Safe, Stable, Nurturing Relationships and Environments (n.d.). Retrieved May 16, 2016, from <http://www.cdph.ca.gov/programs/Pages/ChildMaltreatmentPrevention.aspx>
- <sup>xi</sup> About First 5 California (n.d.). Retrieved May 16, 2016, from [http://www.ccfc.ca.gov/about/about\\_first5.html](http://www.ccfc.ca.gov/about/about_first5.html)
- <sup>xii</sup> ACEs Connection Network About This Site (n.d.). Retrieved May 16, 2016, from <http://www.acesconnection.com/pages/about>
- <sup>xiii</sup> Defending Childhood About the Initiative. Retrieved May 16, 2016, from <https://www.justice.gov/defendingchildhood/about-initiative>
- <sup>xiv</sup> Defending Childhood Initiative. (n.d.). Retrieved May 16, 2016, from <http://www.defendingchildhood.org/>
- <sup>xv</sup> Center for Youth Wellness About Us (n.d.). Retrieved May 16, 2016, from <http://www.centerforyouthwellness.org/about/>

